From: Tyers, Daniel - FS
To: Cooley, Hilary; Frey, Kevin; Fortin-Noreus, Jennifer K
Subject: [EXTERNAL] Baker"s Hole BOR
Date: Tuesday, August 10, 2021 9:05:29 AM
Attachments: image001.png
image002.png
image003.png
image004.png

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Hello! I was wondering about the status of the Baker's Hole BOR-. I saw a news feed that seemed like it had information from that report and FS managers are asking about it. Thanks!

Dan Tyers
GYE Grizzly Bear Habitat Coordinator
Forest Service
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Caring for the land and serving people

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From: Frey, Kevin
To: Cooley, Hilary
Subject: [EXTERNAL] Baker"s Hole fatality report
Date: Friday, June 4, 2021 2:19:57 PM
Attachments: image001.png
Baker"s Hole.docx

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Kevin Frey
Grizzly Bear Specialist
Wildlife Division
Montana Fish, Wildlife & Parks, Region 3

1400 South 19th
Bozeman, MT 59718
Ph: (406) 577 7876
Montana FWP



INVESTIGATION REPORT

The subsequent fatality of Mr. Charles (Carl) Wesley Mock from a grizzly bear attack on April 15, 2021 near Baker's Hole Campground on the Custer Gallatin National Forest

SUMMARY:

On the afternoon of 15 April 2021, a 40-year-old male resident of West Yellowstone had gone hiking near Baker's Hole Campground on the Custer Gallatin National Forest (CGNF) to either fish, take photographs or both. At approximately 3:45 pm, the man called 911, connecting to the West Yellowstone Police Department reporting he had been mauled by a grizzly bear. Search and rescue were immediately implemented. The victim, Mr. Charles (Carl) Wesley Mock was found severely injured by search and rescue personnel. Mr. Mock was given medical attention in the field, taken to an ambulance, and transported to Idaho Falls, Idaho Regional Medical Center. The following day, April 16th investigation team members were charged by a bear near the site where Mr. Mock had been mauled. Investigators killed the bear during the encounter. Unfortunately on Saturday, 17 April 2021, Mr. Mock died from complications caused by the severe wounds of the grizzly bear attack. Mr. Mock was a West Yellowstone resident and guide for Back Country Adventures.

Format of report:

A board of review is required after any human fatality caused by a grizzly bear as per the Interagency Grizzly Bear Guidelines (p 59). This report is based on the investigations, efforts and information of personnel with the Gallatin County Sheriff's Office, West Yellowstone Police Department, United States Forest Service, Gallatin County Search and Rescue, Hagen Basin Fire and Montana Fish Wildlife & Parks. Gallatin County Sheriff's Office (Deputy Mike Gavagan) report of Mr. Mock's rescue and Montana Fish Wildlife & Parks enforcement division (Warden Robert Pohle) overall report are attached in Appendix A. This report is written in sections of occurrence and with an investigative conclusion at the end of the report. To avoid speculation as to how this attack and resulting fatality occurred, only information gathered and documented during the investigations is contained in this report.

Baker's Hole Campground:

Baker's Hole Campground is located on the Hebgen Ranger District of the Custer Gallatin National Forest. The campground is located in a lodgepole pine (LPP) forest with willows along the southeast side. The campground is east of U.S. highway 191, west of the Madison River,

approximately 2.5 miles north of West Yellowstone, Montana and approximately 200 yards west of the Yellowstone National Park boundary.
The campground has 73 campsites within the 3 campsite loops. The campground is annually closed to camping from October 1 to May 1 but the area is open to recreationists year-round. People also use the campground to access the Madison River for fishing and wildlife viewing as the area is known for its use by bears, moose, elk, ospreys, eagles, waterfowl and bison. Baker's Hole Campground is very well posted with permanent wooden or metal signs at the entrance and on kiosks within the campground informing the public of grizzly bear presence in the area and of food storage order requirements. An image of the attack site in relation to Baker's Hole Campground, West Yellowstone and Yellowstone National Park is shown in Figure 1.

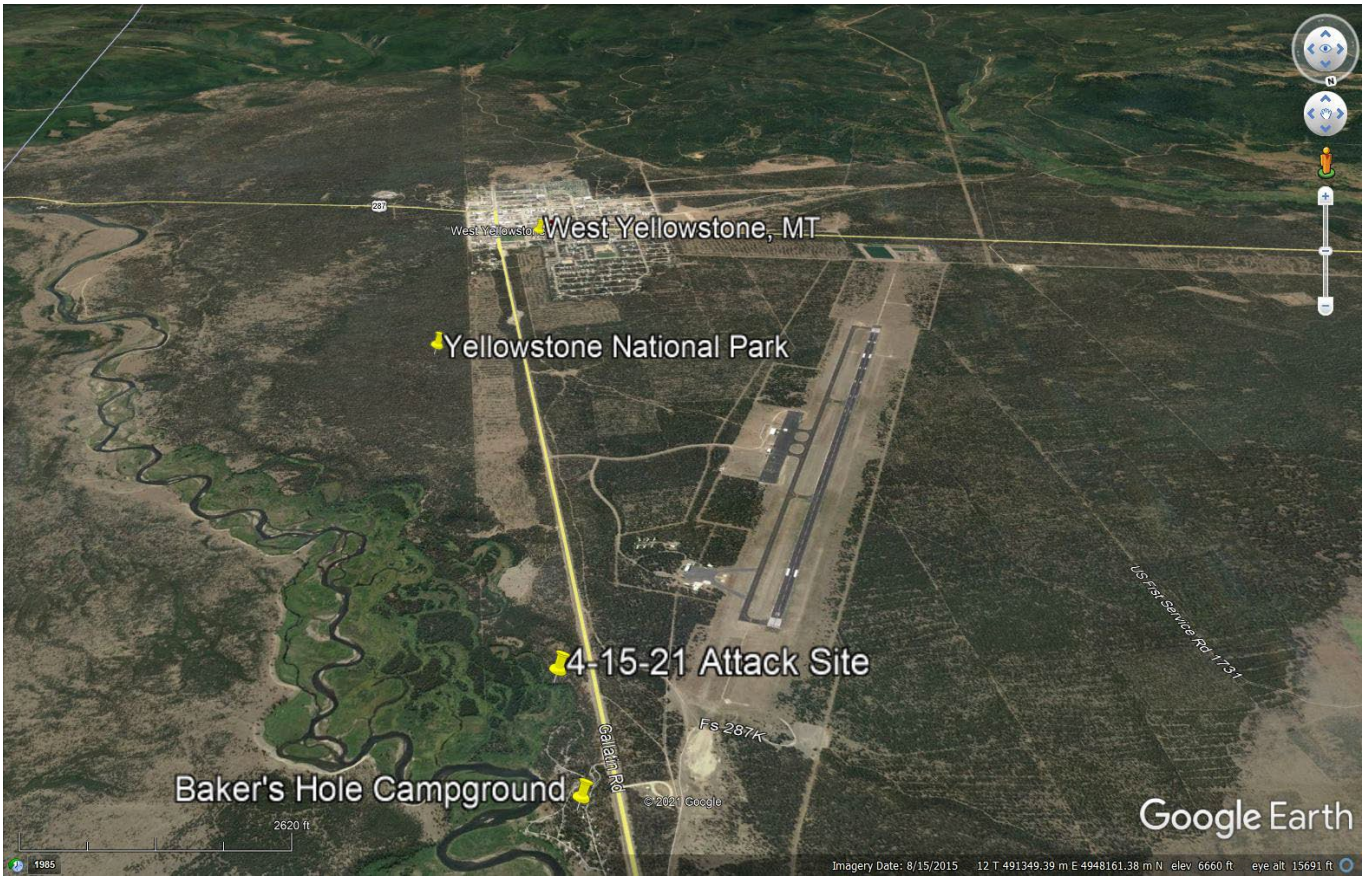


Figure 1. Baker's Hole Campground in relation to West Yellowstone and Yellowstone National Park

04-15-2021

SEARCH and RESCUE:

15:42 hours - West Yellowstone Police Department (WYPD) received a call from a 40-year-old male reporting he has been mauled by a grizzly bear approximately 200 yards from USFS Baker's Hole Campground.

West Yellowstone PD, Gallatin County Sheriff's Deputy (GCSO), US Forest Service law enforcement (USFS LEO), Gallatin County SAR and Hebgen Basin Fire are dispatched to respond. Hebgen Basin EMS was then dispatched to Baker's Hole Campground to wait for rescue of victim.
Secondary information from WTPD dispatch was issued to Search and Rescue (SAR) that the victim reported he had facial injuries, was laying on the ground, there was one bear and to go to the closed campground main entrance.

15:52 hours -approximately
*GCSO, USFS LEO, WYPD, Hebgen Basin Fire and Gallatin County SAR arrive at Baker's Hole Campground to begin search. Initially human footprints were searched for in the snow near hiking trails at the campground.

*Hebgen Basin Fire was instructed by GCSO to assume incident command.

*Dispatch was unable to triangulate the victim's cell phone. Phone was not active, just 911 capacity.

*The victim though seriously injured was able to communicate with WYPD dispatch.

*Hebgen Basin Fire activated sirens and the victim told dispatch he could hear the sirens and then told dispatch he was about ¼ mile from campers (camp host) in campground, towards town (south of main entrance).

*The victim then relayed he was off the blue diamond ski trail.

*The search was then able to focus on an area.

*Incident command requested West Yellowstone based Air Idaho (helicopter) to aid in support and search. Also a SAR page was sent out for a backcountry rescue.

*GC SAR and USFS LEO proceeded on the ski trail out of campground, within minutes followed by GCSO and WYPD.

*These 2 officers were joined by another WYPD officer after they had stopped hiking due to sighting a grizzly bear approximately 80 yards east of the ski trail. The bear was standing on hind legs, making huffing sounds. The bear dropped to all 4 feet and charged towards the officers, breaking of the charge after 30 yards.
Dispatch relayed that the victim could hear the officers yelling and that the bear was very close to him.

*The search party then turned east off the ski trail, down an old logging spur in the direction of the bear.

*Approximately 70 yards down an old logging spur the victim was found lying on the ground.

*The bear continued to aggressively move around the rescue party, moving around in a half circle, varying 20 to 70 yards away.

*The bear continued to stalk the rescuers and victim, making another bluff charge while initial medical attention was being given to the victim.

*Emergency medical (EMS) and Air Idaho personnel hiked into the site of the injured man.

*Two GC SAR members arrived with snowmobiles and a rescue toboggan.

*EMS was able to bandage the victim, carry him up to the ski trail to the SAR rescue toboggan. The victim was transported to EMS ambulance in the campground and was transported to Regional Medical Center in Idaho Falls, Idaho. *Poor weather conditions prohibited victim transport via helicopter.*

16:54 hours – Montana Fish Wildlife & Parks (MTFWP) Warden arrived at campground.
*Two WYPD officers, 1 GCSO deputy, 1 USFS LEO and the MTFWP warden went back to the site to get coordinates and take initial pictures of the incident scene. The victim's personal items including an empty can of bear spray were noted and photographed. The initial investigation group then left the scene. The bear was not encountered during this brief investigation.
**A digital camera with a telephoto lens was found lying within 4 feet of where the victim was lying on the ground when found by rescuers. The camera was secured in the victim's vehicle at the entrance gate to the Baker's Hole Campground when the victim was transferred to the ambulance. A friend of the victim took possession of the camera and vehicle and investigators did not have opportunity to examine the camera.*

**The moose carcass was not noticed by SAR or by the helicopter during the recovery of the victim.*

1830 hours – USFS HEBGEN RANGER DISTRICT posts closure signs of area.

04-16-2021

1000 hours - Official order from the Custer Gallatin Forest Supervisor was signed and posted.

SITE INVESTIGATION and BEAR MORTALITY:

1400 hours –

* An investigation team consisting of two USFS LEOs, three MTFWP Wardens and two MTFWP Bear Specialists with one dog meet at USFS/MTFWP site north of Baker's Hole. It was required and imperative to investigate the attack site due to proximity to a public campground, cabin area and well used hiking trails. The investigation party then drives to Baker's Hole Campground and to the south end of the south campground loop and ski trail.

*Pre-investigation discussions were conducted regarding the overall investigation, methodology of approach/hike, individual duties at the site and considering the encounters and the bear's behavior

during the victim's rescue the bear may be present and potentially charge. If the bear is present, it will not "bump off" and a bear does charge, it would have to be killed.

*The investigation team began hiking south along the ski trail towards the mauling site. Within 45 yards of hiking, the team stopped firing 2 cracker rounds and hollered. The dog began barking and alerted that it could smell a bear. One of the team members said he had seen something moving approximately 50 yards away in the trees east of the team and ski trail and said it could be a bear. The dog was now growling and barking indicating a bear was close. The bear was travelling in a parallel direction to the team as they had hiked south.

*The team waited a few minutes, then a proceeded another 80 yards, stopping to fire 3 additional cracker rounds. Members of the team alternated yelling during the entire hike to the site. The team again waited a few minutes and there were no other sightings or indications the bear was near or approaching. Though the dog was barking, the investigation team did not know if the bear had possibly moved out of the area or if it was still nearby.

*The team then hiked to where the old spur logging trail forked off the ski trail, downhill in a southeasterly direction. This juncture is approximately 200 yards along the ski trail south of the campground loop. Upon stopping, 2 more cracker rounds were fired. Again, there was no indication the bear was nearby. Team members yelled as the dog continued to bark while they slowly walked down the spur trail towards the attack site. The trail had intermittent deadfall trees across it.

*Approximately 50 yards down the spur trail, several team members said they could see some brush and a small conifer move, indicating towards the northeast across an open boggy wet area. All members stopped and readied in case it was the bear and it charged. Within seconds the bear silently charged out of the brush, head down, ears back and running full out. The bear crossed the open wet area and continued charging towards the team members, running into a patch of deep rotten snow in the willows. The bear floundered in the deep snow, dug its way clear and begin to charge again. At this point the decision was made to shoot the bear.
1435 hours - Multiple members shot at once killing the bear instantly.

*The bear was checked to confirm it was dead and to see if the bear had been previously captured or marked.
*A submerged, cached/buried moose carcass was found nearby.
*Scenes were photographed.
*Distances between key locations were measured.
*Mr. Mock's personal items were collected as were items left by first responder medical staff.
*GC SAR was contacted, bringing a tracked ATV to move the bear carcass to vehicles in the campground.

1630 hours - All personnel and the bear carcass at vehicles in campground.

INVESTIGATION FINDINGS:

The site of where the grizzly bear attacked Mr. Mock was investigated 3 times. On 15 April during an initial investigative overview after Mr. Mock had been recovered by SAR, on 16 April during the actual site investigation and on 21 April during the removal of the moose carcass.

Following the ski trail from the south end loop of Baker's Hole Campground and then the old logging spur trail, the attack site is approximately 270 yards.

The attack site was approximately 70 yards down an old logging spur trail running southeast from the ski trail. The attack site was at the end of the old logging spur ending in mature LLP timber and edge of boggy wet area.

Personal items found at the attack site area belonging to Mr. Mock included one muck-type boot, sunglasses, small plastic fishing tackle box, a winter cap, an empty can of bear spray* & holster, safety lock from bear-spray cannister, fishing pole and a half-empty can of juice.
*The can of bear spray was the UDAP brand, 7.9ounce, Expiration 12/2023 S/N P1711-071135).

It was later discovered that a digital camera was found near Mr. Mock during the rescue but the camera was taken into possession of Mr. Mock's friends. On 17 April, a MTFWP warden was able to view the memory card from the camera and did not find there were pictures from the Baker's Hole area or from the day of the attack.

After the investigation team had to kill the bear on 16 April, a moose carcass was discovered cached in the water (Photo 1) near the site where Mr. Mock had been attacked. It was 47 yards from the cached moose carcass to the attack site. Searching the area around the moose carcass it was evident that the bear had been feeding on the moose for numerous days due to multiple and drying bear scats.



Photo 1. Moose carcass cached in water near the attack site.

The bear-spray safety lock, fishing pole and a half empty juice contains were discovered where Mr. Mock had been and first reacted defensively due to the bear. The bear-spray safety lock and juice container were 1 to 2 feet E x NE of the fishing pole. The fishing pole was approximately 6 feet away (NE) from where Mr. Mock had obviously been mauled. At the mauling site Mr. Mock's boot, tackle box, sunglasses, knit cap and empty bear-spay were found scattered in the snow. A diagram of Mr. Mock's personal items at the attack site can be viewed in Figure 2. Investigators assumed Mr. Mock had sprayed the entire can of bear-spray.

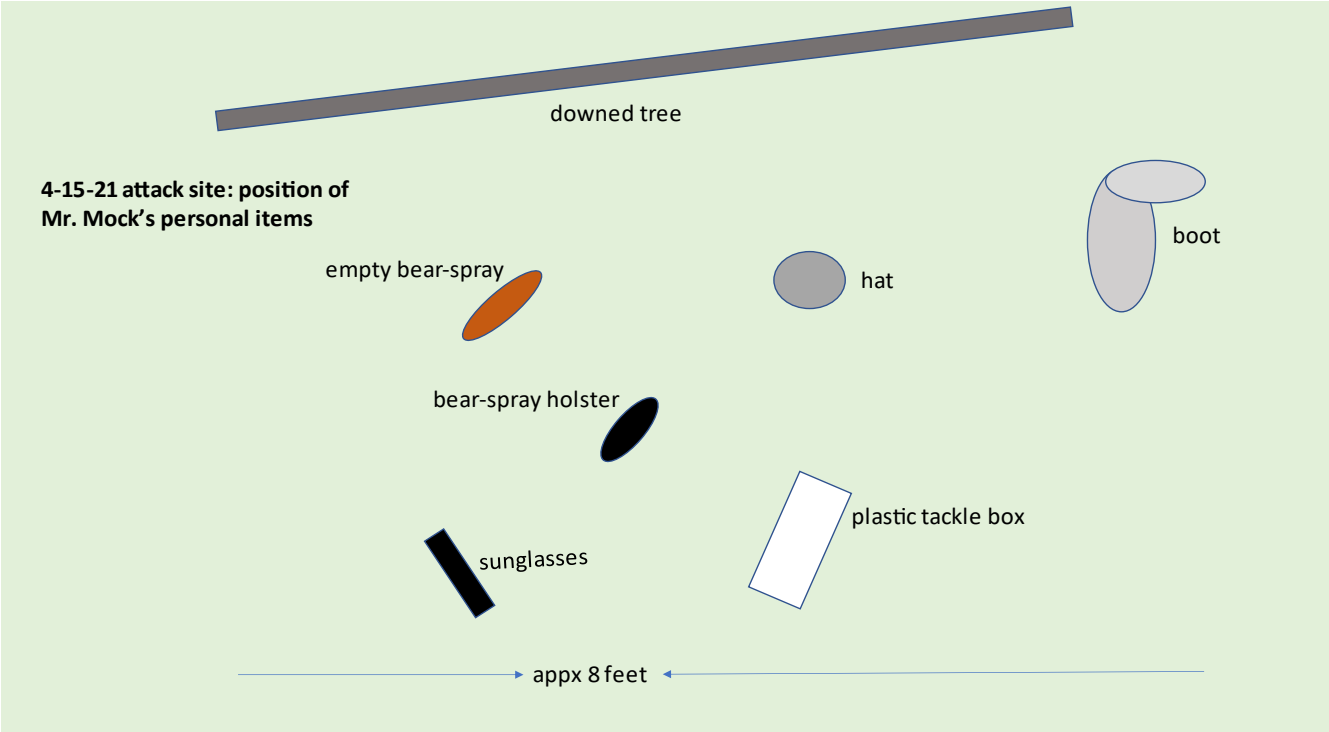


Figure 2. Position of personal items belonging to Mr. Mock found at the attack site.

Search and Rescue had found Mr. Mock 12 feet up the logging spur trail from where he had been attacked.

A diagram of the distances and location of moose carcass, attack site, bear and investigative team are shown in Figure 3. A satellite image of the locations and relationship of attack site to campground (south loop visible in upper left) and US Highway 191 are shown in Figure 4 and a closer view image of the attack area is shown in Figure 5.

Anecdotal information from a friend in West Yellowstone of Mr. Mock's stated that he had talked with Carl Mock in the early afternoon (1342 hours) of 15 April and Mr. Mock said he was going home to get lunch and go back out that afternoon. This information indicates Mr. Mock had only been in the Baker's Hole area for a relatively short time before the bear attack occurred.

Mr. Mock's 911 call to WYPD was recorded. The 911 call lasted for 49 minutes and 47 seconds, 27 minutes into the call at 1609 hours, the dispatcher asked him (Mr. Mock) if he was out fishing. He responded "No, I was taking pictures (with moaning in that statement)" She asked him, "You were out taking pictures?" He then moans with an unintelligible response.

BEAR FINDINGS:

The bear was 20 yards from the moose carcass when it charged the investigation team who were 57 yards from the bear across the boggy wet area.

The bear was killed 24 yards from the investigative team who were approximately 37 yards from the moose carcass.

FIELD: Examination of the bear revealed tattoos were visible in both upper inside lips.
No ear tags were present.
Overall body condition was a 4 on a scale of 1 to 5.
No visible wounds or injuries.
Teeth were worn with lower canine teeth broken and worn. Incisor teeth were worn smooth with some missing as is normal with aged bears. Field estimate of age was around 20 years old.
Tattoos were noted in both inside upper lips.
When the bear was loaded into a vehicle at the campground, it was evident the bear had been bear-sprayed by Mr. Mock during the attack as personnel began coughing from the bear-spray residue becoming airborne from handling the bear.

LABORATORY: Examination of the bear at MTFWP Region 3 Headquarters in Bozeman again the bear-spray residue physically affected investigators.
The bear weighed 411 pounds.
A gastro-intestinal examination of the bear was conducted, which revealed moose hair, trachea cartilage, muscle tissue along with grass/dirt debris. Some tissue that was not identifiable was collected and submitted to the Wyoming Game and Fish Forensics Laboratory in Laramie, Wyoming for identification as to origin of tissue. *Results pending….Appendix C*

The skull/brain of the bear was submitted for rabies testing to the Montana Department of Livestock, Montana Veterinary Diagnostic Laboratory in Bozeman, Montana. The results were negative for rabies. See Appendix B.

The tattoo was read as 504 in both upper inside lips. Tattoo 504 identified the bear as bear number 449 in the Inter-agency Grizzly Bear Study Team (IGBST) database for the Yellowstone Ecosystem.
Bear 449 had been captured by the IGBST as a 6-year-old during research capture efforts on 9/21/2003 at Cascade Creek, YNP. Bear 449 had been ear tagged, fitted with a GPS/VHF radio-collared and implanted with a micro-chip at that time. Last known location of the bear was on

2/22/2004 at his den site near Nymph Lake, YNP. It was deemed a collar failure as the signal had been intermittent since the bear had been captured, collared, and released on site.
Overtime, male bears are prone to losing ear tags and radio-collars when fighting with other male bears, plus radio-collars are designed to drop off bears.
No functioning micro-chip could be located on bear 449.
A tissue sample was submitted for DNA testing to completely confirm it was bear 449. *Results are currently pending.*
Bear 449 had no previous conflict management captures or history.

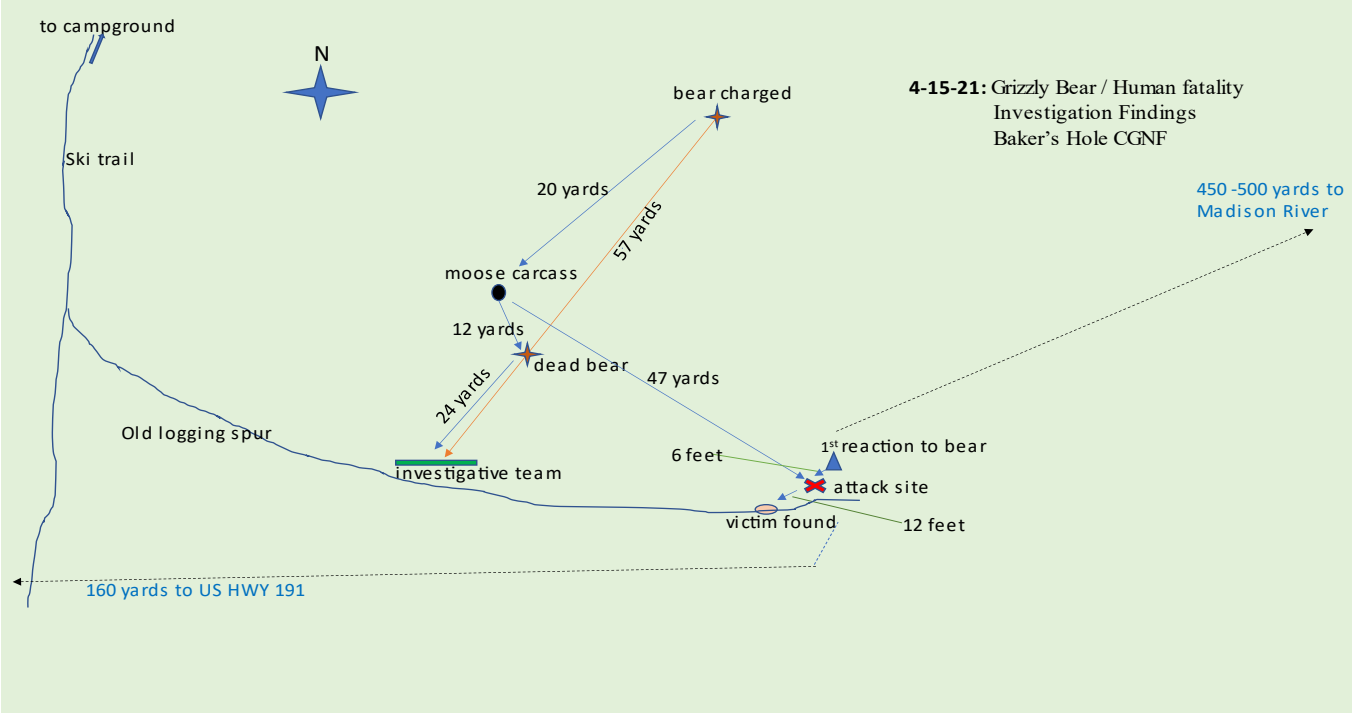


Figure 3. Distances and location of moose carcass, attack site, bear and investigative team near Baker's Hole Campground.



Figure 4. View of the relationship between the attack area, south end of Baker's Hole Campground and US Highway 191.



Figure 5. Close view of the attack area and locations of events.

04-19-2021

Discussions between CGNF Hebgen Basin District and MTFWP Bear Management occur regarding the known moose carcass, potential attractant to other bears, proximity to campground, hiking trail and options for removal. Dragging the moose carcass out of area would create a scent trail for other bears to follow to the campground and feasibility of doing so did not exist due to boggy wet area. Hebgen Basin District decided to use explosives for removal and would handle all logistics in the removal of the moose carcass.

04-21-21

REMOVAL (explosives) OF MOOSE CARCASS:

Personnel from the Hebgen Basin District CGNF, Bozeman District CGNF, Cody, Wyoming Bureau Land Management (BLM), MTFWP, GCSO and WYPD were all involved in the removal of the carcass.
The BLM flew a drone over the area for possible detection of another bear on or at the moose carcass. No bears were observed and the carcass did not appear to have been recently fed on. A USFS LEO and two MTFWP personnel provided security. CGNF field staff and certified explosive blasters were responsible for actual moose carcass positioning and blasting.

The moose carcass was successfully exploded into oblivion. The area remained closed to the public to allow for scavengers to utilize any pieces of moose and for scent to dissipate.

04-30-2021 Custer Gallatin National Forest lifts closure and re-opens the area to public use.

CONCLUSION:

On 15 April 2021 prior to 1542 hours Mr. Charles (Carl) Wesley Mock was attacked by a grizzly bear near Baker's Hole Campground on the GCNF. Mr. Mock was found severely injured 12 feet from the mauling site when rescued and did not give statements or communicate as to the attack by a grizzly bear. Once in medical care Mr. Mock did not speak or was ever in a condition to talk about the attack. Unfortunately, Mr. Mock died from the complications of his sustained injuries on 17 April 2021.

Mr. Mock had parked his vehicle at the entrance of GCNF Baker's Hole Campground. The campground and entry are well posted with grizzly bear information.

It cannot be determined if Mr. Mock purposely or randomly went to the site of the attack. Mr. Mock was in possession of fishing gear and a telephoto lens camera. The attack site is approximately 450 to 500 yards from the Madison River.

Also, it cannot be determined how much time Mr. Mock had been at the site prior to being attacked. Considering field investigation findings of the locations of the attack site, the cached

moose carcass and the old logging spur trail, it seems apparent that Mr. Mock had walked down the trail, passing within 37 yards of the moose carcass to the location of the bear attack site. Either he had done so without being noticed by the bear or the bear came later to the moose carcass after Mr. Mock had reached the area of the attack site, which was 47 yards from the moose carcass. The old logging spur/trail basically ends at the attack site.

Though Mr. Mock had told 911 dispatch that he was taking pictures, it cannot be confirmed what Mr. Mock was doing prior to the bear detecting and then attacking him, but the half empty juice container suggests Mr. Mock had likely stopped at the location before the bear detected him.

Due to the empty cannister of bear-spray and the bear-spray residue on the bear carcass (hair), Mr. Mock had obviously deployed his bear-spray at the bear. It is not known if he bear-sprayed at the bear prior to the bear contacting him or at what points during the attack he used the spray. During field and lab investigations, it was confirmed that the bear had substantial bear-spray residue on its hair. Additionally, the overall effects of the bear-spray to the bear are not known but the bear had quit attacking, indicating the bear was affected by the bear-pray, allowing Mr. Mock to move a short distance and call 911 emergency. However, the bear remained agitated, close to the attack site and near the unknown moose carcass during the SAR and again the next day (16 April) during the team investigation of the attack site area, when the male bear was killed as it charged the investigation team.

The tragic event of Mr. Mock being attacked by an adult male grizzly bear and subsequently dying from, was the direct result of Mr. Mock's purposeful or random placed proximity to a cached moose carcass that an adult male bear had claimed, cached, and was feeding upon.

Kevin Frey, Montana Fish Wildlife & Parks, Grizzly Bear Management Specialist, Bozeman, MT.

Appendix A:

OFFICE OF THE SHERIFF / CORONER
GALLATIN COUNTY, MONTANA

Dan Springer
Sheriff

Jeremy Kopp
Undersheriff

Randy Jones
Chaplain

615 South 16th
Bozeman, Montana 59715
(406) 582-2100
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On April 15, 2021 at approximately 1543 hours, I was dispatched by the West Yellowstone Police Department dispatch center to the report of a 40 year old male who reported he had been attacked by a bear. Dispatch reported the male was approximately 200 yards from the front entrance to the Bakers Hole Campground and was off trail. The male was later identified as Charles Wesley Mock of West Yellowstone.

I instructed dispatch to page out Hebgen Basin EMS and have them stage at the front entrance to the campground. An update from dispatch informed responding units that Mock had sustained facial injuries, was laying on the ground, there was only one bear and responders should go right at the main entrance.

I arrived on scene approximately 10 minutes after the initial dispatch. Also arriving on scene were Forest Service LEO Ryan Linhart (FS72), West Yellowstone PD officer Neil Courtis (686), Hebgen Basin Fire Chief Shane Grube (36) and Gallatin County SAR member Travis Mann. We all started a hasty search of the area, looking for foot prints in the snow near popular hiking areas. WYPD officer Leonel Sosa arrived a short time later and joined us in the search.

I assigned Chief Grube to take over Incident Command and help coordinate our search efforts. With a lot of ground to try to cover, more information was requested from dispatch. Unfortunately they were unable to triangulate the 911 call, but were still on the phone with Mock. Mock was able to communicate with dispatch, although garbled and hard to understand. Grube activated his siren in hopes that Mock would be able to hear it and possibly guide us closer. Mock was able to tell dispatch that he could hear the siren and that he was about ¼ away from the campers in the campground, toward town. He then said he was off the blue diamond ski trail.

This information gave us a definitive area to focus the search in. Grube asked Air Idaho in West Yellowstone to add some aerial search support and they launched. He also sent out a Search & Rescue page for a backcountry rescue. Linhart and Mann were closest to the trailhead at the southern part of the campground and immediately headed up the trail. Courtis and I followed behind, roughly three minutes behind them. We were joined by Sosa later, after Courtis and I stopped, having spotted the bear.

Approximately 200 yards south of the campground on the blue diamond trail, I spotted a bear that was about 80 yards east of our location. The bear was standing on its hind legs

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and making huffing noises at us. The bear then dropped to all fours and charged us, breaking off his charge after about 30 yards. We were yelling and hollering at the bear as he charged. Dispatch notified us that Mock could hear us yelling at the bear and he said the bear was very close to him. I notified other search units to respond to our location, knowing we were very close to Mock.

We proceeded south on the trail about another 20 yards until we discovered human footprints in the snow, heading east toward the location of the bear. We started following the footprints east and hollering at the bear who was still aggressively pacing the area and watching us. Approximately 70 yards later, we found Mock laying on the ground. He was seriously injured, having suffered significant head and facial injuries. The bear continued to stalk us, aggressively moving around us in a half circle at a distance of approximately 40 – 70 yards.

Courtis, Sosa and Mann provided scene security for us while Linhart and I provided medical care to Mock. None of the responders on scene had any medical gear with us. Linhart and I determined that we needed to somehow stop the large amount of blood that Mock was losing. Linhart took off his uniform top and removed his t-shirt while I continued to support Mock. Linhart wrapped the t-shirt around Mock's head and applied direct compression. Mock was having difficulty talking and breathing due to the amount of blood in his mouth. We made the decision to move him into the recovery position with Linhart supporting his head & neck and me rolling his body onto his side. This seemed to allow Mock better breathing.

The bear continued to stalk the group and made another false charge. At this point, I turned patient care over to Linhart while grabbing my rifle and providing additional security against the bear. Emergency medical personnel from Hebgen Basin and Air Idaho were able to hike into our location while we provided protection from the bear. Two Gallatin County Sheriff SAR members arrived on scene with two snowmobiles and a rescue toboggan. EMS personnel were able to bandage and wrap Mock's head, they placed him on a backboard and carried him the 70 yards uphill to the SAR rescue personnel and gear.

Mock was then transported to the ambulance at the entrance to the campground. The armed first responders then escorted the EMS crew out of the area and back to the campground. Due to snow and bad weather that had moved in during this incident, Air

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Idaho was unable to fly Mock to the hospital, so he was transported to Eastern Idaho Regional Medical Center in Idaho Falls by ambulance.

Fish, Wildlife and Parks LEO Robert Pohle (FG32) arrived. Officers Courtis, Sosa, Linhart and I escorted him back in to the scene of the attack so that he could take some quick pictures and log an accurate GPS location of the attack. The incident happened at 44.70002, -111.10018

Initial investigation at the scene indicated that Mock was likely attacked 15 feet east of the location he was laying at when we found him. It appeared that Mock was able to retrieve his bear spray from its holder and was able to deploy it (can was empty). Additional items on scene were a digital camera with a large telephoto lens, spin fishing rod, small plastic box of lures, and a backpack.

The following day on April 16, personnel from the Forest Service and FWP reentered the location of the bear attack and were charged by a bear. Even with seven people yelling, shooting explosive noise making shotgun rounds, and a dog barking at the bear; the bear continued to charge the group. They were forced to shoot the bear and killed it.

An investigation of the area revealed a large moose which had been buried and cached by the bear. This moose was about 35 – 40 yards away from the location where Mock was attacked. Forest Service requested an agency assist from me, requesting equipment and help removing the bear carcass from the woods. I arrived on scene with a tracked four-wheeler with attached winch. We were able to winch the moose up a short hill and drag it out to the campground across the snow covered trail. The bear was loaded into the back of a truck and taken by FWP for further evaluation and research.

Case closed – Search & Rescue and Agency Assist

Michael P. Gavagan

Deputy Mike Gavagan – Badge #635
Gallatin County Sheriff's Office

FWP21CAD001860 Robert Pohle

On April 15, 2021 at approximately 1630 hours, I, Game Warden (GW) Robert Pohle was home off shift when I received a Gallatin County Search and Rescue page on my personal phone requesting help searching for a 40 year old male who had been attacked by a bear. The location of the attack was Bakers Hole. Upon seeing this I called the West Yellowstone Police Department (WYPD) to let them know I was responding, inquiring if the attack occurred inside Yellowstone National Park (YNP) or the county. I was told dispatch was having a difficult time locating the victim, later identified as Charles (Carl) Wesley Mock (DOB 03/24/2981). **Note:** Due to some technical issue, Carl's phone was not providing coordinates to the 911 system allowing for a back trace. After hanging up with WYPD, I called Montana Fish Wildlife & Parks (FWP) Bear Management Specialist (BMS) Kevin Frey, leaving him a voice mail notifying him of the incident. As my Sergeant was away, I called Warden Captain Adam Pankratz leaving him a voice mail as well. My final call was to Sergeant Coy Kline in Butte, Montana, so I was able to directly notify a supervisor of the incident.

After gearing up, I responded, lights and siren to the Bakers Hole area. While en route I called Montana Highway Patrol (MHP) dispatch to have a call for service started. Captain Pankratz returned my call and after relaying the limited information I had, we agreed if I saw a bear in the vicinity of Bakers Hole, it was to be dispatched.

As I arrived to the Bakers Hole area, I radioed Hebgen Basin Fire Chief Shane Grube who was Incident Commander (IC), requesting info on where other responders were. I was instructed to come to the south loop of Bakers Hole United States Forest Service (USFS) campground where IC was staged. Chief Grube let me know Carl had been located and was in the process of being extricated by law enforcement and medical staff.

I met the group of first responders as they were exfiltrating from the attack location with Carl. Carl was heavily bandaged, being towed on a Search and Rescue (SAR) sled behind a snowmobile. Gallatin County Sheriffs Office (GCSO) Deputy Mike Gavagan, WYPD Officers Leonel Sosa and Neil Courtis, and USFS Law Enforcement Officer (LEO) Ryan Linhart gave me a quick brief of the situation. The officers stated they encountered the bear several times during the search for Carl. During the first encounter the bear bluff charged the group of officers several times at approximately 100 yards. During this first encounter, they noticed what appeared to be blood on the head/mouth of the bear. As they continued to search for Carl, they stated the bear hung out in the area refusing to leave, even while medics worked on Carl and the snowmobiles moved in to extract Carl. This information was concerning to me, as with that much human activity, it is not normal behavior for a bear to continue to hang out. **Note:** I learned several days later that while searching for Carl, a SAR helicopter was flying low over the area assisting in the search. Upon hearing the bear was still in the area, I went back to the attack scene with Officers Sosa, Courtis and Deputy Gavagan, with the intent to dispatch the bear.

When we arrived at the attack scene, I observed no indication that a bear was in the immediate area. Not identifying an immediate threat, I took several photos to

document the scene and used my OnX hunt maps to get Global Positioning System (GPS) coordinates of that location. The location of the scene is 44.70002, -111.10018.
The scene consisted of a patch of snow soaked in what appeared to be blood. A rubber boot, fishing tackle box, sun glasses and a blood soaked beanie cap were strewn about the patch of snow. A blood splattered can of bear spray and holster, later determined to be empty, laid on the edge of the snow. The orange safety cap from the bear spray was several feet away in the grass. A fishing pole and juice bottle lay off to the south east. North west of the snow was the area where medical staff performed first aid. There was various medical packaging littering the ground, clothing that had been cut off Carl and used bandages. After quick photographic documentation of the site, all units returned to the IC.
Note: The can of bear spray was the UDAP brand, 7.9ounce, Expiration 12/2023 S/N P1711-071135).
After returning to the IC, I met with USFS District Ranger (DR) Jason Brey, Chief Grube and USFS LEO Linhart to discuss what the preliminary plan was for public safety due to the popularity the location held for recreationists. DR Brey stated the USFS was closing the area and evacuating the few campground hosts who were prepping the facility for opening. Chief Grube informed me that Carl had been transported via ground ambulance to Idaho Falls, due to weather the helicopter was grounded. The helicopters medical crew however was in the ambulance providing patient care to Carl. I cleared the scene while calling in updates to the BMS while the USFS put up barricades and signs stating bear in area and closure information.
Since Carl was going to a hospital in Idaho, I contacted an Idaho Fish and Game (IDFG) Warden requesting assistance. I requested a Warden meet Carl at the hospital to collect clothing and if possible, take photos of the injuries and conduct a quick interview as is standard procedure in a Wildlife Human Attack (WHART) incident. I was later notified by IDFG they had been unable to interview Carl or take photos as he was on a ventilator and rushed straight into the doctors. IDFG were able to collect Carl's pants which medical crews had cut off of him. **Note:** I met IDFG Investigator Lauren Lane on April 17th, 2021 in Ashton ID to collect that item.
With night approaching, I talked with BMS Frey and discussed the next steps for the following morning. As I headed home, I came across a vehicle parked inside the USFS emergency closure. I notified WYPD dispatch I would be out looking for the occupants as we did not know the circumstances behind the bear attack and could not leave them in the area without notification of the incident and closure. After finding the individual had been fishing outside of closure on the Madison River, it was determined his car had been parked there before the closure went into effect. He left the scene without incident. Clearing that contact LEO Linhart and I observed another vehicle attempt to enter the closure by the means of the FWP driveway before backing out heading south on US HWY191 where they turned into the Bakers Hole Campground drive. USFS LEO Linhart and I contacted that individual to advise them of the closure and they commented they had heard of a bear attack and were out looking to take pictures of the bear.

Note: Between the attack and when investigators returned to the scene the following day, law enforcement made multiple contacts of people trying to access the closure area. A white Ford F150 with ID license plates stopped by my residence before the attack, while I was off shift. The 2 male occupants of that Ford inquired about a sow grizzly and 2 cubs they had heard were active in the Basin which I was unaware of. They were wearing camo clothing and had a camera with large lenses on the center console. This indicated to me they were wildlife photographers looking for bears. I observed that vehicle along US HWY191 when I initially responded to the scene and then again turning into the Bakers Hole Campground drive as units were clearing. When I last saw that vehicle, USFS personnel were talking to the occupants.

The following morning, April 16, 2021, I was contacted by Captain Pankratz. He informed me to hold off going to the Bozeman Regional Office (BRO) as he was headed down to West Yellowstone, that he would contact Bear Management and we would then plan to meet and return to the attack scene. My decision to return to the scene was made due to the following considerations;

- Without being able to interview Carl, it was unknown what precipitated the attack. We did not know if it was a predatory attack, defensive attack or surprise encounter.
- We had no time line of when an interview with Carl may take place.
- No evidence was collected the day of the attack except for photos and the pants which IDFG retrieved from the hospital.
- It was forecast to start snow/rain in a couple days which would diminish any evidence on scene.
- The area the attack took place is a "high use" recreation area. It is common for anglers, hikers, campers and skiers to frequent the Bakers hole area.
- As noted earlier, multiple law enforcement contacts had been made concerning individuals trying to take pictures of bears. News of bear activity was drawing them in.
- This close to a weekend, we could expect a significant number of recreationists wanting to use the area. This would be compounded by the opening of Yellowstone National Park (YNP) for the summer season and news of a bear active in the area.
- It was imperative that we find out what precipitated the attack. While it was likely guarding a carcass, it was equally likely it was a surprise encounter, it was a bear with cubs or it was a predatory attack. Especially given the volume of human activity in the area while rescuing Carl did not scare the animal away.

After careful consideration, it was decided the significant risk to public safety resulting from the unknown causation of the attack outweighed the risk of a potential bear encounter from a re-entry to the scene. Phone calls were made and a team of seven (7) plus one (1) bear dog was assembled. We met at approximately 1400 hours and after a quick briefing on the situation entered Bakers Hole Campground.

Note: The team consisted of Captain Pankratz, GW Daven Thorne, GW Robert Pohle, USFS LEO Noah Pieprzyca, USFS LEO Linhart, BMS Frey (K9 Loki) and BMS

Jeremiah Smith. All team members were armed with lethal firepower and we had bear spray available.
We began our entry to the attack site, following the Boundary Ski trail that exits out of the south loop of Bakers Hole Campground. All members yelled out randomly making noise to alert a bear, humans were present. K9 Loki added to the noise barking loudly. At approximately the same location responders observed the bear the day prior, USFS LEO Pieprzyca alerted the team he saw something brown moving south towards the attack site. The movement came to the east of our location in a marshy area. It was unknown at that point if it was a bear as there were fresh bison tracks in the snow and mud. The team held that position as multiple cracker shells were fired and more yelling was made in attempts to haze the animal away. After several minutes holding that position and not seeing further movement, we continued down the trail. Along the way the team continued yelling and more cracker shells were fired. Specialist Frey alerted the team that the behavior and loud incessant barking from K9 Loki indicated a bear was nearby. **Note:** We were walking into a northerly breeze which would bring any bear scent directly to K9 Loki.
The attack site is approximately 50 yards to the south east of the main Boundary Ski trail down an old, over grown USFS road. That road had multiple downed trees laying across it and others growing through the former road bed. As we turned that way, we got approximately 30 yards from the attack site when BMS Smith alerted us to a bear. The bear was east of our location, at the edge of a small marshy clearing. It was moving south east before it stopped. At that point the bear looked at us for a split second before immediately changing directions and charging directly towards the team. The bear had to clear the marshy area before encountering willows partially buried in snow. As the bear cleared the marshy area, it hit the snow in the willows and was slowed due to the depth and softness. We held fast yelling as the bear kept pushing through the deep snow in a fashion similar to the way a dog runs through deep snow in a field. As the bear continued, it quickly became apparent this was not a bluff charge. The snow while deepest where the bear was currently located, began to thin before disappearing the closer you got towards the team's location. In the event the bear cleared the deep snow and regained traction, there would be no time for the team to react before contact was made with a human, resulting in serious injury or death.
In the split second it took to process what was taking place, I made the decision I was going to engage the bear and shoot it before it was able to gain traction again. I called out loud that I was taking a shot, before firing my shotgun. Afterwards I learned both Specialist Frey and Smith called out to shoot as well. Multiple shots were fired and I could see the impact of several rounds on the bear's body as they hit. The bear slumped down in the snow before moving again. USFS LEO Pieprzyca was armed with an issued 45/70 government rifle and heavy 540 grain bullets designed for penetration. At the instruction of Specialist Frey, USFS LEO Pieprzyca fired a couple rounds into the bear. **Note:** Once shot, it is absolutely imperative to prevent unnecessary pain and suffering of the bear and for public safety, we ensure the bear is deceased. After the bear stopped moving, the other team members covered Specialist Smith and I as we

approached the bear to check it's status. As we still did not know the sex of the bear, we approached ready to engage another animal should it have been a female with cubs. Once confirmed dead, I assisted Specialist Smith in rolling the bear over where we discovered it was an adult male. While others maintained a security perimeter and Bear Management began their checks on the bear, I took pictures of the scene, only to discover that during the charge the bear had run over a cached moose carcass, buried in the marshy area. It was difficult to see the moose as it was mostly buried and I could not smell anything that would indicate there was a carcass there.

I used my OnX Hunt maps to get GPS coordinates of the following locations;

- 44.70168, -111.10067 -- Location of the south loop of Bakers Hole Campground.
- 44.69999, -111.10053 -- Location I was standing at when I shot the charging bear.
- 44.70010, -111.10025 -- Location of deceased bear once rolled over.
- 44.70017, -111.10021 -- Location of cached moose carcass.
- 44.70002, -111.10018 -- Location of the attack site from 04/15/2021.

A brief conversation occurred with BMS Frey and it was evident that the primary causation of the bear attack on Carl was the defense of a food source. It is unknown if Carl knew the carcass was there or why he was in that location. The articles of clothing and Carl's possessions left on scene were collected. The only items retained for evidence were the discharged can of bear spray, a bloody beanie soft cap and the pants collected by IDFG. Reports indicated the attack focused on Carl's head, resulting in major head trauma with very little injury to other parts of his body. As such it is unlikely that the bear would have left any saliva or blood on other articles clothing in significant volume to provide any useable evidence to identify an individual animal. The fact the WHART team experienced a strikingly similar encounter less than 24 hours after the initial attack, resulting in a dead male bear leads one to believe the deceased bear was responsible for the attack. It would be unlikely to have multiple dominate male bears so close to such a valuable food source coexisting as the more dominate would chase the lesser male away.

USFS LEO Linhart arranged for Deputy Gavagan to bring a tracked All Terrain Vehicle (ATV) to retrieve the dead bear, as well as USFS Sawyer to clear the path. The ATV's winch was used to retrieve the bear where it was loaded into Captain Pankratz truck and taken to the BRO. While loading the bear, I noticed a burning, tingling sensation in my nose and lungs, coughing several times. That sensation was consistent with past exposure I have had to bear spray, albeit at a much lower dose. Later, while going through Carl's belongings collected from the attack site, I experienced the same sensation of burning and coughing. This indicates bear spray was discharged some time during the attack, consistent with the empty canister of bear spray found. Whether the spray was successfully deployed on the bear, or if the residue on the bear and Carl's belongings was the result of cross contamination, will forever be unknown.

Note: I was notified there had been a digital camera with Carl after the fact. That camera was passed off to his friends before my arrival during the initial rescue. On April 17, 2021, I met Keith Johnson (DOB 06/15/1985) at Back Country Adventures in West Yellowstone and was able to view the pictures on the memory card for the month of April 2021. I did not observe any pictures on that card similar to the attack site. Whether any pictures were removed before my observation is unknown, as control was lost over the camera.

I was notified the morning of April 17, 2021 by Captain Pankratz that Carl had succumbed to his injuries while in the hospital. As a result, investigators will never know for certain the events that led up to this bear attack.

No Further Action Taken. Robert Pohle FG32

Appendix B:

MONTANA VETERINARY DIAGNOSTIC LABORATORY

PHONE: (406) 994-4885
FAX: (406) 994-6344
WEBSITE: www.liv.mt.gov/lab
WEB RESULTS: https://mvdl.mt.gov
E-MAIL: mvdl@mt.gov

1911 WEST LINCOLN STREET
BOZEMAN, MT 59718

JENNIFER RAMSEY DVM FW & P
1400 S. 19TH AVE
BOZEMAN MT 59718

CASE:21-18156
Name/ID: FWP Grizzly
Species: Brown Bear (Grizzly)

Sex: Unknown **Age:** 20 Years

Owner: Montana FWP

COMPLETE REPORT 04/19/21

Sample Collection: 04/16/21
Accession: 04/19/21

Case Coordinator Authorization:
SH

Previous Reports
04/19/21
04/19/21
04/19/21

RABIES

Rabies	Brain	Verified on: 04/19/21 by: SH
Animal ID	Test	Result
FWP Grizzly	Condition	Fair
	Human Exposure	Yes
	Rabies Final Result	**Negative**

From: Frey, Kevin
To: Cooley, Hilary
Subject: [EXTERNAL] BOR group
Date: Wednesday, June 23, 2021 6:10:07 PM
Attachments: image001.png

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

I was thinking of the following:

Kerry Gunther
Jeremy Nicholson
Brian Debolt and or Dan Thompson
Dan Tyers or Hebgen District Ranger….Jason Brey
Mark Haroldson
Hilary Cooley
Kevin Frey

Give me you thoughts on the and/or for WY and USFS.
I can send out a scout message on availability of folks.
Thanks,

Kevin Frey
Grizzly Bear Specialist
Wildlife Division
Montana Fish, Wildlife & Parks, Region 3

1400 South 19th
Bozeman, MT 59718
Ph: (406) 577 7876
Montana FWP

THE **OUTSIDE** IS IN US ALL.

From: Frey, Kevin
To: Cooley, Hilary
Subject: [EXTERNAL] BOR recommendations.....
Date: Wednesday, August 4, 2021 2:26:11 PM
Attachments: image001.png
recommendatins.docx

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

I inserted this after the conclusion. Up for your review and thoughts.
We can chat about things if you need/want.

Kevin Frey
Grizzly Bear Specialist
Wildlife Division
Montana Fish, Wildlife & Parks, Region 3

1400 South 19th
Bozeman, MT 59718
Ph: (406) 577 7876
Montana FWP



BOR Recommendations:

The unfortunate subsequent death of Mr. Carl Mock caused by a grizzly bear attack on 15 April 2021, reinforces the inherent possibility of people being involved a serious grizzly bear encounter and the need for individuals to know and try to follow known safety recommendations.

Due to an increase in human use, bear population numbers and geographic grizzly bear distribution, more people are encountering grizzly bears. These encounters can and have resulted in human injuries or death. Multi-agency bear managers and researchers have conducted a continuous examination of these events. The goal is to provide public information to help reduce dangerous encounters and increase human safety in grizzly bear country.

There are standard grizzly bear safety messages for different public users and private landowners that can help minimize surprise encounters with grizzly bears, thereby reducing human injuries and possible death.

Some of the base safety messages are:

* Be constantly alert

* Hike or hunt with a partner(s)

* Make noise, if possible, to help avoid surprising a bear

* Secure food attractants at camps, homes, and work sites

* Do not run if you encounter a bear

* Avoid animal carcasses -watch for concentrations of scavengers (i.e. ravens)

* Carry and know how to use self-defense….bear-spray and or firearms

It is always recommended to carry bear-spray even if individuals carry firearms.

From: Smith, Kate
To: "hilary_cooley@fws.gov"
Subject: [EXTERNAL] DRAFT M62067 Narrative Report
Date: Thursday, January 13, 2022 12:41:33 PM
Attachments: M62067 Year 1 UM FWS Narrative Report DRAFT.docx
F15AC01157 Narrative Report FY20 FINAL.pdf
M62067 Year 1 expenses for FWS report FY21.xlsx

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Hi Hilary – I'm attaching the latest draft of the UM/FWS agreement's annual report covering year 1: 10/1/2020-9/30/2021 as well as a list of expenses. Please review and add in Togwotee details and People and Carnivores, as well as any other edits you have. I also attached the prior year's report in case you want to review. Wayne, Justin, and Jennifer have edited their sections.

Let me know if you have any questions!

Kate

……

Kate Smith
FWS Grizzly Bear Recovery Program
W.A. Franke College of Forestry & Conservation | University of Montana
University Hall, Room 309
Missoula, MT 59812
phone: (406)243-4903

Year1 Narrative Report: Grizzly Bear Recovery – Implementation, Monitoring, Research, Education & Conservation

The University of Montana: Cooperative Agreement Award F20AC11441
Reporting Period: 10/1/2020 – 9/30/2021

Program Accomplishments

Surveys for grizzly bears in peripheral portions of their range

During the summer of 2021, we used digital cameras and hair snare corrals to look for the presence of grizzly bears in southwest Montana, outside the normal range of the species to document range expansion. In 2020, we developed a database for verified sightings within the peripheral portion of the current range of bears. Those verified sightings, along with expert opinion, were the basis for sample sites. During the 2021 field season, mid-May through the end of Augst, 140 hair corals were placed on the Bitterroot, Lolo, and Beaverhead-Deerlodge National Forests. Each coral was in place for 3 to 4 weeks for a total of 3,446 corral nights. Preliminary results were presented at community and IGBC subcommittee meetings during the fall of 2021. Hair samples (n = 181) collected at corrals at which grizzly bears were detected or at which there were camera issues were submitted for DNA analysis. Results are anticipated in the spring of 2022 and final results will be presented at spring/summer IGBC meetings.

Monitoring of grizzly bears in the Cabinet-Yaak and Selkirk ecosystems

We continue to actively monitor vital rates (survival, cub production), population trend, and distribution of the small grizzly population in the Cabinet-Yaak and Selkirk ecosystems using radio collars, hair snaring, and rub trees. We captured and radio-collared four grizzly bears in the Selkirks and seven grizzly bears in the Cabinet-Yaak during the 2021 field season. We monitored 11 grizzly bears with radio collars on both sides of the US/Canada border in the Cabinet-Yaak area and 8 grizzly bears on both sides of the US/Canada border in the Selkirk Mountains area. This included an augmentation bears released in 2019 in the Cabinet Mountains and three management bear captures during 2021. During 2021, we placed 133 hair snare corral/camera sites and collected hair at 453 rub tree sites in the Selkirk Mountains. Trail cameras produced grizzly bear photographs at 38 sites, identifying one female with cubs. In the Cabinet-Yaak, we placed 33 corral/camera sites and collected hair at 770 rub trees. Camera photographs identified grizzly bears at 12 sites including one female with yearlings. We have been monitoring huckleberry production for more than 30 years in the Cabinet-Yaak ecosystem and expanded the effort to the Selkirk Mountains during 2014. We sampled 5 sites in the Selkirks and 15 sites in the Cabinet-Yaak and found huckleberry production during 2021 to be similar to the long term average (1989-2020). *2020 annual reports can be found at the following links:*

- https://www.fws.gov/mountain-prairie/es/species/mammals/grizzly/CabYaak_Annual_Report_2020_corrected_final_1206521.pdf
- https://www.fws.gov/mountain-prairie/es/species/mammals/grizzly/Selkirk_Grizzly_Bear_Annual_Report_2020.pdf

Evaluation of the use of DNA collected at bear rub trees and corrals to estimate the CYE and SE grizzly populations

Genetic sample results from the laboratory are not complete until the summer after collection and therefore our results here reflect samples collected in 2020. We sampled 442 rub trees and 93 corrals in the Selkirk Mountains during 2020. Genetic analysis indicated that rub trees produced grizzly bear hair from 24 individuals and corrals produced hair from 17 individuals. Some individuals were identified at both rubs and corrals. Using all data from rubs, corrals, captures, and photographs we identified 36 different individuals in the Selkirks (15 Females : 21 Males). We sampled 346 rub trees and 24 corrals in the Cabinet-Yaak during 2020. Genetic analysis resulted in the identification of 23 individuals at rubs and 10 individuals at corrals. Some individuals were identified at both rubs and corrals. Using all data from rubs, corrals, captures, and photographs we identified 41 different bears in the Cabinet-Yaak (14 Females : 27 males).

NCDE Trend Monitoring Project

We supported the Northern Continental Divide Ecosystem (NCDE) grizzly bear trend monitoring project by providing funding for one full time employee's salary and benefits. Lori Roberts is a research assistant working with Montana Fish, Wildlife & Parks doing database management and leading a trap team during the summer months. In 2021, we purchased two iridium grizzly bear radio collars and release mechanisms for use in the NCDE by Montana Fish, Wildlife & Parks. *Click here for the latest NCDE Grizzly Bear Population Monitoring Team Report.*

Conflict Prevention

In 2021, we supported numerous preventative projects throughout Montana. Preventive projects included electric fencing supplies, bear spray distribution, critter gitter devices, and bear-resistant garbage containers.

Defenders of Wildlife's 2021 Electric Fencing Incentive Program worked directly with individuals and communities, non-profit organizations, small businesses, and state, federal and tribal agencies to complete a wide variety of electric fence projects, primarily on private lands. We see tremendous conservation value in providing the financial support and technical expertise to build electric fence systems that effectively deter grizzly bears and other carnivores from accessing anthropogenic attractants. This program is designed to be proactive in preventing conflicts, though they give priority to those with previous or existing bear conflicts. Defenders saw a direct reduction in human-bear conflicts and other wildlife conflicts at these sites where fences are completed and maintained.

Since Defenders of Wildlife's fencing program began in 2010, they have completed 466 electric fences and provided over $149,000 in reimbursements and financial support to participants. In 2020, despite fieldwork limitations surrounding the Covid-19 pandemic, Defenders' 2020 fencing program assisted 54 landowners with technical assistance and reimbursements. *See attached report from 2021.*

Prevention Cost Share Projects with the Blackfoot Challenge

In 2021, the Blackfoot Challenge continued to build electric fences to reduce grizzly bear conflicts in the Blackfoot watershed. We supported multiple high priority electric fence projects. In addition to electric fence projects, we purchased 65 canisters of bear spray for the Blackfoot Challenge to distribute to local residents. The program has been very successful at reducing and preventing conflicts throughout the Blackfoot corridor. Cost share on these projects was made possible by landowner contributions, the Blackfoot Challenge, USFWS Partners Program, Vital Ground, Defenders of Wildlife, Western Bear Foundation and Montana Fish, Wildlife and Parks. *Visit the Blackfoot Challenge's website for all wildlife reports.*

People & Carnivores Electric Fencing Projects

Hilary add support details for Glen and Wise River Refuse Site

Grizzly Bear Use of Huckleberries

This project seeks to identify productive huckleberry shrubfields in the Cabinet-Yaak and Selkirk grizzly bear recovery areas via on-the-ground investigating of grizzly bear radio location data. Field staff conducted field sampling during 2018–2020. During 2021, program staff analyzed field-truthed data with resource selection function (RSF) methodology (logistic regression; "use" points versus "available" at 29 environmental and climatic variables). We have successfully developed a predictive model (AUC = 0.864; 0.7–0.9 indicates a good predictive model, > 0.9 is excellent) that combines 12 significant ($P < 0.05$) predictor variables. Currently, staff is 1) improving model fit with updated layers and 2) addressing publication-worthy model validation techniques and 3) incorporating suggestions from colleagues. Next steps include model finalization and extrapolation to sampled regions of the Cabinet-Yaak and Selkirk ecosystems, to identify important huckleberry habitat not visited by radio-collared bears. Management actions that produce or maintain predicted habitat (timber harvest, prescribed fire, etc.) may be identified for future management. We also plan to use our predictive model to address whether huckleberry habitat influences population productivity, space use, caloric capacity relative to recovery population targets, source/sink dynamics, dispersal, and habitat linkage. This project will be completed with existing staff, expectation of a publication-quality manuscript in late 2022.

Army Cutworm Moth Use by Grizzly Bears in the Greater Yellowstone Ecosystem

In cooperation with the Shoshone National Forest, this project is investigating the use of stable isotope analysis to assess the dietary importance of army cutworm moths to grizzly bears in the Greater Yellowstone Ecosystem. Since the late 1990s, use of army cutworm moths have been monitored via aerial observations of grizzly bears at confirmed moth sites to measure trends in grizzly bear presence at moth sites. Stable isotope analysis will allow us to estimate the proportion of the assimilated diet that is composed of moths compared to other meat (e.g., other insects and ungulates) and plant matter. Food items and grizzly bear hair were collected in 2020 and analyzed in 2021. Moths were collected from more peaks during 2020 and 2021 for expanded analysis. In addition, grizzly bear hair collected in 2021 is being analyzed over winter for DNA analysis and then will be sent for stable isotope analysis in 2022.

Teton County, WY conflict managment

Outreach & Education

The mission of **Swan Valley Bear Resources** (SVBR) is to provide community resources to promote coexistence between people and bears. SVBR is a collaborative working group including local non-profit conservation/education organization Swan Valley Connections (SVC) and community members working in partnership with the U.S. Forest Service, Montana Fish, Wildlife & Parks, the U.S. Fish & Wildlife Service and other natural resource entities. By pooling resources, experience, and expertise SVBR provides place-based solutions for minimizing bear conflicts on private and public property in the Swan Valley. To learn more about SVBR's 2020 bear-resistant garbage container loaner, electric fencing program, and outreach and education efforts *see attached report.*

UM Graduate Committees and Lectures

Jennifer Fortin-Noreus and Hilary Cooley are both affiliate faculty at UM and serve on graduate committees and give guest lectures and seminars on campus. During this reporting period, Jennifer served on one graduate committee and Jennifer gave a lecture in a Careers class.

FY21 expenses for year 1 narrative report: M62067

2021 field season - Travel, salary		
Kate Smith salary		
Lori Roberts salary		
Mark Drew, bear handlers meeting	$ 1,500	
WSU Pullman	$ 589	
Beaverhead County	$ 4,500	Wise River Refuse Site via Kim Johnston, People & Carnivores (another $1500 paid through FWS)
Telonics - March 2021	$ 4,816	2 collars and release mechanisms for L Roberts, FWP
Anderson Fencing	$ 3,312	Electric fencing project in Glen via Kim Johnston, P&C
Murdochs - Manley	$ 1,600	Energizers for FWP - 10 total
Murdochs - People & Carnivores (P&C)	$ 1,728	Fencing supplies for P&C - project in the Pistol Creek Hills near Arlee
American Grazinglands - P&C	$ 1,588	Fencing supplies for P&C - project in the Pistol Creek Hills near Arlee
Blackfoot Challenge	$ 500	Shipping container for Heart bar heart - BC
Dell computer - field tech Libby, MT	$ 1,206	
Supplies	$ 106	
Bear spray for Blackfoot Challenge	$ 1,374	25 via REI and an additional 40 through Counter Assault below = 65 total
Mountain West Coop 7/23	$ 2,000	Helmville ranch fencing after GB depredation
Murdochs 7/23	$ 123	
Pfendler Post - Meilar fence/Blackfoot Challenge	$ 1,500	Meilar fence project in Ovando
Advanced Products (counter assault)	$ 1,693	Bear spray for BC and program
Margo Supplies	$ 157	Togwotee Pass
Integrity Balistics	$ 181	Togwotee Pass
CHS Mountain West Coop 9/27 - Meilar Fence/Blackfoot Challenge	$ 3,494	Meilar fence project in Ovando
Microdaq	$ 213	
Togwottee Pass - Travel, salary		
IBA Conference - planning committee		

From: Frey, Kevin
To: Cooley, Hilary
Subject: [EXTERNAL] Final BOR 4-15-21
Date: Wednesday, August 4, 2021 5:03:09 PM
Attachments: Baker"s Hole Fatality - final.pdf

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Yee-haw…..we are done other than you/Jen posting it.
Thanks HC!

Let me know if this does not come thru clear enough or diff to post…..I had to save as a pdf…….word doc got too big….14.4MB and system will not send it today.

From: Cooley, Hilary <hilary_cooley@fws.gov>
Sent: Wednesday, August 4, 2021 2:50 PM
To: Frey, Kevin <KFrey@mt.gov>
Subject: Re: [EXTERNAL] BOR recommendations……

INVESTIGATION REPORT

The subsequent fatality of Mr. Charles (Carl) Wesley Mock from a grizzly bear attack on 15 April 2021 near Baker's Hole Campground on the Custer Gallatin National Forest

Hilary Cooley – *Grizzly Bear Recovery Coordinator, United States Fish Wildlife Service, Missoula. Montana*
Brian Debolt - *Large Carnivore Section Conflict Coordinator, Wyoming Game & Fish, Lander, Wyoming*
Kevin Frey – *Grizzly Bear Management Specialist, Montana Fish Wildlife & Parks, Bozeman, Montana*
Kerry Gunther - *Bear Management Biologist, Yellowstone National Park, Mammoth, Wyoming*
Mark Haroldson - *Supervisory Wildlife Biologist, U.S. Geological Survey, Interagency Grizzly Bear Study Team, Bozeman, Montana*
Jeremy Nicholson - *Wildlife Biologist, Idaho Fish and Game, Island Park, Idaho*
Dan Thompson - *Large Carnivore Section Supervisor, Wyoming Game & Fish, Lander, Wyoming*
Dan Tyers - *GYE Grizzly Bear Habitat Coordinator, United States Forest Service, Bozeman, Montana*

SUMMARY:

On the afternoon of 15 April 2021, a lone 40-year-old male resident of West Yellowstone, Montana had gone hiking at nearby Baker's Hole Campground on the Custer Gallatin National Forest (CGNF) to either fish, take photographs or both. At approximately 3:45 pm, the man called 911, connecting to the West Yellowstone Police Department Dispatch reporting he had been mauled by a grizzly bear. Search and rescue were immediately implemented. The victim, Mr. Charles (Carl) Wesley Mock was found severely injured by search and rescue personnel. Mr. Mock was given medical attention in the field, taken to an ambulance, and transported to Idaho Falls, Idaho Regional Medical Center. The following day, 16 April investigation team members were charged by a bear near the site where Mr. Mock had been mauled. Investigators killed the bear during the encounter. Unfortunately on Saturday, 17 April 2021, Mr. Mock died from complications from the severe wounds to his head and neck caused by a grizzly bear attack. Mr. Mock was a West Yellowstone resident and guide for Back Country Adventures.

Format of report:

A board of review (BOR) is required after any human fatality caused by a grizzly bear as per the Interagency Grizzly Bear Guidelines (p 59). This report is based on the investigations, personal statements, and documentations of personnel with the Gallatin County Sheriff's Office, West Yellowstone Police

Department, United States Forest Service, Gallatin County Search and Rescue, Hebgen Basin Fire and Montana Fish Wildlife & Parks. Gallatin County Sheriff's Office (Deputy Mike Gavagan) report of Mr. Mock's rescue and Montana Fish Wildlife & Parks enforcement division (Warden Robert Pohle) overall reports are attached in Appendix A. This report is written in sections of occurrence and with an investigative conclusion at the end of the report. To avoid

unwarranted speculation as to how this attack and resulting fatality occurred, only information gathered and documented during the investigations is contained in this report.

Note: There are several minor discrepancies between this investigation report and officers Gavagan's and Pohle's reports. Those minor discrepancies are footnoted below their reports. The information in this investigation report is correct.

Baker's Hole Campground:

Baker's Hole Campground is located on the Hebgen Ranger District, Custer Gallatin National Forest. The campground is located within a lodgepole pine (LPP) forest with willows along the southeast side. The campground is east of U.S. highway 191, west of the Madison River, approximately 2.5 miles north of West Yellowstone, Montana and approximately 200 yards west of the Yellowstone National Park boundary.
The campground has 73 campsites within the 3 campsite loops. The campground is annually closed to camping from October 1 to May 1 but the area is open to recreationists year-round. People also use the campground to access the Madison River for fishing and wildlife viewing as the area is known for its use by bears, moose, elk, ospreys, eagles, waterfowl, and bison. Baker's Hole Campground is very well posted with permanent wooden or metal signs at the entrance and on kiosks among the campsite loops informing the public of grizzly bear presence in the area and of food storage order requirements (Photos 1 & 2). An image of the attack site in relation to Baker's Hole Campground, West Yellowstone and Yellowstone National Park is shown in Figure 1.



Photo 1. Grizzly Bear awareness signs at Baker's Hole Campground



Photo 2. Grizzly Bear awareness and food storage sign at Baker's Hole Campground



Figure 1. Baker's Hole Campground in relation to West Yellowstone and Yellowstone National Park

04-15-2021

SEARCH and RESCUE:

15:42 hours - West Yellowstone Police Department (WYPD) Dispatch received a call from a 40-year-old male reporting he has been mauled by a grizzly bear approximately 200 yards from CGNF Baker's Hole Campground.
West Yellowstone PD, Gallatin County Sheriff's Deputy (GCSO), US Forest Service law enforcement (USFS LEO), Gallatin County SAR (GC SAR) and Hebgen Basin Fire are immediately dispatched to respond. Hebgen Basin EMS was then dispatched to Baker's Hole Campground to wait for rescue of the victim.
Secondary information from WYPD Dispatch was issued to Search and Rescue (SAR) that the victim reported he had facial injuries, was laying on the ground, there was one bear and to go to the closed campground main entrance.

15:52 hours -approximately
*GCSO, USFS LEO, WYPD, Hebgen Basin Fire and GC SAR arrive at Baker's Hole Campground to begin the search. Initially human footprints were searched for in the snow near hiking trails towards the Madison River.

*Hebgen Basin Fire was instructed by GCSO to assume incident command.

*Dispatch was unable to triangulate or ping a location of the victim's cell phone. His phone was not active, 911emergency call capacity only. Though found by SAR relatively quickly the phone's status had delayed SAR from finding the victim sooner.

*Although seriously injured, the victim was able to communicate with WYPD dispatch before he was found by SAR.

*Hebgen Basin Fire activated sirens, which victim told dispatch he could hear the sirens. He then told dispatch he was about ¼ mile from campers (camp host) in campground, towards town (south of main entrance).

*The victim then relayed he was off the blue diamond ski trail.

*With this information SAR was then able to focus on an area.

*Incident command requested West Yellowstone based Air Idaho (helicopter) to aid in support and search. Also a SAR page was sent out for a backcountry rescue.

*GC SAR and USFS LEO proceeded on the ski trail out of campground, followed within minutes by 2 officers with GCSO and WYPD.

*These 2 officers were joined by another WYPD officer after they stopped hiking due to sighting a grizzly bear approximately 80 yards east of the ski trail. The bear was standing on hind legs and making huffing sounds. The bear dropped to all 4 feet and charged towards the officers, breaking of the charge after 30 yards.
Dispatch relayed that the victim could hear the officers yelling and that the bear was very close to him.

*The search party then turned east off the ski trail, down an old logging spur in the direction of the bear.

*Approximately 70 yards down the old logging spur the victim was found lying on the ground.

*The bear continued to aggressively move around the rescue party in a half circle, at a distance varying 20 to 70 yards.

*The bear continued to stalk the rescuers and victim, making another bluff charge while initial medical attention was being given to the victim.

*Emergency medical (EMS) and Air Idaho personnel hiked into the site of the injured man.

*Two GC SAR members arrived with snowmobiles and a rescue toboggan.

*EMS was able to bandage the victim and carry him up to the ski trail to the SAR rescue toboggan. The victim was transported to the EMS ambulance in the campground and was then transported to the Regional Medical Center in Idaho Falls, Idaho. *Poor weather conditions prohibited victim transport via helicopter.*

16:54 hours – Montana Fish Wildlife & Parks (MTFWP) Warden arrived at campground.
*Two WYPD officers, 1 GCSO deputy, 1 USFS LEO and the MTFWP warden went back to the site to get coordinates and take initial pictures of the incident scene. The victim's personal items including an empty can of bear spray were noted and photographed. The initial investigation group then left the scene. The bear was not encountered during this brief investigation.

**A digital camera with a telephoto lens was found within 4 feet of where the victim had been laying when found by rescuers. The camera was secured in the victim's vehicle at the entrance gate to the Baker's Hole Campground when the victim was transferred to the ambulance. A friend of the victim took possession of the vehicle and investigators did not have opportunity to examine the camera.*

The moose carcass **was not noticed by SAR or by the helicopter during the rescue recovery of the victim.*

1830 hours – USFS HEBGEN RANGER DISTRICT posts closure signs of area.

04-16-2021

1000 hours - Official order from the Custer Gallatin Forest Supervisor was signed and posted.

SITE INVESTIGATION and BEAR MORTALITY:

1400 hours –

***** An investigation team consisting of two USFS LEOs, three MTFWP Wardens and two MTFWP Bear Specialists with one dog meet at USFS/MTFWP residential site north of Baker's Hole. It was required and imperative to investigate the attack site due to its proximity to a public campground, cabin area and well used hiking trails.

The overall investigation, methodology of approach/hike, individual duties at the site and considering the bear's aggressive behavior during the victim's rescue, the bear may still be present and potentially charge were all discussed. Additionally, if the bear was present and would not "bump off" and did charge, it would have to be killed.

The investigation party then drove to Baker's Hole Campground proceeding to the south end of the south campground loop and ski trail.

*The investigation team began hiking south along the ski trail towards the mauling site. After approximately 45 yards of hiking, the team stopped, firing 2 cracker rounds and hollered. The dog began barking and alerted that it could smell a bear. One of the team members said he had seen something moving approximately 50 yards away in the trees east of the team and ski trail and stated it could be a bear. The dog was now growling and barking indicating a bear was close. The bear was travelling in a parallel direction to the team as they hiked south.

*The team waited a few minutes, then a proceeded another 80 yards, stopping to fire 3 additional cracker rounds. Members of the team alternated yelling during the entire hike to the site. The team again waited a few minutes and there were no other sightings or indications the bear was near or approaching. Though the dog was barking, the investigation team did not know if the bear had possibly moved out of the area or if it was still nearby.

*The team then hiked to where the old spur logging trail forked off the ski trail, downhill in a southeasterly direction. This junction is approximately 200 yards along the ski trail south of the campground loop. Upon stopping, 2 more cracker rounds were fired. Again, there was no indication the bear was nearby. Team members yelled as the dog continued to bark while they slowly walked down the spur trail towards the attack site. The trail had intermittent deadfall trees across it.

*Approximately 50 yards down the spur trail, several team members said they could see some brush and a small conifer move, indicating towards the northeast across an open boggy wet area.
All members stopped and readied in case it was the bear and it charged. Within seconds the bear silently charged out of the brush, head down, ears back and running full out. The bear crossed the open wet area and continued charging towards the team members, running into a patch of deep rotten snow in the willows. The bear floundered in the deep snow, dug its way clear and begin to charge again. At this point the decision was made to shoot the bear.

1435 hours - Multiple members shot at once killing the bear instantly.

*The bear was checked to confirm it was dead and to see if it had been previously captured or marked.

*A submerged, cached/buried moose carcass was found nearby.

*All scenes associated with the incidences were photographed.
*Distances between key locations were measured.
*Mr. Mock's personal items were collected as were items left by first responder medical staff.
*GC SAR was contacted, bringing a tracked ATV to move the bear carcass to vehicles in the campground.

1630 hours - All personnel and the bear carcass at vehicles in the campground.

INVESTIGATION FINDINGS:

The site of where the grizzly bear attacked Mr. Mock was investigated 3 times, on 15 April during an initial investigative overview after Mr. Mock had been recovered by SAR, on 16 April during the actual site investigation and on 21 April during the removal of the moose carcass.

Following the ski trail from the south end loop of Baker's Hole Campground and then the old logging spur trail, it is approximately 270 yards to the attack site.

The attack site was approximately 70 yards down an old logging spur trail running southeasterly from the ski trail. The site is at the end of the old logging spur located in mature LPP timber and at the edge of a boggy wet area.

Personal items found at the attack site area belonging to Mr. Mock included one muck-type boot, sunglasses, small plastic fishing tackle box, a winter cap, an empty can of bear spray* & holster, safety lock from bear-spray cannister, fishing pole and a half-empty juice container.
*The can of bear spray was the UDAP brand, 7.9ounce, Expiration 12/2023 S/N P1711-071135).

It was later discovered that a digital camera was found near Mr. Mock during the rescue but the camera was taken into the possession of Mr. Mock's friends. On 17 April, a MTFWP warden was able to view the memory card from the camera and did not find any pictures from the Baker's Hole area or from the day of the attack.

After the investigation team had to kill the bear on 16 April, a moose carcass was discovered cached in the water (Photo 3) near the site where Mr. Mock had been attacked. It was 47 yards from the cached moose carcass to the attack site. Searching the area around the moose carcass it was evident that a bear had been feeding on the moose for numerous days due to multiple and drying bear scats. It could not be determined what caused the death of the moose. Common causes of moose deaths are predation, ticks, winterkill (poor nutrition), meningeal artery worms and vehicle strikes. There were no broken long bones observed on the moose that are normally associated with a vehicle strike from nearby US Highway 191.



Photo 3. Moose carcass cached in water near the attack site.

The bear-spray safety lock, fishing pole and a half empty juice contains were discovered where it was determined Mr. Mock had been and first reacted defensively due to the bear. The bear-spray safety lock and juice container were 1 to 2 feet E x NE of the fishing pole. The fishing pole was approximately 6 feet away (NE) from where Mr. Mock had obviously been mauled. At the mauling site Mr. Mock's boot, tackle box, sunglasses, knit cap and empty bear-spay were found scattered in the snow. A diagram of Mr. Mock's personal items at the attack site can be viewed in Figure 2. The bear-spray can was empty and investigators assumed Mr. Mock had likely sprayed the entire can of bear-spray.

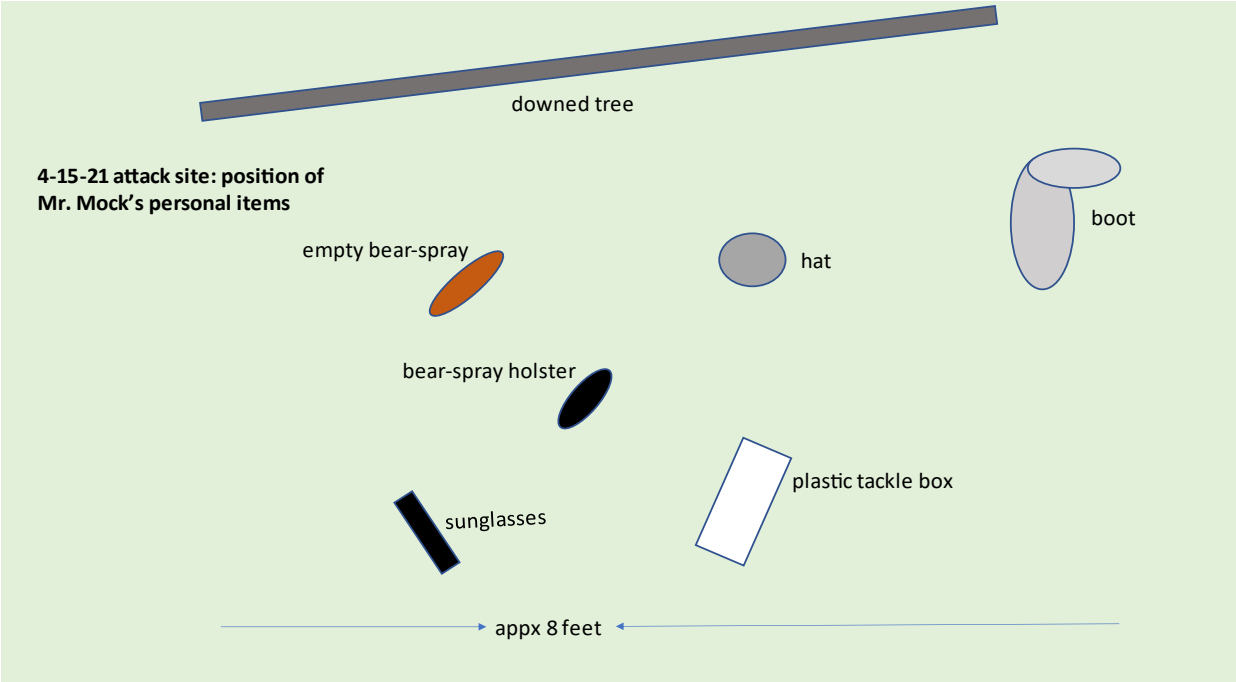


Figure 2. Position of personal items belonging to Mr. Mock found at the attack site.

Search and Rescue had found Mr. Mock 12 feet up the logging spur trail from where he had been attacked.

A diagram of the distances and location of moose carcass, attack site, bear and investigative team are shown in Figure 3. A satellite image of the locations and relationship of attack site to campground (south loop visible in upper left) and US Highway 191 are shown in Figure 4 and a closer view of the attack area is shown in Figure 5.

Anecdotal information from a friend in West Yellowstone of Mr. Mock's stated that he had talked with Carl Mock in the early afternoon (1342 hours) of 15 April. Mr. Mock said he was going home to get lunch and go back out that afternoon. This information indicates Mr. Mock had only been in the Baker's Hole area for a relatively short time before the bear attack occurred.

Mr. Mock's 911 call to WYPD was recorded. The 911 call lasted for 49 minutes and 47 seconds, 27 minutes into the call at 1609 hours, the dispatcher asked him (Mr. Mock) if he was out fishing. He responded "No, I was taking pictures (with moaning in that statement)" She asked him, "You were out taking pictures?" He then moans with an unintelligible response.

BEAR FINDINGS:

The bear was 20 yards northeast of the unknown moose carcass when it charged the investigation team, who were 57 yards from the bear across the boggy wet area.

The bear was killed 24 yards from the investigative team who were approximately 37 yards from the unknown cached moose carcass.

FIELD:
Examination of the bear revealed tattoos were visible in both upper inside lips.
No ear tags were present.
Overall body condition was a 4 on a scale of 1 to 5.
No visible recent wounds or injuries.
Teeth were worn with lower canine teeth broken and worn. Incisor teeth were worn smooth with some missing as is normal with aged bears. Field estimate of age was around 20 years old.
Tattoos were noted in both inside upper lips.
When the bear was loaded into a vehicle at the campground, it was evident the bear had been bear-sprayed by Mr. Mock during the attack as personnel began coughing from the bear-spray residue becoming airborne from handling the bear.

LABORATORY:
During the examination of the bear at MTFWP Region 3 Headquarters in Bozeman the bear-spray residue again physically affected investigators.

The bear weighed 411 pounds.

The tattoo was read as 504 in both upper inside lips. Tattoo 504 identified the bear as bear number 449 in the Inter-agency Grizzly Bear Study Team (IGBST) database for the Yellowstone Ecosystem.
Bear 449 was 6 years old when captured on 9/21/2003 at Cascade Creek, YNP by the IGBST during research capture efforts. Bear 449 had been lip tattooed in both upper lips with green ink, number 504 inside both upper lips (Photo 4.), ear tagged, fitted with a GPS/VHF radio-collared and implanted with a micro-chip at that time. Last known location of bear 449 was on 2/22/2004 at his den site near Nymph Lake, YNP. It was deemed a collar failure as the signal had been intermittent since the bear had been captured, collared, and released on site.



Photo 4. Tattoo number 504 in upper lip of bear 449.

Overtime, male bears are prone to losing ear tags and radio-collars when fighting with other male bears, plus radio-collars are designed to drop off bears.
No functioning micro-chip could be located on bear 449 during laboratory examination, which was not surprising after nearly 18 years since the chip was implanted.

Bear 449 had no previous conflict management captures or history.

A gastro-intestinal examination of bear 449 was conducted revealing moose hair, trachea cartilage, and muscle tissue along with grass/dirt debris. A piece of tissue that was suspected as skin and cartilage that was not identifiable or consistent with other tissues in the stomach was collected and submitted to the Wyoming Game and Fish Forensics Laboratory in Laramie, Wyoming for identification as to origin of tissue. Results were received 14 June 2021. The tissue was identified as originating from a grizzly bear (Ursus arctos). See Appendix B.

*The unknown grizzly bear tissue and its location in the lower stomach portion of bear 449 indicates 449 had possibly been in a very recent fight with another grizzly bear defending the moose carcass or fought taking the moose carcass from another grizzly bear. If this were the case, those interactions could have contributed to bear 449's overall aggressive defense of the moose carcass towards Mr. Mock, initial SAR and the Investigation Team.

Muscle (meat) tissue can persist for 14+ hours in the digestive tract of fully active and feeding brown (Ursus arctos) bears (Elfstro"m et al. 2013). Skin and cartilage tissue can persist longer due to slower gastro-intestinal digestion of the tissue and tissues could also persist longer if a bear was not actively consuming amounts of foods to move previously ingested food through the digestive tract. Skin and cartilage could persist in the digestive tract at an outside time of 2 to 3 days (pers. comm. Charlie Robbins Ph.D. -Washington State University, Pullman, WA.)

The skull/brain of bear 449 was submitted for rabies testing to the Montana Department of Livestock, Montana Veterinary Diagnostic Laboratory in Bozeman, Montana. The results were negative for rabies. See Appendix C.

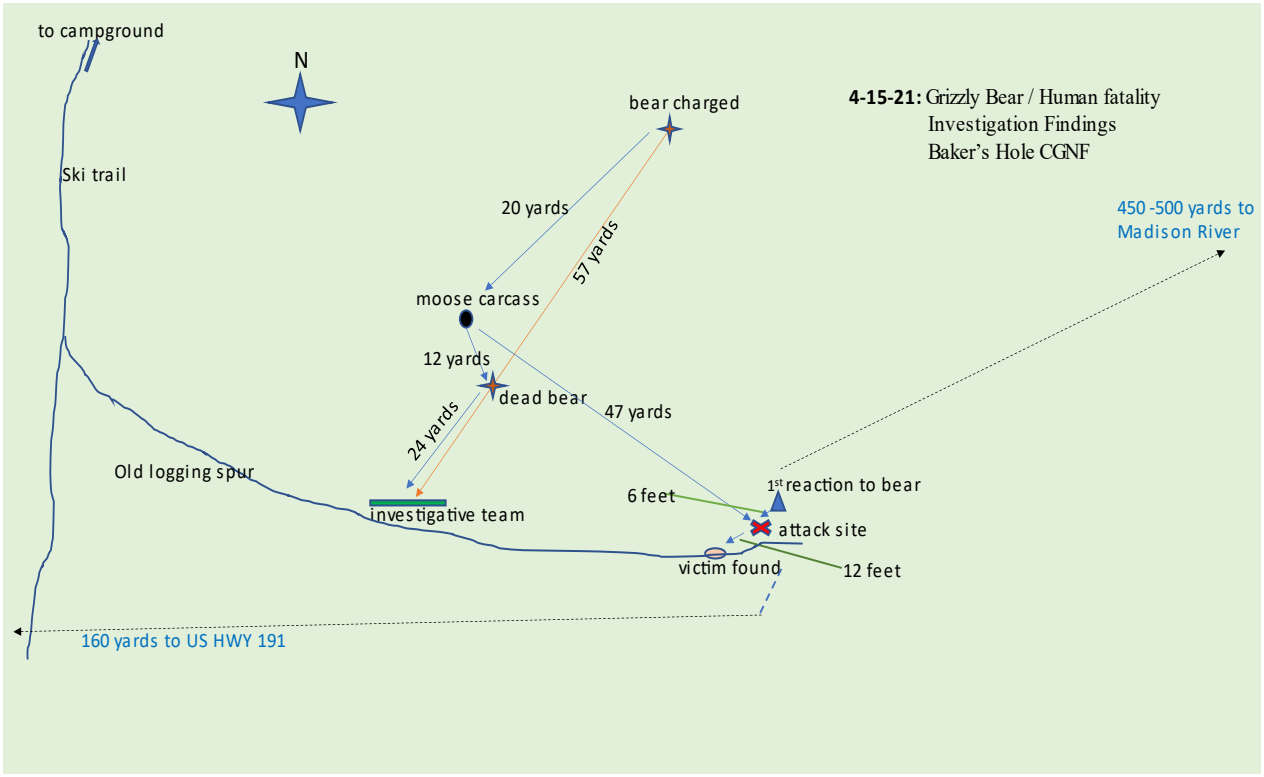


Figure 3. Distances and location of moose carcass, attack site, bear and investigative team near Baker's Hole Campground.



Figure 4. View of the relationship between the attack area, south end loop of Baker's Hole Campground and US Highway 191.

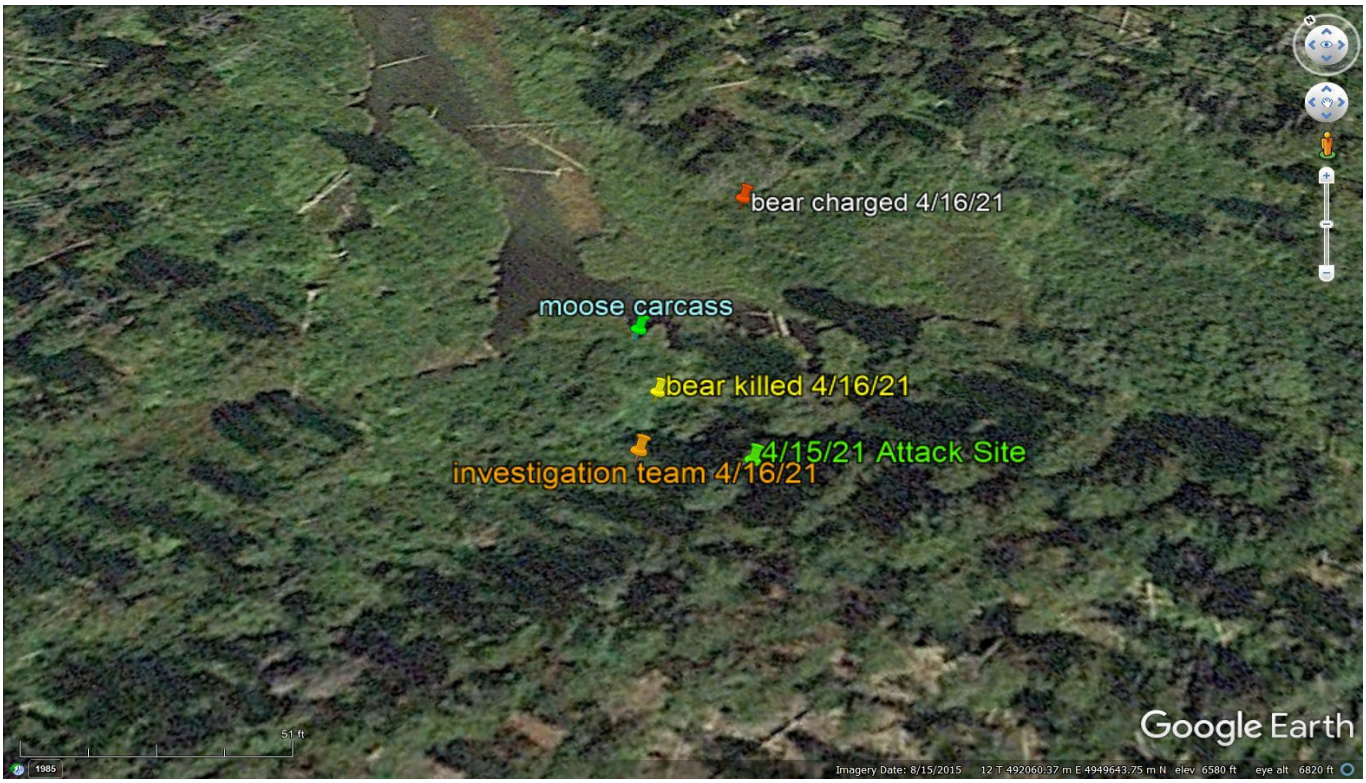


Figure 5. Closer view of the attack area and locations of significant points.

04-19-2021

CGNF Hebgen Basin District and MTFWP Bear Management discuss the known moose carcass, its potential to attract other bears, proximity to campground, hiking trails and the options for its removal. Dragging the moose carcass out of area would create a scent trail for other bears to follow to the campground and feasibility of doing so did not exist due to boggy wet area. Hebgen Basin District decided to use explosives for removal and would handle all logistics in the removal of the moose carcass.

04-21-21

REMOVAL (explosives) OF MOOSE CARCASS:

Personnel from the Hebgen Basin District CGNF, Bozeman District CGNF, Cody, Wyoming Bureau Land Management (BLM), MTFWP, GCSO and WYPD were all involved in the removal of the carcass.
The BLM flew a drone over the area for possible detection of another bear on or near the moose carcass. No bears were observed and the carcass did not appear to have been recently fed on. A USFS LEO and two MTFWP personnel provided security. CGNF field staff and certified explosive blasters were responsible for actual moose carcass positioning and blasting.

The moose carcass was successfully exploded into obscurity. The area remained closed to the public to allow for scavengers to utilize any small pieces of the moose and for the scent to dissipate.

04-30-2021 Custer Gallatin National Forest lifts closure and re-opens the area to public use.

CONCLUSION:

On 15 April 2021 prior to 1542 hours Mr. Charles (Carl) Wesley Mock was attacked by a grizzly bear near Baker's Hole Campground on the CGNF. When rescued Mr. Mock was found severely injured 12 feet west of the mauling site. Mr. Mock did not give statements or communicate with SAR as to the grizzly bear attack. Once in medical care Mr. Mock did not speak or was in condition to talk about the attack. Unfortunately, Mr. Mock died from the complications of his sustained severe head and neck injuries on 17 April 2021.

Alone, Mr. Mock had parked his vehicle at the entrance of CGNF Baker's Hole Campground to begin his hike and activities. The campground and entry are well posted with grizzly bear information.

It cannot be determined if Mr. Mock purposely or randomly went to the site of the attack. Mr. Mock was in possession of fishing gear and a telephoto lens camera. The closest point to the Madison River is approximately 400 yards northeast of the attack site.
From information provided by Mr. Mock's friend it is estimated Mr. Mock was in the Baker's Hole area for less than 1.5 hours. However, it cannot be determined exactly how much time Mr. Mock had been at the site area prior to being attacked.

Considering field investigation findings of the locations of the attack site, the cached moose carcass and the old logging spur trail, it seems apparent that Mr. Mock had walked along the ice packed ski trail and then down the logging spur trail, passing within 37 yards of the moose carcass to the location of the bear attack site. Either he had done so without being noticed by the bear or the bear came to the moose carcass after Mr. Mock had reached the area of the attack site, which was 47 yards from the moose carcass. The old logging spur/trail basically ends at the attack site.

Though Mr. Mock had told 911 dispatch that he was taking pictures, it cannot be confirmed what Mr. Mock was doing prior to the bear detecting and then attacking him, but the half empty juice container suggests Mr. Mock had likely stopped at the location before the bear detected him.

Field investigation and examination of Mr. Mock's fishing gear did not indicate he was or had been actively fishing when the attack occurred. Mr. Mock was in possession of a valid Montana fishing license, purchased March 10, 2021. Mr. Mock had not purchased a YNP fishing license on-line and vendors in West Yellowstone were not yet in possession of 2021 fishing licenses to sell. Fishing in YNP opened May 29th.

Due to the empty cannister of bear-spray and the bear-spray residue on the bear carcass (hair), Mr. Mock had obviously been aware of possible grizzly bear encounters in the area and had deployed his bear-spray at the bear. It is not known if he bear-sprayed towards the bear prior to the bear contacting him or at what points during the attack he used the spray. During field and lab investigations, it was confirmed that the bear had substantial bear-spray residue on its hair. Additionally, the overall effects of the bear-spray to the bear are not known but the bear had quit attacking Mr. Mock, indicating the bear was affected by the bear-spray. After the bear stopped attacking, Mr. Mock was able to move a short distance and call 911 emergency. However, the bear remained agitated, close to the attack site and near the moose carcass, which was unknown to rescuers during the initial SAR and again the next day (16 April) during the team investigation of the attack site area, when the male bear was killed as it charged the investigation team.

The tragic event of Mr. Mock being attacked by an adult male grizzly bear and subsequently dying from the attack, was the direct result of Mr. Mock's own purposeful or random placed proximity to a moose carcass that an adult male bear had cached and was actively feeding on. A short time before the adult male bear attacked Mr. Mock it may have defended or claimed the moose carcass from another grizzly bear. If so, this would have contributed to the bear's extended aggressive defense of the moose carcass.

BOR Recommendations:

The unfortunate subsequent death of Mr. Charles (Carl) Mock caused by a grizzly bear attack on 15 April 2021, reinforces the inherent possibility of people being involved in a serious grizzly bear encounter and the need for individuals to know and try to follow known safety recommendations.

Due to an increase in human use, bear population numbers and geographic grizzly bear distribution, more people are encountering grizzly bears. These encounters can and have resulted in human injuries or death. Multi-agency bear managers and researchers have conducted a continuous examination of these events. The goal is to provide public information to help reduce dangerous encounters and increase human safety in grizzly bear country.

There are standard grizzly bear safety messages for different public users and private landowners that can help minimize surprise encounters with grizzly bears, thereby reducing human injuries and possible death.

Some of the base safety messages are:

* Be constantly alert

* Hike or hunt with a partner(s)

* Make noise, if possible, to help avoid surprising a bear

* Secure food attractants at camps, homes, and work sites

* Do not run if you encounter a bear

* Avoid animal carcasses -watch for concentrations of scavengers (i.e. ravens)

* Carry and know how to use self-defense….bear-spray and or firearms

It is always recommended to carry bear-spray even if individuals carry firearms.

Kevin Frey – Grizzly Bear Specialist, Montana Fish Wildlife & Parks

References:

Elfstro¨m, M., Støen, O-G., Zedrosser, A., Warrington, I., Swenson, J.E. 2013: Gut retention time in captive brown bears Ursus arctos - Wildlife Biology 19: 317-324

Appendix A:

OFFICE OF THE SHERIFF / CORONER
GALLATIN COUNTY, MONTANA

Dan Springer
Sheriff

Jeremy Kopp
Undersheriff

Randy Jones
Chaplain

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On April 15, 2021 at approximately 1543 hours, I was dispatched by the West Yellowstone Police Department dispatch center to the report of a 40 year old male who reported he had been attacked by a bear. Dispatch reported the male was approximately 200 yards from the front entrance to the Bakers Hole Campground and was off trail. The male was later identified as Charles Wesley Mock of West Yellowstone.

I instructed dispatch to page out Hebgen Basin EMS and have them stage at the front entrance to the campground. An update from dispatch informed responding units that Mock had sustained facial injuries, was laying on the ground, there was only one bear and responders should go right at the main entrance.

I arrived on scene approximately 10 minutes after the initial dispatch. Also arriving on scene were Forest Service LEO Ryan Linhart (FS72), West Yellowstone PD officer Neil Courtis (686), Hebgen Basin Fire Chief Shane Grube (36) and Gallatin County SAR member Travis Mann. We all started a hasty search of the area, looking for foot prints in the snow near popular hiking areas. WYPD officer Leonel Sosa arrived a short time later and joined us in the search.

I assigned Chief Grube to take over Incident Command and help coordinate our search efforts. With a lot of ground to try to cover, more information was requested from dispatch. Unfortunately they were unable to triangulate the 911 call, but were still on the phone with Mock. Mock was able to communicate with dispatch, although garbled and hard to understand. Grube activated his siren in hopes that Mock would be able to hear it and possibly guide us closer. Mock was able to tell dispatch that he could hear the siren and that he was about ¼ away from the campers in the campground, toward town. He then said he was off the blue diamond ski trail.

This information gave us a definitive area to focus the search in. Grube asked Air Idaho in West Yellowstone to add some aerial search support and they launched. He also sent out a Search & Rescue page for a backcountry rescue. Linhart and Mann were closest to the trailhead at the southern part of the campground and immediately headed up the trail. Courtis and I followed behind, roughly three minutes behind them. We were joined by Sosa later, after Courtis and I stopped, having spotted the bear.

Approximately 200 yards south of the campground on the blue diamond trail, I spotted a bear that was about 80 yards east of our location. The bear was standing on its hind legs

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and making huffing noises at us. The bear then dropped to all fours and charged us, breaking off his charge after about 30 yards. We were yelling and hollering at the bear as he charged. Dispatch notified us that Mock could hear us yelling at the bear and he said the bear was very close to him. I notified other search units to respond to our location, knowing we were very close to Mock.

We proceeded south on the trail about another 20 yards until we discovered human footprints in the snow, heading east toward the location of the bear. We started following the footprints east and hollering at the bear who was still aggressively pacing the area and watching us. Approximately 70 yards later, we found Mock laying on the ground. He was seriously injured, having suffered significant head and facial injuries. The bear continued to stalk us, aggressively moving around us in a half circle at a distance of approximately 40 – 70 yards.

Courtis, Sosa and Mann provided scene security for us while Linhart and I provided medical care to Mock. None of the responders on scene had any medical gear with us. Linhart and I determined that we needed to somehow stop the large amount of blood that Mock was losing. Linhart took off his uniform top and removed his t-shirt while I continued to support Mock. Linhart wrapped the t-shirt around Mock's head and applied direct compression. Mock was having difficulty talking and breathing due to the amount of blood in his mouth. We made the decision to move him into the recovery position with Linhart supporting his head & neck and me rolling his body onto his side. This seemed to allow Mock better breathing.

The bear continued to stalk the group and made another false charge. At this point, I turned patient care over to Linhart while grabbing my rifle and providing additional security against the bear. Emergency medical personnel from Hebgen Basin and Air Idaho were able to hike into our location while we provided protection from the bear. Two Gallatin County Sheriff SAR members arrived on scene with two snowmobiles and a rescue toboggan. EMS personnel were able to bandage and wrap Mock's head, they placed him on a backboard and carried him the 70 yards uphill to the SAR rescue personnel and gear.

Mock was then transported to the ambulance at the entrance to the campground. The armed first responders then escorted the EMS crew out of the area and back to the campground. Due to snow and bad weather that had moved in during this incident, Air

OFFICE OF THE SHERIFF / CORONER
GALLATIN COUNTY, MONTANA

Dan Springer
Sheriff

Jeremy Kopp
Undersheriff

Randy Jones
Chaplain

615 South 16th
Bozeman, Montana 59715
(406) 582-2100
FAX (406) 582-2126

Idaho was unable to fly Mock to the hospital, so he was transported to Eastern Idaho Regional Medical Center in Idaho Falls by ambulance.

Fish, Wildlife and Parks LEO Robert Pohle (FG32) arrived. Officers Courtis, Sosa, Linhart and I escorted him back in to the scene of the attack so that he could take some quick pictures and log an accurate GPS location of the attack. The incident happened at 44.70002, -111.10018

Initial investigation at the scene indicated that Mock was likely attacked 15 feet east of the location he was laying at when we found him. It appeared that Mock was able to retrieve his bear spray from its holder and was able to deploy it (can was empty). Additional items on scene were a digital camera with a large telephoto lens, spin fishing rod, small plastic box of lures, and a backpack.

The following day on April 16, personnel from the Forest Service and FWP reentered the location of the bear attack and were charged by a bear. Even with seven people yelling, shooting explosive noise making shotgun rounds, and a dog barking at the bear; the bear continued to charge the group. They were forced to shoot the bear and killed it.

An investigation of the area revealed a large moose which had been buried and cached by the bear. This moose was about 35 – 40 yards away from the location where Mock was attacked. Forest Service requested an agency assist from me, requesting equipment and help removing the bear carcass from the woods. I arrived on scene with a tracked four-wheeler with attached winch. We were able to winch the moose up a short hill and drag it out to the campground across the snow covered trail. The bear was loaded into the back of a truck and taken by FWP for further evaluation and research.

Case closed – Search & Rescue and Agency Assist

Michael P. Gavagan

Deputy Mike Gavagan – Badge #635
Gallatin County Sheriff's Office

Footnote: it was the bear carcass that was winched up a short hill, not the moose carcass.

FWP21CAD001860 Robert Pohle

On April 15, 2021 at approximately 1630 hours, I, Game Warden (GW) Robert Pohle was home off shift when I received a Gallatin County Search and Rescue page on my personal phone requesting help searching for a 40 year old male who had been attacked by a bear. The location of the attack was Bakers Hole. Upon seeing this I called the West Yellowstone Police Department (WYPD) to let them know I was responding, inquiring if the attack occurred inside Yellowstone National Park (YNP) or the county. I was told dispatch was having a difficult time locating the victim, later identified as Charles (Carl) Wesley Mock (DOB 03/24/2981). **Note:** Due to some technical issue, Carl's phone was not providing coordinates to the 911 system allowing for a back trace. After hanging up with WYPD, I called Montana Fish Wildlife & Parks (FWP) Bear Management Specialist (BMS) Kevin Frey, leaving him a voice mail notifying him of the incident. As my Sergeant was away, I called Warden Captain Adam Pankratz leaving him a voice mail as well. My final call was to Sergeant Coy Kline in Butte, Montana, so I was able to directly notify a supervisor of the incident.

After gearing up, I responded, lights and siren to the Bakers Hole area. While en route I called Montana Highway Patrol (MHP) dispatch to have a call for service started. Captain Pankratz returned my call and after relaying the limited information I had, we agreed if I saw a bear in the vicinity of Bakers Hole, it was to be dispatched.

As I arrived to the Bakers Hole area, I radioed Hebgen Basin Fire Chief Shane Grube who was Incident Commander (IC), requesting info on where other responders were. I was instructed to come to the south loop of Bakers Hole United States Forest Service (USFS) campground where IC was staged. Chief Grube let me know Carl had been located and was in the process of being extricated by law enforcement and medical staff.

I met the group of first responders as they were exfiltrating from the attack location with Carl. Carl was heavily bandaged, being towed on a Search and Rescue (SAR) sled behind a snowmobile. Gallatin County Sheriffs Office (GCSO) Deputy Mike Gavagan, WYPD Officers Leonel Sosa and Neil Courtis, and USFS Law Enforcement Officer (LEO) Ryan Linhart gave me a quick brief of the situation. The officers stated they encountered the bear several times during the search for Carl. During the first encounter the bear bluff charged the group of officers several times at approximately 100 yards. During this first encounter, they noticed what appeared to be blood on the head/mouth of the bear. As they continued to search for Carl, they stated the bear hung out in the area refusing to leave, even while medics worked on Carl and the snowmobiles moved in to extract Carl. This information was concerning to me, as with that much human activity, it is not normal behavior for a bear to continue to hang out. **Note:** I learned several days later that while searching for Carl, a SAR helicopter was flying low over the area assisting in the search. Upon hearing the bear was still in the area, I went back to the attack scene with Officers Sosa, Courtis and Deputy Gavagan, with the intent to dispatch the bear.

When we arrived at the attack scene, I observed no indication that a bear was in the immediate area. Not identifying an immediate threat, I took several photos to

document the scene and used my OnX hunt maps to get Global Positioning System (GPS) coordinates of that location. The location of the scene is 44.70002, -111.10018.
The scene consisted of a patch of snow soaked in what appeared to be blood. A rubber boot, fishing tackle box, sun glasses and a blood soaked beanie cap were strewn about the patch of snow. A blood splattered can of bear spray and holster, later determined to be empty, laid on the edge of the snow. The orange safety cap from the bear spray was several feet away in the grass. A fishing pole and juice bottle lay off to the south east. North west of the snow was the area where medical staff performed first aid. There was various medical packaging littering the ground, clothing that had been cut off Carl and used bandages. After quick photographic documentation of the site, all units returned to the IC.
Note: The can of bear spray was the UDAP brand, 7.9ounce, Expiration 12/2023 S/N P1711-071135).
After returning to the IC, I met with USFS District Ranger (DR) Jason Brey, Chief Grube and USFS LEO Linhart to discuss what the preliminary plan was for public safety due to the popularity the location held for recreationists. DR Brey stated the USFS was closing the area and evacuating the few campground hosts who were prepping the facility for opening. Chief Grube informed me that Carl had been transported via ground ambulance to Idaho Falls, due to weather the helicopter was grounded. The helicopters medical crew however was in the ambulance providing patient care to Carl. I cleared the scene while calling in updates to the BMS while the USFS put up barricades and signs stating bear in area and closure information.
Since Carl was going to a hospital in Idaho, I contacted an Idaho Fish and Game (IDFG) Warden requesting assistance. I requested a Warden meet Carl at the hospital to collect clothing and if possible, take photos of the injuries and conduct a quick interview as is standard procedure in a Wildlife Human Attack (WHART) incident. I was later notified by IDFG they had been unable to interview Carl or take photos as he was on a ventilator and rushed straight into the doctors. IDFG were able to collect Carl's pants which medical crews had cut off of him. **Note:** I met IDFG Investigator Lauren Lane on April 17th, 2021 in Ashton ID to collect that item.
With night approaching, I talked with BMS Frey and discussed the next steps for the following morning. As I headed home, I came across a vehicle parked inside the USFS emergency closure. I notified WYPD dispatch I would be out looking for the occupants as we did not know the circumstances behind the bear attack and could not leave them in the area without notification of the incident and closure. After finding the individual had been fishing outside of closure on the Madison River, it was determined his car had been parked there before the closure went into effect. He left the scene without incident. Clearing that contact LEO Linhart and I observed another vehicle attempt to enter the closure by the means of the FWP driveway before backing out heading south on US HWY191 where they turned into the Bakers Hole Campground drive. USFS LEO Linhart and I contacted that individual to advise them of the closure and they commented they had heard of a bear attack and were out looking to take pictures of the bear.

Footnote: A fishing pole and juice bottle lay off to the northwest. West of the snow was the area…..

Note: Between the attack and when investigators returned to the scene the following day, law enforcement made multiple contacts of people trying to access the closure area. A white Ford F150 with ID license plates stopped by my residence before the attack, while I was off shift. The 2 male occupants of that Ford inquired about a sow grizzly and 2 cubs they had heard were active in the Basin which I was unaware of. They were wearing camo clothing and had a camera with large lenses on the center console. This indicated to me they were wildlife photographers looking for bears. I observed that vehicle along US HWY191 when I initially responded to the scene and then again turning into the Bakers Hole Campground drive as units were clearing. When I last saw that vehicle, USFS personnel were talking to the occupants.

The following morning, April 16, 2021, I was contacted by Captain Pankratz. He informed me to hold off going to the Bozeman Regional Office (BRO) as he was headed down to West Yellowstone, that he would contact Bear Management and we would then plan to meet and return to the attack scene. My decision to return to the scene was made due to the following considerations;

- Without being able to interview Carl, it was unknown what precipitated the attack. We did not know if it was a predatory attack, defensive attack or surprise encounter.
- We had no time line of when an interview with Carl may take place.
- No evidence was collected the day of the attack except for photos and the pants which IDFG retrieved from the hospital.
- It was forecast to start snow/rain in a couple days which would diminish any evidence on scene.
- The area the attack took place is a "high use" recreation area. It is common for anglers, hikers, campers and skiers to frequent the Bakers hole area.
- As noted earlier, multiple law enforcement contacts had been made concerning individuals trying to take pictures of bears. News of bear activity was drawing them in.
- This close to a weekend, we could expect a significant number of recreationists wanting to use the area. This would be compounded by the opening of Yellowstone National Park (YNP) for the summer season and news of a bear active in the area.
- It was imperative that we find out what precipitated the attack. While it was likely guarding a carcass, it was equally likely it was a surprise encounter, it was a bear with cubs or it was a predatory attack. Especially given the volume of human activity in the area while rescuing Carl did not scare the animal away.

After careful consideration, it was decided the significant risk to public safety resulting from the unknown causation of the attack outweighed the risk of a potential bear encounter from a re-entry to the scene. Phone calls were made and a team of seven (7) plus one (1) bear dog was assembled. We met at approximately 1400 hours and after a quick briefing on the situation entered Bakers Hole Campground.

Note: The team consisted of Captain Pankratz, GW Daven Thorne, GW Robert Pohle, USFS LEO Noah Pieprzyca, USFS LEO Linhart, BMS Frey (K9 Loki) and BMS

Jeremiah Smith. All team members were armed with lethal firepower and we had bear spray available.
We began our entry to the attack site, following the Boundary Ski trail that exits out of the south loop of Bakers Hole Campground. All members yelled out randomly making noise to alert a bear, humans were present. K9 Loki added to the noise barking loudly. At approximately the same location responders observed the bear the day prior, USFS LEO Pieprzyca alerted the team he saw something brown moving south towards the attack site. The movement came to the east of our location in a marshy area. It was unknown at that point if it was a bear as there were fresh bison tracks in the snow and mud. The team held that position as multiple cracker shells were fired and more yelling was made in attempts to haze the animal away. After several minutes holding that position and not seeing further movement, we continued down the trail. Along the way the team continued yelling and more cracker shells were fired. Specialist Frey alerted the team that the behavior and loud incessant barking from K9 Loki indicated a bear was nearby. **Note:** We were walking into a northerly breeze which would bring any bear scent directly to K9 Loki.
The attack site is approximately 50 yards to the south east of the main Boundary Ski trail down an old, over grown USFS road. That road had multiple downed trees laying across it and others growing through the former road bed. As we turned that way, we got approximately 30 yards from the attack site when BMS Smith alerted us to a bear. The bear was east of our location, at the edge of a small marshy clearing. It was moving south east before it stopped. At that point the bear looked at us for a split second before immediately changing directions and charging directly towards the team. The bear had to clear the marshy area before encountering willows partially buried in snow. As the bear cleared the marshy area, it hit the snow in the willows and was slowed due to the depth and softness. We held fast yelling as the bear kept pushing through the deep snow in a fashion similar to the way a dog runs through deep snow in a field. As the bear continued, it quickly became apparent this was not a bluff charge. The snow while deepest where the bear was currently located, began to thin before disappearing the closer you got towards the team's location. In the event the bear cleared the deep snow and regained traction, there would be no time for the team to react before contact was made with a human, resulting in serious injury or death.
In the split second it took to process what was taking place, I made the decision I was going to engage the bear and shoot it before it was able to gain traction again. I called out loud that I was taking a shot, before firing my shotgun. Afterwards I learned both Specialist Frey and Smith called out to shoot as well. Multiple shots were fired and I could see the impact of several rounds on the bear's body as they hit. The bear slumped down in the snow before moving again. USFS LEO Pieprzyca was armed with an issued 45/70 government rifle and heavy 540 grain bullets designed for penetration. At the instruction of Specialist Frey, USFS LEO Pieprzyca fired a couple rounds into the bear. **Note:** Once shot, it is absolutely imperative to prevent unnecessary pain and suffering of the bear and for public safety, we ensure the bear is deceased. After the bear stopped moving, the other team members covered Specialist Smith and I as we

Footnote: We were walking into a southerly breeze. The bear was northeast of our location…
It was moving southwest before it stopped.

approached the bear to check it's status. As we still did not know the sex of the bear, we approached ready to engage another animal should it have been a female with cubs. Once confirmed dead, I assisted Specialist Smith in rolling the bear over where we discovered it was an adult male. While others maintained a security perimeter and Bear Management began their checks on the bear, I took pictures of the scene, only to discover that during the charge the bear had run over a cached moose carcass, buried in the marshy area. It was difficult to see the moose as it was mostly buried and I could not smell anything that would indicate there was a carcass there.

I used my OnX Hunt maps to get GPS coordinates of the following locations;

- 44.70168, -111.10067 -- Location of the south loop of Bakers Hole Campground.
- 44.69999, -111.10053 -- Location I was standing at when I shot the charging bear.
- 44.70010, -111.10025 -- Location of deceased bear once rolled over.
- 44.70017, -111.10021 -- Location of cached moose carcass.
- 44.70002, -111.10018 -- Location of the attack site from 04/15/2021.

A brief conversation occurred with BMS Frey and it was evident that the primary causation of the bear attack on Carl was the defense of a food source. It is unknown if Carl knew the carcass was there or why he was in that location. The articles of clothing and Carl's possessions left on scene were collected. The only items retained for evidence were the discharged can of bear spray, a bloody beanie soft cap and the pants collected by IDFG. Reports indicated the attack focused on Carl's head, resulting in major head trauma with very little injury to other parts of his body. As such it is unlikely that the bear would have left any saliva or blood on other articles clothing in significant volume to provide any useable evidence to identify an individual animal. The fact the WHART team experienced a strikingly similar encounter less than 24 hours after the initial attack, resulting in a dead male bear leads one to believe the deceased bear was responsible for the attack. It would be unlikely to have multiple dominate male bears so close to such a valuable food source coexisting as the more dominate would chase the lesser male away.

USFS LEO Linhart arranged for Deputy Gavagan to bring a tracked All Terrain Vehicle (ATV) to retrieve the dead bear, as well as USFS Sawyer to clear the path. The ATV's winch was used to retrieve the bear where it was loaded into Captain Pankratz truck and taken to the BRO. While loading the bear, I noticed a burning, tingling sensation in my nose and lungs, coughing several times. That sensation was consistent with past exposure I have had to bear spray, albeit at a much lower dose. Later, while going through Carl's belongings collected from the attack site, I experienced the same sensation of burning and coughing. This indicates bear spray was discharged some time during the attack, consistent with the empty canister of bear spray found. Whether the spray was successfully deployed on the bear, or if the residue on the bear and Carl's belongings was the result of cross contamination, will forever be unknown.

Note: I was notified there had been a digital camera with Carl after the fact. That camera was passed off to his friends before my arrival during the initial rescue. On April 17, 2021, I met Keith Johnson (DOB 06/15/1985) at Back Country Adventures in West Yellowstone and was able to view the pictures on the memory card for the month of April 2021. I did not observe any pictures on that card similar to the attack site. Whether any pictures were removed before my observation is unknown, as control was lost over the camera.

I was notified the morning of April 17, 2021 by Captain Pankratz that Carl had succumbed to his injuries while in the hospital. As a result, investigators will never know for certain the events that led up to this bear attack.

No Further Action Taken. Robert Pohle FG32

Appendix B:

WYOMING GAME AND FISH DEPARTMENT 5400 Bishop Blvd. Cheyenne, WY 82006 Phone: (307) 777-4600 Fax: (307) 777-4699 wgfd.wyo.gov **GOVERNOR** MARK GORDON **DIRECTOR** BRIAN R. NESVIK **COMMISSIONERS** PETER J. DUBE – President GAY LYNN BYRD – Vice President RALPH BROKAW MARK JOLOVICH RICHARD LADWIG ASHLEE LUNDVALL KENNETH D. ROBERTS

Wyoming Game and Fish Wildlife Forensic and Fish Health Laboratory
1212 South Adams Street
Laramie, WY 82070
Phone: (307) 721-1921

FORENSIC LABORATORY EXAMINATION REPORT LAB NO.
21-27-W-CAF

DATE:
June 14, 2021

SUBMITTERS: Kevin Frey
Grizzly Bear Specialist
AGENCY:
Montana Fish, Wildlife and Parks
1400 South 19th
Bozeman, MT 59718

EXAMINER: Tasha Bauman
Lauren Schumacher
CASE NO.: 2021-04
PURPOSE: Species identification of the submitted item.

EVIDENCE RECEIVED:
Tasha Bauman, Forensic Specialist, received the following item via Federal Express on May 7, 2021:
Item #1: "Possible skin/cartilage tissue from stomach of grizzly bear"

EXAMINATIONS CONDUCTED:
Tests for species and family level identification were performed using serological and enzymatic electrophoretic techniques. Species identification was also performed using an amplified portion of the mitochondrial DNA cytochrome b gene and subsequent sequencing of the amplicon (mcb398 and mcb869). The sequence obtained was matched against sequences in the National Center for Biotechnology Information DNA database (www.ncbi.nlm.hih.gov).

RESULTS:
1) Species identification, by serological and enzymatic electrophoretic techniques, of item #1 was non-reactive.
2) The sequence of item #1 is 99% (max identity) to grizzly bear (*Ursus arctos*) sequences in the GenBank database over (395/401) base pairs indicating the sample originated from grizzly bear.

CONCLUSIONS:
1) Item #1 originated from grizzly bear.

DISPOSITION OF SAMPLES:
The item was retained in the custody of the examiners.

SEROLOGY AND DNA EXAMINER:_____
Tasha Bauman, M.S.
Forensic Specialist

SEROLOGY AND DNA EXAMINER:_____
Lauren Schumacher, M.S.
Forensic Analyst

Appendix C:

MONTANA VETERINARY DIAGNOSTIC LABORATORY

PHONE: (406) 994-4885
FAX: (406) 994-6344
WEBSITE: www.liv.mt.gov/lab
WEB RESULTS: https://mvdl.mt.gov
E-MAIL: mvdl@mt.gov

1911 WEST LINCOLN STREET
BOZEMAN, MT 59718

JENNIFER RAMSEY DVM FW & P
1400 S. 19TH AVE
BOZEMAN MT 59718

CASE:21-18156
Name/ID: FWP Grizzly
Species: Brown Bear (Grizzly)

Sex: Unknown **Age:** 20 Years

Owner: Montana FWP

COMPLETE REPORT 04/19/21

Sample Collection: 04/16/21
Accession: 04/19/21

Case Coordinator Authorization: SH

Previous Reports
04/19/21
04/19/21
04/19/21

RABIES

Rabies	Brain	Verified on: 04/19/21 by: SH
Animal ID	Test	Result
FWP Grizzly	Condition	Fair
	Human Exposure	Yes
	Rabies Final Result	**Negative**

From: Bertellotti, Gary
To: Cooley, Hilary
Subject: [EXTERNAL] FW: Grizzly bear captured, moved from Avon area
Date: Friday, May 14, 2021 3:36:31 PM

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

From: Montana FWP <montanafwp@announcements.mt.gov>
Sent: Thursday, May 13, 2021 4:17 PM
To: Bertellotti, Gary <GBertellotti@mt.gov>
Subject: Grizzly bear captured, moved from Avon area

FWP Header

Grizzly bear captured, moved from Avon area

AVON - Montana Fish, Wildlife & Parks wildlife specialists captured and moved a male grizzly bear on May 6 in the Ophir Creek area northeast of Avon.

Over the past month, several grizzly bears have been confirmed in the immediate area, in close proximity to cattle calving grounds on local ranches. A grizzly killed a yearling cow in early April in the vicinity, and bears have continued to remain in the area since then.

>> Read more

Big Snowy Mountains grizzly euthanized

Bear confirmed in livestock depredation

LEWISTOWN – A grizzly bear was euthanized Wednesday by the U.S. Department of Agriculture Wildlife Services after it was confirmed to have killed a cow in the Big Snowy Mountains south of Lewistown.

The bear was first reported last week after a remote camera captured images of it feeding on a cow carcass. Traps were set over the weekend following the discovery of a second cow carcass with bear sign nearby. Wildlife Services technicians confirmed evidence that the bear had killed both cows.

>> Read more



This email was sent to gbertellotti@mt.gov using GovDelivery, on behalf of Montana Fish, Wildlife& Parks
1420 East Sixth Avenue, P.O. Box 200701 · Helena, MT 59620-0701 · (406) 444-2535

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From:	Mark, Chuck -FS
To:	Be Bear Award; ben_conard@fws.gov; Carbonari, Seth -FS; Cathey, Karen; cmack@nezperce.org; Colleen Matt; Davis, Ellen -FS; DeMaagd, Jim -FS; Erin Edge; Gale, Debra D -FS; Higgins, Jeanne M -FS; Hilary Cooley; bryon_holt@fws.gov; Jamie Jonkel; Jeff Burrows; Jennifer Fortin-Noreus; Jerome Hansen; Jodi_Bush@fws.gov; Jonathon Proctor; kereybm@nezperce.org; Krieger, Karryl -FS; Lannom, Keith -FS; Allen, Lydia R -FS; marciec@nezperce.org; Mark, Chuck -FS; McKay, Tod G -FS; steve.nadeau@idfg.idaho.gov; Pierson, Kim -FS; Probert, Cheryl -FS; Russell, Scott A -FS; Steele, Kurt -FS; Swanson,Lucas; vcrowser@mt.gov; Windsor, Michele A -FS
Subject:	[EXTERNAL] FW: Grizzly Bear in Stevi
Date:	Monday, October 29, 2018 5:26:38 PM
Attachments:	image001.png image002.png image003.png image004.png

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Fyi. Chuck.

Charles A. Mark, CF
Forest Supervisor

Forest Service
Salmon-Challis National Forest

p: 208-756-5111
c: 208-303-8100
f: 208-756-5151
cmark@fs.fed.us

1206 South Challis Street
Salmon, ID 83467
www.fs.fed.us

Caring for the land and serving people

From: McKay, Tod G -FS
Sent: Monday, October 29, 2018 12:50 PM
To: fredweis@cybernet1.com; Chuck Bartlebaugh <bearinfo@cfwi.org>; Beckwith, Nathan - FS <nbeckwith@fs.fed.us>
Cc: Strayer, Erica L -FS <estrayer@fs.fed.us>; Gale, Debra D -FS <ddgale@fs.fed.us>; Baumer, Amy E -FS <abaumer@fs.fed.us>; Mark, Chuck -FS <cmark@fs.fed.us>; Davis, Ellen -FS <ellendavis@fs.fed.us>
Subject: RE: Grizzly Bear in Stevi

https://ravallirepublic.com/news/local/article_10f3f415-9cc5-5df4-91f8-2bc045650fdc.html#tracking-source=home-top-story

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From: McKay, Tod G -FS
Sent: Monday, October 29, 2018 12:34 PM
To: 'alfred weisbecker' <fredweis@cybernet1.com>; 'Chuck Bartlebaugh' <bearinfo@cfwi.org>; Beckwith, Nathan - FS <nbeckwith@fs.fed.us>

Cc: Strayer, Erica L -FS <estrayer@fs.fed.us>; Gale, Debra D -FS <ddgale@fs.fed.us>; Baumer, Amy E -FS <abaumer@fs.fed.us>; Mark, Chuck -FS <cmark@fs.fed.us>; Davis, Ellen -FS <ellendavis@fs.fed.us>
Subject: Grizzly Bear in Stevi

See photos of Grizzly trapped by FWP over the weekend on the Stevensville golf course, near Lee Metcalf NWR. This could be a game changer! Perry Backus (Ravalli Republic/Missoulian) is doing a story about this today.

Tod McKay
Public Affairs Officer

Forest Service
Bitterroot National Forest

p: 406-363-7122
c: 406-531-1130
tgmckay@fs.fed.us

1801 N. First
Hamilton, MT 59840
www.fs.usda.gov/bitterroot

Caring for the land and serving people

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From: Frey, Kevin
To: Cooley, Hilary
Subject: [EXTERNAL] FW: grizzly bear/human fatalities
Date: Friday, July 16, 2021 6:41:51 PM
Attachments: image001.png

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FYI

From: Frey, Kevin
Sent: Friday, July 16, 2021 4:41 PM
To: FWP *Reg Supervisors <RegSuper@mt.gov>; FWP *Wildlife Regional Mgrs <FWP#WLMgrs@mt.gov>
Cc: McDonald, Ken <kmcdonald@mt.gov>; Hanauska-Brown, Lauri <LHanauska-Brown@mt.gov>; Wakeling, Brian <Brian.Wakeling@mt.gov>; Ramsey, Jennifer <jramsey@mt.gov>
Subject: grizzly bear/human fatalities

All,
In light of the grizzly bear caused human fatality at Ovando, I thought about how many I have been through and having to admit these will regrettably keep occurring in locations that have not dealt with many or no serious human injuries or fatalities. This is only a share of my experience to help all down the road.

My first necropsy was in 1979 with Ken Greer, Dan Palmisciano and Montana Veterinarian Diagnostic Laboratory (**MVDL**) in Bozeman. Ken Greer was instrumental in developing a consistent program regarding grizzly bear deaths and any associated conflicts. During these early years and still today conflict/fatality bears (carnivores) can come from MT, YNP, GNP, Tribal Lands or any jurisdiction requiring assistance. This program was developed in the era of when grizzly bears were placed on the Threatened and Endangered Species List. In the GYE collective, we have unfortunately had numerous human fatality investigations in the last 10+ years. The bear managers and the overall procedures have become well-tuned when dealing with human fatality events.

All serious incidents are dynamic and require latitude to adjust responses, investigation and potential management actions. This is the most difficult part and can be a different discussion if wanted. Grizzly bear caused human fatality investigations are not just a WHART investigation.

Once the offending bear (animal) is dead, that is the easy part-
It does not matter if a person is injured or killed by a bear (any offending carnivore) and the offending animal has been killed in self-defense or killed through management actions, there are a

few relatively easy steps to tie up the event and investigation:

*If the carcass is retrievable, collect it. Contact and get the carcass to the MFWP Wildlife Lab in Bozeman ASAP. If carcass is not retrievable, always take the head and paws.

*The decision to test or necropsy does not fall on the MFWP Wildlife Lab, that should be a given to do so by those involved in the incident.

*As in the past the Wildlife Lab can/will contact MVDL for a needed necropsy (all offending carnivores should be necropsied involving a human fatality). Should the Wildlife Lab be unavailable, Region 3 Bear Managers can assist with logistics.

*The Wildlife Lab can/will submit the carcass or parts for examination or testing. You could also contact MVDL (406 994 4885) but the reports of the results will be labeled as submitted under Jennifer Ramsey DVM.

***For any animal that bites or kills a person, the animal is dead and in possession, it is a responsibility to have that animal tested for rabies. Rabies tested to eliminate the possible contributing factor to attack and tested for the welfare of any person who had contact with the animal. The rabies test is conducted by submitting the intact skull to MVDL-Bozeman. If the head/skull has not been left in ambient temperatures for too long or if frozen, there is a good possibility the brain is still viable for testing. I have had this conversation with MVDL. An attempted test is better than no test.**

If the offending bear's carcass was available, the rabies test or necropsy results are included in the overall human fatality investigative report as required by the USFWS Recovery Guidelines while the grizzly bear is listed. Even if the bear is one day delisted, these comprehensive investigative reports are highly valuable. The examination reports along with the site investigation reports in a final investigative report can alleviate a lot of questions from press and public and give one consistent answer for the responsible agency.

I have written the fatality report for the Baker's Hole incident in April. We (state and federal GYE bear managers) have collectively reviewed the report and it will soon be posted on the USFWS website along with all the other previous fatality investigations. When the edits are completed and posted I can notify all it is posted or send you a copy if wanted.

Again, this is to help everyone in the future, it is not a critique.

Kevin Frey
Grizzly Bear Specialist
Wildlife Division
Montana Fish, Wildlife & Parks, Region 3

1400 South 19th
Bozeman, MT 59718

Ph: (406) 577 7876
Montana FWP



THE **OUTSIDE** IS IN US ALL.

From: Jonkel, James
To: Crowser, Vivaca; hilary_cooley@fws.gov
Subject: [EXTERNAL] Fwd: Grizzly Bear in Stevi
Date: Monday, October 29, 2018 5:35:45 PM
Attachments: image001.png
image002.png
image003.png
image004.png

Fyi

Sent from my Verizon Wireless 4G LTE smartphone

-------- Original message --------
From: "Mark, Chuck -FS" <cmark@fs.fed.us>
Date: 10/29/2018 3:26 PM (GMT-07:00)
To: Be Bear Award <bearinfo@cfwi.org>, ben_conard@fws.gov, "Carbonari, Seth -FS" <scarbonari@fs.fed.us>, "Cathey, Karen" <karen_cathey@fws.gov>, cmack@nezperce.org, Colleen Matt <colleenamatt@gmail.com>, "Davis, Ellen -FS" <ellendavis@fs.fed.us>, "DeMaagd, Jim -FS" <jdemaagd@fs.fed.us>, Erin Edge <EEDGE@defenders.org>, "Gale, Debra D -FS" <ddgale@fs.fed.us>, "Higgins, Jeanne M -FS" <jmhiggins@fs.fed.us>, Hilary Cooley <hilary_cooley@fws.gov>, bryon_holt@fws.gov, "Jonkel, James" <JaJonkel@mt.gov>, Jeff Burrows <jburrows@rc.mt.gov>, Jennifer Fortin-Noreus <jennifer.fortin-noreus@mso.umt.edu>, Jerome Hansen <jerome.hansen@idfg.idaho.gov>, Jodi_Bush@fws.gov, Jonathon Proctor <jproctor@defenders.org>, kereybm@nezperce.org, "Krieger, Karryl -FS" <kkrieger@fs.fed.us>, "Lannom, Keith -FS" <klannom@fs.fed.us>, "Allen, Lydia R -FS" <lrallen@fs.fed.us>, marciec@nezperce.org, "Mark, Chuck -FS" <cmark@fs.fed.us>, "McKay, Tod G -FS" <tgmckay@fs.fed.us>, steve.nadeau@idfg.idaho.gov, "Pierson, Kim -FS" <kpierson@fs.fed.us>, "Probert, Cheryl -FS" <cprobert@fs.fed.us>, "Russell, Scott A -FS" <sarussell@fs.fed.us>, "Steele, Kurt -FS" <ksteele@fs.fed.us>, "Swanson,Lucas" <lucas.swanson@idfg.idaho.gov>, "Crowser, Vivaca" <Vcrowser@mt.gov>, "Windsor, Michele A -FS" <micheleawindsor@fs.fed.us>
Subject: FW: Grizzly Bear in Stevi

Fyi. Chuck.

Charles A. Mark, CF
Forest Supervisor

Forest Service
Salmon-Challis National Forest

p: 208-756-5111
c: 208-303-8100
f: 208-756-5151
cmark@fs.fed.us

1206 South Challis Street
Salmon, ID 83467
www.fs.fed.us

Caring for the land and serving people

From: McKay, Tod G -FS
Sent: Monday, October 29, 2018 12:50 PM
To: fredweis@cybernet1.com; Chuck Bartlebaugh <bearinfo@cfwi.org>; Beckwith, Nathan - FS <nbeckwith@fs.fed.us>
Cc: Strayer, Erica L -FS <estrayer@fs.fed.us>; Gale, Debra D -FS <ddgale@fs.fed.us>; Baumer, Amy E -FS <abaumer@fs.fed.us>; Mark, Chuck -FS <cmark@fs.fed.us>; Davis, Ellen -FS <ellendavis@fs.fed.us>
Subject: RE: Grizzly Bear in Stevi

https://ravallirepublic.com/news/local/article_10f3f415-9cc5-5df4-91f8-2bc045650fdc.html#tracking-source=home-top-story

---

From: McKay, Tod G -FS
Sent: Monday, October 29, 2018 12:34 PM
To: 'alfred weisbecker' <fredweis@cybernet1.com>; 'Chuck Bartlebaugh' <bearinfo@cfwi.org>; Beckwith, Nathan - FS <nbeckwith@fs.fed.us>
Cc: Strayer, Erica L -FS <estrayer@fs.fed.us>; Gale, Debra D -FS <ddgale@fs.fed.us>; Baumer, Amy E -FS <abaumer@fs.fed.us>; Mark, Chuck -FS <cmark@fs.fed.us>; Davis, Ellen -FS <ellendavis@fs.fed.us>
Subject: Grizzly Bear in Stevi

See photos of Grizzly trapped by FWP over the weekend on the Stevensville golf course, near Lee Metcalf NWR. This could be a game changer! Perry Backus (Ravalli Republic/Missoulian) is doing a story about this today.

Tod McKay
Public Affairs Officer

Forest Service
Bitterroot National Forest

p: 406-363-7122
c: 406-531-1130
tgmckay@fs.fed.us

1801 N. First
Hamilton, MT 59840
www.fs.usda.gov/bitterroot

Caring for the land and serving people

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From:	Frey, Kevin
To:	Gunther, Kerry A; Haroldson, Mark A; jeremy.nicholson; Tyers, Daniel - FS; Daniel Thompson; Brian DeBolt
Cc:	Cooley, Hilary
Subject:	[EXTERNAL] MT Baker"s Hole fatality BOR
Date:	Thursday, July 1, 2021 4:06:29 PM
Attachments:	image001.png

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

All,
The report is written. Hilary has seen it. Would all of you be available for a few hours session one day during the week or July 11th?
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Dan Tyers if not you, I can ask Jason Brey.
WY Dan & Brian, you guys can decide on one of you or if both want in, we're ok with that.

Let me know early next week if possible.
Thanks,

Kevin Frey
Grizzly Bear Specialist
Wildlife Division
Montana Fish, Wildlife & Parks, Region 3

1400 South 19th
Bozeman, MT 59718
Ph: (406) 577 7876
Montana FWP



From: Bertellotti, Gary
To: Cooley, Hilary
Subject: [EXTERNAL] Press release for Bear at Dupuyer
Date: Thursday, May 27, 2021 6:53:54 PM
Attachments: image001.png
image002.png
image003.png
image004.png
image005.png
image006.png
Bear Release for Dupuyer 2021.pdf
2021-05-27 Grizzly bear euthanized near Dupuyer - R4final.docx

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Hilary,

There are two press releases (Draft).

I sent to John Stueber WS to review and the yellow highlight was his suggestion which in the first draft we had but not right up front.

We also informed in that draft that the Tribes were provided the bear for traditional cultural uses.

Are you ok with that as sometimes we provide info on the disposition so people know we use the bear for education.

The PDF is what we got from Helena and their version was better in some ways but they felt the disposition to tribes was not what they wanted. I feel it is important to show that these bears that are euthanized are utilized and honored in some form.

Any thoughts on these two versions.

Gary

Gary Bertellotti
Regional Supervisor
Management
Montana Fish, Wildlife & Parks, Region 4

4600 Giant Springs Road
Great Falls, MT 59405
Ph: (406) 454-5846 | C: (406) 788-1174

fwp.mt.gov

THE **OUTSIDE** IS IN US ALL.

FWP NEWS RELEASE

Region 4
4600 Giant Springs Road • Great Falls, MT 59405
Media Contact: David Hagengruber • 406-454-5845 • dhagengruber@mt.gov

THE **OUTSIDE** IS IN US ALL.

FOR IMMEDIATE RELEASE—May 27, 2021

Grizzly bear euthanized near Dupuyer after cattle depredations

DUPUYER – After receiving final authorization from the U.S. Fish and Wildlife Service a male grizzly was euthanized Wednesday after a series of calf depredations across five ranches in the Dupuyer area.

The 6-year-old bear weighed nearly 450 pounds and was first tagged as a non-target capture east of Dupuyer in 2019, and bear managers identified it this spring by images collected on game cameras set at depredation sites. Despite repeated attempts, they were unable to trap the bear and it was shot when it returned to feed on one of the depredations along Dupuyer Creek late Wednesday evening.

The U.S. Fish and Wildlife Service authorized providing the bear to Blackfeet Tribal Fish and Wildlife, where it will be distributed among approved tribal members for cultural purposes.

Grizzly bears are still protected under the Endangered Species Act, and final authority regarding their management is up to the U.S. Fish and Wildlife Service. Landowners may haze grizzly bears off their property from the safety of a hard-sided vehicle or with loud noises, provided the federally protected animal is not harmed in the process.

If you see a bear near your residence in central or north central Montana, please report the activity as soon as possible to Wesley Sarmento at 450-1097, Chad White at 788-4755, or your local FWP office.

For more information on living, working, and recreating in Montana's bear country, visit the FWP Bear Aware website at fwp.mt.gov/conservation/species/bear/bear-aware.

-fwp-

FWP NEWS RELEASE
Region 4
4600 Giant Springs Road • Great Falls, MT 59405
Media Contact: David Hagengruber • 406-454-5845 • dhagengruber@mt.gov

THE **OUTSIDE** IS IN US ALL.

FOR IMMEDIATE RELEASE—May 27, 2021

Grizzly bear euthanized near Dupuyer after cattle depredations

DEPUYER – After receiving final authorization from the U.S. Fish and Wildlife Service Grizzly Bear Coordinator, USDA Wildlife Services and Montana Fish, Wildlife & Parks euthanized a male grizzly bear Wednesday evening near Dupuyer. The six-year-old bear was estimated to weigh nearly 450 pounds and was believed to be responsible for a series of at least six calf depredations this spring across five ranches near Dupuyer.

The bear was first tagged as a non-target capture east of Dupuyer in 2019, and bear managers identified it this spring by images collected on game cameras set at depredation sites. Despite repeated attempts, they were unable to trap the bear and thus the decision was made in cooperation with the U.S. Fish and Wildlife Service to euthanize the bear when it returned to feed on one of the depredations late Wednesday evening along Dupuyer Creek.

The U.S. Fish and Wildlife Service authorized providing the bear to Blackfeet Tribal Fish and Wildlife, where it will be distributed among approved tribal members for cultural purposes.

FWP reminds farmers, ranchers, homeowners and outdoor recreationists to be prepared to encounter bears in the future, as their population and range expands east from the Rocky Mountain Front. Grizzly bears are still protected under the Endangered Species Act, and final authority regarding their management is up to the U.S. Fish and Wildlife Service.

If you see a bear near your residence in central or north central Montana, please report the activity as soon as possible to Sarmento at 450-1097, Chad White at 788-4755, or your local FWP office.

For more information on living, working, and recreating in Montana's bear country, visit the FWP Bear Aware website at fwp.mt.gov/conservation/species/bear/bear-aware.

-fwp-

From: Mark, Chuck -FS
To: Davis, Ellen -FS
Cc: hilary_cooley@fws.gov
Subject: [EXTERNAL] RE: Bitterroot letter to IGBC - Chuck Mark
Date: Wednesday, February 27, 2019 1:01:27 PM
Attachments: image001.png
image002.png
image003.png
image004.png

Hi Ellen. This letter was not a letter to the IGBC, this was a letter to the editor for our local paper addressing some local constituents who believe that my serving as the chairman for the Bitterroot Ecosystem Subcommittee is a conflict of interest because my Forest is in Forest Plan Revision. I talked to Rob Chaney at the Missoulian yesterday and I was clear about my intent regarding this "letter to the editor." If you would like to talk further about this, I would be glad to. Chuck.

Charles A. Mark, CF
Forest Supervisor

Forest Service
Salmon-Challis National Forest

p: 208-756-5111
c: 208-303-8100
f: 208-756-5151
chuck.mark@usda.gov

1206 South Challis Street
Salmon, ID 83467
www.fs.fed.us

Caring for the land and serving people

From: Davis, Ellen -FS
Sent: Wednesday, February 27, 2019 10:50 AM
To: Mark, Chuck -FS <cmark@fs.fed.us>; Baumer, Amy E -FS <abaumer@fs.fed.us>
Cc: Frank van Manen <fvanmanen@usgs.gov>
Subject: FW: Bitterroot letter to IGBC - Chuck Mark

Hi Chuck. Hilary forwarded this article to me (see link below). Did you send this letter to IGBC Chair Matt Hogan? I hadn't seen it so wasn't sure.
Also, FYI. I attended a presentation Saturday night (flyer attached) talking about some of the same issues you bring up in your letter. In fact Dave Mattson

believes the Salmon Selway-Bitterroot could actually support up to 450 grizzlies bears. I'm not sure how those numbers compare with what some of our folks think but nevertheless, those are some of the number floating out there.

Also, as you have noted in the past, the interest and focus of grizzlies making their way here to the Bitterroot ecosystem has increased enormously. Especially since the bear (Arnie, after Arnold Palmer, named by Friends of the Bitterroot) made his way to the Stevi golf course. There were about 50-60 people in attendance for Dave's presentation and it was by invitation only, not even open to the public. Hope you are doing well in all this snow! Ellen

From: Cooley, Hilary [mailto:hilary_cooley@fws.gov]
Sent: Monday, February 25, 2019 2:55 PM
To: Davis, Ellen -FS <ellendavis@fs.fed.us>
Cc: kannis@mt.gov; Lori Roberts <lroberts@mt.gov>; Dillon Tabish <dillon.tabish@mt.gov>; Smith, Kate <kate.smith@cfc.umt.edu>
Subject: Bitterroot letter to IGBC - Chuck Mark

Hi Ellen,

I just came across this news story and letter from Chuck Mark to IGBC. Have you seen and do you know about it? I had not seen the letter and just downloaded from the news website. Is this official and if so, probably need to share with I&E committee to consider putting on IGBC website?

Hilary Cooley
Grizzly Bear Recovery Program
U.S. Fish & Wildlife Service

406-243-4903

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From:	Frey, Kevin
To:	Tyers, Daniel - FS; Gunther, Kerry A; Haroldson, Mark A; jeremy.nicholson; Daniel Thompson; Brian DeBolt
Cc:	Cooley, Hilary
Subject:	[EXTERNAL] RE: MT Baker"s Hole fatality BOR
Date:	Tuesday, July 6, 2021 4:30:07 PM
Attachments:	image001.png

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Thanks for the replies. Looks like the 13th or 16th is ok with all. However, no reply from Jeremy.
Lets shoot for the 13th at 10 AM. Should be able to whittle through it in the morning hours.
If the 13th crashes for anyone, we will try for same time on the 16th.
Everyone ok with date/time?
Thanks,
Kevin

From: Frey, Kevin <KFrey@mt.gov>
Sent: Thursday, July 1, 2021 2:06 PM
To: Gunther, Kerry A <Kerry_Gunther@nps.gov>; Haroldson, Mark A <mharoldson@usgs.gov>; jeremy.nicholson <jeremy.nicholson@idfg.idaho.gov>; Tyers, Daniel - FS <daniel.tyers@usda.gov>; Daniel Thompson <daniel.thompson@wyo.gov>; Brian DeBolt <brian.debolt@wyo.gov>
Cc: Cooley, Hilary <Hilary_Cooley@fws.gov>
Subject: MT Baker's Hole fatality BOR

All,
The report is written. Hilary has seen it. Would all of you be available for a few hours session one day during the week or July 11th?
Hilary and I talked….we could do a zoom/teams type thing…share the screen and go over the findings. I would like to get this completed so FWS can post on website.
Dan Tyers if not you, I can ask Jason Brey.
WY Dan & Brian, you guys can decide on one of you or if both want in, we're ok with that.

Let me know early next week if possible.
Thanks,

Kevin Frey
Grizzly Bear Specialist
Wildlife Division
Montana Fish, Wildlife & Parks, Region 3

1400 South 19th
Bozeman, MT 59718
Ph: (406) 577 7876
Montana FWP [gcc02.safelinks.protection.outlook.com]



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From:	Frey, Kevin
To:	Tyers, Daniel - FS; Gunther, Kerry A; Haroldson, Mark A; jeremy.nicholson; Daniel Thompson; Brian DeBolt
Cc:	Cooley, Hilary
Subject:	[EXTERNAL] RE: MT Baker"s Hole fatality BOR
Date:	Tuesday, July 13, 2021 4:37:59 PM
Attachments:	image001.png

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I am going to list review members in alphabetical order if ok with everyone…..if not, please speak up.

From: Frey, Kevin
Sent: Tuesday, July 6, 2021 2:30 PM
To: Tyers, Daniel - FS <daniel.tyers@usda.gov>; Gunther, Kerry A <Kerry_Gunther@nps.gov>; Haroldson, Mark A <mharoldson@usgs.gov>; jeremy.nicholson <jeremy.nicholson@idfg.idaho.gov>; Daniel Thompson <daniel.thompson@wyo.gov>; Brian DeBolt <brian.debolt@wyo.gov>
Cc: Cooley, Hilary <Hilary_Cooley@fws.gov>
Subject: RE: MT Baker's Hole fatality BOR

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From: Frey, Kevin <KFrey@mt.gov>
Sent: Thursday, July 1, 2021 2:06 PM
To: Gunther, Kerry A <Kerry_Gunther@nps.gov>; Haroldson, Mark A <mharoldson@usgs.gov>; jeremy.nicholson <jeremy.nicholson@idfg.idaho.gov>; Tyers, Daniel - FS <daniel.tyers@usda.gov>; Daniel Thompson <daniel.thompson@wyo.gov>; Brian DeBolt <brian.debolt@wyo.gov>
Cc: Cooley, Hilary <Hilary_Cooley@fws.gov>
Subject: MT Baker's Hole fatality BOR

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WY Dan & Brian, you guys can decide on one of you or if both want in, we're ok with that.

Let me know early next week if possible.
Thanks,

Kevin Frey
Grizzly Bear Specialist
Wildlife Division
Montana Fish, Wildlife & Parks, Region 3

1400 South 19th
Bozeman, MT 59718
Ph: (406) 577 7876
Montana FWP [gcc02.safelinks.protection.outlook.com]



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From: Tyers, Daniel - FS
To: Frey, Kevin; Gunther, Kerry A; Haroldson, Mark A; jeremy.nicholson; Daniel Thompson; Brian DeBolt
Cc: Cooley, Hilary
Subject: [EXTERNAL] RE: MT Baker"s Hole fatality BOR
Date: Thursday, July 1, 2021 4:09:57 PM
Attachments: image002.png
image003.png
image004.png
image005.png
image006.png

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I'm available. Thanks.

Dan Tyers
GYE Grizzly Bear Habitat Coordinator
Forest Service
406-600-8949
daniel.tyers@usda.gov
www.fs.fed.us
Caring for the land and serving people

From: Frey, Kevin <KFrey@mt.gov>
Sent: Thursday, July 1, 2021 2:06 PM
To: Gunther, Kerry A <Kerry_Gunther@nps.gov>; Haroldson, Mark A <mharoldson@usgs.gov>; jeremy.nicholson <jeremy.nicholson@idfg.idaho.gov>; Tyers, Daniel - FS <daniel.tyers@usda.gov>; Daniel Thompson <daniel.thompson@wyo.gov>; Brian DeBolt <brian.debolt@wyo.gov>
Cc: Cooley, Hilary <Hilary_Cooley@fws.gov>
Subject: MT Baker's Hole fatality BOR

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Dan Tyers if not you, I can ask Jason Brey.
WY Dan & Brian, you guys can decide on one of you or if both want in, we're ok with that.

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Thanks,

Kevin Frey
Grizzly Bear Specialist
Wildlife Division
Montana Fish, Wildlife & Parks, Region 3

1400 South 19th
Bozeman, MT 59718
Ph: (406) 577 7876
Montana FWP



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From:	Johnson, Shawn
To:	Sperry, Charlie; Costello, Cecily; Harris, Rich; Stokes, Heather; Crowser, Vivaca; Hilary Cooley; Schenk, Bill; Tabish, Dillon; Bertellotti, Gary
Subject:	[EXTERNAL] Re: Presenters for Transplant Protocols Topic - GBAC January Meeting
Date:	Tuesday, December 31, 2019 12:04:02 PM

Thanks, Charlie. Good to catch up on this thread. All makes good sense.

I'm working through updates to the agenda (including desired speakers) today and tomorrow. We'll be in a position to reach out with invites by Thursday.

Best,
Shawn

_____

Shawn Johnson
Center for Natural Resources & Environmental Policy
University of Montana
(406) 381-2904 | shawn.johnson@umontana.edu
www.naturalresourcespolicy.org

From: Sperry, Charlie <csperry@mt.gov>
Sent: Tuesday, December 31, 2019 9:37 AM
To: Costello, Cecily <cecostello@mt.gov>; Harris, Rich <Richard.Harris@mt.gov>; Stokes, Heather <heather.stokes@umconnect.umt.edu>; Crowser, Vivaca <Vcrowser@mt.gov>; Hilary Cooley <hilary_cooley@fws.gov>; Schenk, Bill <BSchenk@mt.gov>; Tabish, Dillon <Dillon.Tabish@mt.gov>; Bertellotti, Gary <GBertellotti@mt.gov>; Johnson, Shawn <shawn.johnson@mso.umt.edu>
Subject: RE: Presenters for Transplant Protocols Topic - GBAC January Meeting

I didn't see Shawn on the previous emails so I added him to this one.

Rich and I visited on the phone this morning. While he won't be able to attend the meeting in Polson, he offered to talk with Tim or other potential speakers ahead of the meeting to help guide them toward a beneficial and efficient use of the Council's time. Shawn and Heather, are we at a point now where we know who we want to invite?

Charlie

From: Costello, Cecily
Sent: Tuesday, December 31, 2019 9:16 AM
To: Harris, Rich <Richard.Harris@mt.gov>; Stokes, Heather <heather.stokes@umconnect.umt.edu>; Crowser, Vivaca <Vcrowser@mt.gov>; Sperry, Charlie <csperry@mt.gov>; Hilary Cooley <hilary_cooley@fws.gov>; Schenk, Bill <BSchenk@mt.gov>; Tabish, Dillon <Dillon.Tabish@mt.gov>; Bertellotti, Gary <GBertellotti@mt.gov>

Subject: RE: Presenters for Transplant Protocols Topic - GBAC January Meeting

I agree with Rich about Tim Manley. I think it might be good to have someone from the Flathead National Forest, too, to talk about their considerations when moving bears. Tim would be able to suggest some one.

Sent from my Verizon, Samsung Galaxy smartphone

-------- Original message --------
From: "Harris, Rich" <Richard.Harris@mt.gov>
Date: 12/31/19 6:37 AM (GMT-07:00)
To: "Stokes, Heather" <heather.stokes@umconnect.umt.edu>, "Crowser, Vivaca" <Vcrowser@mt.gov>, "Sperry, Charlie" <csperry@mt.gov>, Hilary Cooley <hilary_cooley@fws.gov>, "Costello, Cecily" <cecostello@mt.gov>, "Schenk, Bill" <BSchenk@mt.gov>, "Tabish, Dillon" <Dillon.Tabish@mt.gov>, "Bertellotti, Gary" <GBertellotti@mt.gov>
Subject: Re: Presenters for Transplant Protocols Topic - GBAC January Meeting

All

My view is that we'd like the Council to focus primarily on the issue of moving bears from one "place" (ecosystem? recovery zone? PCA? best not to get caught up in terminology for now) to another (because this gets at the critical issue "Where does Montana want grizzlies and how do we accomplish that?). For this, I'd think having Chuck Mark present would be very useful, probably on the same panel as Jamie (who I think is critical for Polson). A secondary, related but separate topic, is that of moving bears within areas. For that, an appropriate speaker would be Tim Manley. Like Jamie, he's been in front of the Council before. However, when I spoke (at length!) with Tim last week, he expressed a frustration at his limited time in Missoula, and would, I think, welcome the chance to provide more input and answer questions. He's moved more grizzlies than anybody else, and has also given considerable thought (and, in some ways, revised some protocols) regarding within-area translocations. He told me he was planning to attend in any case, and is located quite close (lives in Bigfork).

I'd suggest capping it at that, lest we again tip the balance of the Council's work away from discussing amongst themselves and beginning to draft recommendations and toward (more) listening. Makes more sense to me to save GYE and East Front presenters for meetings closer to them. If info they share suggests that initial drafts of recommendations need revising, there's time for that.

(By the way, I'm unsure why Gary's response email on the topic isn't included in this conversation thread - some techical reason I guess).

Rich Harris
Grizzly Bear Planning Coordinator
Montana Fish Wildlife and Parks
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richard.harris@mt.gov

From: Stokes, Heather <heather.stokes@umconnect.umt.edu>
Sent: Monday, December 30, 2019 4:20 PM
To: Crowser, Vivaca; Sperry, Charlie; Hilary Cooley; Costello, Cecily; Schenk, Bill; Tabish, Dillon; Bertellotti, Gary; Harris, Rich
Subject: [EXTERNAL] Re: Presenters for Transplant Protocols Topic - GBAC January Meeting

Yeah, might not be the right fit in trying to stay focused on protocols. Chuck can speak more to the difference regarding social tolerance on the ID vs MT side for the Bitterroot. He can also speak to how this is impacting forest planning revision. It has more to do with readiness to allow for transplants rather than the actual protocols at this time. The IGBC Bitterroot subcommittee has stepped up their membership as activities for 2020 as a result of the Stevi bear so still related but worthy of different time slot in the agenda.

Heather Stokes
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www.naturalresourcespolicy.org

From: Crowser, Vivaca <Vcrowser@mt.gov>
Sent: Monday, December 30, 2019 4:17 PM
To: Stokes, Heather <heather.stokes@umconnect.umt.edu>; Sperry, Charlie <csperry@mt.gov>; Hilary Cooley <hilary_cooley@fws.gov>; Costello, Cecily <cecostello@mt.gov>; Schenk, Bill <BSchenk@mt.gov>; Tabish, Dillon <Dillon.Tabish@mt.gov>; Bertellotti, Gary <GBertellotti@mt.gov>; Harris, Rich <Richard.Harris@mt.gov>
Subject: RE: Presenters for Transplant Protocols Topic - GBAC January Meeting

I don't know him, so not sure. Specific to the topic that Jamie/Mike/Randy could cover on the Stevi bear and other transplant protocols that Jamie has worked on through the years, I don't think he's a fit. But, he might have perspective on a separate issue.

From: Stokes, Heather <heather.stokes@umconnect.umt.edu>
Sent: Monday, December 30, 2019 4:16 PM
To: Crowser, Vivaca <Vcrowser@mt.gov>; Sperry, Charlie <csperry@mt.gov>; Hilary Cooley <hilary_cooley@fws.gov>; Costello, Cecily <cecostello@mt.gov>; Schenk, Bill <BSchenk@mt.gov>; Tabish, Dillon <Dillon.Tabish@mt.gov>; Bertellotti, Gary <GBertellotti@mt.gov>; Harris, Rich

<Richard.Harris@mt.gov>
Subject: [EXTERNAL] Re: Presenters for Transplant Protocols Topic - GBAC January Meeting

Thanks Gary, Vivaca, and Charlie!

Chuck Mark is planning on attending the first day of this meeting - he is the Forest Supervisor for the Salmon - Challis. He is also the IGBC Bitterroot Subcommittee Chair. Would his dynamic work on the Jamie, Randy, Mike panel?

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From: Crowser, Vivaca <Vcrowser@mt.gov>
Sent: Monday, December 30, 2019 3:05 PM
To: Sperry, Charlie <csperry@mt.gov>; Stokes, Heather <heather.stokes@umconnect.umt.edu>; Hilary Cooley <hilary_cooley@fws.gov>; Costello, Cecily <cecostello@mt.gov>; Schenk, Bill <BSchenk@mt.gov>; Tabish, Dillon <Dillon.Tabish@mt.gov>; Bertellotti, Gary <GBertellotti@mt.gov>; Harris, Rich <Richard.Harris@mt.gov>
Subject: RE: Presenters for Transplant Protocols Topic - GBAC January Meeting

Yep, I had the same thought…Jamie Jonkel, Randy Arnold, Mike Thompson could all handle this and actually having several of them present together would be a good dynamic, I think.

From: Sperry, Charlie <csperry@mt.gov>
Sent: Monday, December 30, 2019 2:43 PM
To: Crowser, Vivaca <Vcrowser@mt.gov>; Stokes, Heather <heather.stokes@umconnect.umt.edu>; Hilary Cooley <hilary_cooley@fws.gov>; Costello, Cecily <cecostello@mt.gov>; Schenk, Bill <BSchenk@mt.gov>; Tabish, Dillon <Dillon.Tabish@mt.gov>; Bertellotti, Gary <GBertellotti@mt.gov>; Harris, Rich <Richard.Harris@mt.gov>
Subject: RE: Presenters for Transplant Protocols Topic - GBAC January Meeting

Good reminder, Viv. Randy has a good handle on this incident and topic as well; perhaps an alternative if the others are not available. Randy is always welcome anyway!

Charlie

From: Crowser, Vivaca
Sent: Monday, December 30, 2019 2:23 PM
To: Stokes, Heather <heather.stokes@umconnect.umt.edu>; Sperry, Charlie <csperry@mt.gov>; Hilary Cooley <hilary_cooley@fws.gov>; Costello, Cecily <cecostello@mt.gov>; Schenk, Bill <BSchenk@mt.gov>; Tabish, Dillon <Dillon.Tabish@mt.gov>; Bertellotti, Gary

<GBertellotti@mt.gov>; Harris, Rich <Richard.Harris@mt.gov>
Subject: Re: Presenters for Transplant Protocols Topic - GBAC January Meeting

Heather-

As we talked about a bit on our last call, and Rich mentioned in an email as well, I think Jamie Jonkel would be great to have to talk about the Stevi bear specific decision making process and all of his experience with transplant protocols in general. We could consider having R2 Wildlife Manager, Mike Thompson, present with him.

Thanks,
Vivaca

From: Stokes, Heather <heather.stokes@umconnect.umt.edu>
Sent: Monday, December 30, 2019 12:43 PM
To: Sperry, Charlie; Hilary Cooley; Costello, Cecily; Schenk, Bill; Crowser, Vivaca; Tabish, Dillon; Bertellotti, Gary; Harris, Rich
Subject: [EXTERNAL] Presenters for Transplant Protocols Topic - GBAC January Meeting

Hi Team,
We are in the process of refining the GBAC January agenda.

We would appreciate your help in identifying presenters for addressing the transplant protocols topic. Please indicate what aspect the person would address and from what perspective.

It would be helpful to do a reply all so that we are all on the same page. We can then extend the invitations.

Thanks,
Heather and Shawn

Heather Stokes
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From: Sarmento, Wesley
To: Cooley, Hilary
Subject: [EXTERNAL] Sarmento annual report 2021
Date: Monday, January 3, 2022 5:34:28 PM
Attachments: Sarmento Annual Report 2021.pdf

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Happy New Year Hilary!

Attached is my annual report for 2021. Please let me know if you have any questions or concerns on it.

Thanks for all you do.

Sincerely,
Wesley

Wesley Sarmento
Grizzly Bear Management Specialist
Montana Fish, Wildlife and Parks

514 South Front Street, Suite C
Conrad, MT 59425
C: (406) 450-1097

2021 - Grizzly Bear Management Efforts – Region 4 Conrad Office

Period Covered: 01/01/2021 – 12/31/2021

Wesley Sarmento, Bear Management Specialist
Jack Austin, Bear Management Technician
Montana Fish, Wildlife and Parks
514 S. Front Street, Suite C. Conrad, MT 59425. 406-450-1097

Synopsis

The 2021 work season differed from past efforts because FWP administrative Region 4 was not divided into two separate grizzly bear management districts. This year, both bear managers shared the entire region, with whoever closest and available responding to bear calls. Thus, these summary statistics don't necessarily provide the whole representation of bear management efforts across the region, but instead reflect the work coordinated by the Conrad field office. Grizzly bears in the area remain federally protected via the Endangered Species Act, thus final management authority is under the United States Fish and Wildlife Service.



Figure 1: Public meeting and safety training in the town of Big Sandy, following observations of grizzlies in the area.

Conflict Prevention and Response Efforts

- Participated in 10 organized education events involving over 364 people, including public meetings in Lewistown and Big Sandy, where grizzlies are just showing up (Fig. 1)
- Provided bear spray training to over 160 people
- Donated ≥ 33 bear sprays to public
- Installed 16 new steel bear aware signs
- Communicated 156 bear aware alerts to let people know about bear presence

- Established first call tree for Dupuyer
- Answered 144 service requests, 208 contacts for information, 49 bear observations, & 44 bear complaints (445 phone contacts total)
- Helped create a bird hunter bear aware video
- Removed the carcasses of 45 dead animals
- Supervised carcass driver who picked up 96 dead animals for 34 producers
- Cleaned up >19,596 lbs. of spilled grain (Fig. 2)
- Provided 1 bear proof garbage can
- Distributed 5 air horns
- Provided 1 guard dog to grain producer for conflict prevention and research project (Fig.3)
- Deployed ≥ 56 scare devices
- Deployed ≥ 65 trail cameras
- Helped obtain a $4,000 Vital Ground grant for new Choteau bear team
- Loaned out grain vacuum trailer to Choteau team and Blackfeet Fish and Wildlife
- Obtained 12 grizzly bear DNA samples
- Lent one paintball marker
- 279 trap nights total for capturing grizzly bears
- Hazed grizzly bears 22 times with 54 cracker-shells, > 50 paintballs, and 3 rubber bullets
- Built 10 permanent electric fences, 5 temporary electric fences, and repaired 4 fences
- Helped identify grizzly bear relocation sites for public comment and commission review
- Coordinated FWP R4 maintenance team building/installing 1 bear-proof grain bin door
- Helped establish range rider pilot program on Upper Dupuyer Creek
- Coauthored successful $70k Safari Club International grant for conflict preventionist
- Grizzlies detected for the first time in the Upper Missouri Breaks National Monument



Figure 2: Thousands of pounds of spilled grain that we removed, then donated to neighbor for feed (was e-fenced).



Figure 3: Livestock guard dog deployed at farm with grain spills to test its deterrence efficacy.

Human-Grizzly Bear Complaints

2021 was a relatively mild year for grizzly bear conflicts. We received 44 complaints about bears this year, of which nine were transferred to the Choteau team, and 33 were confirmed as bear issues by the Conrad team (Fig 4). Of those confirmed bear issues, 20 were conflicts where bears caused property damage or obtained reasonably secured attractants, while 13 complaints were preemptive responses where bears were near people or obtaining unsecured attractants (Fig. 5). Of the conflicts, there were 15 livestock depredations and five property damage complaints. Livestock loss caused by grizzlies totaled ten calves, two cows, one beehive, and four sheep.

Complaint type	Number
Cattle	12
Near people	5
Property damage	5
Harvested grain	3
Garbage	2
Birdseed	2
Sheep	2
Beehives	1
Encounter	1
Total	**33**

Figure 4: Bear complaints confirmed by Conrad team in 2021.

Most of the livestock loss occurred on Dupuyer creek (Fig. 6). Bears caused property damage on; two grain bags, one haylage bag, two bird coops. For bears using unsecured food – twice each for birdseed and garbage, and three times for grain spills. There were no attacks this year, but one encounter – people bumped a bear at close range and it ran off. We received five complaints about bears near people without any attractant being acquired. We responded to all calls as quickly as possible, with most of our bear complaint responses occurring within 30 minutes.

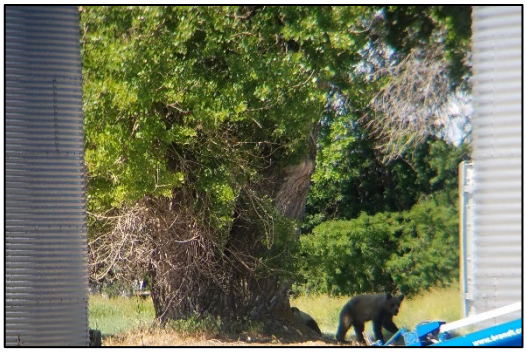


Figure 5: Two yearling grizzlies at unoccupied farm eating spilled grain.

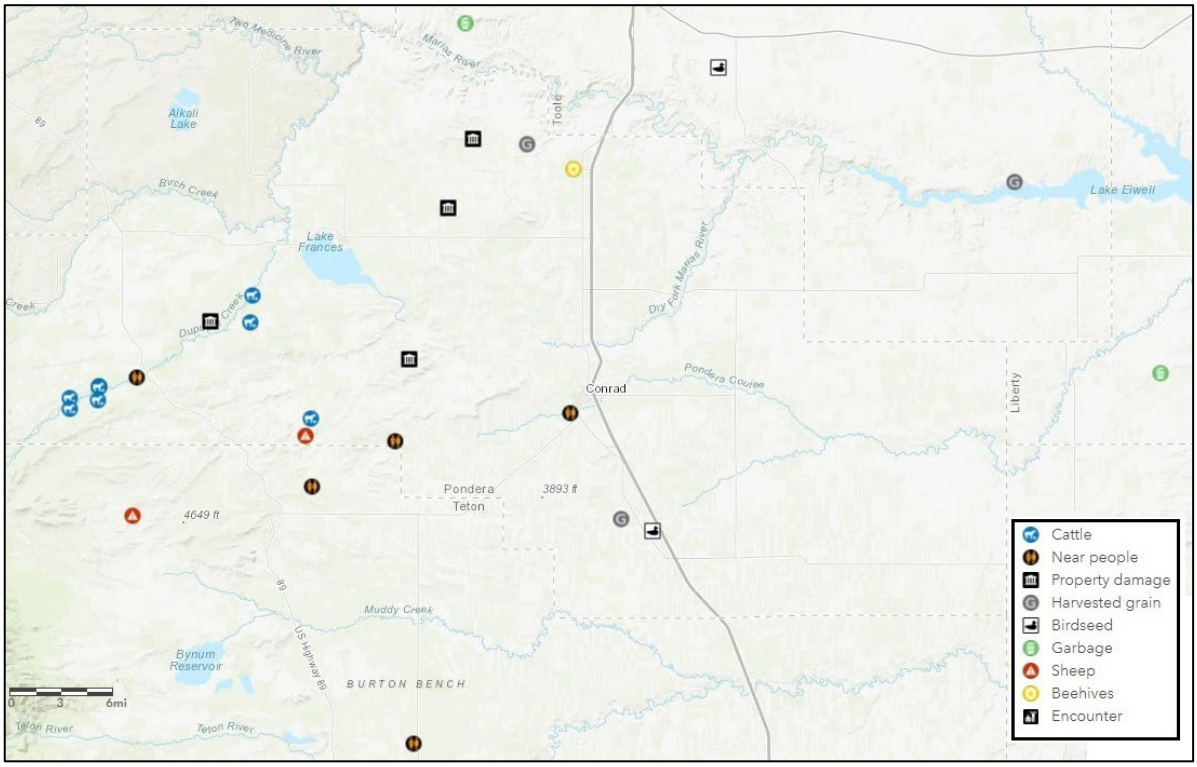


Figure 6. Map of 2021 grizzly bear complaints. Six complaints are outside map area, including two calf depredations near Augusta, two cow depredations in the Big Snowy mountains, and one bird coop damage and encounter near Sun River.

Grizzly Bear Captures

1) In conjunction with USDA, a non-target adult female captured on Dupuyer Creek and relocated to Glacier National Park (4/28).
2) In conjunction with USDA, an adult male euthanized in Fergus County due to depredation on two adult cows, as relocation wouldn't have reasonably eliminated the issue (5/12).
3) In conjunction with USDA, an adult male euthanized on Dupuyer Creek for several calf depredations, as relocation would not have reasonably eliminated the threat (5/26).
4) Yearling male caught south of Conrad for accessing spilled grain near residence and not responding to hazing or conflict prevention equipment (6/23). Relocated to Pike Creek.
5) Subadult female caught for a research project testing if guard dogs are an effective bear deterrent for farmsteads with abundant grain spills (8/20).

6) Subadult female for a research project testing if guard dogs are an effective bear deterrent for farmsteads with abundant grain spills (8/29).
7) Subadult male caught for a research project testing if guard dogs are an effective bear deterrent for farmsteads with abundant grain spills (9/6).
8) An adult male caught for a research project testing if guard dogs are an effective bear deterrent for farmsteads with abundant grain spills (9/14).
9) An adult female caught for a research project testing if guard dogs are an effective bear deterrent for farmsteads with abundant grain spills (9/16).
10) A subadult female caught for a research project testing if guard dogs are an effective bear deterrent for farmsteads with abundant grain spills (10/16).

Grizzly Bear Mortalities

1) Adult male euthanized in the Big Snowy Mountains (Fergus County) due to depredation on two adult cows (5/12).
2) Adult male euthanized on Dupuyer Creek for several calf depredations (5/26).
3) Adult male bear was found dead near Marias River (10/20). Death under investigation.

Acknowledgements

Support for conflict prevention work was provided by Western Bear Foundation, Vital Ground Foundation, Defenders of Wildlife, United States Fish and Wildlife Service, Utah State University, Conservation Collaborative, Natural Resources Defense Council, and Montana Outdoor Legacy Foundation. We greatly appreciate USDA Wildlife Services management efforts – Skippy Sims, John/Kurt Miedtke, Glenn Hall, Luke Peebles, Dymond Running-Crane, Kraig Glazier, and Dr. Young. Big thanks to our call coordinators for keeping communities informed. We also thank local and county law enforcement for their assistance. We appreciate people inviting us out to give presentations. Also, thanks to the folks who proactively prevent bears from coming near residences, and for communicating with us nicely when they do. Thanks to producers for their patience, allowing conflict prevention work, and for coordination with Rocky Mountain Front Ranchlands group and Marias River Livestock Association. Additionally, we thank FWP biologists, managers, wardens, maintenance crew (George Larson), and support staff for their assistance with resolving human-bear conflicts. Thanks to the NCDE bear management team – John Waller, Tim Manley, Jamie Jonkel, Chad White, Daniel McHugh, Cecily Costello, Lori Roberts, Hilary Cooley, et al. Thanks to Glacier Park and US Forest Service for relocation sites. We appreciate the collaborative efforts with Blackfeet Fish and Wildlife. Thanks to our guard dog technician, Ali Morgan, for her work and our range rider, Preston Spotted Eagle, for his (Fig 6). Thanks to Sarah Zielke and other volunteers for their responsive efforts. Thanks to the carcass pickup driver. Finally, a special thanks to Rock Creek Airedales for donating a dog.



Figure 6: Dupuyer creek range rider, Preston Spotted Eagle, saddles up for a ride with our wolf management specialist, Ty Smucker.

From: Smith, Kate
To: "hilary_cooley@fws.gov"
Subject: 20200107 F15AC01157 Narrative Report FINAL.pdf
Date: Wednesday, January 8, 2020 12:30:09 PM
Attachments: 20200107 F15AC01157 Narrative Report FINAL.pdf

Hilary,

Attached is the final report for our UM/FWS cooperative agreement. Would you like to take a look before I forward to Kaimy and Jodi?

Thanks,
Kate

Narrative Report: Grizzly Bear Recovery – Implementation, Monitoring, Research, Education & Conservation

The University of Montana: Cooperative Agreement Award F15AC01157
Reporting Period: 10/1/2018 – 9/30/2019

Program Accomplishments

Surveys for grizzly bears in peripheral portions of their range

We use digital cameras and barbed wire hair samples to look for the presence of grizzly bears in areas outside the normal range of the species to document range expansion. DNA from hair samples enables us to determine the origins of any bears found. We respond to all credible sightings and/or photographs with immediate placement of sampling systems. Formal surveys are not ongoing at the present time. We also coordinate the genetic analysis of any samples collected by our partner agencies.

Monitoring of grizzly bears in the Cabinet-Yaak and Selkirk ecosystems

We continue to actively monitor vital rates (survival, cub production), population trend, and distribution of the small grizzly population in the Cabinet-Yaak and Selkirk ecosystems using radio collars, hair snaring, and rub trees. We captured and radio-collared 8 grizzly bears in these two recovery areas during the 2019 field season. We monitored 10 grizzly bears with radio collars on both sides of the US/Canada border in the Cabinet-Yaak area and 9 grizzly bears on both sides of the US/Canada border in the Selkirk Mountains area. This included two augmentation bears released in 2019 in the Cabinet Mountains. During 2019, we placed 122 hair snare corral/camera sites and collected hair at 416 rub tree sites in the Selkirk Mountains. Trail cameras produced grizzly bear photographs at 28 sites, identifying five females with young. In the Cabinet-Yaak, we placed 29 corral/camera sites and collected hair at 842 rub trees. Camera photographs identified grizzly bears at 6 sites including one female with young. We have been monitoring huckleberry production for more than 25 years in the Cabinet-Yaak ecosystem and expanded the effort to the Selkirk Mountains during 2014. We sampled 5 sites in the Selkirks and 15 sites in the Cabinet-Yaak and found average huckleberry production during 2019. *The annual reports covering 2018 activities can be found at the FWS Grizzly Bear Recovery website:* https://www.fws.gov/mountain-prairie/es/grizzlyBear.php.

Evaluation of the use of DNA collected at bear rub trees and corrals to estimate the grizzly population

Genetic sample results from the laboratory are not complete until the summer after collection and therefore our results here reflect samples collected in 2018. We sampled 373 rub trees and 129 corrals in the Selkirk Mountains during 2018. Genetic analysis indicated that rub trees produced grizzly bear hair from 26 individuals and corrals produced hair from 28 individuals. Some individuals were identified at both rubs and corrals. Using all data from rubs, corrals, captures, and photographs we identified 51 different individuals in the Selkirks (19 Females : 25 Males : 7 unknown sex). We sampled 782 rub trees and 55 corrals in the Cabinet-Yaak during 2018. Genetic analysis resulted in the identification of 45 individuals at

rubs and 17 individuals at corrals. Some individuals were identified at both rubs and corrals. Using all data from rubs, corrals, captures, and photographs we identified 54 different bears in the Cabinet-Yaak (21 Females : 26 males : 4 unknown sex).

NCDE Trend Monitoring Project

We supported the Northern Continental Divide Ecosystem (NCDE) grizzly bear trend monitoring project by providing funding for one full time employee's salary and benefits. Lori Roberts is a research assistant working with Montana Fish, Wildlife & Parks doing data base management and leading a trap team during the summer months. We purchased two iridium grizzly bear radio collars and release mechanisms for use in the NCDE by Montana Fish, Wildlife & Parks. *The latest report for this project can be found on MFWP's website:* http://fwp.mt.gov/fishAndWildlife/management/grizzlyBear/monitoring.html.

Prevention Work

Defenders of Wildlife's 2019 Electric Fencing Incentive Program worked directly with local residents, non-profit organizations, small businesses and government agencies on a wide variety of electric fence projects, primarily on private lands. We see tremendous conservation value in providing the financial support and technical expertise to build electric fence systems that effectively deter grizzly bears and other carnivores from accessing anthropogenic attractants. This program is designed to be proactive in preventing conflicts, though they give priority to those with previous or existing bear conflicts. Defenders saw a direct reduction in human-bear conflicts and other wildlife conflicts at these sites where fences are completed and maintained.

In 2019, Defenders completed 44 electric fence projects across the program area. In addition to various outreach events, program staff have been contacted by an additional 60 people seeking advice on electric fencing options and inquiring about assistance. Similar to years past, approximately half of the completed projects were initiated via referral from state and tribal bear managers and our partnership with Wildlife Services – Montana. These projects range from permanent, large scale, commercial livestock enclosures to temporary fence installations in response to ongoing conflicts. Program staff continue to survey past participants that have had their fence in operation for more than a year about the effectiveness of their electric fences. Of the newly surveyed participants that had fences installed in 2017, all are reporting their fences are still in use and have not experienced any conflicts since their fence was installed.

Prevention Cost Share Projects with the Blackfoot Challenge

In 2018, conflicts with grizzly bears in the Blackfoot watershed reached an all-time high. There were close to 80 conflicts with grizzly bears in the watershed, which was well beyond a typical year of 15-20 conflicts. To help address these issues the Blackfoot Challenge reached out to several partners to help local residents prevent future conflicts with grizzly bears. UM funding provided two residents with requested bear-resistant Kodiak garbage containers. In 2018, funding provided by UM and partners of the Blackfoot Challenge also built permanent electric fences to keep the bears out of two home sites (between Ovando and Helmville) that had a long history of conflicts with grizzly bears. These fences contained bear

attractants such as pet food, fruit trees, chickens, and garbage as well as provide human safety for the residents.

In 2019, the Blackfoot Challenge continued to build permanent electric fences to address the conflicts with grizzly bears in 2018. One of three projects was the construction of electric fencing around the Helmville dump. Local residents had reported grizzly bear sightings at the dump in 2018 and this project was rated as a high priority especially after several grizzly bears accessed the Ovando dump. The second and third projects were building permanent electric fence around home sites and calving yards at two ranches along the Blackfoot River north of Helmville, MT. Both of these ranches had experienced high volumes of grizzly bear activity with conflicts in the past and MT Fish, Wildlife and Parks spent a lot of time trapping for grizzly bears at these sites in 2018. Once again, these fences contained bear attractants such as pet food, fruit trees, chickens, and garbage as well as provide human safety for residents.

The cost share of these 2018-2019 electric fence projects included funding from the University of Montana Grizzly Bear Recovery Program, the Blackfoot Challenge, the US Fish & Wildlife Service Partners Program, Defenders of Wildlife, Western Bear Foundation, MT Fish, Wildlife & Parks, the landowners, and Vital Ground.

Masters Student Project: Grizzly Bear Use of Huckleberries

A graduate student began this project during the summer of 2018 and enrolled at the University of Montana during fall semester of 2018 and both spring and fall semesters of 2019. This project seeks to identify productive huckleberry shrubfields in the Cabinet-Yaak and Selkirk grizzly bear recovery areas by investigating grizzly bear radio location data. The project will develop a predictive model to identify additional productive shrubfields not visited by radio collared bears. Management actions that produce or maintain the utilized shrubfields (timber harvest, prescribed fire, etc.) may be identified for future management. The student completed his first field season and will continue field site visits and vegetation descriptions through the summer of 2020.

Army Cutworm Moth Use by Grizzly Bears in the Greater Yellowstone Ecosystem

In cooperation with the Shoshone National Forest, this project is investigating the use of stable isotope analysis to assess the dietary importance of army cutworm moths to grizzly bears in the Greater Yellowstone Ecosystem. Since the late 1990s, use of army cutworm moths have been monitored via aerial observations of grizzly bears at confirmed moth sites to measure trends in grizzly bear presence at moth sites. Stable isotope analysis will allow us to estimate the proportion of the assimilated diet that is composed of moths compared to other meat (e.g., other insects and ungulates) and plant matter. Food items were collected and analyzed in 2019 and grizzly bear hair collected in 2019 will be analyzed in early 2020. Moths will be collected from more peaks during 2020 for expanded analysis.

Workshop Support

Bear Handlers Workshop

Each year the Grizzly Bear Recovery Program puts on a workshop for bear researchers and managers who may handle grizzly bears. The workshop covers safe handling protocols and provides attendees with grizzly bear handling information and resources. The 2019 workshop occurred in Missoula, MT on March 5th and 6th with an attendance of more than 75 individuals from various agencies across Montana, Idaho, and Washington.

2020 International Conference on Bear Research & Management

We supported the upcoming 27th IBA conference in Kalispell, Montana by funding website and logo design.

Outreach & Education

The **Be Bear Aware Campaign** educates the public about living with bears and about bear avoidance in order to minimize human-bear conflicts. In 2019, the Be Bear Aware Campaign conducted over 65 programs, including presentations to grade schools and secondary schools, colleges, government workers, and the general public. These events were in depth about a variety of scenarios: how to avoid bear encounters, what to do during a bear encounter, and how to properly use bear spray. The target audience in 2019 continued to expand to include travel corridors for grizzly bears, from one recovery area to the next. These corridors included routes in and the Bitterroot recovery area, the recovery area east of the continental divide, north or the Bitterroot recovery area, and areas in and around Coeur d'Alene and Spokane. *See attached for Be Bear Aware Campaign's full 2019 report.*

The mission of **Swan Valley Bear Resources** (SVBR) is to offer community resources to promote coexistence between people and bears. SVBR is a working group formed by a collaborative effort between a local non-profit conservation/education organization and community members in partnership with the U.S. Forest Service, Montana Fish Wildlife & Parks, U.S. Fish & Wildlife Service and other natural resource entities. The purpose of this collaborative effort is to pool resources, experience and expertise, in order to address bear conflicts on private and public property in the Swan Valley. SVBR has now been providing place-based solutions to human/bear coexistence for 12 years. In 2019, SVBR distributed 28 bear-resistant garbage containers to local residents, about double the annual average. Currently, 265 containers and 28 dumpsters are currently being used by community members or businesses as part of their program. In 2019, SVBR also assisted six residents with construction of permanent electric fences, setting a record for the number of fences built by SVBR in a year. *See attached 2019 report.*

We supported the **Blackfoot Challenge Range Rider Program** during this reporting period. The Range Rider Program offers an array of services that include: keeping track of grizzly bear activity on private ranch and agricultural properties; following and monitoring cattle on private lands and federal and state livestock allotments on the summer ranges in order to prevent and document grizzly bear depredation; assisting with monitoring radio collared bears and wolves; and providing support to MFWP's bear /wolf specialist management team during research and management trapping efforts. The Range Rider also assists with the area-wide livestock carcass pick-up program, community bear awareness and education, setting up and

educating the public on the use of electric fencing, and grizzly bear management calls involving residential/agricultural attractants. As a result of these efforts, livestock depredations and conflicts and grizzly bear deaths related to improper management of garbage and other attractants have been greatly reduced. *The most recent report is attached.*

Interagency Grizzly Bear Committee website management was transitioned to Kate Smith in our office and Dillon Tabish with MFWP this year. Kate and Dillon updated website issues and discrepancies, as well as general needed clean-up of the website. They continue to update the website's meeting calendar and post all meeting minutes and presentations to the website, as well as work with the IEO committee on any other updates that are needed.

UM Graduate Committees and Lectures

Jennifer Fortin-Noreus and Hilary Cooley are both affiliate faculty at UM and serve on graduate committees and give guest lectures and seminars on campus. In 2019, they served on three graduate committees and gave lectures to the Careers in Wildlife Class and The Wildlife Society Student Chapter.

Note: While the University was not billed for the Swan Valley Bear Resources or Defenders of Wildlife work during this reporting period, we did have contracts with them for support during this period.

Projected Expenses: 10/1/19-9/30/20

Be Bear Aware Campaign - Outreach + Education from E WA to the E Front, MT
IGBC, Trans-border Grizzly Bear Project, and Missoula Bears website hosting and management
Bear Handlers Annual Workshop
Bear-resistant containers & electric fencing for preventative priority areas (transfer stations, private landowners, livestock producers)
Cedar Mountain Software – support for Tom's database
Swan Valley Connections preventative support
Defenders Electric Fencing Program
Field supplies
Electric fencing and/or bear resistant garbage cans for MDFWP and IDFG
Garbage Transfer Station Assistance
Graduate Student: wages, fringe, tuition, fees, insurance
Kate Smith: salary, fringe, benefits
Lori Roberts: MT FWP (F/T salary, fringe, benefits)
NCDE Management Bear Collars for Montana Fish, Wildlife & Parks
Office supplies
Publication costs of research results from peer reviewed papers
Summer field season in the Cabinet/Yaak: salary, fringe, and travel
Volunteer mileage and per diem for field work assistance
Computer hardware and software UM field technician computers
Wildlife monitoring cameras (6)

Support up to $5,000 for the 2020 IBA Conference in Kalispell, MT
Transferring Trans-Border Grizzly Bear Project from Dreamweaver to WordPress
iPads for conflict database (5)
Isotope analysis for bear diets in NCDE, CY, SM, and YE

Be Bear Aware Campaign: 2019 Educational Outreach Report

This year we worked for the safety of people and the safety of bears in one of our biggest outreach years to date in an attempt to reach everyone, everywhere.





We trained the trainers. Above left, we trained the staff of the Bureau of Land Management on how to use their bear spray and avoid bears. Above right, we trained the University of Montana Wildlife Society.





We trained the next generation. We taught Boy Scouts how to be aware of their surroundings and children in rural parts of Montana, Washington and Idaho.





Be Bear Aware and Wildlife Stewardship Campaign
P.O. Box 7487 • Missoula, Montana • 59807 • 406-239-2315

December 18, 2019

Hillary Cooley
Grizzly Bear Recovery Coordinator
U.S. Fish and Wildlife Service

Attached is our end of year report for 2019. The incredibly generous support from the U.S. Fish and Wildlife Service allowed to us expand our reach farther than we've ever done in a single program year. Without these funds, a tremendous part of our outreach would not not be possible.

The US Fish and Wildlife Service played a big part in us being able to expand our program in 2019. This report is both a summary for your records and a "thank you," to show the agency what a difference is made by providing support for the Be Bear Aware Campaign.

This year saw us reach new audiences and travel to new horizons. We expanded our reach by targeting not only people in the field, but also strategically targeting people who can be ambassadors for bear safety. In addition to our bear avoidance and bear spray training course programs we also adapted special materials to distribute throughout the year to help rising numbers of bear-human garbage conflict, and mountain lion attacks, as it was a deadly year for carnivores, primarly because of ill-informed people.

This year we expanded our reach into eastern Montana, where the grizzly population is making a return. We were swarmed at the Central Montana Fair in Lewistown as the public clamored for information about the expanding habitat of the grizzly bear, and how to live with the bears.

We also focused on giving roadside programming in wildlife corridors that grizzly bears are using to expand their habitat into the Bitterroot, the Rock Creek area, Couer D'Alene and Spokane.

It was an absolute banner year. Thank you for your support and we look forward to working with you in 2020.

Sincerely,



Chuck Bartlebaugh

Summary of Outreach Programs for 2019

In 2019 we completed more than 65 programs, but ended up giving more than 90 days of programming when you factor in the fact that some programs were multi-day events like the Ravalli or Central Montana Fair, and the road-side set ups in grizzly bear cooridors. These programs included presentations to gradeschools and secondary schools, colleges, government workers and the general public. Our programs include the usage of our bear spray training course, which includes a set up of how to react to an aggressive, agitated bear charge from 60 feet, 30 feet, 15 feet and a charge with no or little warning. These scenarios are used with the bear mounts to provide a life-like situations for people to practice deploying their bear spray.

We again estimated the number of people who saw the educational bear trailer to be at **100,000** or more based on billboard industry statistics. The eye-grabbing displays prompt people to ask the Be Bear Aware crew about bears, bear safety, and bear handouts. It is not uncommon for people to take photos of our displays and share that information with others.

Major Bear Avoidance and Bear Spray Training Events 2019

*Training of the 2019 Montana State Parks Americorps class which were able to pass their knowledege on to the 2.65 million annual visitors to more than 50 parks

* Great Outdoor Expo at the Fair Grounds in Spokane, Washington (20,0000+ attendees)
* Keynote speech at the Pope and Young Biennial Convention in Omaha, Nebraska
* Ravalli County Fair
* Central Montana Fair
* I-90 Corridor Events (Alberton, Superior, St. Regis, and I-90 Campgrounds)
* Rock Creek Corridor Events
* Bitterroot Corridor Events
* Special events in response to problem bears in Lindberg Lake and the Bitterroot

Special Services Provided 2019

* Distributed over 30,000 4x6 black bear and grizzly bear identification cards
* Distributed 15,000 Bear Sprea Words/ Speed Chart Cars
* Distributed more than 2,000 hard copies of our new How to Deploy Bear Spray Against an Agitated Charging Bear Guide
* Our social media efforts to share our How to Deploy Bear Spray Against An Agitated Charging Bear Guide were more successful than we hoped. It was shared to an audience of more than 80,000 people in a single month's time.
* Worked with Grand Teton National Park Foundation to get 10,000 copies of bear avoidance materials to the park in a summer where bear conflict was very high.

2019 has been an incredible year of expansion!



We took our bear spray training course across the state including the Central Montana Fair and Ravalli County Fair, where we were mobbed by people concerned about expanding grizzly bear habitat and how to stay safe as grizzlies were spotted further west and into the Bitterroot this summer.



We gave presentations to school groups across Montana, including very rural small schools like the Sunset School, which lies in the heart of bear country.





Left: We hid the grizzly mount so that Boy Scouts at Scout-O-Rama in Post Falls, Idaho could experience how easy it is to not recognize a bear is nearby. None of the boys noticed the bear as they walked by.



Media Coverage



The Greater Yellowstone Coalition gave people a chance to test their reaction time deploying bear spray at last year's ElkFest with a decoy charging bear.

Bear spray best practices

Not all informational pamphlets about the proper use of bear spray are created equal, says Chuck Bartlebaugh, a Missoula, Montana, resident who founded the Be Bear Aware campaign (bebearaware.org). "The agencies keep looking for a way to get hunters using more bear spray, and the way is simple: A clear, concise, and consistent message," Bartlebaugh says. "We do not have that. We don't even come close."

Bartlebaugh says bear spray users should rehearse accessing and using their canisters to the point where it's muscle memory, because the likelihood is that they will have two seconds or less to respond. A grizzly bear charging at 30 miles an hour that first comes into view from 20 yards away will close the gap in 1.4 seconds. "You deploy your bear spray by pulling it out of the holster, and as it's coming out of the holster you're pulling [the safety] with the front of the curled-up lip," Bartlebaugh says. "Deploy the bear spray downward toward the charging bear. You just spray, don't aim for the bear. Continue spraying until that bear says I've had enough. Do not use a short burst to see if it works."



The excerpt to the left is from the above magazine, Jackson Hole magazine.

Bear activity spikes in Lolo prompting concerns over garbage

Posted: 7:25 AM, Jul 30, 2019 **Updated:** 7:25 AM, Jul 30, 2019
By: Katie Miller



LOLO – Some Lolo residents have been noticing dumpsters flipped over and trash on the side of the road, attracting more bears than normal.

Sleeman Creek Road, off of US Highway 12 west of town, is one of the last wildlife crossings between Missoula and Lolo.

There are six-to-eight bears feeding off the garbage in Lolo and state wildlife officials say that's not happening anywhere else in the Missoula Valley.

Residents say people are leaving trash out in the open, on top of dumpsters, and in the road.

Some people have been cleaning the trash and even putting bricks and locks on the dumpsters in an effort to try and solve the issue.

Meanwhile, the Lolo Community Council is trying to coordinate bear aware events to educate the public, sometime in the future.

Montana Fish, Wildlife and



One of the areas sparking the most concern



Why we redesigned the website and mobile app

ADVERTISEMENT



This article, done by KPAX television, included a full link to our new 8-page guide at the end.

Media Coverage

COVERING CENTRAL MONTANA LIKE THE STARS
LEWISTOWN NEWS
VOLUME 137 NUMBER 72 LEWISTOWNNEWS.COM

Education crucial for living safely in bear country



Chuck Bartlebaugh (right) of the Be Bear Aware campaign explains the difference between black bears and grizzlies to Emma Kuehn, age 1.5, and her mother, Alana. Bartlebaugh's booth at the fair showed the distances at which bear spray is effective

Photo by Deb Hill

By DEB HILL
News-Argus Managing Editor

Grizzlies are moving into Central Montana, and residents need to be prepared. That's the word according to Chuck Bartlebaugh with the Be Bear Aware campaign. Bartlebaugh was in town last week to offer bear education at the Central Montana Fair.

Armed with taxidermied specimens of a black bear and a grizzly, along with bear spray containers and educational material, Bartlebaugh was busy teaching people about bear behavior and how to be safe in bear country.

"I do it because I am passionate about grizzly bears and I don't want to see them shot," he said. "I've been studying bears and bear behavior since 1985. They are beautiful animals."

Part of what Bartlebaugh teaches has to do with assessing bear behavior.

"Even a black bear can kill you," he said. "You need to be 'bear aware' whenever you are out in areas where bears live."

Bartlebaugh was quick to point out the vast majority of interactions between bears and people are harmless.

"If you see a bear at a distance, don't approach it. You might need to alter your route to keep a safe distance from it," he said. "If you suddenly encounter a bear at a close distance, you need to stay calm and assess the bear for signs it is getting agitated."

Those signs, Bartlebaugh said, include woofing, clicking its teeth, stamping its paws, growling or lunging.

"If you see any of those behaviors, remove your bear spray from the holster and remove the safety clip," he said. "Remain calm. Avoid direct eye contact or confrontational behavior. You want to give the bear a chance to leave, if it will."

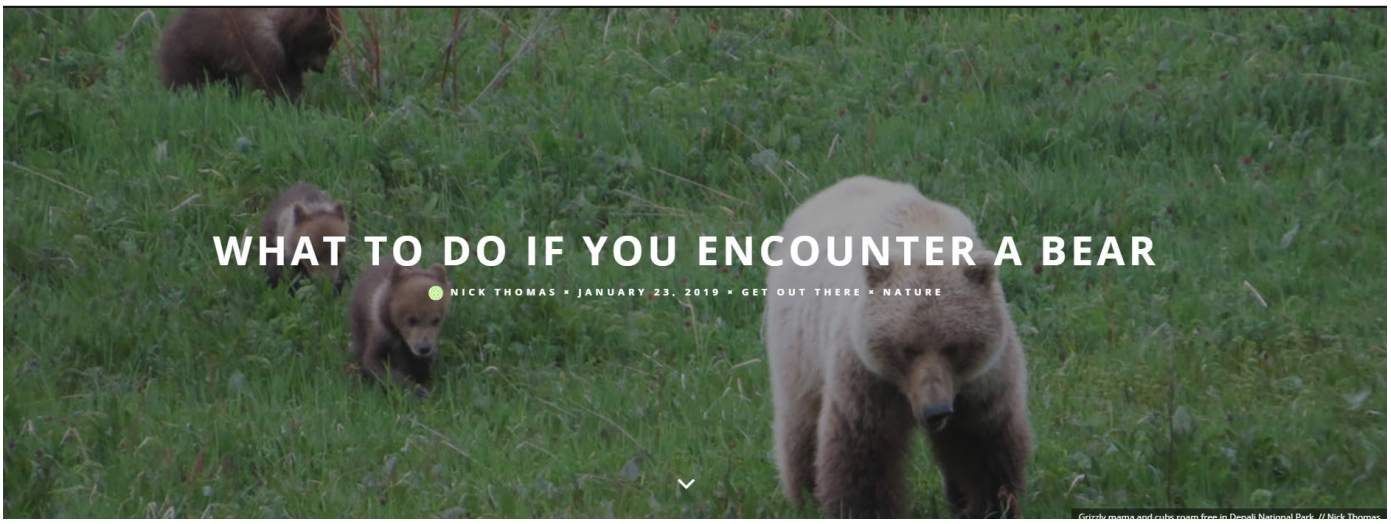
Bear spray, Bartlebaugh said, can make the difference if a bear turns aggressive, but most people don't know how to use it correctly.

"Not every product sold as bear spray is effective," he explained. "For one thing, you need to make sure what you buy is bear spray, not personal self defense spray."

See Bears | Page 5

We were featured in the Lewistown News and OutThere Outdoors Magazine, of Spokane.

OutThere OUTDOORS
viewranger CASIO Find your way ViewRanger + Casio Pro Trek Smart EXPLORE MORE



Media Coverage



Our appearance at the Last Best Outdoorsfest, which reaches hunters, fishermen, hikers, bikers and other recreationists was featured on NBC Montana, the #1 news channel in the state.





Be Bear Aware Campaign Releases Bear Spray Guide

August 25, 2019 Janelle Burns Local News

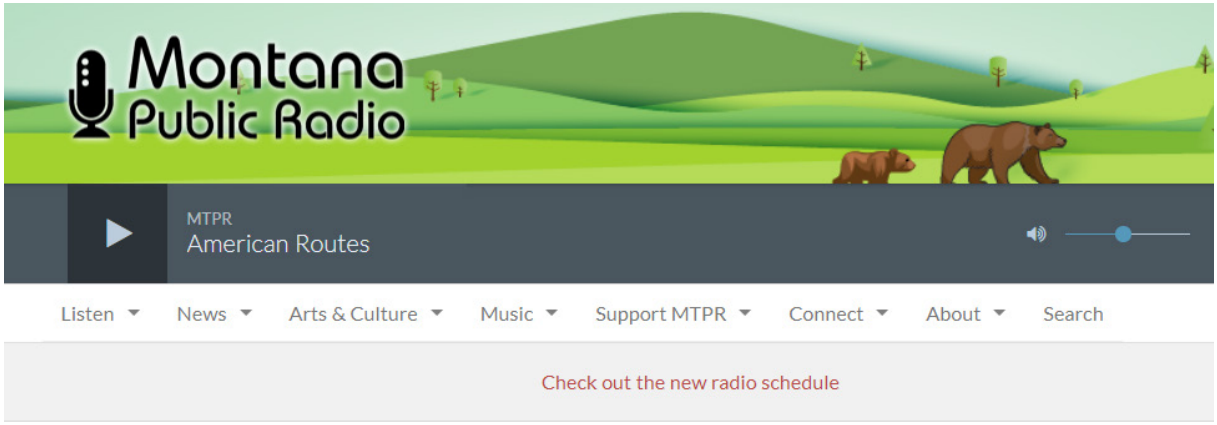
MISSOULA, Mont. (NMB) – The Be Bear Aware Campaign has released a new 8-page guide called "How to Deploy your Bear Spray Against a Highly Agitated Charging Bear." A press release says the guide was made because the Be Bear Aware Campaign is concerned because most bear spray training is based on using pepper spray for people, not bear spray for use on bears. They are two different applications and using the wrong instructions or product can get you mauled.

Be Bear Aware™

The Be Bear Aware Campaign has monitored bear attacks and maulings that occurred with and without bear spray for more than 40 years. Since bear spray was marketed in the 1990's, incidences where bear spray failed to perform had several similarities, including waiting for the bear to be too close for the spray to take effect, spraying over top of the bear because they were not holding the can firmly, being unable to get the safety clip off, spraying short bursts, incorrectly aiming toward a bear's eyes, nose and mouth, and mistaking bear spray, pepper spray and military spray as the same product.

Other media picked up copies of our 8-page guide including the Carbon County news in Northern Montana, the Island Park News in Idaho, Explore Big Sky, and many others.

Media Coverage



Are You Sure You Know How To Use Bear Spray?

By EDWARD O'BRIEN • AUG 27, 2019

Share
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We were interviewed by Ed O'Brien of Montana Public Radio.





Because our Communications Coordinator also works as a blogger at the Montana Outdoor Radio Show, all the newest news on bear spray and our products reaches thousands of hunters, fishers, hikers and recreationists.

Be Bear Aware Campaign
P.O. Box 7487 • Missoula, Montana 59807 • 406-239-2315 • **Email:** bearinfo@cfwi.org

This 2-page educational product was made for Lindbergh Lake, Seeley Lake and the Bitteroot Valley!

Let's make Lindbergh Lake safe for people and bears, especially for our kids

Lindbergh Lake is a spectacular place to live and recreate, with a mountain backdrop, and sightings of moose, elk and deer common, with occasional bears. There is a healthy population of black bears and a growing number of grizzly bears living in the area. Let's work together to keep wildlife wild.

Let's work together as stewards of our wildlife and wildlife treasures, which has been a tradition for generations. By doing some basic bear avoidance safety protocols, we can reduce the possibility of wildlife encounters where people and wildlife may be injured. The wildlife have called Lindbergh Lake their home for centuries and by following the listed recommendations to avoid attracting bears to our homes and communities, we can enjoy their presence and maintain community safety.



Suggestions for residential bear or cougar avoidance:

- Walk your yard or property and ask if you have any attractants that will draw in bear, deer, or other wildlife. Remember: cougars follow deer. Bears follow their nose. Ripe fruit trees and some plants are strong attractants and should be picked and stored.

- Ask yourself if your yard is well-lighted so when you get up in the morning or come home at night you will be able to see if there is a cougar or a bear nearby. Motion detected lights will turn on and off automatically and will also be triggered if a bear or a cougar is in your area.

- Make sure your trash is stored in a garage, inaccessible to wildlife and taken out on the morning of pick up, not the night before.

- When you have family activities outdoors have a trash collection site established, and return food inside as soon as possible after a meal. Make sure the trash is picked up and stored in a garage until trash day.

- If bears are frequenting your residential area, ask yourself why. What is attracting the bear?

- Use bear resistant trash containers, but remember they are an attractant and should be stored in a secure building such as a supply shed or a garage on the day of pickup.

- Birdfeeders should be used only during the winter months when birds really need the extra help getting through the winter and bears are asleep. If you want to hang birdfeeders, hang them at least 10 feet off the ground as far away from your home as possible, with a simple pulley system to lower or raise them when its time to add more seed.

- Swings and slides for kids should be placed where they can be easily watched from inside the house or within earshot, and quickly accessible for adults. Do not place them near brushy or concealing areas where a bear or a cougar might be concealed.

- Remove heavy brush along the lot line that may conceal the approach of wildlife.

- BBQ grills, coolers, bear-resistant or not, should be stored in outbuildings or garages until needed.

Pets:

Pets need a little extra care. They often don't know what bears, cougars and moose are and how aggressively they will protect their young. Safety pointers include:

- Do not let pets run freely where they may encounter a bear, cougar, moose or even deer.

- Outside pets should be fed during the day, with feeding bowls taken inside so there are no pet foods lingering outside to attract wildlife.

- If your pet is acting strangely and does not want to go outside, do not force it. This may be an indication that there is a bear or cougar nearby.

Walking the neighborhood:

- Take a flashlight and your bear spray. Walk with a friend.

- Stay on well-lit pathways.

For more information contact Montana Fish, Wildlife and Parks.

Check your local hardware and feed store for information about electric fencing and other animal deterrent and resistant products.

BeBearAware.org
PO Box 7487
Missoula, MT 59807
Phone: 406-239-2315
Email: bearinfo@cfwi.org

www. facebook.com/bebearaware

www.youtube.com/bebearaware

Visit us online for more resources on bear avoidance, bear spray, and bear safety!



Swan Valley Bear Resources Reporting Period 01/01/19 thru 9/30/19

The mission of Swan Valley Bear Resources (SVBR) is to offer community resources to promote coexistence between people and bears. SVBR is a working group formed by a collaborative effort between a local non-profit conservation/education organization Swan Valley Connections (SVC) and community members in partnership with the U.S. Forest Service (USFS), Montana Fish Wildlife & Parks (FWP), U.S. Fish & Wildlife Service (FWS) and other natural resource entities. The purpose of this collaborative effort is to pool resources, experience and expertise, and to address bear conflicts on private and public property in the Swan Valley. SVBR has now been providing place-based solutions to human/bear coexistence for 12 years. The group continues to re-evaluate goals and strategies so it may continue to use local knowledge and cooperation to create place-based solutions that diminish human-bear conflicts.

Private Property Projects:
SVBR focuses on a spectrum of private property projects geared toward providing interested property owners with materials, information, and conflict response to create site-specific solutions for securing bear attractants and minimizing risk of bear conflicts. SVBR collaboration with private property owners may come by a variety of different means such as landowner interest or response to a bear conflict. Some on-going examples of SVBR collaboration with private property owners in the Swan Valley include: providing advice on securing bear attractants, loaning bear-resistant garbage containers, helping build electric fences around attractants, removing animal carcasses, helping remove ripe fruit from trees, installing motion-sensor activated cameras to monitor bear conflicts, and contacting FWP management specialists in the event of a conflict. In 2019, SVBR staff provided numerous private property consultations that involved different methods for securing bear attractants.

Swan Valley Bear Resources administers a Bear-Resistant Garbage Container Loaner Program within the Swan Valley. The program allows community members to check out bear-resistant garbage containers for free and on an indefinite basis, with a suggested donation. Bear-resistant containers are also available for purchase. Loaner containers for the program are purchased with a combination of SVC funds, grant dollars procured by the USFWS Grizzly Bear Recovery Program, USFS funds, Defenders of Wildlife, and private donations. The loaner container program is aimed at providing local residents a means to securely store garbage. SVBR staff will deliver containers to residents' properties free of charge and take the opportunity to offer advice on how to secure other bear attractants that may be present. In 2019, SVBR distributed 28 bear-resistant garbage containers to local residents, about double the annual average. Currently, 265 containers and 28 dumpsters are currently being used by community members or businesses as part of the program in the Swan Valley.

Electric Fencing Projects:
From 2009 to 2018, SVBR assisted 19 private landowners with construction of permanent electric bear exclusion fences. SVBR assists with the entire fence building process including site identification, fence design, technical specifications, help to secure funding sources, purchase of materials, and final hands-on fence construction. Fencing projects are done opportunistically with interested landowners as needs and opportunities arise. SVBR has seen an increase in residents raising small livestock in the Swan Valley and the associated demand for electric fencing projects to minimize bear conflicts.

In 2019, SVBR assisted six residents with construction of permanent electric fences, setting a record for number of fences built by SVBR in a year. Four of the six locations where SVBR helped build

electric fences had experienced previous bear conflicts due to chickens, small livestock, livestock grain, and orchard fruit, while the other two were residents who were taking proactive preventative measures.

Attractants that have been secured by these 25 permanent electric fence projects are: chickens, turkeys, ducks, goats, sheep, pigs, rabbits, bees, miniature horses, outside chest freezers, livestock grain, orchard trees, compost bins, and gardens. Partners on these projects have included: SVBR, U.S. Fish and Wildlife Services' Partners for Fish and Wildlife Program, Montana Fish, Wildlife, and Parks, Defenders of Wildlife, and the landowners.

Educational Events:
Every year SVBR partners with various agencies, organizations, and businesses to provide educational events aimed at promoting human-bear coexistence. In April, SVBR hosted a Spring Bear Wake-Up Social at the Swan River community hall in Ferndale that featured presentations by Montana Fish, Wildlife, and Parks grizzly bear management specialist Tim Manley and locally renowned author and biologist Doug Chadwick. The event serves as an annual reminder for residents to contain their bear attractants as bears emerge from hibernation. The event marked the second Spring Bear Wake Up Social in the greater Ferndale area, and was well attended by around 125 local residents.

In June, SVBR also hosted its popular summer event, the Bear Fair, at the Condon community hall. The event brought together regional bear experts, organizations, and companies to share information about bear ecology, behavior, research, conservation, conflict management, and different resources available to secure bear attractants. Presentations were given by Tim Manley and U.S. Forest Service Wildlife Biologist Mark Ruby, who gave informative talks on the most up-to-date grizzly bear research, recreation management, and conflict management. In addition, representatives from SVBR, Vital Ground Foundation, Be Bear Aware, and Gallagher Fencing were also present, offering informative displays, educational materials, kids activities, and demonstrations about bear pepper spray use and effectiveness, bear-resistant trash cans, electric fencing, habitat linkage zones, conservation easements, and how to live in bear country. Approximately 100 people attended the event throughout the day.

Outreach and Education:
In addition to educational events, SVBR also provides outreach and education through other avenues. SVBR annually publishes Swan Valley Bear News, which is included in Swan Valley Connections' winter newsletter. The newsletter is sent out to about 2,000 of SVC's subscribers. Swan Valley Bear News typically includes articles written by SVBR staff or local agency bear management specialists concerning annual natural bear food availability, research, biology, conflict management, new data, interesting bear stories, or SVBR activities. The goal of the publication is to provide another form of outreach to educate people about living in bear country.

Swan Valley Connections has a visitor center that is staffed by a full-time employee. The visitor center contains a mounted grizzly bear, Counter Assault pepper spray and bear-related books for sale, and free SVBR brochures and pamphlets. New residents that stop by the visitor center are provided with a free 'living with wildlife' packet that contains information about living in bear country, attractants and how to secure them, and resources available to help minimize conflicts. With help from SVBR staff, inert cans of bear pepper spray are also available to visitors to get hands-on experience with how to properly deploy the spray. Some SVBR staff have office space in the visitor center, and are readily available to answer any bear-related questions that may arise from visitors. In addition, the

visitor center office manager answers many bear-related questions and provides tips on how to safely recreate, properly store food, and camp in bear country.

In addition, Swan Valley Connections taught two college field semester courses in 2019. Students received in-depth information and education about bear ecology, behavior, research, recovery, management, effective bear pepper spray use, and practiced with inert cans of bear spray. 14 students were reached through these educational opportunities.

SVBR also provides outreach and updated information through Swan Valley Connections' website https://www.swanvalleyconnections.org/swan-valley-bear-resources/.

THE BLACKFOOT WATERSHED WOLF AND BEAR ACTIVITY REPORT
Fall 2018 and Spring 2019

Hello everyone, this is Eric Graham working for the wildlife program at the Blackfoot Challenge. In coordination with Montana Fish, Wildlife and Parks (MFWP) we produce this wolf and bear activity report. These reports are typically compiled during our range rider season from May through October, but due to the large volume of grizzly bear conflicts and activity last fall, and the fact that we were short-handed due to the fact that James Jonkel (FWP R2 bear manager) was unable to work due to an injury, I was not able to complete a report last fall. And, it looks like we will be short-handed again this spring, James Jonkel will be out most of the spring and early summer recovering from surgery and it will be Eli Hampson and myself covering most of the issues with bears.

First, some history on the Blackfoot Challenge Range Rider Program: It was back in 2008 that the Blackfoot Challenge (BC) started a pilot season to explore hiring seasonal range riders and here we are in our 10th season of range rider efforts in the watershed. We will continue to work with ranches throughout the Blackfoot watershed to help them keep an eye on predator activity and to increase herd supervision and communication until the cows come home from their grazing leases this fall.

Thanks again to all of the ranchers and landowners that make this program possible. Thanks to all of the partners that provide funding and technical assistance - MFWP, the United States Fish and Wildlife Service (USFWS), the Bureau of Land Management (BLM), The Nature Conservancy (TNC), the Livestock Loss Board, Northern Rockies Conservation Co-op, Defenders of Wildlife, Vital Ground, the Cross Charitable Foundation, the Stranahan Foundation, and numerous individuals.

If you have any questions about the wildlife program please call the Blackfoot Challenge **Wildlife Committee Chair - Randy Gazda (406) 793-7402.**

Contact Info for reporting wolf and/or bear activity:
Eric Graham – Blackfoot Challenge Wildlife Technician (406) 240-3132
Jamie Jonkel – MFWP Bear Management Specialist (406) 544-1447
Eli Hampson---MFWP Bear/Lion Management Technician (406) 210-3213
Tyler Parks – MFWP Wolf Management Specialist (406) 531-4454
Scott Eggeman – MFWP Blackfoot Area Wildlife Biologist (406) 542-5542

If you have a suspected depredation please notify USDA **Wildlife Services** (WS) as soon as possible to determine the cause of death. Regarding reimbursement for losses through the **Livestock Loss Board**: If you suspect a livestock loss due to mountain lion/wolf/grizzly bear predation, you can request an investigation to see if the losses were due to a confirmed or probable depredation. The Livestock Loss Board can pay only for confirmed or probable losses as determined by USDA-Wildlife Services (WS).

WS Powell County - Bart Smith (406) 660-0368
WS Missoula County - Ted North (406) 274-4856
WS Lewis & Clark County - John Meidtke (406) 855-8429
Department of Livestock - Livestock Loss Board (406) 444-5609

IMPORTANT UPDATES

BLACKFOOT VALLEY WOLF PACKS –

ARRASTRA CREEK PACK
Pack Structure: 5 or more Adults
Collared Wolf: Yes (1)
Pack Report: There were two radio collared wolves in this pack in 2018. One radio collared wolf was harvested during the 2018 wolf hunting and trapping season. A radio collared female should still be active in the pack.

AVON PACK
Pack Structure: 5 Adults
Collared Wolf: No
Pack Report: Nothing new to report.

BELMONT PACK
Pack Structure: ~5 Adults
Collared Wolf: No
Pack Report: This pack is thought to spend time on the Confederated Salish and Kootenai Tribe reservation.

BUGLE MOUNTAIN PACK
Backcountry

CHAMBERLAIN PACK
Pack Structure: ~8 Adults
Collared Wolf: No
Pack Report: Nothing new to report.

CONGER POINT PACK
Backcountry

HUMBUG PACK
Pack Structure: Unknown
Collared Wolf: No
Pack Report: Nothing new to report.

INEZ PACK
Pack Structure: ~5 Adults
Collared Wolf: No
Pack Report: There were two radio collared wolves in this pack in 2018. A radio collared adult was harvested during the 2018 wolf hunting and trapping season. And a two-year-old radio collared female was illegally taken.

LANDERS FORK PACK
Pack Structure: Unknown
Collared Wolf: No
Pack Report: Nothing new to report.

MORRELL MOUNTAIN PACK
Pack Structure: 7 Adults
Collared Wolf: Yes (4)
Pack Report: MFWP continues to monitor via radio telemetry.

SEELEY LAKE PACK
Pack Structure: 4 Adults
Collared Wolf: No
Pack Report: Nothing new to report.

STONEWALL MOUNTAIN PACK
Pack Structure: 4 Adults
Collared Wolf: Yes (1)
Pack Report: Nothing new to report.

UNION PEAK PACK
Pack Structure: 4 Adults
Collared Wolf: No
Pack Report: Nothing new to report.

WOLF ACTIVITY

Wolf activity in the Blackfoot remains consistent with years past, with reports coming in throughout the valley.



Wolf tracks from the Sunflower Pack near Gold Creek.

On March 7th, 2019, The Blackfoot Challenge partnered with Wildlife Services, FWP, and a local ranch to deploy turbo fladry to deter wolves from entering a calving yard.

For 2019, Wildlife Services has not verified any wolf depredations in the Blackfoot or in FWP's Region 2 (As of 4/26/2019).



A wolf track (lower right corner) paralleling the turbo fladry on the outside of a calving yard.

IMPORTANT UPDATES REGARDING GRIZZLY BEAR ACTIVITY IN THE BLACKFOOT VALLEY

2018:

Last summer turned out to be the worst grizzly conflict season on record in the Blackfoot watershed. Most years, we average four to five livestock depredations and 15 or so residential conflicts, involving garbage, bird feeders, fruit trees, freezers, grain sheds and other attractants. But this last year we had approximately 80 grizzly-related conflicts, six of which were verified livestock depredations and one depredation attempt.

Due to the large number of residential-related conflicts last year, I grouped some of the individual conflict incidents into conflict episodes. For example, during a two-night period in June, we had two grizzlies come into Ovando, that got into uncontained garbage at multiple homes and businesses, grain in one chicken coop and a garbage wagon. These conflicts were all lumped and counted as one conflict episode.

With that in mind, I did my best to break the 2018 grizzly bear conflicts up by tributary:

Clearwater Drainage 2018

In the Clearwater Drainage we had approximately 18 conflicts: 15 involved grizzlies getting into uncontained garbage and chicken or livestock feed; one predation of a pig; and two crowd control/ traffic hazard- related conflicts. The majority, of these conflicts, were related to the radio collared grizzly bear "Baptiste", who was destroyed by FWP near Condon in early July. There was at least one additional adult male grizzly that killed the pig and was involved in a handful of garbage incidents. This unmarked adult male also spent time on the Blackfoot Valley side near Woodworth and Ovando.

Upper Blackfoot Drainage 2018

In the Blackfoot Valley we had approximately 62 conflict episodes. There were roughly 50 incidents involving grizzlies accessing garbage, livestock feed, chicken feed, Crystal Lyx, bird feeders, BBQs, dog food, fruit trees, animal carcasses in yards and one incident of a freezer full of meat on a back porch. There were two reports of a grizzly hitting hunting camps in the Scapegoat Wilderness. There were three sudden encounters, in two of which bear spray was deployed. And in the Blackfoot, Wildlife Services, verified five livestock depredations and one depredation attempt on calves. And in the Lincoln area there was one road hazard/crowd control situation involving a road-killed female grizzly and her 3 orphaned cubs. The majority, of the residential conflicts, involved two grizzly bears traveling together and additional grizzly bears, one of which had a severe limp. It was difficult to determine how many grizzlies were involved with the Blackfoot Valley depredations, but it was verified that a family group was involved with the one calf injury west of Helmville in early April, and a lone grizzly was suspected in depredations south west of Helmville. But, due to the large numbers of conflicts in 2018 it was difficult to determine exactly how many different bears were involved in conflicts. Two adult grizzlies and three orphaned cubs were trapped as a result of these conflicts. The two adults were relocated to the Flathead National Forest and the three cubs were placed in the Quebec Zoo.

(Note: there were a handful of additional incidents with livestock involving grizzly bears feeding on or scavenging other predator's kills and/or suspect kills. And south of the Blackfoot Valley, in the Gold Creek area, there was one verified grizzly calf depredation July.)

We had higher conflicts in 2018 for multiple reasons: 1) The grizzly bear population has increased and we have reached capacity; 2) Grizzlies that have keyed into agricultural crops in proximity to houses; 3) Multiple family groups with dispersing sub adults are inhabiting the valley; 4) Unusual spring and heavy snow pack has concentrated the bear activity on green-up sites around the valley floor; 5) The 2017 fires burned hot along the south end of the Bob Marshall and Scapegoat Wildernesses and bears were displaced to adjacent areas; 6)

Exceptional berry crops (service berry, choke cherry and hawthorn) lured bears into the lower elevations; and 7) Bears are being trained up by individuals with uncontained residential/agricultural foods that are good to eat (garbage, grain, fruit, etc.).

The two male grizzlies trapped and relocated were captured during the following management actions:

1. On April 22nd, 2018, a calf was attacked and injured northwest of Helmville. The calf survived. Wildlife Services verified the attack and traps were set for a female grizzly bear with 3 sub-adults that were observed at the site of the incident. The family group was not captured, however, on 4/25 a 474 pound-male grizzly named "McElwain" was incidentally captured. The bear was collared and relocated to Glacier National Park. (Due to heavy snow at the time, there were no other adequate relocation sites.) In late summer 2018 "McElwain" dropped his collar in Glacier National Park.

2. On September 19th, 2018, a young adult male was captured at a ranch near the Aunt Molly Wildlife Area after it tipped over several burn barrels and investigated the yard area. The bear was approximately 300 pounds and was named "Blackfoot". The bear was collared and relocated to the Flathead National Forest on the edge of the Great Bear Wilderness Area. His last known location was last fall south of the Blackfoot Indian Reservation on the Rocky Mountain Front.

The residential/ranch-site conflicts that occurred in 2018 were mostly due to a handful of grizzlies that developed food-conditioned behavior last year. These bears are showing us where lots of home sites and ranches are leaving out uncontained sources of grain, chicken feed, bird feeders and grain. Please remember, that the best way to keep bears from developing bad habits in the first place is to be diligent in containing any food-related items around the household or ranch. If possible manage garbage carefully and store grain, sweet licks and other desirable attractants behind electric fence or within stout buildings with closed doors. That is, anything that a bear might find desirable should be locked up tight and be made unavailable--especially if your homesite or ranch is adjacent to areas with known bear activity. The best way to keep the area safe is to deter bears from coming in and around homesites by not encouraging them or training them to seek out food rewards around homesites in the first place.

2019 To-Date:

Adult male grizzly tracks were observed in the foothills and higher ridge lines as early as March 19th this year. By the end of March our two collared males, a research male known as "Walking Bear" and a subadult Male that was relocated from the Bitterroot to the NE side of the Rattlesnake Wilderness, both emerged from their dens. The research female grizzly, known as "Silverqueen," was still in her den as of last week.

Since the second week of April a handful of bears appeared in the valley floor. There have been multiple incidents this spring:

- On April 5th a grizzly was observed crossing a field with cows near Helmville. The bear did not chase or show interest in the cows.
- On April 13th a grizzly was observed crossing Hwy 200 on the west side of Ovando. The bear skirted the edge of town and continued south toward the Blackfoot River.
- On April 15th there were two separate incidents where grizzlies investigated residences. A grizzly was photographed at night in a yard near Clearwater Junction. The bear tipped over two empty garbage cans and moved around several fuel/oil barrels. And that same night a grizzly, north of Seeley Lake, accessed a winter's worth of garbage that was being stored in an open trailer. We are monitoring "Stevi" as he is in this vicinity and we hope he has not learned about garbage.
- In the Helmville area, Wildlife Services responded to a handful of grizzly/predator complaints involving livestock, including: an injured calf near the Aunt Molly WMA; an injured calf near Nevada Lake; a scavenged calf near Avon and several reports of missing calves; and several verified depredations. On April 20th Wildlife Services did set traps for a grizzly involved with a calf depredation SW of Helmville and on April 23rd a lone grizzly was captured and destroyed. It was believed that this grizzly was involved in two depredations at this site this spring and three depredations at the same site last year. Traps were also set at an adjacent ranch on April 23rd for a grizzly that killed one calf, maybe two. No bear has been captured at this site.
- On April 25th three grizzlies were observed near a homesite/bus stop in the vicinity of the Aunt Molly WMA. It was determined that the grizzlies were feeding on a bull carcass near the site. This situation was monitored and it appears that the bears have left the area now that the carcass is mostly consumed.

See the link below for more:
https://missoulian.com/news/local/after-busy-grizzly-managers-brace-for-more-work/article_7f861c8b-3169-58f5-9b9a-10748263efe5.html

LIVESTOCK CARCASS PICKUP PROGRAM

The Blackfoot Challenge's Livestock Carcass Pick Up and Removal Program runs from mid-February through mid-May. Thereafter, carcasses in the Blackfoot watershed are picked up by FWP. If you currently have a carcass for pick up, please call 544-1447 to reach Jamie Jonkel with Montana FWP. The carcass will be taken to the compost site near Clearwater Junction to help prevent conflicts with bears and wolves. To learn more about this program, watch the video "Living with Carnivores: Boneyards, Bear & Wolves."

In the spring of 2018 there were 5 incidents of grizzly bears venturing into ranch compounds to retrieve carcasses left out for the carcass pickup program. Dead calves were either left on the ground or placed on hay bales within high activity areas on the ranch and bears were lured in to feed on the carcasses. As a result, we are re-evaluating pickup protocol and now recommend that after March 2019 all carcasses set aside for pickup be stored away from the ranch premises.

In late March 2019 we sent a letter out to participants with this wording:

> "Due to last year's issues with grizzlies being lured into several ranch compounds for livestock carcasses, it is recommended that, after April 1st, carcasses not be stored within the ranch headquarters or near cattle activity. Rather, carcasses should be stored at a minimum of 400 yards from human and livestock activity at an accessible site with good visibility. Make sure the carcasses are still convenient for carcass pickup, but at safe site well away from human activity and cover. If possible, place carcass on top of an old hay bale. If livestock die be sure to call Dan Massey so he can prioritize his normal route pickup schedule. If needed, the ranch can also call Eric Graham with the Blackfoot Challenge or James Jonkel with MFWP for emergency pickup. If there is concern that a carcass will lure in bears before pick up, there is always the option of personally hauling the carcass to the Clearwater Compost site. In certain situations, the carcass can also be relocated to a remote site on the ranch, well away from livestock where it can be left for scavengers. It is recommended, for safety reasons, that such locations on the ranch be made off limits. Note: Be sure to lock up all sheds and barns where garbage, grain and other attractants are stored and if you are in need of additional electric fence materials or energizers for containing carcasses or other bear attractants (grain, sweet licks, garbage, etc.) call Eric Graham or James Jonkel."

NEW GRIZZLY BEAR ADVISORY COUNCIL TO BE APPOINTED BY GOVERNOR BULLOCK

Grizzly bear management in Montana is complex. While they are at recovery levels in the Greater Yellowstone (GYE) and Norther Continental Divide Ecosystems (NCDE), they have yet to reach recovery goals in the Bitterroot and Cabinet-Yaak Recovery Zones. In places where bear numbers are on the rise, they are dispersing into places they haven't been for decades, sometimes causing conflicts with people and communities. The council will consider these changes and challenges and will help make recommendations for grizzly bear management and conservation in Montana.

The Grizzly Bear Advisory Council will be comprised of a broad cross section of Montanans with a diversity of views on grizzly bear management, conservation, and recovery. The Council will be tasked with considering broad strategic objectives, such as:

- Maintaining and enhancing human safety
- Ensuring a healthy and sustainable grizzly bear population
- Improving timely and effective response to conflicts involving grizzly bears
- Engaging all partners in grizzly-related outreach and conflict prevention
- Improving intergovernmental, interagency, and tribal coordination

For more information on the new advisory council, visit:
http://fwp.mt.gov/fishAndWildlife/management/grizzlyBear/gbac.html

BLACK BEAR AND MOUNTAIN LION ACTIVITY

Black bear conflicts have been minimal this spring. Two different black bears have been reported investigating back yards in the Seeley Lake area. There were a handful of mountain lion conflicts this March in the Seeley Lake and Potomac areas. Reports of mountain lion activity the Blackfoot, especially in the Lincoln and Seeley Lake areas are common.

For more information on black bear and lion activity in and around Region 2 check out these two sites:

http://missoulabears.org/
https://www.facebook.com/missoulabears/

And for information on how to avoid either directly or indirectly feeding wildlife in Montana, visit:
http://fwp.mt.gov/fishAndWildlife/livingWithWildlife/feeding/default.html

Electric fence cost share program

Multiple fencing projects have occurred at various residences across the valley. Electric fencing is an excellent way to protect livestock, fowl and contain residential attractants. Electric fence is a surefire method of ensuring that any bears or other predators that check out yard areas will not come back again. A good shock is the best way to teach bears to keep away. Contact Jamie Jonkel at 544-1447 if you would like to talk about cost share programs to install electric fence around home sites, livestock holding pens (chickens, cattle, pigs, goats, sheep, bee yards), fruit orchards, gardens and other sites that might attract bears or other wildlife. Again, more information is available on electric fence and detailed reports on grizzly, black bear and mountain lion activity at:

http://www.missoulabears.org

https://defenders.org/got-grizzlies

THE BLACKFOOT WATERSHED WOLF AND BEAR ACTIVITY REPORT SUMMER 2019

In coordination with Montana Fish, Wildlife and Parks (FWP) and the Blackfoot Challenge (BC) we produce this wolf and bear activity report. These reports are typically compiled during our range rider season from spring through the fall. We have been short-handed again this spring and summer as Jamie Jonkel has been out most of the summer recovering from surgery. Therefore, most of the bear management and grizzly bear research issues have been handled by Eli Hampson (FWP) and Eric Graham (BC). Thanks to the Blackfoot Challenge Range Riders - Sigrid Olson, Jordan Mannix, Vicki Pocha and Lindsey Mulcare who have assisted this summer with monitoring for predator activity. We would also like to thank Dan Massee and Barry Gordon who have been picking up most of the carcasses related to the carcass pickup program.

Here is some history on the Blackfoot Challenge Range Rider Program: It was back in 2008 that the Blackfoot Challenge started a pilot season that began to explore the idea of hiring on seasonal range riders and here we are in our 12th season of range rider efforts in the watershed. We will continue to work with ranches throughout the Blackfoot watershed to help them keep an eye on predator activity and to increase herd supervision and communication until the cows come home from their grazing leases this fall.

Thanks again to the ranchers and landowners that make this program possible. We would like to recognize all of the partners that provide funding and technical assistance - FWP, the United States Fish and Wildlife Service (USFWS), the Bureau of Land Management (BLM), The Nature Conservancy (TNC), the Livestock Loss Board, Northern Rockies Conservation Co-op, Defenders of Wildlife, Vital Ground, the Cross Charitable Foundation, the Stranahan Foundation, the Western Bear Foundation and numerous individuals.

If you have any questions about the wildlife committee or this range rider program call the Blackfoot Challenge **Wildlife Committee Chair - Randy Gazda (406) 406-880-4386**

Contact Info for reporting wolf and/or bear activity:
Eric Graham – Blackfoot Challenge Wildlife Coordinator (406) 240-3132
Jamie Jonkel – MFWP Bear Management Specialist (406) 544-1447
Eli Hampson---MFWP Bear/Lion Management Technician (406) 210-3213
Tyler Parks – MFWP Wolf Management Specialist (406) 531-4454
Scott Eggeman – MFWP Blackfoot Area Wildlife Biologist (406) 542-5542

If you have a suspected livestock-predation, please notify USDA **Wildlife Services** (WS) as soon as possible to determine the cause of death. Regarding reimbursement for losses through the **Livestock Loss Board**: If you suspect a livestock loss due to mountain lion/wolf/grizzly bear predation, you can request an investigation to see if the losses were due to a confirmed or probable depredation. The Livestock Loss Board can pay only for confirmed or probable losses as determined by USDA-Wildlife Services (WS).

WS Powell County - Bart Smith (406) 660-0368
WS Missoula County - Ted North (406) 274-4856
WS Lewis & Clark County - John Meidtke (406) 855-8429
Department of Livestock - Livestock Loss Board (406) 444-5609

BLACKFOOT VALLEY WOLF PACKS

The pack structure for most of these packs is unknown. The rough numbers below are based on reports and wolf activity that is seen throughout the summer and are likely not very accurate. The most accurate pack counts are collected during the winter when tracks are easily seen and the young of the year are traveling with the pack.

ARRASTRA CREEK PACK
Pack Structure: Unknown
Collared Wolf: No?
Pack Report:
The yearling female wolf that was radio collared in 2018 has not been located this summer. The collared female may have dispersed.

AVON PACK
Pack Structure: Unknown
Collared Wolf: No
Pack Report: Nothing new to report.

BELMONT PACK
Pack Structure: ~5 Adults,
Collared Wolf: No
Pack Report: This pack has pups, but the number of pups is unknown. This pack is thought to spend time on the Confederated Salish and Kootenai Tribe reservation.

BUGLE MOUNTAIN PACK
Backcountry

CHAMBERLAIN PACK
Pack Structure: 4 or more Adults
Collared Wolf: Yes (2)
Pack Report: In May two yearling gray male wolves were radio collared by Wildlife Services. During the summer Wildlife Services removed 4 adult wolves from this pack in response to livestock depredations.

CONGER POINT PACK
Backcountry

HUMBUG PACK
Pack Structure: At least 3 adults, likely more
Collared Wolf: Yes (1)
Pack Report: In June, Wildlife Services radio collared a yearling wolf in this pack.

INEZ PACK
Pack Structure: ~5 Adults
Collared Wolf: No
Pack Report: Very little activity this summer.

LANDERS FORK PACK
Pack Structure: Unknown
Collared Wolf: Yes (1)
Pack Report: In June, FWP trapped and radio collared a yearling wolf. This collared wolf may be part of a new pack that borders the Landers Fork pack to the East. Time will tell whether or not this wolf is part of the Landers Fork Pack.

MORRELL MOUNTAIN PACK
Pack Structure: ~5 Adults
Collared Wolf: Yes (3)
Pack Report: On June 10th, a radio collared adult and a yearling were shot and poached on the Blackfoot Clearwater Wildlife Management Area (BCWMA).

SEELEY LAKE PACK
Pack Structure: ~4 or more Adults
Collared Wolf: No
Pack Report: Nothing new to report.

STONEWALL MOUNTAIN PACK
Pack Structure: ~4 Adults
Collared Wolf: Yes (1)
Pack Report: Nothing new to report.

SUNFLOWER PACK
Pack Structure: ~4 Adults
Collared Wolf: Yes (2)
Pack Report: On June 20th, FWP trapped and radio collared a yearling male wolf.

UNION PEAK PACK
Pack Structure: ~4 Adults
Collared Wolf: Yes (1)
Pack Report: On June 30th, FWP trapped and radio collared a yearling male wolf. FWP and range riders will begin monitoring these wolves.



Yearling male that was captured and collared from the Union Peak pack. Photo by Tyler Parks.

WOLF ACTIVITY

There have been a handful of confirmed wolf depredations in the Blackfoot this summer and wolf activity around livestock appears to be picking up this fall. So far, Wildlife Services has confirmed at least one calf injured by wolves and 3 calves killed by wolves. WS radio collard three wolves and removed 5 adult wolves in response to reported wolf activity and confirmed depredations.

- On May 17th, Wildlife Services trapped and radio collared a yearling male wolf out of the Chamberlain Pack.

- On May 20th, Wildlife Services trapped and radio collared a yearling male wolf out of the Chamberlain pack.
- On June 6th, FWP trapped and radio collared a yearling male wolf out of the Landers Fork pack.
- On June 9th, Wildlife Services trapped and radio collared a yearling wolf out of the Humbug pack.
- On June 10th, the breeding female and a yearling wolf were poached on the BCWMA.
- On June 20th, FWP trapped and radio collared a yearling wolf out of the Sunflower pack.
- On June 30th, FWP trapped and radio collared a yearling wolf out of the Union Peak pack.

IMPORTANT UPDATES REGARDING GRIZZLY BEAR ACTIVITY IN THE BLACKFOOT VALLEY

As we mentioned in the 2019 spring report, last year turned out to be the worst grizzly conflict season on record in the Blackfoot Valley. Most years, we average four to five livestock depredations and 15 or so residential conflicts----mostly involving uncontained garbage, bird feeders, fruit trees, freezers and grain. But last year (2018), in the Blackfoot and Clearwater Drainages, we had approximately 80 grizzly-related conflicts, six of which were verified livestock depredations and one depredation attempt. The remaining incidents mostly involved uncontained residential and agricultural attractants.

Thus far, in 2019, there have been fewer grizzly bear conflicts, but, three grizzlies have been euthanized for management reasons and one grizzly was struck and killed by a vehicle. During July and August, due to bountiful huckleberry, choke cherry and hawthorn production, conflict occurrences were low. But, historically the highest conflict period in the Blackfoot occurs in September and October, therefore, FWP and the Blackfoot Challenge are urging everyone to be diligent about containing attractants so that no additional bears get “trained up.”

ROAD-KILLED GRIZZLY BEAR:

On June 6th a 500-pound adult male grizzly was killed by a vehicle on Highway 200 near Patterson Prairie. This is the 12th grizzly killed by vehicles in the Blackfoot Valley since 2004. Eight of these grizzlies have been killed along Highway 200 in the Lincoln Canyon between Ovando and Lincoln, MT.

RADIO COLLARED GRIZZLY BEARS:

Spring, 2019 started out with a bang. The first grizzly tracks were observed in the foothills and higher ridge lines as early as March 19th and by the end of March we were getting reports of grizzlies on ranch lands in the Blackfoot Valley and from snowmobilers throughout the Clearwater Drainage. Here is a quick summary of our radio collared grizzlies that emerged from their den’s this spring:

- We were able to verify when two of our radio collared grizzlies emerged from their dens. “Walking Bear”, a 535- pound adult male, recaptured last July, denned in Arrastra

Creek. He poked his head out of his den on March 22nd. He continues to wear his radio collar and spends most of his time ranging the river bottoms around the Aunt Molly Wildlife Management Area, the Blackfoot Canyon and the mountains north and south of Lincoln, MT. In year's past "Walking Bear" has made two tremendous/fast paced trips from the Blackfoot Valley over the top of the Mission Mountains to visit the corn fields around Ronan, MT. It will be interesting to see if he makes a similar journey this fall. In a recent flight, he was not located, and his collar may not be functioning.

- "Stevi," a sub adult male, captured last fall after digging up worms in the Stevensville Golf Course, denned in the southern Mission Range after he was relocated to the eastern edge of the Rattlesnake Wilderness. He came out of his den on March 17th. In mid-April he stumbled onto a residence north of Seeley Lake with a large accumulation of winter-garbage. FWP assisted the family with the removal of the trash. But, after that episode "Stevi" continued to seek out garbage, dog food, chicken feed and bird feeders. He was suspected to have damaged a house trailer on the Blackfoot Clearwater Game Range and entered several open sheds and buildings for garbage and grain. He was documented at multiple residences in the Seeley Lake area, Clearwater Junction area, Ovando area and Woodworth area. On July 18th he was captured and euthanized after entering a building and accessing dog food on a porch at a ranch near Woodworth, MT.

- We were not able to determine when our research female "Silver Queen" came out of her den, but she was spotted this spring and again this August with her yearling in the headwaters of the Landers Fork of the Blackfoot. She was captured last July northeast of Lincoln. She has spent most of the summer ranging the south end of the Scapegoat Wilderness. "Silver Queen" is an older 245-pound adult female.

- The sub adult male grizzly "Blackfoot", who was relocated to the Flathead Valley last fall after accessing a ranch's burn barrels and garbage near Helmville, MT, emerged from his Sun River Game Range den site on March 16th. He dropped his collar on May 13th while traveling north through the Blackfoot Indian Reservation.

- A female grizzly, known as "Sabine" and who was captured on the Flathead Indian Reservation for research purposes last summer, denned in the Missions Mountains. This spring she came over to the Seeley Lake area and ended up dropping her collar west of Placid Lake on May 2nd.

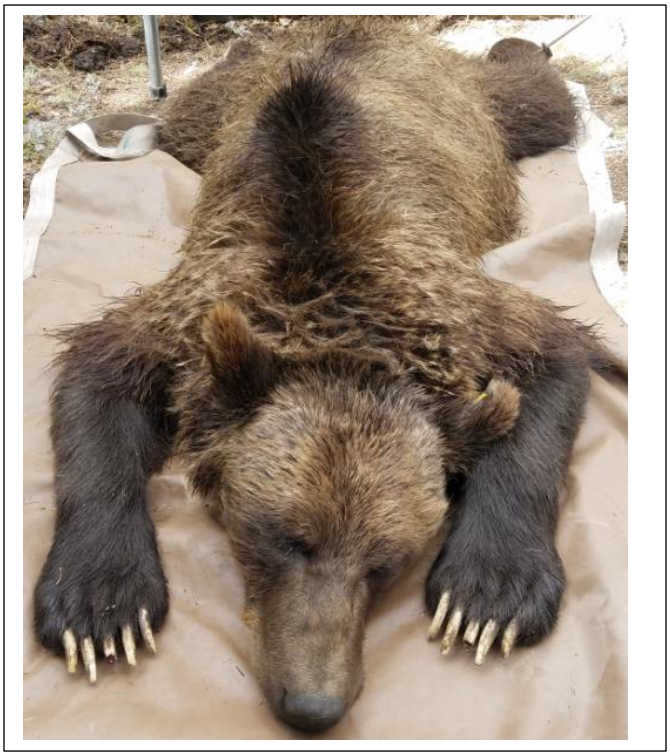
- On July 9, 2019 a new research grizzly was captured northeast of Lincoln, MT in the Landers Fork area. The 225-pound sub adult male was named "Landers". He dropped his collar on July 29th. During the time he was collared he ranged widely between Lincoln and the Rocky Mountain Front.

- On August 26, 2019 a new research female grizzly, with cub/s, was captured northeast of Lincoln, MT. The female was named "Ursa". In the last several weeks she has spent most of her time north of the Highway 200 in and around the Continental Divide.

RESEARCH TRAPPING

As mentioned above one new sub adult male "Landers" was captured in July. In late August a new adult female grizzly "Ursa" was captured in the upper reaches of the Blackfoot. For more information related to the grizzly bear population monitoring go to:

http://fwp.mt.gov/fishAndWildlife/management/grizzlyBear/monitoring.html



Adult female grizzly "Ursa" captured and radio collared for research. Photo by Eric Graham.

LIVESTOCK DEPREDATIONS/ONE GRIZZLY EUTHENIZED

Between April and the end of July, the Department of Agriculture's Wildlife Services and FWP R2 responded to 4 verified livestock depredation incidents and a handful of additional calls about livestock (where cause of death or injury was natural, or not determined). Below is a synopsis of each of the incidents and management actions that occurred in the Blackfoot Valley:

- On April 19th, Wildlife Services investigated wounds on a newborn calf at a ranch east of Ovando, MT, and determined that the injury was grizzly-related. Due to the amount of

time that had passed and the fact that the calf was recovering, trapping was not an option.

- On April 20th, Wildlife Services responded to a calf killed near Helmville, MT. During the investigation it was discovered that a second calf had gone missing. Culvert traps and snares were set at site. On the 23rd one of two grizzlies were captured. Even though this was the sub adult male's first offense, after close consultation with the USFWS, it was decided that due to chronic depredations occurring in the area, the 225-pound sub-adult male grizzly bear would be put down. The second bear was not captured. Adjacent to this ranch, in 2018, there were multiple calf depredations by grizzlies. Traps were set at this site last year on three occasions, but no bears were captured. For more information check out this link:

  https://www.blackfootvalleydispatch.com/story/2019/05/01/news/grizzly-euthanized-after-cattle-depredations-in-helmville-valley/1001.html

- On May 23rd two calves were killed by a grizzly at a 2nd ranch near Helmville, MT. Wildlife Services set traps at-site, but the bears had consumed the calves and did not return. Traps were closed after several days of trapping.

- On June 15th another calf depredation was discovered near Helmville, MT. Wildlife Services determined the death to be grizzly-related. But, due to the amount of time that had passed trapping was not an option.

- Since April, Wildlife Services has investigated seven additional calf carcasses where it was determined the calves had died of natural causes and were scavenged by grizzlies. Two of these incidents occurred in the Avon area. In addition, Wildlife Services documented one calf killed by coyotes that had been scavenged by grizzlies. Wildlife Services also investigated a calf with a neck wound, near Avon, MT, that was determined to be related to an infection and not a bite wound.

- Since June 15th, there have been no additional grizzly bear depredation reports in the Blackfoot Valley.

LIVESTOCK CARCASS PICKUP PROGRAM

The Blackfoot Challenge's Livestock Carcass Pick Up and Removal Program runs during calving season from mid-February through mid-May. Thereafter, carcasses in the Blackfoot Valley have been picked up by FWP or Blackfoot Challenge employees. In the spring of 2018, there were 5 incidents of grizzly bears venturing into ranch compounds to retrieve carcasses left out for the carcass pickup program. Dead calves were either left on the ground or placed on hay bales within high activity areas on the ranch and bears were lured in to feed on the carcasses. As a result, we are re-evaluating pickup protocol and now recommend that after March all carcasses

set aside for pickup be stored away from ranch premises. If you currently have a carcass for picking up, please call 544-1447 to reach Jamie Jonkel with Montana FWP. **If you are unable to reach Jonkel call Barry Gordon at 406-541-1078.** Or call Eric Graham with the Blackfoot Challenge at 240-3132 or Eli Hampson with FWP at 210-3213. The carcass will be taken to the compost site near Clearwater Junction to help prevent conflicts with bears and wolves. To learn more about this program, watch "Living with Carnivores: Boneyards, Bear & Wolves." Click here: https://vimeo.com/131528982.

TWO GRIZZLIES EUTHENIZED DUE TO FOOD-CONDITIONED BEHAVIOR

Compared to last year conflicts have been minimal in the Blackfoot Valley. But, two grizzlies have had to be destroyed this summer as a result of their extreme food-conditioned behavior.

- The first of these bears has already been discussed in the radio-collared bear section. This is "Stevi," the grizzly that was trapped last fall in the Bitterroot Valley and relocated to the headwaters of Belmont Creek near Missoula, MT. For more information check out this link:

  https://missoulian.com/news/local/grizzly-that-prowled-stevi-golf-course-euthanized-after-seeley-lake/article_6d24e8a2-2d9d-5565-bc1e-72cb9db35b6b.html

- The second grizzly, euthanized on May 12th, southeast of Seeley Lake in the Woodworth area, did not have a known history. But, because of this bear's extreme food-conditioned behavior, after consultation with the USFWS, it was decided to put this bear down. This young 250-pound sub adult male grizzly broke open a locked door of a secured barn in order to access grain. He had been observed damaging the barn on video the night before and he was at adjacent home sites accessing unsecured grain, garbage, pet food, chickens and other attractants. It can be assumed that this bear is one of several grizzlies that learned "bad behavior" last year, as a result of some folks not having grain, garbage and other attractants secured. For more information check out this link:

  https://www.seeleylake.com/story/2019/05/30/news/fwp-euthanizes-two-bears-in-the-area-in-the-past-month/4868.html

RESIDENTIAL AND AGRICULTURAL CONFLICTS (2019):

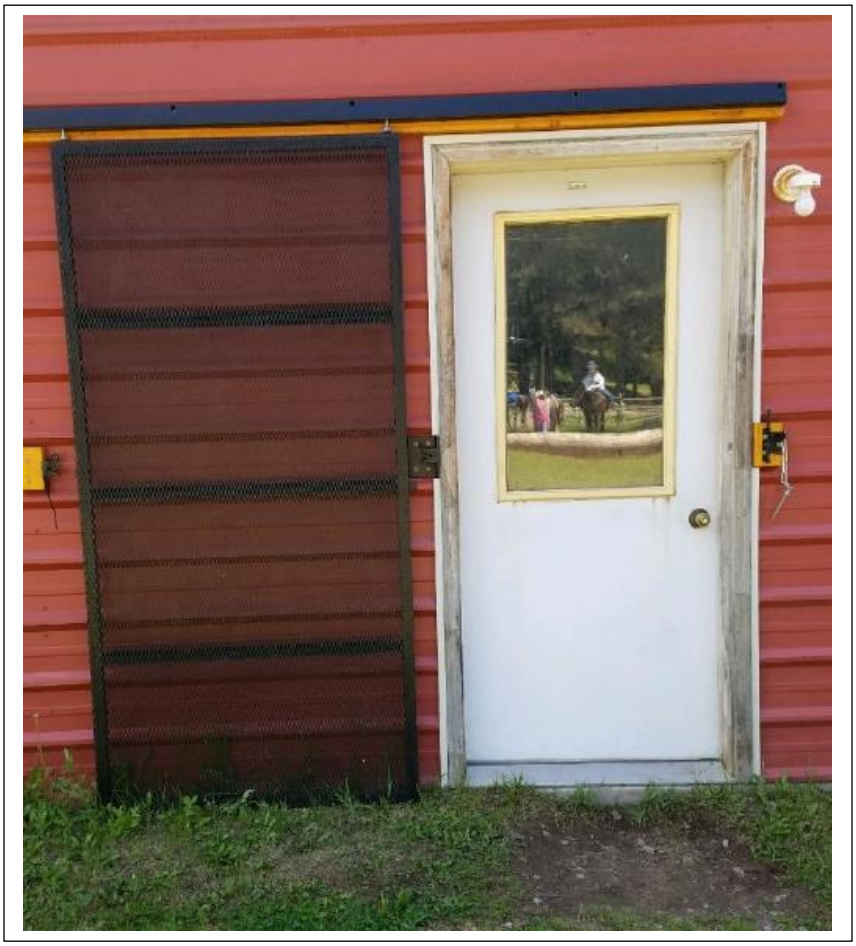
The Blackfoot Region is well known for a community-driven approach to managing and mitigating for bear conflicts, and the Blackfoot Valley has been recognized internationally for having some of the lowest numbers of grizzly conflicts in the state.

But, as mentioned earlier, multiple grizzlies in the Blackfoot watershed developed bad habits last year. In 2018, a handful of bears learned that homesites and ranches are good places to

find unsecured food. It is always best to lock up all sheds and barns where garbage, grain and other attractants are stored. If you need additional electric fence materials or energizers for containing carcasses or other bear attractants (grain, sweet licks, garbage, etc.) call Eric Graham or James Jonkel.

BLACKFOOT VALLEY:

There have been numerous reports of grizzlies observed crossing cow pastures, feeding in agricultural fields, skirting the edges of communities, walking near homesites, traveling the banks of rivers and in proximity to campgrounds and ranch headquarters. But, compared to last year at this time, calls involving bear conflicts are low. This year, April through the end of August, FWP and the Blackfoot Challenge have responded to 14 conflicts in the Blackfoot Valley---that is the areas up the Blackfoot river from Clearwater Junction. Some of these conflicts involved the two bears discussed in the above section, but it is important that everyone in the valley understands, that as a result of the large number of conflicts last year, we still have individual "trained up" bears that may escalate their attempts to access grain and garbage this fall.



Bear-resistant sliding door built by the Rich Ranch after a grizzly broke into the barn for grain. Photo by Eric Graham.

Please, report all conflicts involving bears to FWP or the Blackfoot Challenge as it helps us keep track and ascertain which bears have developed unacceptable behaviors. Here is a synopsis of the 14 conflicts that have occurred this summer and spring:

- There were seven incidents involving grizzlies entering barns or sheds for grain, garbage or other attractants. At four or these sites the buildings were "wide-open" and garbage, grain and other attractants were readily available. The bears walked in, helped themselves and left with the knowledge of where food was to be found.

- In three of the seven incidents, however, the buildings were secured, and the attractants were contained. But, because of previous learning experiences, the bears tested the doors, broke in and were rewarded with access to grain or garbage.

- There was another incident, probably with "Stevi" or one of the "trained-up" grizzles being discussed, where a secure camper trailer was damaged while parked at the Blackfoot Clearwater Wildlife Management Area.

- The remaining six incidents involved garbage, pet food or BBQ being stored outside alongside buildings or on porches and available to bears, skunks and racoons.

- Note, there were a handful of incidents where attractants were contained and bears investigated, tested doors, and the bears moved on. These reports were not counted as conflicts, but the information allows FWP and the Blackfoot Challenge to keep track of where these individual bears are showing up and where they might be heading.

CLEARWATER VALLEY:

Similar, to the Blackfoot Basin, there have been numerous reports of grizzlies skirting the edges of Seeley Lake and walking near homesites. But, compared to last year at this time, calls involving bear conflicts have been minimal. FWP and the Blackfoot Challenge have responded to a total of 9 business/home site conflicts involving grizzlies accessing or seeking out uncontained garbage, animal feed and bird feed. Some of these conflicts were related to the radio collared grizzly bear "Stevi", but there are other bears in the Clearwater Drainage exhibiting food-conditioned behavior.

BLACK BEAR AND MOUNTAIN LION ACTIVITY:

This summer, black bear conflicts in the Potomac Valley and Seeley Lake area have been constant. In Seeley Lake, MT, two black bears were euthanized as a result of uncontained attractants. One of these bears was blind as a result of being shot in the face with bird shot. The second bear was shot by a deputy while it was in the act of peeling boards off a home. It turned out that squirrels had stuffed the walls with dog food. At the same residence, a female black bear with two cubs was trapped and relocated. FWP is working with the landlord to have the dog food removed and to place a bear-resistant dumpster.

In Potomac, there is an extreme ongoing situation involving garbage. At the ends of county roads, multiple homes are required to bring garbage cans to certain sites for garbage service. However, most of these cans are being left out all week. As a result, multiple black bears are obtaining garbage. FWP is working with the community and the sanitation company in hopes of resolving the situation. Several of these bears started to visit home sites and in July and Wildlife Services trapped and euthanized one black bear and a lion that killed goats. There was also a report of another incident with a goat being killed this summer by a female black bear with a yearling. FWP is in the process of investigating the incident.

There were a handful of mountain lion conflicts this summer in the Seeley Lake, Ninemile Prairie and Potomac areas. Most of the incidents involved lions being spotted around cabins and tent sites at local resorts and recreation areas. Reports of mountain lion activity in the Blackfoot Valley, especially in the Lincoln and Seeley Lake areas are common. One lion was shot at a residence at a homesite near Clearwater Junction.

For detailed information on black bear and lion activity in and around Region 2 check out these two sites:

http://missoulabears.org/
https://www.facebook.com/missoulabears/

And for information on how to avoid either directly or indirectly feeding wildlife in Montana, visit:

http://fwp.mt.gov/fishAndWildlife/livingWithWildlife/feeding/default.html

ELECTRIC FENCE COST SHARE PROJECTS:

Multiple fencing projects have occurred at various residents across the valley. Over the last two summers the Blackfoot Challenge has assisted five families with electrified residential containment fences. And in late June, working with the Powell County Dump Board and multiple funding partners, an electric fence was erected around the Helmville Transfer Site.

Electric fencing is an excellent way to protect livestock, fowl and contain residential attractants. Electric fence is a method of ensuring that bears or other predators that check out yard areas will not come back again. A good shock is the best way to teach bears to keep away. Contact Jamie Jonkel (544-1447) or Eric Graham (240-3132) if you would like to talk about cost share programs to install electric fence around home sites, livestock holding pens, chickens, cattle, pigs, goats, sheep, bee yards, fruit orchards, gardens and other sites that might attract bears or other wildlife. For information on electric fence and another option for cost sharing on electric fence check out this website:

https://defenders.org/got-grizzlies



The new Helmville Transfer Site electric fence. Photo by Eric Graham.

From:	Frey, Kevin
To:	Cooley, Hilary
Subject:	Baker"s Hole fatality report
Date:	Friday, June 4, 2021 2:07:21 PM
Attachments:	image001.png Baker"s Hole.docx

Kevin Frey
Grizzly Bear Specialist
Wildlife Division
Montana Fish, Wildlife & Parks, Region 3

1400 South 19th
Bozeman, MT 59718
Ph: (406) 577 7876
Montana FWP



INVESTIGATION REPORT

The subsequent fatality of Mr. Charles (Carl) Wesley Mock from a grizzly bear attack on April 15, 2021 near Baker's Hole Campground on the Custer Gallatin National Forest

SUMMARY:

On the afternoon of 15 April 2021, a 40-year-old male resident of West Yellowstone had gone hiking near Baker's Hole Campground on the Custer Gallatin National Forest (CGNF) to either fish, take photographs or both. At approximately 3:45 pm, the man called 911, connecting to the West Yellowstone Police Department reporting he had been mauled by a grizzly bear. Search and rescue were immediately implemented. The victim, Mr. Charles (Carl) Wesley Mock was found severely injured by search and rescue personnel. Mr. Mock was given medical attention in the field, taken to an ambulance, and transported to Idaho Falls, Idaho Regional Medical Center. The following day, April 16th investigation team members were charged by a bear near the site where Mr. Mock had been mauled. Investigators killed the bear during the encounter. Unfortunately on Saturday, 17 April 2021, Mr. Mock died from complications caused by the severe wounds of the grizzly bear attack. Mr. Mock was a West Yellowstone resident and guide for Back Country Adventures.

Format of report:

A board of review is required after any human fatality caused by a grizzly bear as per the Interagency Grizzly Bear Guidelines (p 59). This report is based on the investigations, efforts and information of personnel with the Gallatin County Sheriff's Office, West Yellowstone Police Department, United States Forest Service, Gallatin County Search and Rescue, Hagen Basin Fire and Montana Fish Wildlife & Parks. Gallatin County Sheriff's Office (Deputy Mike Gavagan) report of Mr. Mock's rescue and Montana Fish Wildlife & Parks enforcement division (Warden Robert Pohle) overall report are attached in Appendix A. This report is written in sections of occurrence and with an investigative conclusion at the end of the report. To avoid speculation as to how this attack and resulting fatality occurred, only information gathered and documented during the investigations is contained in this report.

Baker's Hole Campground:

Baker's Hole Campground is located on the Hebgen Ranger District of the Custer Gallatin National Forest. The campground is located in a lodgepole pine (LPP) forest with willows along the southeast side. The campground is east of U.S. highway 191, west of the Madison River,

approximately 2.5 miles north of West Yellowstone, Montana and approximately 200 yards west of the Yellowstone National Park boundary.
The campground has 73 campsites within the 3 campsite loops. The campground is annually closed to camping from October 1 to May 1 but the area is open to recreationists year-round. People also use the campground to access the Madison River for fishing and wildlife viewing as the area is known for its use by bears, moose, elk, ospreys, eagles, waterfowl and bison. Baker's Hole Campground is very well posted with permanent wooden or metal signs at the entrance and on kiosks within the campground informing the public of grizzly bear presence in the area and of food storage order requirements. An image of the attack site in relation to Baker's Hole Campground, West Yellowstone and Yellowstone National Park is shown in Figure 1.

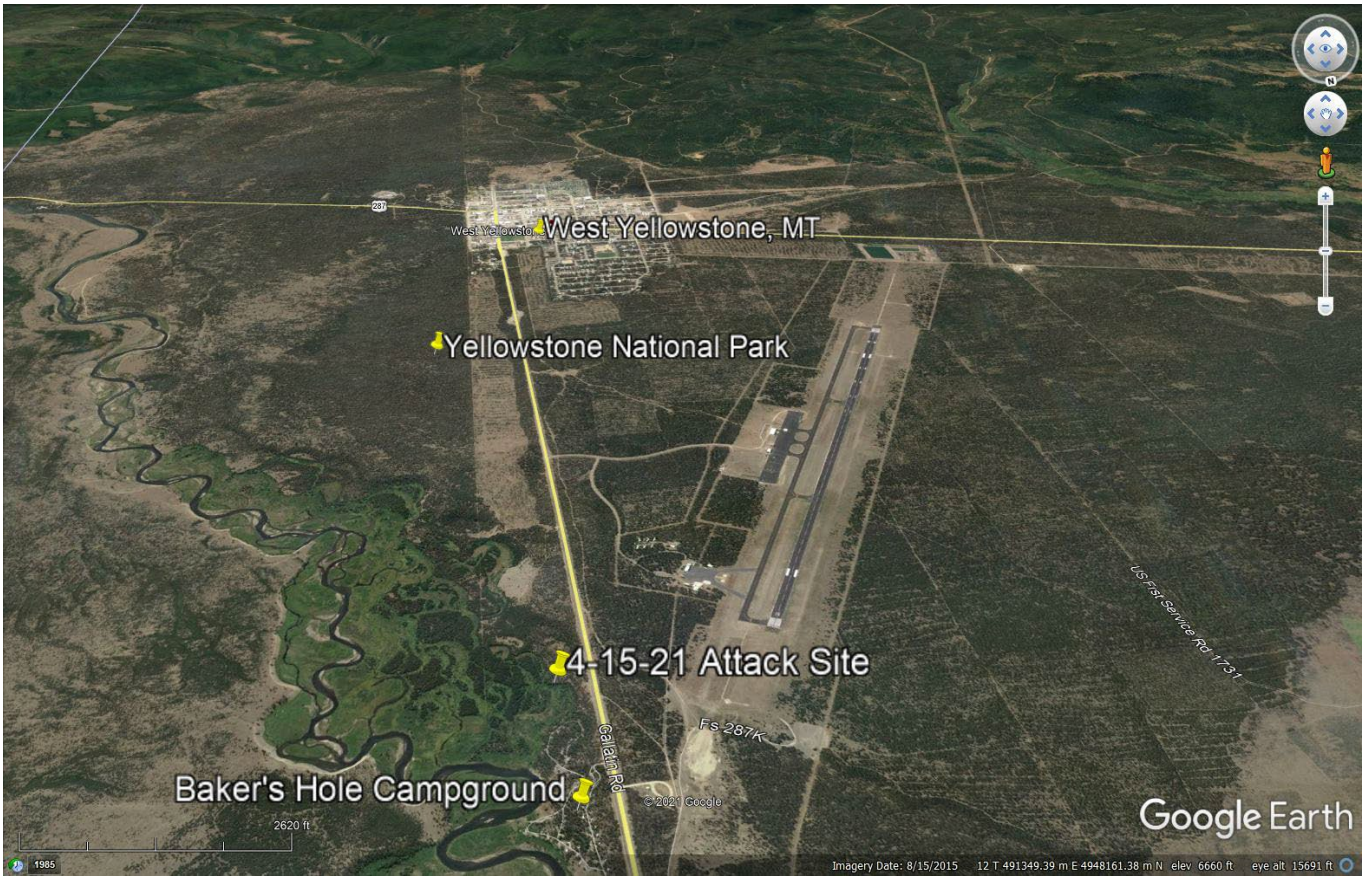


Figure 1. Baker's Hole Campground in relation to West Yellowstone and Yellowstone National Park

04-15-2021

SEARCH and RESCUE:

15:42 hours - West Yellowstone Police Department (WYPD) received a call from a 40-year-old male reporting he has been mauled by a grizzly bear approximately 200 yards from USFS Baker's Hole Campground.

West Yellowstone PD, Gallatin County Sheriff's Deputy (GCSO), US Forest Service law enforcement (USFS LEO), Gallatin County SAR and Hebgen Basin Fire are dispatched to respond. Hebgen Basin EMS was then dispatched to Baker's Hole Campground to wait for rescue of victim.
Secondary information from WTPD dispatch was issued to Search and Rescue (SAR) that the victim reported he had facial injuries, was laying on the ground, there was one bear and to go to the closed campground main entrance.

15:52 hours -approximately
*GCSO, USFS LEO, WYPD, Hebgen Basin Fire and Gallatin County SAR arrive at Baker's Hole Campground to begin search. Initially human footprints were searched for in the snow near hiking trails at the campground.

*Hebgen Basin Fire was instructed by GCSO to assume incident command.

*Dispatch was unable to triangulate the victim's cell phone. Phone was not active, just 911 capacity.

*The victim though seriously injured was able to communicate with WYPD dispatch.

*Hebgen Basin Fire activated sirens and the victim told dispatch he could hear the sirens and then told dispatch he was about ¼ mile from campers (camp host) in campground, towards town (south of main entrance).

*The victim then relayed he was off the blue diamond ski trail.

*The search was then able to focus on an area.

*Incident command requested West Yellowstone based Air Idaho (helicopter) to aid in support and search. Also a SAR page was sent out for a backcountry rescue.

*GC SAR and USFS LEO proceeded on the ski trail out of campground, within minutes followed by GCSO and WYPD.

*These 2 officers were joined by another WYPD officer after they had stopped hiking due to sighting a grizzly bear approximately 80 yards east of the ski trail. The bear was standing on hind legs, making huffing sounds. The bear dropped to all 4 feet and charged towards the officers, breaking of the charge after 30 yards.
Dispatch relayed that the victim could hear the officers yelling and that the bear was very close to him.

*The search party then turned east off the ski trail, down an old logging spur in the direction of the bear.

*Approximately 70 yards down an old logging spur the victim was found lying on the ground.

*The bear continued to aggressively move around the rescue party, moving around in a half circle, varying 20 to 70 yards away.

*The bear continued to stalk the rescuers and victim, making another bluff charge while initial medical attention was being given to the victim.

*Emergency medical (EMS) and Air Idaho personnel hiked into the site of the injured man.

*Two GC SAR members arrived with snowmobiles and a rescue toboggan.

*EMS was able to bandage the victim, carry him up to the ski trail to the SAR rescue toboggan. The victim was transported to EMS ambulance in the campground and was transported to Regional Medical Center in Idaho Falls, Idaho. *Poor weather conditions prohibited victim transport via helicopter.*

16:54 hours – Montana Fish Wildlife & Parks (MTFWP) Warden arrived at campground.
*Two WYPD officers, 1 GCSO deputy, 1 USFS LEO and the MTFWP warden went back to the site to get coordinates and take initial pictures of the incident scene. The victim's personal items including an empty can of bear spray were noted and photographed. The initial investigation group then left the scene. The bear was not encountered during this brief investigation.
**A digital camera with a telephoto lens was found lying within 4 feet of where the victim was lying on the ground when found by rescuers. The camera was secured in the victim's vehicle at the entrance gate to the Baker's Hole Campground when the victim was transferred to the ambulance. A friend of the victim took possession of the camera and vehicle and investigators did not have opportunity to examine the camera.*

**The moose carcass was not noticed by SAR or by the helicopter during the recovery of the victim.*

1830 hours – USFS HEBGEN RANGER DISTRICT posts closure signs of area.

04-16-2021

1000 hours - Official order from the Custer Gallatin Forest Supervisor was signed and posted.

SITE INVESTIGATION and BEAR MORTALITY:

1400 hours –

* An investigation team consisting of two USFS LEOs, three MTFWP Wardens and two MTFWP Bear Specialists with one dog meet at USFS/MTFWP site north of Baker's Hole. It was required and imperative to investigate the attack site due to proximity to a public campground, cabin area and well used hiking trails. The investigation party then drives to Baker's Hole Campground and to the south end of the south campground loop and ski trail.

*Pre-investigation discussions were conducted regarding the overall investigation, methodology of approach/hike, individual duties at the site and considering the encounters and the bear's behavior

during the victim's rescue the bear may be present and potentially charge. If the bear is present, it will not "bump off" and a bear does charge, it would have to be killed.

*The investigation team began hiking south along the ski trail towards the mauling site. Within 45 yards of hiking, the team stopped firing 2 cracker rounds and hollered. The dog began barking and alerted that it could smell a bear. One of the team members said he had seen something moving approximately 50 yards away in the trees east of the team and ski trail and said it could be a bear. The dog was now growling and barking indicating a bear was close. The bear was travelling in a parallel direction to the team as they had hiked south.

*The team waited a few minutes, then a proceeded another 80 yards, stopping to fire 3 additional cracker rounds. Members of the team alternated yelling during the entire hike to the site. The team again waited a few minutes and there were no other sightings or indications the bear was near or approaching. Though the dog was barking, the investigation team did not know if the bear had possibly moved out of the area or if it was still nearby.

*The team then hiked to where the old spur logging trail forked off the ski trail, downhill in a southeasterly direction. This juncture is approximately 200 yards along the ski trail south of the campground loop. Upon stopping, 2 more cracker rounds were fired. Again, there was no indication the bear was nearby. Team members yelled as the dog continued to bark while they slowly walked down the spur trail towards the attack site. The trail had intermittent deadfall trees across it.

*Approximately 50 yards down the spur trail, several team members said they could see some brush and a small conifer move, indicating towards the northeast across an open boggy wet area. All members stopped and readied in case it was the bear and it charged. Within seconds the bear silently charged out of the brush, head down, ears back and running full out. The bear crossed the open wet area and continued charging towards the team members, running into a patch of deep rotten snow in the willows. The bear floundered in the deep snow, dug its way clear and begin to charge again. At this point the decision was made to shoot the bear.
1435 hours - Multiple members shot at once killing the bear instantly.

*The bear was checked to confirm it was dead and to see if the bear had been previously captured or marked.
*A submerged, cached/buried moose carcass was found nearby.
*Scenes were photographed.
*Distances between key locations were measured.
*Mr. Mock's personal items were collected as were items left by first responder medical staff.
*GC SAR was contacted, bringing a tracked ATV to move the bear carcass to vehicles in the campground.

1630 hours - All personnel and the bear carcass at vehicles in campground.

INVESTIGATION FINDINGS:

The site of where the grizzly bear attacked Mr. Mock was investigated 3 times. On 15 April during an initial investigative overview after Mr. Mock had been recovered by SAR, on 16 April during the actual site investigation and on 21 April during the removal of the moose carcass.

Following the ski trail from the south end loop of Baker's Hole Campground and then the old logging spur trail, the attack site is approximately 270 yards.

The attack site was approximately 70 yards down an old logging spur trail running southeast from the ski trail. The attack site was at the end of the old logging spur ending in mature LLP timber and edge of boggy wet area.

Personal items found at the attack site area belonging to Mr. Mock included one muck-type boot, sunglasses, small plastic fishing tackle box, a winter cap, an empty can of bear spray* & holster, safety lock from bear-spray cannister, fishing pole and a half-empty can of juice.
*The can of bear spray was the UDAP brand, 7.9ounce, Expiration 12/2023 S/N P1711-071135).

It was later discovered that a digital camera was found near Mr. Mock during the rescue but the camera was taken into possession of Mr. Mock's friends. On 17 April, a MTFWP warden was able to view the memory card from the camera and did not find there were pictures from the Baker's Hole area or from the day of the attack.

After the investigation team had to kill the bear on 16 April, a moose carcass was discovered cached in the water (Photo 1) near the site where Mr. Mock had been attacked. It was 47 yards from the cached moose carcass to the attack site. Searching the area around the moose carcass it was evident that the bear had been feeding on the moose for numerous days due to multiple and drying bear scats.



Photo 1. Moose carcass cached in water near the attack site.

The bear-spray safety lock, fishing pole and a half empty juice contains were discovered where Mr. Mock had been and first reacted defensively due to the bear. The bear-spray safety lock and juice container were 1 to 2 feet E x NE of the fishing pole. The fishing pole was approximately 6 feet away (NE) from where Mr. Mock had obviously been mauled. At the mauling site Mr. Mock's boot, tackle box, sunglasses, knit cap and empty bear-spay were found scattered in the snow. A diagram of Mr. Mock's personal items at the attack site can be viewed in Figure 2. Investigators assumed Mr. Mock had sprayed the entire can of bear-spray.

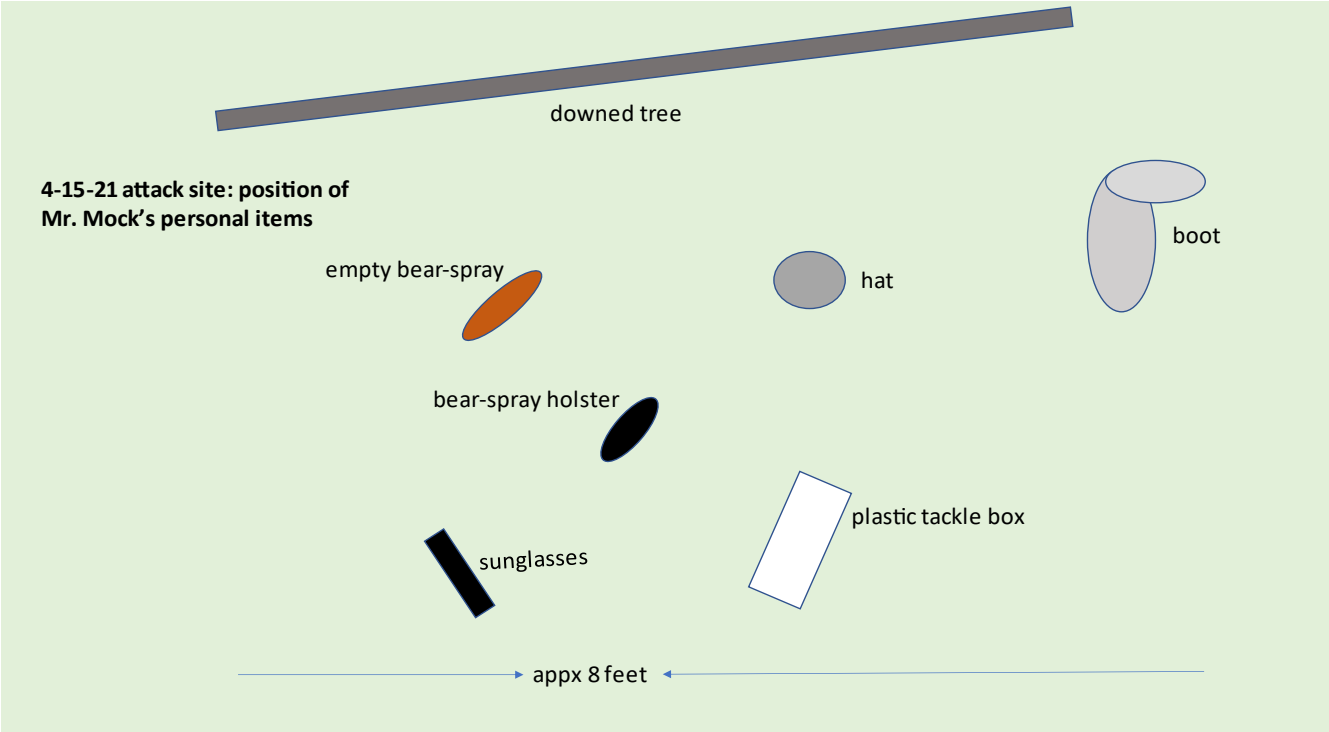


Figure 2. Position of personal items belonging to Mr. Mock found at the attack site.

Search and Rescue had found Mr. Mock 12 feet up the logging spur trail from where he had been attacked.

A diagram of the distances and location of moose carcass, attack site, bear and investigative team are shown in Figure 3. A satellite image of the locations and relationship of attack site to campground (south loop visible in upper left) and US Highway 191 are shown in Figure 4 and a closer view image of the attack area is shown in Figure 5.

Anecdotal information from a friend in West Yellowstone of Mr. Mock's stated that he had talked with Carl Mock in the early afternoon (1342 hours) of 15 April and Mr. Mock said he was going home to get lunch and go back out that afternoon. This information indicates Mr. Mock had only been in the Baker's Hole area for a relatively short time before the bear attack occurred.

Mr. Mock's 911 call to WYPD was recorded. The 911 call lasted for 49 minutes and 47 seconds, 27 minutes into the call at 1609 hours, the dispatcher asked him (Mr. Mock) if he was out fishing. He responded "No, I was taking pictures (with moaning in that statement)" She asked him, "You were out taking pictures?" He then moans with an unintelligible response.

BEAR FINDINGS:

The bear was 20 yards from the moose carcass when it charged the investigation team who were 57 yards from the bear across the boggy wet area.

The bear was killed 24 yards from the investigative team who were approximately 37 yards from the moose carcass.

FIELD: Examination of the bear revealed tattoos were visible in both upper inside lips.
No ear tags were present.
Overall body condition was a 4 on a scale of 1 to 5.
No visible wounds or injuries.
Teeth were worn with lower canine teeth broken and worn. Incisor teeth were worn smooth with some missing as is normal with aged bears. Field estimate of age was around 20 years old.
Tattoos were noted in both inside upper lips.
When the bear was loaded into a vehicle at the campground, it was evident the bear had been bear-sprayed by Mr. Mock during the attack as personnel began coughing from the bear-spray residue becoming airborne from handling the bear.

LABORATORY: Examination of the bear at MTFWP Region 3 Headquarters in Bozeman again the bear-spray residue physically affected investigators.
The bear weighed 411 pounds.
A gastro-intestinal examination of the bear was conducted, which revealed moose hair, trachea cartilage, muscle tissue along with grass/dirt debris. Some tissue that was not identifiable was collected and submitted to the Wyoming Game and Fish Forensics Laboratory in Laramie, Wyoming for identification as to origin of tissue. *Results pending….Appendix C*

The skull/brain of the bear was submitted for rabies testing to the Montana Department of Livestock, Montana Veterinary Diagnostic Laboratory in Bozeman, Montana. The results were negative for rabies. See Appendix B.

The tattoo was read as 504 in both upper inside lips. Tattoo 504 identified the bear as bear number 449 in the Inter-agency Grizzly Bear Study Team (IGBST) database for the Yellowstone Ecosystem.
Bear 449 had been captured by the IGBST as a 6-year-old during research capture efforts on 9/21/2003 at Cascade Creek, YNP. Bear 449 had been ear tagged, fitted with a GPS/VHF radio-collared and implanted with a micro-chip at that time. Last known location of the bear was on

2/22/2004 at his den site near Nymph Lake, YNP. It was deemed a collar failure as the signal had been intermittent since the bear had been captured, collared, and released on site.
Overtime, male bears are prone to losing ear tags and radio-collars when fighting with other male bears, plus radio-collars are designed to drop off bears.
No functioning micro-chip could be located on bear 449.
A tissue sample was submitted for DNA testing to completely confirm it was bear 449. *Results are currently pending.*
Bear 449 had no previous conflict management captures or history.

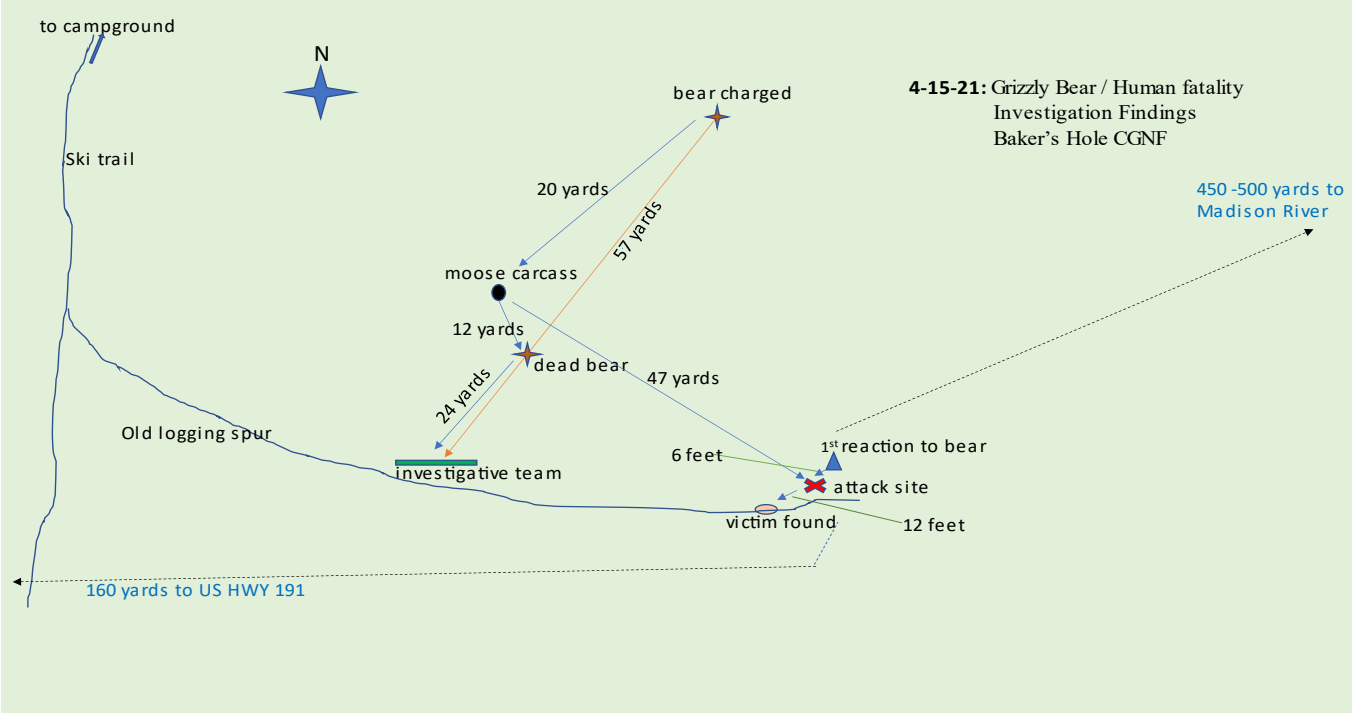


Figure 3. Distances and location of moose carcass, attack site, bear and investigative team near Baker's Hole Campground.



Figure 4. View of the relationship between the attack area, south end of Baker's Hole Campground and US Highway 191.



Figure 5. Close view of the attack area and locations of events.

04-19-2021

Discussions between CGNF Hebgen Basin District and MTFWP Bear Management occur regarding the known moose carcass, potential attractant to other bears, proximity to campground, hiking trail and options for removal. Dragging the moose carcass out of area would create a scent trail for other bears to follow to the campground and feasibility of doing so did not exist due to boggy wet area. Hebgen Basin District decided to use explosives for removal and would handle all logistics in the removal of the moose carcass.

04-21-21

REMOVAL (explosives) OF MOOSE CARCASS:

Personnel from the Hebgen Basin District CGNF, Bozeman District CGNF, Cody, Wyoming Bureau Land Management (BLM), MTFWP, GCSO and WYPD were all involved in the removal of the carcass.
The BLM flew a drone over the area for possible detection of another bear on or at the moose carcass. No bears were observed and the carcass did not appear to have been recently fed on. A USFS LEO and two MTFWP personnel provided security. CGNF field staff and certified explosive blasters were responsible for actual moose carcass positioning and blasting.

The moose carcass was successfully exploded into oblivion. The area remained closed to the public to allow for scavengers to utilize any pieces of moose and for scent to dissipate.

04-30-2021 Custer Gallatin National Forest lifts closure and re-opens the area to public use.

CONCLUSION:

On 15 April 2021 prior to 1542 hours Mr. Charles (Carl) Wesley Mock was attacked by a grizzly bear near Baker's Hole Campground on the GCNF. Mr. Mock was found severely injured 12 feet from the mauling site when rescued and did not give statements or communicate as to the attack by a grizzly bear. Once in medical care Mr. Mock did not speak or was ever in a condition to talk about the attack. Unfortunately, Mr. Mock died from the complications of his sustained injuries on 17 April 2021.

Mr. Mock had parked his vehicle at the entrance of GCNF Baker's Hole Campground. The campground and entry are well posted with grizzly bear information.

It cannot be determined if Mr. Mock purposely or randomly went to the site of the attack. Mr. Mock was in possession of fishing gear and a telephoto lens camera. The attack site is approximately 450 to 500 yards from the Madison River.

Also, it cannot be determined how much time Mr. Mock had been at the site prior to being attacked. Considering field investigation findings of the locations of the attack site, the cached

moose carcass and the old logging spur trail, it seems apparent that Mr. Mock had walked down the trail, passing within 37 yards of the moose carcass to the location of the bear attack site. Either he had done so without being noticed by the bear or the bear came later to the moose carcass after Mr. Mock had reached the area of the attack site, which was 47 yards from the moose carcass. The old logging spur/trail basically ends at the attack site.

Though Mr. Mock had told 911 dispatch that he was taking pictures, it cannot be confirmed what Mr. Mock was doing prior to the bear detecting and then attacking him, but the half empty juice container suggests Mr. Mock had likely stopped at the location before the bear detected him.

Due to the empty cannister of bear-spray and the bear-spray residue on the bear carcass (hair), Mr. Mock had obviously deployed his bear-spray at the bear. It is not known if he bear-sprayed at the bear prior to the bear contacting him or at what points during the attack he used the spray. During field and lab investigations, it was confirmed that the bear had substantial bear-spray residue on its hair. Additionally, the overall effects of the bear-spray to the bear are not known but the bear had quit attacking, indicating the bear was affected by the bear-pray, allowing Mr. Mock to move a short distance and call 911 emergency. However, the bear remained agitated, close to the attack site and near the unknown moose carcass during the SAR and again the next day (16 April) during the team investigation of the attack site area, when the male bear was killed as it charged the investigation team.

The tragic event of Mr. Mock being attacked by an adult male grizzly bear and subsequently dying from, was the direct result of Mr. Mock's purposeful or random placed proximity to a cached moose carcass that an adult male bear had claimed, cached, and was feeding upon.

Kevin Frey, Montana Fish Wildlife & Parks, Grizzly Bear Management Specialist, Bozeman, MT.

Appendix A:

OFFICE OF THE SHERIFF / CORONER
GALLATIN COUNTY, MONTANA

Dan Springer
Sheriff

Jeremy Kopp
Undersheriff

Randy Jones
Chaplain

615 South 16th
Bozeman, Montana 59715
(406) 582-2100
FAX (406) 582-2126

On April 15, 2021 at approximately 1543 hours, I was dispatched by the West Yellowstone Police Department dispatch center to the report of a 40 year old male who reported he had been attacked by a bear. Dispatch reported the male was approximately 200 yards from the front entrance to the Bakers Hole Campground and was off trail. The male was later identified as Charles Wesley Mock of West Yellowstone.

I instructed dispatch to page out Hebgen Basin EMS and have them stage at the front entrance to the campground. An update from dispatch informed responding units that Mock had sustained facial injuries, was laying on the ground, there was only one bear and responders should go right at the main entrance.

I arrived on scene approximately 10 minutes after the initial dispatch. Also arriving on scene were Forest Service LEO Ryan Linhart (FS72), West Yellowstone PD officer Neil Courtis (686), Hebgen Basin Fire Chief Shane Grube (36) and Gallatin County SAR member Travis Mann. We all started a hasty search of the area, looking for foot prints in the snow near popular hiking areas. WYPD officer Leonel Sosa arrived a short time later and joined us in the search.

I assigned Chief Grube to take over Incident Command and help coordinate our search efforts. With a lot of ground to try to cover, more information was requested from dispatch. Unfortunately they were unable to triangulate the 911 call, but were still on the phone with Mock. Mock was able to communicate with dispatch, although garbled and hard to understand. Grube activated his siren in hopes that Mock would be able to hear it and possibly guide us closer. Mock was able to tell dispatch that he could hear the siren and that he was about ¼ away from the campers in the campground, toward town. He then said he was off the blue diamond ski trail.

This information gave us a definitive area to focus the search in. Grube asked Air Idaho in West Yellowstone to add some aerial search support and they launched. He also sent out a Search & Rescue page for a backcountry rescue. Linhart and Mann were closest to the trailhead at the southern part of the campground and immediately headed up the trail. Courtis and I followed behind, roughly three minutes behind them. We were joined by Sosa later, after Courtis and I stopped, having spotted the bear.

Approximately 200 yards south of the campground on the blue diamond trail, I spotted a bear that was about 80 yards east of our location. The bear was standing on its hind legs

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and making huffing noises at us. The bear then dropped to all fours and charged us, breaking off his charge after about 30 yards. We were yelling and hollering at the bear as he charged. Dispatch notified us that Mock could hear us yelling at the bear and he said the bear was very close to him. I notified other search units to respond to our location, knowing we were very close to Mock.

We proceeded south on the trail about another 20 yards until we discovered human footprints in the snow, heading east toward the location of the bear. We started following the footprints east and hollering at the bear who was still aggressively pacing the area and watching us. Approximately 70 yards later, we found Mock laying on the ground. He was seriously injured, having suffered significant head and facial injuries. The bear continued to stalk us, aggressively moving around us in a half circle at a distance of approximately 40 – 70 yards.

Courtis, Sosa and Mann provided scene security for us while Linhart and I provided medical care to Mock. None of the responders on scene had any medical gear with us. Linhart and I determined that we needed to somehow stop the large amount of blood that Mock was losing. Linhart took off his uniform top and removed his t-shirt while I continued to support Mock. Linhart wrapped the t-shirt around Mock's head and applied direct compression. Mock was having difficulty talking and breathing due to the amount of blood in his mouth. We made the decision to move him into the recovery position with Linhart supporting his head & neck and me rolling his body onto his side. This seemed to allow Mock better breathing.

The bear continued to stalk the group and made another false charge. At this point, I turned patient care over to Linhart while grabbing my rifle and providing additional security against the bear. Emergency medical personnel from Hebgen Basin and Air Idaho were able to hike into our location while we provided protection from the bear. Two Gallatin County Sheriff SAR members arrived on scene with two snowmobiles and a rescue toboggan. EMS personnel were able to bandage and wrap Mock's head, they placed him on a backboard and carried him the 70 yards uphill to the SAR rescue personnel and gear.

Mock was then transported to the ambulance at the entrance to the campground. The armed first responders then escorted the EMS crew out of the area and back to the campground. Due to snow and bad weather that had moved in during this incident, Air

OFFICE OF THE SHERIFF / CORONER
GALLATIN COUNTY, MONTANA

Dan Springer
Sheriff

Jeremy Kopp
Undersheriff

Randy Jones
Chaplain

615 South 16th
Bozeman, Montana 59715
(406) 582-2100
FAX (406) 582-2126

Idaho was unable to fly Mock to the hospital, so he was transported to Eastern Idaho Regional Medical Center in Idaho Falls by ambulance.

Fish, Wildlife and Parks LEO Robert Pohle (FG32) arrived. Officers Courtis, Sosa, Linhart and I escorted him back in to the scene of the attack so that he could take some quick pictures and log an accurate GPS location of the attack. The incident happened at 44.70002, -111.10018

Initial investigation at the scene indicated that Mock was likely attacked 15 feet east of the location he was laying at when we found him. It appeared that Mock was able to retrieve his bear spray from its holder and was able to deploy it (can was empty). Additional items on scene were a digital camera with a large telephoto lens, spin fishing rod, small plastic box of lures, and a backpack.

The following day on April 16, personnel from the Forest Service and FWP reentered the location of the bear attack and were charged by a bear. Even with seven people yelling, shooting explosive noise making shotgun rounds, and a dog barking at the bear; the bear continued to charge the group. They were forced to shoot the bear and killed it.

An investigation of the area revealed a large moose which had been buried and cached by the bear. This moose was about 35 – 40 yards away from the location where Mock was attacked. Forest Service requested an agency assist from me, requesting equipment and help removing the bear carcass from the woods. I arrived on scene with a tracked four-wheeler with attached winch. We were able to winch the moose up a short hill and drag it out to the campground across the snow covered trail. The bear was loaded into the back of a truck and taken by FWP for further evaluation and research.

Case closed – Search & Rescue and Agency Assist

Michael P. Gavagan

Deputy Mike Gavagan – Badge #635
Gallatin County Sheriff's Office

FWP21CAD001860 Robert Pohle

On April 15, 2021 at approximately 1630 hours, I, Game Warden (GW) Robert Pohle was home off shift when I received a Gallatin County Search and Rescue page on my personal phone requesting help searching for a 40 year old male who had been attacked by a bear. The location of the attack was Bakers Hole. Upon seeing this I called the West Yellowstone Police Department (WYPD) to let them know I was responding, inquiring if the attack occurred inside Yellowstone National Park (YNP) or the county. I was told dispatch was having a difficult time locating the victim, later identified as Charles (Carl) Wesley Mock (DOB 03/24/2981). **Note:** Due to some technical issue, Carl's phone was not providing coordinates to the 911 system allowing for a back trace. After hanging up with WYPD, I called Montana Fish Wildlife & Parks (FWP) Bear Management Specialist (BMS) Kevin Frey, leaving him a voice mail notifying him of the incident. As my Sergeant was away, I called Warden Captain Adam Pankratz leaving him a voice mail as well. My final call was to Sergeant Coy Kline in Butte, Montana, so I was able to directly notify a supervisor of the incident.

After gearing up, I responded, lights and siren to the Bakers Hole area. While en route I called Montana Highway Patrol (MHP) dispatch to have a call for service started. Captain Pankratz returned my call and after relaying the limited information I had, we agreed if I saw a bear in the vicinity of Bakers Hole, it was to be dispatched.

As I arrived to the Bakers Hole area, I radioed Hebgen Basin Fire Chief Shane Grube who was Incident Commander (IC), requesting info on where other responders were. I was instructed to come to the south loop of Bakers Hole United States Forest Service (USFS) campground where IC was staged. Chief Grube let me know Carl had been located and was in the process of being extricated by law enforcement and medical staff.

I met the group of first responders as they were exfiltrating from the attack location with Carl. Carl was heavily bandaged, being towed on a Search and Rescue (SAR) sled behind a snowmobile. Gallatin County Sheriffs Office (GCSO) Deputy Mike Gavagan, WYPD Officers Leonel Sosa and Neil Courtis, and USFS Law Enforcement Officer (LEO) Ryan Linhart gave me a quick brief of the situation. The officers stated they encountered the bear several times during the search for Carl. During the first encounter the bear bluff charged the group of officers several times at approximately 100 yards. During this first encounter, they noticed what appeared to be blood on the head/mouth of the bear. As they continued to search for Carl, they stated the bear hung out in the area refusing to leave, even while medics worked on Carl and the snowmobiles moved in to extract Carl. This information was concerning to me, as with that much human activity, it is not normal behavior for a bear to continue to hang out. **Note:** I learned several days later that while searching for Carl, a SAR helicopter was flying low over the area assisting in the search. Upon hearing the bear was still in the area, I went back to the attack scene with Officers Sosa, Courtis and Deputy Gavagan, with the intent to dispatch the bear.

When we arrived at the attack scene, I observed no indication that a bear was in the immediate area. Not identifying an immediate threat, I took several photos to

document the scene and used my OnX hunt maps to get Global Positioning System (GPS) coordinates of that location. The location of the scene is 44.70002, -111.10018.
The scene consisted of a patch of snow soaked in what appeared to be blood. A rubber boot, fishing tackle box, sun glasses and a blood soaked beanie cap were strewn about the patch of snow. A blood splattered can of bear spray and holster, later determined to be empty, laid on the edge of the snow. The orange safety cap from the bear spray was several feet away in the grass. A fishing pole and juice bottle lay off to the south east. North west of the snow was the area where medical staff performed first aid. There was various medical packaging littering the ground, clothing that had been cut off Carl and used bandages. After quick photographic documentation of the site, all units returned to the IC.
Note: The can of bear spray was the UDAP brand, 7.9ounce, Expiration 12/2023 S/N P1711-071135).
After returning to the IC, I met with USFS District Ranger (DR) Jason Brey, Chief Grube and USFS LEO Linhart to discuss what the preliminary plan was for public safety due to the popularity the location held for recreationists. DR Brey stated the USFS was closing the area and evacuating the few campground hosts who were prepping the facility for opening. Chief Grube informed me that Carl had been transported via ground ambulance to Idaho Falls, due to weather the helicopter was grounded. The helicopters medical crew however was in the ambulance providing patient care to Carl. I cleared the scene while calling in updates to the BMS while the USFS put up barricades and signs stating bear in area and closure information.
Since Carl was going to a hospital in Idaho, I contacted an Idaho Fish and Game (IDFG) Warden requesting assistance. I requested a Warden meet Carl at the hospital to collect clothing and if possible, take photos of the injuries and conduct a quick interview as is standard procedure in a Wildlife Human Attack (WHART) incident. I was later notified by IDFG they had been unable to interview Carl or take photos as he was on a ventilator and rushed straight into the doctors. IDFG were able to collect Carl's pants which medical crews had cut off of him. **Note:** I met IDFG Investigator Lauren Lane on April 17th, 2021 in Ashton ID to collect that item.
With night approaching, I talked with BMS Frey and discussed the next steps for the following morning. As I headed home, I came across a vehicle parked inside the USFS emergency closure. I notified WYPD dispatch I would be out looking for the occupants as we did not know the circumstances behind the bear attack and could not leave them in the area without notification of the incident and closure. After finding the individual had been fishing outside of closure on the Madison River, it was determined his car had been parked there before the closure went into effect. He left the scene without incident. Clearing that contact LEO Linhart and I observed another vehicle attempt to enter the closure by the means of the FWP driveway before backing out heading south on US HWY191 where they turned into the Bakers Hole Campground drive. USFS LEO Linhart and I contacted that individual to advise them of the closure and they commented they had heard of a bear attack and were out looking to take pictures of the bear.

Note: Between the attack and when investigators returned to the scene the following day, law enforcement made multiple contacts of people trying to access the closure area. A white Ford F150 with ID license plates stopped by my residence before the attack, while I was off shift. The 2 male occupants of that Ford inquired about a sow grizzly and 2 cubs they had heard were active in the Basin which I was unaware of. They were wearing camo clothing and had a camera with large lenses on the center console. This indicated to me they were wildlife photographers looking for bears. I observed that vehicle along US HWY191 when I initially responded to the scene and then again turning into the Bakers Hole Campground drive as units were clearing. When I last saw that vehicle, USFS personnel were talking to the occupants.

The following morning, April 16, 2021, I was contacted by Captain Pankratz. He informed me to hold off going to the Bozeman Regional Office (BRO) as he was headed down to West Yellowstone, that he would contact Bear Management and we would then plan to meet and return to the attack scene. My decision to return to the scene was made due to the following considerations;

- Without being able to interview Carl, it was unknown what precipitated the attack. We did not know if it was a predatory attack, defensive attack or surprise encounter.
- We had no time line of when an interview with Carl may take place.
- No evidence was collected the day of the attack except for photos and the pants which IDFG retrieved from the hospital.
- It was forecast to start snow/rain in a couple days which would diminish any evidence on scene.
- The area the attack took place is a "high use" recreation area. It is common for anglers, hikers, campers and skiers to frequent the Bakers hole area.
- As noted earlier, multiple law enforcement contacts had been made concerning individuals trying to take pictures of bears. News of bear activity was drawing them in.
- This close to a weekend, we could expect a significant number of recreationists wanting to use the area. This would be compounded by the opening of Yellowstone National Park (YNP) for the summer season and news of a bear active in the area.
- It was imperative that we find out what precipitated the attack. While it was likely guarding a carcass, it was equally likely it was a surprise encounter, it was a bear with cubs or it was a predatory attack. Especially given the volume of human activity in the area while rescuing Carl did not scare the animal away.

After careful consideration, it was decided the significant risk to public safety resulting from the unknown causation of the attack outweighed the risk of a potential bear encounter from a re-entry to the scene. Phone calls were made and a team of seven (7) plus one (1) bear dog was assembled. We met at approximately 1400 hours and after a quick briefing on the situation entered Bakers Hole Campground.

Note: The team consisted of Captain Pankratz, GW Daven Thorne, GW Robert Pohle, USFS LEO Noah Pieprzyca, USFS LEO Linhart, BMS Frey (K9 Loki) and BMS

Jeremiah Smith. All team members were armed with lethal firepower and we had bear spray available.
We began our entry to the attack site, following the Boundary Ski trail that exits out of the south loop of Bakers Hole Campground. All members yelled out randomly making noise to alert a bear, humans were present. K9 Loki added to the noise barking loudly. At approximately the same location responders observed the bear the day prior, USFS LEO Pieprzyca alerted the team he saw something brown moving south towards the attack site. The movement came to the east of our location in a marshy area. It was unknown at that point if it was a bear as there were fresh bison tracks in the snow and mud. The team held that position as multiple cracker shells were fired and more yelling was made in attempts to haze the animal away. After several minutes holding that position and not seeing further movement, we continued down the trail. Along the way the team continued yelling and more cracker shells were fired. Specialist Frey alerted the team that the behavior and loud incessant barking from K9 Loki indicated a bear was nearby. **Note:** We were walking into a northerly breeze which would bring any bear scent directly to K9 Loki.
The attack site is approximately 50 yards to the south east of the main Boundary Ski trail down an old, over grown USFS road. That road had multiple downed trees laying across it and others growing through the former road bed. As we turned that way, we got approximately 30 yards from the attack site when BMS Smith alerted us to a bear. The bear was east of our location, at the edge of a small marshy clearing. It was moving south east before it stopped. At that point the bear looked at us for a split second before immediately changing directions and charging directly towards the team. The bear had to clear the marshy area before encountering willows partially buried in snow. As the bear cleared the marshy area, it hit the snow in the willows and was slowed due to the depth and softness. We held fast yelling as the bear kept pushing through the deep snow in a fashion similar to the way a dog runs through deep snow in a field. As the bear continued, it quickly became apparent this was not a bluff charge. The snow while deepest where the bear was currently located, began to thin before disappearing the closer you got towards the team's location. In the event the bear cleared the deep snow and regained traction, there would be no time for the team to react before contact was made with a human, resulting in serious injury or death.
In the split second it took to process what was taking place, I made the decision I was going to engage the bear and shoot it before it was able to gain traction again. I called out loud that I was taking a shot, before firing my shotgun. Afterwards I learned both Specialist Frey and Smith called out to shoot as well. Multiple shots were fired and I could see the impact of several rounds on the bear's body as they hit. The bear slumped down in the snow before moving again. USFS LEO Pieprzyca was armed with an issued 45/70 government rifle and heavy 540 grain bullets designed for penetration. At the instruction of Specialist Frey, USFS LEO Pieprzyca fired a couple rounds into the bear. **Note:** Once shot, it is absolutely imperative to prevent unnecessary pain and suffering of the bear and for public safety, we ensure the bear is deceased. After the bear stopped moving, the other team members covered Specialist Smith and I as we

approached the bear to check it's status. As we still did not know the sex of the bear, we approached ready to engage another animal should it have been a female with cubs. Once confirmed dead, I assisted Specialist Smith in rolling the bear over where we discovered it was an adult male. While others maintained a security perimeter and Bear Management began their checks on the bear, I took pictures of the scene, only to discover that during the charge the bear had run over a cached moose carcass, buried in the marshy area. It was difficult to see the moose as it was mostly buried and I could not smell anything that would indicate there was a carcass there.

I used my OnX Hunt maps to get GPS coordinates of the following locations;

- 44.70168, -111.10067 -- Location of the south loop of Bakers Hole Campground.
- 44.69999, -111.10053 -- Location I was standing at when I shot the charging bear.
- 44.70010, -111.10025 -- Location of deceased bear once rolled over.
- 44.70017, -111.10021 -- Location of cached moose carcass.
- 44.70002, -111.10018 -- Location of the attack site from 04/15/2021.

A brief conversation occurred with BMS Frey and it was evident that the primary causation of the bear attack on Carl was the defense of a food source. It is unknown if Carl knew the carcass was there or why he was in that location. The articles of clothing and Carl's possessions left on scene were collected. The only items retained for evidence were the discharged can of bear spray, a bloody beanie soft cap and the pants collected by IDFG. Reports indicated the attack focused on Carl's head, resulting in major head trauma with very little injury to other parts of his body. As such it is unlikely that the bear would have left any saliva or blood on other articles clothing in significant volume to provide any useable evidence to identify an individual animal. The fact the WHART team experienced a strikingly similar encounter less than 24 hours after the initial attack, resulting in a dead male bear leads one to believe the deceased bear was responsible for the attack. It would be unlikely to have multiple dominate male bears so close to such a valuable food source coexisting as the more dominate would chase the lesser male away.

USFS LEO Linhart arranged for Deputy Gavagan to bring a tracked All Terrain Vehicle (ATV) to retrieve the dead bear, as well as USFS Sawyer to clear the path. The ATV's winch was used to retrieve the bear where it was loaded into Captain Pankratz truck and taken to the BRO. While loading the bear, I noticed a burning, tingling sensation in my nose and lungs, coughing several times. That sensation was consistent with past exposure I have had to bear spray, albeit at a much lower dose. Later, while going through Carl's belongings collected from the attack site, I experienced the same sensation of burning and coughing. This indicates bear spray was discharged some time during the attack, consistent with the empty canister of bear spray found. Whether the spray was successfully deployed on the bear, or if the residue on the bear and Carl's belongings was the result of cross contamination, will forever be unknown.

Note: I was notified there had been a digital camera with Carl after the fact. That camera was passed off to his friends before my arrival during the initial rescue. On April 17, 2021, I met Keith Johnson (DOB 06/15/1985) at Back Country Adventures in West Yellowstone and was able to view the pictures on the memory card for the month of April 2021. I did not observe any pictures on that card similar to the attack site. Whether any pictures were removed before my observation is unknown, as control was lost over the camera.

I was notified the morning of April 17, 2021 by Captain Pankratz that Carl had succumbed to his injuries while in the hospital. As a result, investigators will never know for certain the events that led up to this bear attack.

No Further Action Taken. Robert Pohle FG32

Appendix B:

MONTANA VETERINARY DIAGNOSTIC LABORATORY

PHONE: (406) 994-4885
FAX: (406) 994-6344
WEBSITE: www.liv.mt.gov/lab
WEB RESULTS: https://mvdl.mt.gov
E-MAIL: mvdl@mt.gov

1911 WEST LINCOLN STREET
BOZEMAN, MT 59718

JENNIFER RAMSEY DVM FW & P
1400 S. 19TH AVE
BOZEMAN MT 59718

CASE:21-18156
Name/ID: FWP Grizzly
Species: Brown Bear (Grizzly)

Sex: Unknown **Age:** 20 Years

Owner: Montana FWP

COMPLETE REPORT 04/19/21

Sample Collection: 04/16/21
Accession: 04/19/21

Case Coordinator Authorization:
SH

Previous Reports
04/19/21
04/19/21
04/19/21

RABIES

Rabies	Brain	Verified on: 04/19/21 by: SH
Animal ID	Test	Result
FWP Grizzly	Condition	Fair
	Human Exposure	Yes
	Rabies Final Result	**Negative**

From:	Sara Schmidt
Subject:	Blackfoot Watershed Wolf & Bear Activity Report - Fall 18/Spring 19
Date:	Wednesday, May 1, 2019 5:39:14 PM
Attachments:	FWP_Are you living in an area with lots of bears.pdf BC Wolf Bear Activity Report_Fall 2018 and Spring 2019_FINAL.pdf

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Hello All,

Please find attached the Bear and Wolf Activity Report for the Blackfoot Watershed, compiled by Blackfoot Challenge and Montana Fish, Wildlife & Parks.

Due to increased bear activity and decreased capacity last fall, our wildlife team was unable to produce a report covering activity from mid-August through the end of the Range Riding season in October. Therefore, this report recaps the major highlights of grizzly bear activity in the watershed in 2018, as well as bear and wolf activity to-date in 2019.

2018 saw 80 grizzly-related conflicts in the Blackfoot watershed, the most on record for a single year. The majority of these were due to residential and ranch site attractants so we are also including a list of ways to reduce conflicts with bears around your home and ranch sites compiled by Fish, Wildlife & Parks.

If you have any questions about the Blackfoot Challenge's Range Rider Program or would like more information about the Wildlife Committee generally, please contact Wildlife Committee Chair Randy Gazda at Randy_Gazda@fws.gov or 406-793-7402.

Thank you for your participation,

Sara

--
Sara N. Schmidt
Communications Manager, Blackfoot Challenge
PO Box 103 | 405 Main Street | Ovando, MT 59854
Office: (406)793-3900 | Cell: (406)529-2822
www.blackfootchallenge.org

Montana Fish, Wildlife & Parks

Living with Predators Project: *0004* (Montana Fish, Wildlife and Parks R2)

Are you living in an area with lots of bears?

Is your home or ranch in mountainous terrain, near a stream, wooded area or agricultural field where bear activity occurs? If so, bears may visit your residence. Anything you do to prevent them from developing "bad" behaviors will ensure that the community is safer. Bears that learn this behavior can become a safety risk. Here are a variety of ideas that producers and landowners have used for home protection:

1. Delisting the grizzly is a high priority, but even after delisting, both grizzly and black bears will become unwelcomed and persistent visitors at ranch and home sites when garbage, pet food, burn barrels or other human-based foods are available.
2. Grizzlies feeding in and living around agricultural areas, such as alfalfa fields, can become complacent---especially when there are no negative interactions. For example, when folks approach bears with vehicles to photograph and observe them at close range, bears are more likely to become overly comfortable, then if they are taught to retreat.
3. The trick to keeping bears away from homes and ranches is to not inadvertently lure them in with food rewards. Routinely search your property for signs of bear activity and carefully manage any food-type attractants that might draw them in. Report any bear activity at home sites or around the ranch headquarters immediately. Educate children about bears and that they should let you know immediately if they see a bear around the premises.
4. "Bear-proof" summer homes or cabins when absent for extended periods. Any buildings or sheds on the ranch or homesite used for storing garbage, livestock feed, etc. should have sturdy shutters and doors. Crawl spaces should be boarded up. Alarm devices and remote cameras are useful for scaring and observing.
5. Be aware that certain crops, such as alfalfa, oats, peas and hay/barley, will attract bears and should not be planted adjacent to homesites or in areas where bear activity is not welcome. If you plant near home sites you will have bears.
6. Be aware---heavily irrigated crops and even lawns and gardens attract deer, elk, bears and other wildlife—especially during the dry season. Quite often bears will come around houses under the cover of darkness to graze on green lawns. Be aware that bears feeding on natural foods near the houses can be tempted to investigate the premises. Consider removing natural stands of serviceberry or choke cherries within the yard area.
7. Be aware---cleared property in forested habitats opens the canopy and lures in wildlife. It is always best to landscape with native vegetation (non-fruit bearing) and clear hiding cover near your house, garage and yard.
8. Salting for livestock is a necessity. But it is best not to have salt near homesites. And it is best not to provide feed or salt for the specific purpose of attracting elk and deer ---it is illegal and attracts bears and other predators to the property.
9. Aesthetically pleasing residential electric fence is a great tool. It deters wildlife, contains attractants and creates safe zones. One of the best methods for keeping bears away from ranch headquarters and homesites is to erect an electrified containment fence around the entire premises, thus containing and making the entire area unavailable to bears. The fences can be built to be aesthetically pleasing and in a manner that will not allow children to be shocked from the inside, thus allowing the entire property to be contained with minimal effort.
10. Electric fence, on a smaller scale, can also be used to contain certain buildings and open sheds where

livestock feed and sweet licks are stored. Store livestock salt and mineral licks in contained building and place licks and creep feeders away from small pens and residences.

11. Electric fence can also be useful for keeping bears and other wildlife out of gardens, fruit trees, bee yards or garbage storage areas.
12. Livestock feed and vulnerable livestock such as rabbits, sheep, pigs, goats and especially free ranging chickens, turkeys and other fowl can be very attractive to bears. A multiwire hot/ground electric fence is recommended for containing sheep bedding grounds, goat pens, pig pens and chicken coops. If electric fence is not an option place vulnerable livestock in secure buildings at night.
13. Dogs are a good early warning system for alerting residences to bear activity. But be aware that a dog chasing a bear could bring a bear back to you.
14. Fruit trees are one of the biggest draws for bears. Fruit trees, even grab apples, should not be planted near the house. And if they cannot be contained within electric fence don't let rotting fruit accumulate under fruit trees and pick fruit as soon as it is ripe.
15. Feeding birds is not recommended between April and December. Bird feeders are a major draw for bears. It is best not to have bird feeders, but if you do they should be well away from the house and suspended ten feet above a bear's reach and four feet from the support. Bird seed should be stored in a locked building and be aware that even an empty bird feeder can lure in a bear that has been trained up on bird seed.
16. Garbage is a major draw. When bears learn that garbage is available in areas of human activity they will start seeking out garbage. Garbage management is the key to keeping bears well behaved. Store your garbage in bear-resistant dumpsters, enclosed trailers or closed buildings and never let garbage accumulate.
17. Don't store smelly or food-related garbage outside. Store garbage in an enclosed building until it can be hauled to the dump. Open garbage pits on the ranch are not recommended. It is best not to put out food scraps for birds, wildlife or chickens around the house. If you compost it is best to have the compost inside an electrified garden area. Be aware that bears will scavenge and eat compost and will dig through compost to feed on worms.
18. If you must keep garbage outside, use a bear-resistant dumpster or garbage can. But, don't waste receptacle space with standard household garbage. Store smelly garbage and scraps in bear-resistant products and put the non-attractive garbage in bags and cans.
19. If bear-resistant cans are not available, make a bear-resistant garbage rack, or cage or simply store smelly and food-related garbage in a locked building or behind electric fence until it goes to the dump.
20. Garbage disposals are an excellent way to manage kitchen scraps or keep a single garbage can in a closet or closed garage for smelly and food-related garbage and use outside garbage cans for standard household garbage. In rural areas, smelly or food-related garbage can be burned in a wood stove or vented burn barrel but be careful not to let garbage accumulate in the barrel before burning.
21. Keep your barbecues clean or stored in bear proof structures. Don't place food stores or freezers on back porches or in open buildings.
22. Animal carcasses are perhaps the biggest draw for bears. Be aware that bears will steal big game carcasses hanging in garages or on poorly designed meat poles.
23. Any carcass left out for carcass removal should be well away from the residential area and outside of the ranch compound. If carcass removal is not an option, carcasses should be randomly distributed or buried at a remote site on the ranch well away from livestock and residences. It is best not to use an established "bone yard" as it will turn into a bear activity center.

Mike Madel	Eric Wenum	Tim Manley	Kevin Frey	James Jonkel	Kim Annis
Choteau, MT	Kalispell, MT	Kalispell, MT	Bozeman, MT	Missoula, MT	Libby, MT
406-466-5100	406-752-4588	406-892-0802	406-994-3553	406-542-5508	406-293-4161
406-7884755	406-250-0062	406-250-1265	406-5816981	406-544-1447	406-249-7695

THE BLACKFOOT WATERSHED WOLF AND BEAR ACTIVITY REPORT
Fall 2018 and Spring 2019

Hello everyone, this is Eric Graham working for the wildlife program at the Blackfoot Challenge. In coordination with Montana Fish, Wildlife and Parks (MFWP) we produce this wolf and bear activity report. These reports are typically compiled during our range rider season from May through October, but due to the large volume of grizzly bear conflicts and activity last fall, and the fact that we were short-handed due to the fact that James Jonkel (FWP R2 bear manager) was unable to work due to an injury, I was not able to complete a report last fall. And, it looks like we will be short-handed again this spring, James Jonkel will be out most of the spring and early summer recovering from surgery and it will be Eli Hampson and myself covering most of the issues with bears.

First, some history on the Blackfoot Challenge Range Rider Program: It was back in 2008 that the Blackfoot Challenge (BC) started a pilot season to explore hiring seasonal range riders and here we are in our 10th season of range rider efforts in the watershed. We will continue to work with ranches throughout the Blackfoot watershed to help them keep an eye on predator activity and to increase herd supervision and communication until the cows come home from their grazing leases this fall.

Thanks again to all of the ranchers and landowners that make this program possible. Thanks to all of the partners that provide funding and technical assistance - MFWP, the United States Fish and Wildlife Service (USFWS), the Bureau of Land Management (BLM), The Nature Conservancy (TNC), the Livestock Loss Board, Northern Rockies Conservation Co-op, Defenders of Wildlife, Vital Ground, the Cross Charitable Foundation, the Stranahan Foundation, and numerous individuals.

If you have any questions about the wildlife program please call the Blackfoot Challenge **Wildlife Committee Chair - Randy Gazda (406) 793-7402.**

Contact Info for reporting wolf and/or bear activity:
Eric Graham – Blackfoot Challenge Wildlife Technician (406) 240-3132
Jamie Jonkel – MFWP Bear Management Specialist (406) 544-1447
Eli Hampson---MFWP Bear/Lion Management Technician (406) 210-3213
Tyler Parks – MFWP Wolf Management Specialist (406) 531-4454
Scott Eggeman – MFWP Blackfoot Area Wildlife Biologist (406) 542-5542

If you have a suspected depredation please notify USDA **Wildlife Services** (WS) as soon as possible to determine the cause of death. Regarding reimbursement for losses through the **Livestock Loss Board**: If you suspect a livestock loss due to mountain lion/wolf/grizzly bear predation, you can request an investigation to see if the losses were due to a confirmed or probable depredation. The Livestock Loss Board can pay only for confirmed or probable losses as determined by USDA-Wildlife Services (WS).

WS Powell County - Bart Smith (406) 660-0368
WS Missoula County - Ted North (406) 274-4856
WS Lewis & Clark County - John Meidtke (406) 855-8429
Department of Livestock - Livestock Loss Board (406) 444-5609

IMPORTANT UPDATES

BLACKFOOT VALLEY WOLF PACKS –

ARRASTRA CREEK PACK
Pack Structure: 5 or more Adults
Collared Wolf: Yes (1)
Pack Report: There were two radio collared wolves in this pack in 2018. One radio collared wolf was harvested during the 2018 wolf hunting and trapping season. A radio collared female should still be active in the pack.

AVON PACK
Pack Structure: 5 Adults
Collared Wolf: No
Pack Report: Nothing new to report.

BELMONT PACK
Pack Structure: ~5 Adults
Collared Wolf: No
Pack Report: This pack is thought to spend time on the Confederated Salish and Kootenai Tribe reservation.

BUGLE MOUNTAIN PACK
Backcountry

CHAMBERLAIN PACK
Pack Structure: ~8 Adults
Collared Wolf: No
Pack Report: Nothing new to report.

CONGER POINT PACK
Backcountry

HUMBUG PACK
Pack Structure: Unknown
Collared Wolf: No
Pack Report: Nothing new to report.

INEZ PACK
Pack Structure: ~5 Adults
Collared Wolf: No
Pack Report: There were two radio collared wolves in this pack in 2018. A radio collared adult was harvested during the 2018 wolf hunting and trapping season. And a two-year-old radio collared female was illegally taken.

LANDERS FORK PACK
Pack Structure: Unknown
Collared Wolf: No
Pack Report: Nothing new to report.

MORRELL MOUNTAIN PACK
Pack Structure: 7 Adults
Collared Wolf: Yes (4)
Pack Report: MFWP continues to monitor via radio telemetry.

SEELEY LAKE PACK
Pack Structure: 4 Adults
Collared Wolf: No
Pack Report: Nothing new to report.

STONEWALL MOUNTAIN PACK
Pack Structure: 4 Adults
Collared Wolf: Yes (1)
Pack Report: Nothing new to report.

UNION PEAK PACK
Pack Structure: 4 Adults
Collared Wolf: No
Pack Report: Nothing new to report.

WOLF ACTIVITY

Wolf activity in the Blackfoot remains consistent with years past, with reports coming in throughout the valley.



Wolf tracks from the Sunflower Pack near Gold Creek.

On March 7th, 2019, The Blackfoot Challenge partnered with Wildlife Services, FWP, and a local ranch to deploy turbo fladry to deter wolves from entering a calving yard.

For 2019, Wildlife Services has not verified any wolf depredations in the Blackfoot or in FWP's Region 2 (As of 4/26/2019).



A wolf track (lower right corner) paralleling the turbo fladry on the outside of a calving yard.

IMPORTANT UPDATES REGARDING GRIZZLY BEAR ACTIVITY IN THE BLACKFOOT VALLEY

2018:

Last summer turned out to be the worst grizzly conflict season on record in the Blackfoot watershed. Most years, we average four to five livestock depredations and 15 or so residential conflicts, involving garbage, bird feeders, fruit trees, freezers, grain sheds and other attractants. But this last year we had approximately 80 grizzly-related conflicts, six of which were verified livestock depredations and one depredation attempt.

Due to the large number of residential-related conflicts last year, I grouped some of the individual conflict incidents into conflict episodes. For example, during a two-night period in June, we had two grizzlies come into Ovando, that got into uncontained garbage at multiple homes and businesses, grain in one chicken coop and a garbage wagon. These conflicts were all lumped and counted as one conflict episode.

With that in mind, I did my best to break the 2018 grizzly bear conflicts up by tributary:

Clearwater Drainage 2018

In the Clearwater Drainage we had approximately 18 conflicts: 15 involved grizzlies getting into uncontained garbage and chicken or livestock feed; one predation of a pig; and two crowd control/ traffic hazard- related conflicts. The majority, of these conflicts, were related to the radio collared grizzly bear "Baptiste", who was destroyed by FWP near Condon in early July. There was at least one additional adult male grizzly that killed the pig and was involved in a handful of garbage incidents. This unmarked adult male also spent time on the Blackfoot Valley side near Woodworth and Ovando.

Upper Blackfoot Drainage 2018

In the Blackfoot Valley we had approximately 62 conflict episodes. There were roughly 50 incidents involving grizzlies accessing garbage, livestock feed, chicken feed, Crystal Lyx, bird feeders, BBQs, dog food, fruit trees, animal carcasses in yards and one incident of a freezer full of meat on a back porch. There were two reports of a grizzly hitting hunting camps in the Scapegoat Wilderness. There were three sudden encounters, in two of which bear spray was deployed. And in the Blackfoot, Wildlife Services, verified five livestock depredations and one depredation attempt on calves. And in the Lincoln area there was one road hazard/crowd control situation involving a road-killed female grizzly and her 3 orphaned cubs. The majority, of the residential conflicts, involved two grizzly bears traveling together and additional grizzly bears, one of which had a severe limp. It was difficult to determine how many grizzlies were involved with the Blackfoot Valley depredations, but it was verified that a family group was involved with the one calf injury west of Helmville in early April, and a lone grizzly was suspected in depredations south west of Helmville. But, due to the large numbers of conflicts in 2018 it was difficult to determine exactly how many different bears were involved in conflicts. Two adult grizzlies and three orphaned cubs were trapped as a result of these conflicts. The two adults were relocated to the Flathead National Forest and the three cubs were placed in the Quebec Zoo.

(Note: there were a handful of additional incidents with livestock involving grizzly bears feeding on or scavenging other predator's kills and/or suspect kills. And south of the Blackfoot Valley, in the Gold Creek area, there was one verified grizzly calf depredation July.)

We had higher conflicts in 2018 for multiple reasons: 1) The grizzly bear population has increased and we have reached capacity; 2) Grizzlies that have keyed into agricultural crops in proximity to houses; 3) Multiple family groups with dispersing sub adults are inhabiting the valley; 4) Unusual spring and heavy snow pack has concentrated the bear activity on green-up sites around the valley floor; 5) The 2017 fires burned hot along the south end of the Bob Marshall and Scapegoat Wildernesses and bears were displaced to adjacent areas; 6)

Exceptional berry crops (service berry, choke cherry and hawthorn) lured bears into the lower elevations; and 7) Bears are being trained up by individuals with uncontained residential/agricultural foods that are good to eat (garbage, grain, fruit, etc.).

The two male grizzlies trapped and relocated were captured during the following management actions:

1. On April 22nd, 2018, a calf was attacked and injured northwest of Helmville. The calf survived. Wildlife Services verified the attack and traps were set for a female grizzly bear with 3 sub-adults that were observed at the site of the incident. The family group was not captured, however, on 4/25 a 474 pound-male grizzly named "McElwain" was incidentally captured. The bear was collared and relocated to Glacier National Park. (Due to heavy snow at the time, there were no other adequate relocation sites.) In late summer 2018 "McElwain" dropped his collar in Glacier National Park.

2. On September 19th, 2018, a young adult male was captured at a ranch near the Aunt Molly Wildlife Area after it tipped over several burn barrels and investigated the yard area. The bear was approximately 300 pounds and was named "Blackfoot". The bear was collared and relocated to the Flathead National Forest on the edge of the Great Bear Wilderness Area. His last known location was last fall south of the Blackfoot Indian Reservation on the Rocky Mountain Front.

The residential/ranch-site conflicts that occurred in 2018 were mostly due to a handful of grizzlies that developed food-conditioned behavior last year. These bears are showing us where lots of home sites and ranches are leaving out uncontained sources of grain, chicken feed, bird feeders and grain. Please remember, that the best way to keep bears from developing bad habits in the first place is to be diligent in containing any food-related items around the household or ranch. If possible manage garbage carefully and store grain, sweet licks and other desirable attractants behind electric fence or within stout buildings with closed doors. That is, anything that a bear might find desirable should be locked up tight and be made unavailable--especially if your homesite or ranch is adjacent to areas with known bear activity. The best way to keep the area safe is to deter bears from coming in and around homesites by not encouraging them or training them to seek out food rewards around homesites in the first place.

2019 To-Date:

Adult male grizzly tracks were observed in the foothills and higher ridge lines as early as March 19th this year. By the end of March our two collared males, a research male known as "Walking Bear" and a subadult Male that was relocated from the Bitterroot to the NE side of the Rattlesnake Wilderness, both emerged from their dens. The research female grizzly, known as "Silverqueen," was still in her den as of last week.

Since the second week of April a handful of bears appeared in the valley floor. There have been multiple incidents this spring:

- On April 5th a grizzly was observed crossing a field with cows near Helmville. The bear did not chase or show interest in the cows.
- On April 13th a grizzly was observed crossing Hwy 200 on the west side of Ovando. The bear skirted the edge of town and continued south toward the Blackfoot River.
- On April 15th there were two separate incidents where grizzlies investigated residences. A grizzly was photographed at night in a yard near Clearwater Junction. The bear tipped over two empty garbage cans and moved around several fuel/oil barrels. And that same night a grizzly, north of Seeley Lake, accessed a winter's worth of garbage that was being stored in an open trailer. We are monitoring "Stevi" as he is in this vicinity and we hope he has not learned about garbage.
- In the Helmville area, Wildlife Services responded to a handful of grizzly/predator complaints involving livestock, including: an injured calf near the Aunt Molly WMA; an injured calf near Nevada Lake; a scavenged calf near Avon and several reports of missing calves; and several verified depredations. On April 20th Wildlife Services did set traps for a grizzly involved with a calf depredation SW of Helmville and on April 23rd a lone grizzly was captured and destroyed. It was believed that this grizzly was involved in two depredations at this site this spring and three depredations at the same site last year. Traps were also set at an adjacent ranch on April 23rd for a grizzly that killed one calf, maybe two. No bear has been captured at this site.
- On April 25th three grizzlies were observed near a homesite/bus stop in the vicinity of the Aunt Molly WMA. It was determined that the grizzlies were feeding on a bull carcass near the site. This situation was monitored and it appears that the bears have left the area now that the carcass is mostly consumed.

See the link below for more:
https://missoulian.com/news/local/after-busy-grizzly-managers-brace-for-more-work/article_7f861c8b-3169-58f5-9b9a-10748263efe5.html

LIVESTOCK CARCASS PICKUP PROGRAM

The Blackfoot Challenge's Livestock Carcass Pick Up and Removal Program runs from mid-February through mid-May. Thereafter, carcasses in the Blackfoot watershed are picked up by FWP. If you currently have a carcass for pick up, please call 544-1447 to reach Jamie Jonkel with Montana FWP. The carcass will be taken to the compost site near Clearwater Junction to help prevent conflicts with bears and wolves. To learn more about this program, watch the video "Living with Carnivores: Boneyards, Bear & Wolves."

In the spring of 2018 there were 5 incidents of grizzly bears venturing into ranch compounds to retrieve carcasses left out for the carcass pickup program. Dead calves were either left on the ground or placed on hay bales within high activity areas on the ranch and bears were lured in to feed on the carcasses. As a result, we are re-evaluating pickup protocol and now recommend that after March 2019 all carcasses set aside for pickup be stored away from the ranch premises.

In late March 2019 we sent a letter out to participants with this wording:

> "Due to last year's issues with grizzlies being lured into several ranch compounds for livestock carcasses, it is recommended that, after April 1st, carcasses not be stored within the ranch headquarters or near cattle activity. Rather, carcasses should be stored at a minimum of 400 yards from human and livestock activity at an accessible site with good visibility. Make sure the carcasses are still convenient for carcass pickup, but at safe site well away from human activity and cover. If possible, place carcass on top of an old hay bale. If livestock die be sure to call Dan Massey so he can prioritize his normal route pickup schedule. If needed, the ranch can also call Eric Graham with the Blackfoot Challenge or James Jonkel with MFWP for emergency pickup. If there is concern that a carcass will lure in bears before pick up, there is always the option of personally hauling the carcass to the Clearwater Compost site. In certain situations, the carcass can also be relocated to a remote site on the ranch, well away from livestock where it can be left for scavengers. It is recommended, for safety reasons, that such locations on the ranch be made off limits. Note: Be sure to lock up all sheds and barns where garbage, grain and other attractants are stored and if you are in need of additional electric fence materials or energizers for containing carcasses or other bear attractants (grain, sweet licks, garbage, etc.) call Eric Graham or James Jonkel."

NEW GRIZZLY BEAR ADVISORY COUNCIL TO BE APPOINTED BY GOVERNOR BULLOCK

Grizzly bear management in Montana is complex. While they are at recovery levels in the Greater Yellowstone (GYE) and Norther Continental Divide Ecosystems (NCDE), they have yet to reach recovery goals in the Bitterroot and Cabinet-Yaak Recovery Zones. In places where bear numbers are on the rise, they are dispersing into places they haven't been for decades, sometimes causing conflicts with people and communities. The council will consider these changes and challenges and will help make recommendations for grizzly bear management and conservation in Montana.

The Grizzly Bear Advisory Council will be comprised of a broad cross section of Montanans with a diversity of views on grizzly bear management, conservation, and recovery. The Council will be tasked with considering broad strategic objectives, such as:

- Maintaining and enhancing human safety
- Ensuring a healthy and sustainable grizzly bear population
- Improving timely and effective response to conflicts involving grizzly bears
- Engaging all partners in grizzly-related outreach and conflict prevention
- Improving intergovernmental, interagency, and tribal coordination

For more information on the new advisory council, visit:
http://fwp.mt.gov/fishAndWildlife/management/grizzlyBear/gbac.html

BLACK BEAR AND MOUNTAIN LION ACTIVITY

Black bear conflicts have been minimal this spring. Two different black bears have been reported investigating back yards in the Seeley Lake area. There were a handful of mountain lion conflicts this March in the Seeley Lake and Potomac areas. Reports of mountain lion activity the Blackfoot, especially in the Lincoln and Seeley Lake areas are common.

For more information on black bear and lion activity in and around Region 2 check out these two sites:

http://missoulabears.org/
https://www.facebook.com/missoulabears/

And for information on how to avoid either directly or indirectly feeding wildlife in Montana, visit:
http://fwp.mt.gov/fishAndWildlife/livingWithWildlife/feeding/default.html

Electric fence cost share program

Multiple fencing projects have occurred at various residences across the valley. Electric fencing is an excellent way to protect livestock, fowl and contain residential attractants. Electric fence is a surefire method of ensuring that any bears or other predators that check out yard areas will not come back again. A good shock is the best way to teach bears to keep away. Contact Jamie Jonkel at 544-1447 if you would like to talk about cost share programs to install electric fence around home sites, livestock holding pens (chickens, cattle, pigs, goats, sheep, bee yards), fruit orchards, gardens and other sites that might attract bears or other wildlife. Again, more information is available on electric fence and detailed reports on grizzly, black bear and mountain lion activity at:

http://www.missoulabears.org

https://defenders.org/got-grizzlies

From:	Sara Schmidt
Bcc:	Kevin_Ertl@fws.gov
Subject:	Blackfoot Watershed Wolf & Bear Activity Report: Fall 2019 - Spring 2020
Date:	Tuesday, May 5, 2020 1:08:27 PM
Attachments:	Wolf Bear Report Fall 2019-Spring 2020.pdf

Greetings Blackfoot Challenge Wildlife Committee Members, Blackfoot Producers, and Interested Parties:

Please find attached **the Blackfoot Watershed Wolf and Bear Activity Report for Fall 2019 and Spring 2020**, compiled by Blackfoot Challenge and Montana Fish, Wildlife & Parks.

If you have any questions about the program or would like more information, please contact Wildlife Committee Coordinator Eric Graham at eric@blackfootchallenge.org or 406-240-3132 or Wildlife Committee Chair Randy Gazda at Randy_Gazda@fws.gov or 406-880-4386.

Thank you for your participation.

Sara

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Sara N. Schmidt
Communications Manager, Blackfoot Challenge
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www.blackfootchallenge.org

THE BLACKFOOT WATERSHED WOLF AND BEAR ACTIVITY REPORT FALL 2019/SPRING 2020

In coordination with Montana Fish, Wildlife and Parks (FWP) Region 2 (R2), the Blackfoot Challenge (BC) produces this wolf and bear activity report. These reports are typically compiled during our range rider season in the spring, summer and fall. We were unable to complete a report last fall so that information has been included in this spring update for wolf and bear activity in the Blackfoot watershed.

Most of the grizzly bear management, prevention work and grizzly bear research trapping are handled by Eli Hampson (FWP) and Eric Graham (BC). Jamie Jonkel (FWP) will assist as needed and will handle calls from the public and provide logistical support. We welcome Rory Trimbo who is a bear management technician stationed in the Deer Lodge Valley that will be assisting in the Blackfoot as well.

Wolf, lion and bear depredations or livestock loss reimbursement are handled by Wildlife Services (WS) and the Livestock Loss Board (LLB). When depredations are not an issue - Tyler Parks (FWP) handles all the wolf related management, wolf research trapping and reporting. Eli Hampson (FWP) handles mountain lion related management and black bear management along with (FWP) game wardens. Scott Eggeman (FWP) is the point person for all issues pertaining to elk and deer and all aspects of wildlife in the Blackfoot watershed.

We will continue to work with ranchers throughout the Blackfoot watershed to monitor predator activity, assist with monitoring livestock, communicate with local ranchers and continue operating the livestock carcass pickup program. A special thanks to our range riders – Sigrid Olson, Vicki Pocha and Jordan Mannix. The Blackfoot Challenge Range Rider Program was established in 2008 and is entering its 12th season. We also thank Dan Massee and Barry Gordon who pick up most of the carcasses associated with the carcass pickup program. The Blackfoot Challenge Carcass Pickup Program has been ongoing since 2003.

Thanks again to the ranchers and landowners that make these programs possible. We would like to recognize all of the partners that provide funding and technical assistance - FWP, the United States Fish and Wildlife Service (USFWS), Montana Department of Transportation (MDT), the Bureau of Land Management (BLM), The Nature Conservancy (TNC), the Livestock Loss Board, Defenders of Wildlife, Vital Ground, the Cross Charitable Foundation, Bunting Family Foundation, National Fish and Wildlife Foundation, the Western Bear Foundation and numerous individuals.

If you have any questions about any of the Blackfoot Challenge wildlife programs call the **Wildlife Committee Chair - Randy Gazda (406) 880-4386 or the main office at (406) 793-3900**

CONTACT INFORMATION FOR REPORTING WOLF, BEAR AND/OR LION ACTIVITY:

Jamie Jonkel – MFWP Bear Management Specialist (406) 544-1447
Eric Graham – Blackfoot Challenge Wildlife Program Coordinator (406) 240-3132
Eli Hampson---MFWP Bear/Lion Management Technician (406) 210-3213
Tyler Parks – MFWP Wolf Management Specialist (406) 531-4454
Rory Trimbo—MFWP Deer Lodge Bear Management Technician (406) 465-9343
Scott Eggeman – MFWP Blackfoot Area Wildlife Biologist (406) 542-5542

If you have a suspected livestock depredation, please notify USDA **Wildlife Services** as soon as possible to determine the cause of death. Regarding reimbursement for losses through the **Livestock Loss Board**: If you suspect a livestock loss due to mountain lion/wolf/grizzly bear predation, you can request an investigation to see if the losses were due to a confirmed or probable depredation. The Livestock Loss Board can pay only for confirmed or probable losses as determined by USDA-Wildlife Services (WS).

WS Powell County - Bart Smith (406) 660-0368
WS Missoula County - Ted North (406) 274-4856
WS Lewis & Clark County - John Meidtke (406) 855-8429
Department of Livestock - Livestock Loss Board (406) 444-5609

BLACKFOOT WATERSHED WOLF PACKS

Montana FWP uses a Patch Occupancy Model (POM) to estimate Montana's wolf population and track trends. Details on POM can be found in the Annual Wolf Report on the FWP website http://fwp.mt.gov/fishAndWildlife/management/wolf/. The transition to POM means that collecting minimum pack counts is no longer a high priority for monitoring wolf numbers. Therefore, the pack structure for most of the packs below is unknown. The rough numbers below are based largely on public reports and represent pack counts after the general hunting season, which ended on March 15th, 2020.

ARRASTRA CREEK PACK
Pack Structure: 3 to 4
Collared Wolf: No
Pack Report: Nothing new to report.

AVON PACK
Pack Structure: ~4
Collared Wolf: No
Pack Report: Nothing new to report.

BELMONT PACK
Pack Structure: ~4
Collared Wolf: No

Pack Report: This pack is thought to spend time on the Confederated Salish and Kootenai Tribe reservation.

BUGLE MOUNTAIN PACK
Backcountry

CHAMBERLAIN PACK
Pack Structure: 2
Collared Wolf: Yes (1)
Pack Report: Nothing new to report.

CONGER POINT PACK
Backcountry

HARDSCRABBLE
Pack Structure: 2
Collared Wolf: No
Pack Report: This pack was recognized in 2019 and frequents Alice Creek, Bartlett Creek, Cadotte Creek, and South of Hwy 200 North of Willow Creek.

HUMBUG PACK
Pack Structure: Unknown
Collared Wolf: Yes (1)
Pack Report: Nothing new to report.

INEZ PACK
Pack Structure: 3 Adults
Collared Wolf: No
Pack Report: Nothing new to report.

LANDERS FORK PACK
Pack Structure: Unknown
Collared Wolf: No
Pack Report: Nothing new to report.

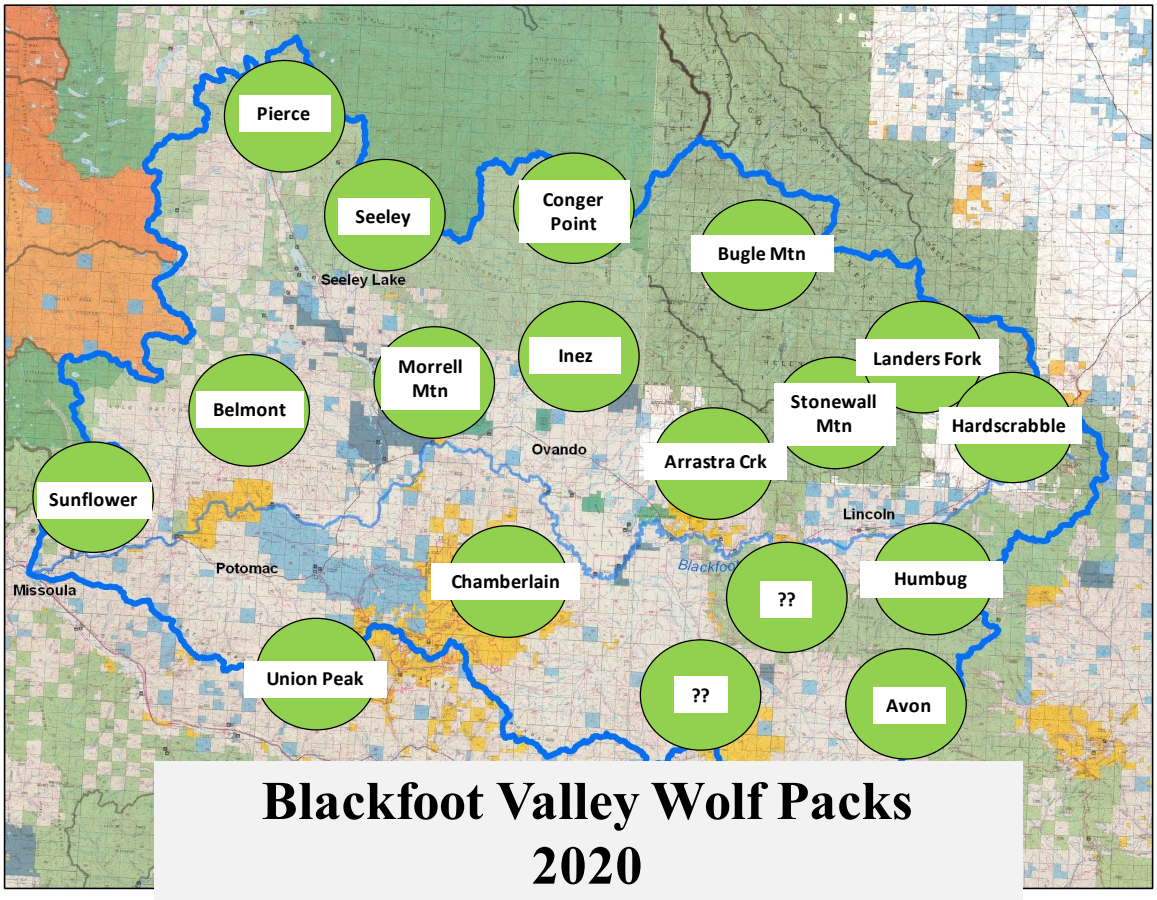
MORRELL MOUNTAIN PACK
Pack Structure: ~3 Adults
Collared Wolf: No
Pack Report: Nothing new to report.

SEELEY LAKE PACK
Pack Structure: ~4 or more Adults
Collared Wolf: No
Pack Report: Nothing new to report.

STONEWALL MOUNTAIN PACK
Pack Structure: ~4 Adults
Collared Wolf: Yes (1)
Pack Report: Nothing new to report.

SUNFLOWER PACK
Pack Structure: ~5 Adults
Collared Wolf: Yes (2)
Pack Report: Nothing new to report.

UNION PEAK PACK
Pack Structure: ~5 or more Adults
Collared Wolf: Yes (1)
Pack Report: Nothing new to report.



WOLF ACTIVITY 2019 SUMMARY

For 2019, in the Blackfoot watershed Wildlife Services confirmed 3 calves and 1 livestock guard dog that were injured by wolves and 5 calves and 4 sheep that were killed by wolves. WS radio collared 4 wolves and lethally removed 15 in response to confirmed wolf depredations. Eleven of the 15 wolves were removed from the chronically depredating Chamberlain wolf pack. Three wolves were removed from the Stonewall pack. A single wolf was removed west of Avon; its pack association is unknown. To assist with wolves around livestock FWP collared eight wolves in Region 2 in 2019, four of which were in the Blackfoot watershed.

UPDATES REGARDING GRIZZLY BEAR ACTIVITY IN THE BLACKFOOT WATERSHED

In 2018 the Blackfoot had its highest number of grizzly bear conflicts on record. In past years, we typically averaged four to five livestock depredations and 15 or so residential conflicts mostly involving uncontained garbage, bird feeders, fruit trees, freezers and grain. But, in 2018, there was an upsurge in conflicts involving uncontained residential and agricultural attractants. Approximately 80 grizzly-related conflicts were reported (six of which were verified livestock depredations and one depredation attempt). The 70 or so home site attractants mostly involved uncontained garbage, pet food, bird seed, chicken feed other livestock feed. As a result, a handful of grizzlies in 2018 learned that uncontained attractants were available, and in 2019 a few of those bears continued to exhibit "food conditioned behavior."

2019 SUMMARY

Through the year there were abundant reports and observations of grizzlies feeding in agricultural crops, traveling through and feeding on natural foods. But, compared to 2018, there was a reduction in the number of conflicts.

The grizzly season started out with grizzly tracks being observed in the foothills and higher ridge lines as early as March 19th and by the end of March we were getting reports of grizzlies on ranch lands in the Blackfoot Valley and from snowmobilers throughout the Clearwater drainage. During the spring we had good moisture and grizzlies were being observed throughout the Blackfoot watershed. In July and August, due to bountiful huckleberry, choke cherry and hawthorn production, sightings and conflicts remained low. But, as with most years, conflicts increased September through November. Historically the highest conflict period in the Blackfoot occurs in the fall. In 2019, there were a total of 47 reported residential conflicts and 4 depredations involving grizzlies. Note, most of the conflicts at residential sites were related to the radio-collared grizzly bear "Stevi" (discussed below) and the two grizzlies he was traveling with. There were, however, several other grizzlies in the Blackfoot valley and at least one lone grizzly and a family group in the Clearwater drainage that exhibited "food-conditioned behavior."

LIVESTOCK DEPREDATIONS AND ONE GRIZZLY EUTHANIZED

Between April and the end of July, the Department of Agriculture's Wildlife Services and FWP R2 responded to four verified livestock depredation incidents and a handful of additional calls about livestock where the cause of death or injury was natural, or not determined. Below is a synopsis of each of the incidents and management actions that occurred in the Blackfoot.

- On 4/19/19, Wildlife Services investigated wounds on a newborn calf at a ranch near Helmville, MT, and determined that the injury was grizzly-related. Due to the amount of time that had passed and the fact that the calf was recovering, trapping was not an option.

- On 4/20/19, Wildlife Services responded to a calf killed near Helmville, MT. During the investigation it was discovered that a second calf had gone missing. Culvert traps and snares were set at site. On the 23rd one of two grizzlies were captured. Even though this was the sub adult male's first offense, after close consultation with the USFWS, it was decided that due to chronic depredations occurring in the area, the 225-pound bear would be euthanized and the second bear was not captured. Adjacent to this ranch, in 2018, there were multiple calf depredations by grizzlies at the neighboring calving ground. Traps were set at this site last year on three occasions, but no bears were captured. For more information you can go to this link: https://www.blackfootvalleydispatch.com/story/2019/05/01/news/grizzly-euthanized-after-cattle-depredations-in-helmville-valley/1001.html

- On 5/23/19 two calves were killed by a grizzly at another ranch near Helmville, MT. Wildlife Services set traps at-site, but the bears had consumed the calves and did not return. Traps were closed after several days of trapping.

- On 6/15/19 another calf depredation was discovered near Helmville, MT. Wildlife Services determined the death to be grizzly related. But, due to the amount of time that had passed trapping was not an option.

- Last spring, Wildlife Services investigated 7 additional calf carcasses where it was determined the calves had died of natural causes and were scavenged on by grizzlies. Two of these incidents occurred in the Avon area. In addition, Wildlife Services documented one calf killed by coyotes that had been scavenged on by grizzlies. Wildlife Services also investigated a calf with a neck wound, near Avon, MT, that was determined to be related to an infection and not a bite wound. After June 15th, there were no additional depredations reported in the Blackfoot watershed.

RESIDENTIAL RELATED CONFLICTS AND TWO GRIZZLIES EUTHANIZED

Two grizzlies were euthanized in 2019 as a result of their extreme food conditioned behavior.

- The first of these bears was "Stevi," a sub adult male, captured the fall of 2018 after digging up worms at the Stevensville Golf Course. This male was translocated from the Bitterroot Valley to the headwaters of Belmont Creek adjacent to the Rattlesnake Wilderness. He came out of his den, located in the southern Mission Range, on March 17th. In mid-April he stumbled onto a residence north of Seeley Lake with a large accumulation of winter garbage. FWP assisted the family with the removal of the trash. But after that episode "Stevi" continued to seek out garbage, dog food, chicken feed and bird feeders. He was suspected to have damaged a house trailer on the Blackfoot Clearwater Game Range and entered open porches, sheds and buildings for garbage, grain, dog food and BBQ grills. He was documented at multiple residences in the Seeley Lake area, Clearwater Junction area, Ovando area and Woodworth area. On July 18th he was captured and euthanized after entering a building and accessing dog food on a porch at a ranch near Woodworth, MT. For more information you can go to this link: https://missoulian.com/news/local/grizzly-that-prowled-stevi-golf-course-euthanized-after-seeley-lake/article_6d24e8a2-2d9d-5565-bc1e-72cb9db35b6b.html

- The second grizzly, euthanized on May 12th, southeast of Seeley Lake in the Woodworth area, did not have a known history, but was observed on multiple occasions traveling with the radio-collared grizzly known as "Stevi". Because of this bear's extreme food-conditioned behavior, after consultation with the USFWS, it was decided to put this bear down after he was captured. This young 250-pound sub adult male grizzly broke a door open to access a secured barn in order to get grain. The bear had also been observed at adjacent home sites accessing unsecured grain, garbage, pet food, chickens and other attractants. Following the incident the landowner took it upon themselves to build bear resistant sliding doors on the barn to prevent future conflicts. It can be assumed that this bear is one of several grizzlies that learned "bad behavior" last year, as a result of some folks not having grain, garbage and other attractants secured. For more information you can go to this link: https://www.seeleylake.com/story/2019/05/30/news/fwp-euthanizes-two-bears-in-the-area-in-the-past-month/4868.html.

- There was a third grizzly traveling with the two bears mentioned above that continued seeking uncontained attractants in the Woodworth and Seeley Lake areas. This bear was not captured. FWP responded to several additional incidents that that involved chicken feed and a female grizzly with cubs. One or two additional grizzlies (may have been the same bear) were reported in the Blackfoot Canyon area west of Lincoln that was involved in several incidents at residential sites involving grain and butchering scraps. FWP responded and erected a temporary electric fence.

ROAD KILLED GRIZZLY BEAR

On 6/6/19 a 500-pound adult male grizzly was killed by a vehicle on Highway 200 near Patterson Prairie. This is the 12th grizzly killed by vehicles in the Blackfoot Valley since 2004. Eight of these grizzlies have been killed along Highway 200 in the Lincoln Canyon between Ovando and Lincoln, MT.

2020 SPRING GRIZZLY BEAR SUMMARY

The first grizzly tracks reported this year were on March 3rd in the Arrastra Creek area and the first grizzly sighting was March 18th east of Placid Lake. Since that time, tracks have been observed in both the Clearwater and Blackfoot drainages. Through April more bears emerged from their dens and traveled to the lower elevations with most females with young out of their dens the first week of May.

GRIZZLY CONFLICTS AND ONE BEAR EUTHANIZED SPRING 2020

On March 28th Wildlife Services investigated wounds on a newborn calf at a ranch near Helmville, MT, and determined that the injury was not grizzly-related.

Between April 10th and the 12th a lone grizzly killed and cached three calves in a pasture bordering a riparian area on the same ranch mentioned above. Due to cold weather and snow it was not feasible to re-locate the cow calf herd. On April 13th Wildlife Services captured a 452-pound adult male. After consultation with the U.S. Fish and Wildlife Service, in accordance with Interagency Grizzly Bear Committee guidelines, it was decided, that because multiple calves had been killed by this individual bear, it would be removed. The hide and skull were salvaged for education purposes and the Blackfoot Challenge has begun working with the ranch on a possible electric fence project.



This is a photo of the 452 pound male grizzly that was euthanized. Photo by Eric Graham

In mid-April there were several incidents of grizzlies in proximity to ranch compounds associated with livestock carcasses. The livestock carcasses were picked up as soon as the reports came in. FWP is recommending that after March all carcasses set aside for pickup, are stored away from ranch premises.

COLLARED GRIZZLY BEARS 2020

Here is a summary of the three radio collared grizzlies in the Blackfoot:

- On April 10th during the spring radio-tracking flight it was discovered that the research female grizzly bear "Silver Queen" had dropped her collar northwest of Silver King Mountain. She had been collared since July 2018. She was originally captured northeast of Lincoln and was observed last fall with her yearling in the headwaters of the Landers Fork of the Blackfoot. This bear spent most of her time ranging the south end of the Scapegoat Wilderness between the Landers Fork and McDonald Pass. "Silver Queen" is an older 245-pound adult female.

- On April 10th the female grizzly bear "Ursa" was located at her den site in the headwaters of Falls Creek on the edge of the Scapegoat Wilderness. "Ursa" was captured last year on August 26th northeast of Lincoln, MT in the Landers Fork. It is not known at this time if she is still with her two cubs. Last year she spent most of her time

ranging the south end of the Scapegoat Wilderness between the Landers Fork and McDonald Pass. “Ursa” is an older 250-pound adult female.

- “Walking Bear”, a 535- pound adult male, recaptured in July 2018, was observed from the air on April 10th. His den site was not determined, but in 2018 and 2019 he denned in Arrastra Creek. The collar has been malfunctioning but he continues to wear his radio collar and spends most of his time ranging the river bottoms around the Aunt Molly Wildlife Management Area, the Blackfoot Canyon and the mountains north and south of Lincoln, MT. In year’s past “Walking Bear” has made two trips from the Blackfoot Valley over the top of the Mission Mountains to visit the corn fields around Ronan, MT.



“Ursa.” Photo by Eric Graham

BLACK BEAR AND MOUNTAIN LION ACTIVITY

2019

Last fall black bear conflicts in the Potomac Valley and Seeley Lake were constant. In Seeley Lake, several lone black bears and a female with cubs were trapped and relocated in response to conflicts. Several black bears were euthanized and multiple other black bears were reported accessing uncontained garbage, bird seed, dog food, chicken feed and other residential attractants. Seeley Lake has an extreme issue with uncontained attractants and last fall black bears were observed accessing garbage and other attractants on a nightly basis.

Last summer in Potomac there was an extreme situation involving bears feeding on residential garbage. At the ends of county roads, multiple homes are required to bring garbage cans to certain sites for garbage service. Most of these cans are left out all week and as a result, resident black bears are obtaining garbage on a nightly basis. Since 2015, FWP has been working with the community to resolve the situation with very little progress. Last year several of these bears began visiting Potomac home sites for garbage and other attractants. In addition, there were multiple incidents of both lions and bears killing small livestock and fowl. Wildlife Services trapped and euthanized one black bear and a lion that killed goats.

Last fall FWP fielded multiple reports of lions throughout the Blackfoot and Clearwater valleys. Similar to year’s past, most of the reports came from the communities of Potomac, Seeley Lake

and Lincoln. These three communities are known for lion activity due to prime habitat and abundant deer. FWP also responded to a handful of lions in the Ninemile Prairie area that were near camp sites. There were four reports of mountain lion attacks on dogs from Placid, Seeley, and the Swan-Clearwater Divide. As a result, two mountain lions were lethally removed.

2020

Black bear activity has been minimal. FWP has fielded reports of tracks and one incident of a black bear accessing garbage in a burn barrel north of Seeley Lake.

Throughout the winter FWP fielded reports of lion activity throughout the Blackfoot and Clearwater valleys. There were a handful of incidents where lions were in proximity to home sites. Similar to year's past, most of the reports come from the communities of Potomac, Seeley Lake and Lincoln. This winter there were a handful of incidents of lions being captured in wolf traps in Region 2. One of these incidents occurred in the Placid Lake area and the lion was safely removed. There were several reports of lions killing house cats in the Potomac area and Wildlife Services removed one lion that killed a goat.

Please report black bear and mountain lion activity/incidents as quickly as possible to Eli Hampson (406-210-3213), Jamie Jonkel (406-544-1447) or Scott Eggeman (406-531-6759).

For detailed information on black bear and lion activity in and around Region 2 check out these two sites:

http://missoulabears.org/
https://www.facebook.com/missoulabears/

GRIZZLY BEAR RESEARCH TRAPPING

There are no plans for any grizzly bear research trapping in the Blackfoot watershed this season. Should one of the collared grizzly bears die or drop their collar, traps will be set for a new bear. However, some opportunistic research trapping may occur depending on resources and time. For more information related to the grizzly bear population monitoring go to:

http://fwp.mt.gov/fishAndWildlife/management/grizzlyBear/monitoring.html

GRIZZLY BEAR ADVISORY COUNCIL UPDATE

Grizzly bear management in Montana is complex. While they are at recovery levels in the Greater Yellowstone (GYE) and Norther Continental Divide Ecosystems (NCDE), they have yet to reach recovery goals in the Bitterroot and Cabinet-Yaak Recovery Zones. In places where bear numbers are on the rise, they are dispersing into places they haven't been for decades, sometimes causing conflicts with people and communities. Last year the Governor of Montana appointed members to the Grizzly Bear Advisory Council. The council has been working

diligently and will eventually have recommendations for grizzly bear management and conservation in Montana.

The Grizzly Bear Advisory Council is comprised of a broad cross section of Montanans with a diversity of views on grizzly bear management, conservation, and recovery. The Council has been tasked with considering broad strategic objectives, such as:

- Maintaining and enhancing human safety
- Ensuring a healthy and sustainable grizzly bear population
- Improving timely and effective response to conflicts involving grizzly bears
- Engaging all partners in grizzly-related outreach and conflict prevention
- Improving intergovernmental, interagency, and tribal coordination

For more information on the advisory council check out this link:
http://fwp.mt.gov/fishAndWildlife/management/grizzlyBear/gbac.html

LIVESTOCK CARCASS PICKUP PROGRAM

The Blackfoot Challenge's Livestock Carcass Pick Up Program runs during calving season from mid-February through mid-May. Thereafter, carcasses in the Blackfoot Valley are picked up by FWP or the Blackfoot Challenge. In the spring of 2018, there were 5 incidents of grizzly bears venturing into ranch compounds to retrieve carcasses left out for the carcass pickup program. Dead calves were either left on the ground or placed on hay bales within high activity areas on the ranch and bears were lured in to feed on the carcasses. **As a result, the pickup protocol was re-evaluated and it is now recommending that starting April 1st all carcasses set aside for pickup be stored away from ranch premises by at least 400 yards.** Carcasses should be stored away from human and livestock activity at an accessible site with good visibility. If needed, the ranch can also call any of the numbers mentioned above for emergency pickup. If there is concern that a carcass will lure in bears before pick up, there is always the option of personally hauling the carcass to the Clearwater Compost site.

CONTACT INFORMATION FOR CARCASS PICKUP

DURING CALVING SEASON:
Dan Massee (406) 793-5639

OUTSIDE OF CALVING SEASON:
Jamie Jonkel (406) 544-1447
Barry Gordon (406) 541-1078
Eric Graham (406) 240-3132
Eli Hampson (406) 210-3213

The carcass will be taken to the compost site near Clearwater Junction to help prevent conflicts with bears and wolves. To learn more about this program, watch "Living with Carnivores: Boneyards, Bear & Wolves." Click here: https://vimeo.com/131528982.

And for information on how to avoid either directly or indirectly feeding wildlife in Montana, visit:
http://fwp.mt.gov/fishAndWildlife/livingWithWildlife/feeding/default.html

ELECTRIC FENCE COST SHARE PROJECTS

Multiple fencing projects have occurred at various ranches and residential sites across the watershed. Over the last two summers the Blackfoot Challenge has assisted multiple families with electrified residential containment fences. In years past the Blackfoot Challenge secured funds to electrify the Helmville Dump, the Ovando Dump, the Seeley Lake Dump and the Clearwater Junction Compost Site. These electric fences have proven effective at deterring bears.



This is an example of a 5 wire electric fence that was built in the Blackfoot to keep grizzly bears out of calving yards and residential home sites. Photo by Eric Graham

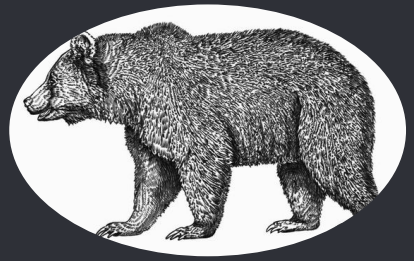
Electric fence is an excellent way to protect livestock, fowl and contain residential attractants. Electric fence is a method of ensuring that bears or other predators that check out yard areas will not come back again. A good shock is the best way to teach bears to keep away. Contact Jamie Jonkel (406) 544-1447 or Eric Graham (406) 240-3132 if you would like to talk about cost share programs to install electric fence around home sites, livestock holding pens, chickens,

cattle, pigs, goats, sheep, bee yards, fruit orchards, gardens and other sites that might attract bears or other wildlife. For information on electric fence and another option for cost sharing on electric fence check out this website:
https://defenders.org/got-grizzlies

From: Cooley, Hilary
To: Diamond, David - FS, BOZEMAN, MT
Subject: BOR ppt
Date: Wednesday, December 8, 2021 10:22:29 AM
Attachments: IGBC Board of Review_12 2021.pptx

Hey David,
It would be helpful if you could run the slide show for me so that I can look at notes.

Hopefully this comes thru…



Board of Review Recommendations Resulting from Human Fatalities

2021 Human Fatalities

- **April 15, 2021, West Yellowstone MT**

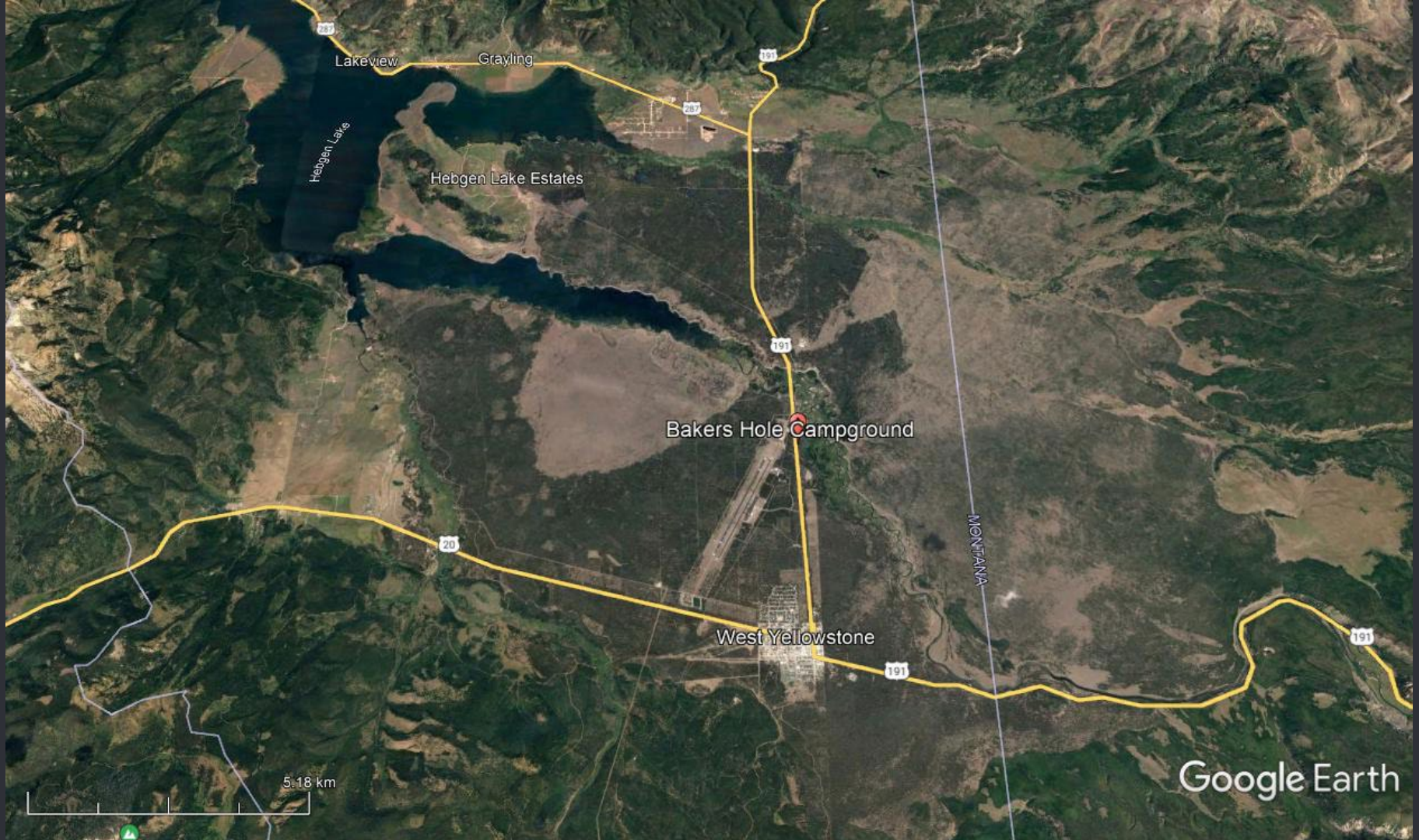
  Carl Mock: West Yellowstone resident; guide for Back Country Adventures

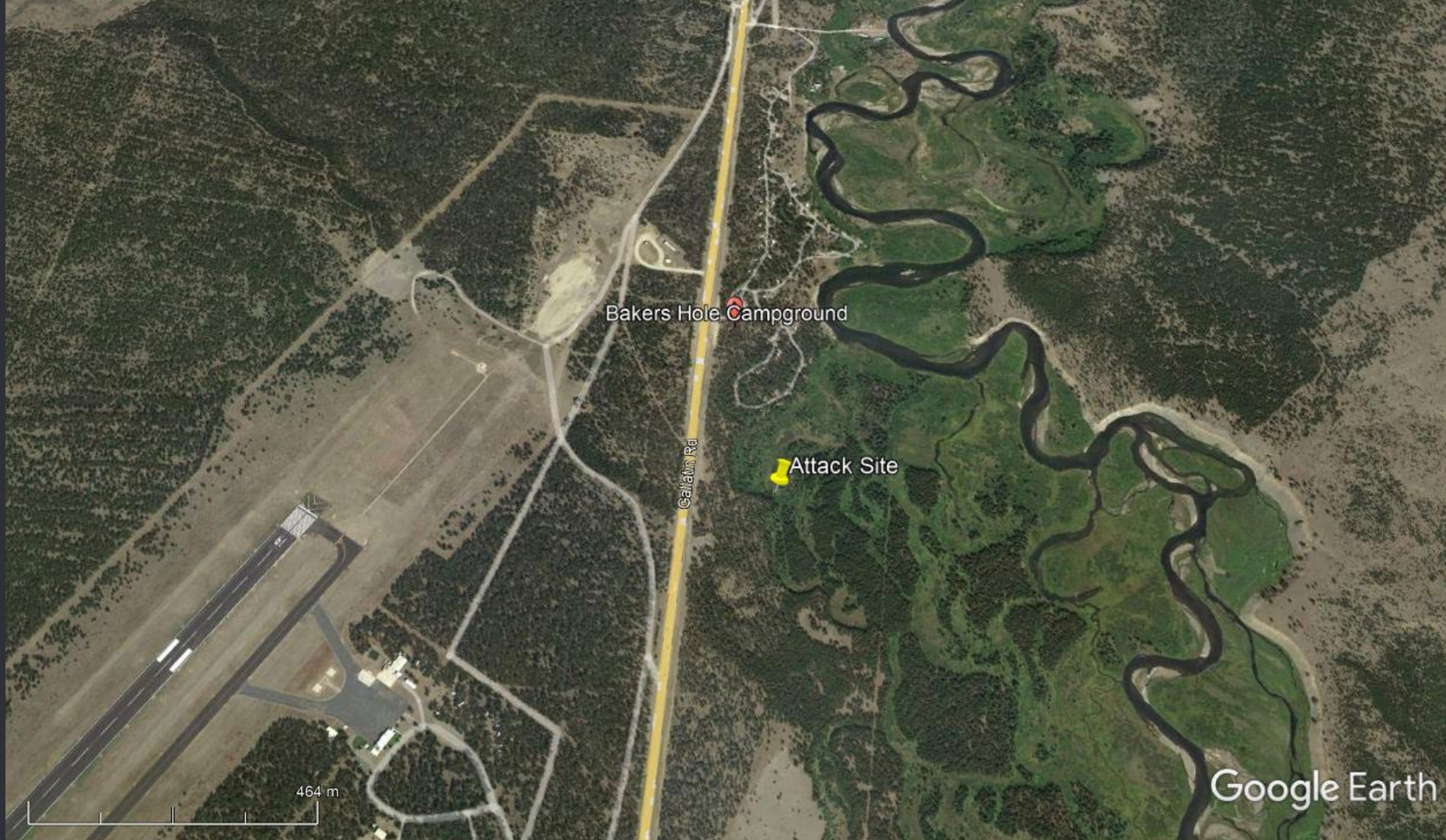
- **July 5, 2021, Ovando MT**

  Leah Davis Lokan: Chico California resident; retired nurse; avid cyclist

Board of Review: Carl Mock, West Yellowstone

- **Interagency Team:** Kevin Frey, Brian Debolt, Kerry Gunther, Mark Haroldson, Jeremy Nicholson, Dan Thompson, Dan Tyers, Hilary Cooley
- **Response & Investigation:** Gallatin County Sherriff's office, West Yellowstone Police Dept, USFS, Gallatin County Search and Rescue, Hebgen Basin Fire, MTFWP
- **Location :** Custer Gallatin NF, near Baker's Hole Campground
- 18th Human Fatality in GYE since 1892.


Lakeview
Grayling
Hebgen Lake
Hebgen Lake Estates
Bakers Hole Campground
West Yellowstone
MONTANA
287
191
20
5.18 km
Google Earth


Bakers Hole Campground
Attack Site
Gallatin Rd
464 m
Google Earth

Summary & Conclusion


191
Campground
Gallatin Rd
bear charged
moose carcass
4-16-21 bear mortality
Investigative team
4-15-21 bear attack
450-500 yards to Madison River
160 yards to US Highway 191
© 2021 Google
Google Earth
163 ft
1985
Imagery Date: 8/15/2015 12 T 492045.18 m E 4949706.45 m N elev 6582 ft eye alt 7347 ft


BEAR
COUNTRY

Recommendations

- Due to an increase in human use, bear population numbers and geographic grizzly bear distribution, more people are encountering grizzly bears. Individuals need to know and follow bear safety recommendations.
- Agencies should continue to provide public information to help reduce dangerous encounters and increase human safety in grizzly bear country.

  - Be constantly alert
  - Hike or hunt with a partner(s)
  - Make noise, if possible, to help avoid surprising a bear
  - Secure food attractants at camps, homes, and work sites
  - Do not run if you encounter a bear
  - Avoid animal carcasses -watch for concentrations of scavengers (i.e. ravens)
  - Carry and know how to use self-defense….bear-spray and or firearms. It is always recommended to carry bear-spray even if individuals carry firearms.

From: Smith, Kate
To: "hilary_cooley@fws.gov"
Subject: DRAFT M62067 Narrative Report
Date: Thursday, January 13, 2022 12:36:54 PM
Attachments: M62067 Year 1 UM FWS Narrative Report DRAFT.docx
F15AC01157 Narrative Report FY20 FINAL.pdf
M62067 Year 1 expenses for FWS report FY21.xlsx

Hi Hilary – I'm attaching the latest draft of the UM/FWS agreement's annual report covering year 1: 10/1/2020-9/30/2021 as well as a list of expenses. Please review and add in Togwotee details and People and Carnivores, as well as any other edits you have. I also attached the prior year's report in case you want to review. Wayne, Justin, and Jennifer have edited their sections.

Let me know if you have any questions!

Kate

……

Kate Smith
FWS Grizzly Bear Recovery Program
W.A. Franke College of Forestry & Conservation | University of Montana
University Hall, Room 309
Missoula, MT 59812
phone: (406)243-4903

Year1 Narrative Report: Grizzly Bear Recovery – Implementation, Monitoring, Research, Education & Conservation

The University of Montana: Cooperative Agreement Award F20AC11441
Reporting Period: 10/1/2020 – 9/30/2021

Program Accomplishments

Surveys for grizzly bears in peripheral portions of their range

During the summer of 2021, we used digital cameras and hair snare corrals to look for the presence of grizzly bears in southwest Montana, outside the normal range of the species to document range expansion. In 2020, we developed a database for verified sightings within the peripheral portion of the current range of bears. Those verified sightings, along with expert opinion, were the basis for sample sites. During the 2021 field season, mid-May through the end of Augst, 140 hair corals were placed on the Bitterroot, Lolo, and Beaverhead-Deerlodge National Forests. Each coral was in place for 3 to 4 weeks for a total of 3,446 corral nights. Preliminary results were presented at community and IGBC subcommittee meetings during the fall of 2021. Hair samples (n = 181) collected at corrals at which grizzly bears were detected or at which there were camera issues were submitted for DNA analysis. Results are anticipated in the spring of 2022 and final results will be presented at spring/summer IGBC meetings.

Monitoring of grizzly bears in the Cabinet-Yaak and Selkirk ecosystems

We continue to actively monitor vital rates (survival, cub production), population trend, and distribution of the small grizzly population in the Cabinet-Yaak and Selkirk ecosystems using radio collars, hair snaring, and rub trees. We captured and radio-collared four grizzly bears in the Selkirks and seven grizzly bears in the Cabinet-Yaak during the 2021 field season. We monitored 11 grizzly bears with radio collars on both sides of the US/Canada border in the Cabinet-Yaak area and 8 grizzly bears on both sides of the US/Canada border in the Selkirk Mountains area. This included an augmentation bears released in 2019 in the Cabinet Mountains and three management bear captures during 2021. During 2021, we placed 133 hair snare corral/camera sites and collected hair at 453 rub tree sites in the Selkirk Mountains. Trail cameras produced grizzly bear photographs at 38 sites, identifying one female with cubs. In the Cabinet-Yaak, we placed 33 corral/camera sites and collected hair at 770 rub trees. Camera photographs identified grizzly bears at 12 sites including one female with yearlings. We have been monitoring huckleberry production for more than 30 years in the Cabinet-Yaak ecosystem and expanded the effort to the Selkirk Mountains during 2014. We sampled 5 sites in the Selkirks and 15 sites in the Cabinet-Yaak and found huckleberry production during 2021 to be similar to the long term average (1989-2020). *2020 annual reports can be found at the following links:*

- https://www.fws.gov/mountain-prairie/es/species/mammals/grizzly/CabYaak_Annual_Report_2020_corrected_final_1206521.pdf
- https://www.fws.gov/mountain-prairie/es/species/mammals/grizzly/Selkirk_Grizzly_Bear_Annual_Report_2020.pdf

Evaluation of the use of DNA collected at bear rub trees and corrals to estimate the CYE and SE grizzly populations

Genetic sample results from the laboratory are not complete until the summer after collection and therefore our results here reflect samples collected in 2020. We sampled 442 rub trees and 93 corrals in the Selkirk Mountains during 2020. Genetic analysis indicated that rub trees produced grizzly bear hair from 24 individuals and corrals produced hair from 17 individuals. Some individuals were identified at both rubs and corrals. Using all data from rubs, corrals, captures, and photographs we identified 36 different individuals in the Selkirks (15 Females : 21 Males). We sampled 346 rub trees and 24 corrals in the Cabinet-Yaak during 2020. Genetic analysis resulted in the identification of 23 individuals at rubs and 10 individuals at corrals. Some individuals were identified at both rubs and corrals. Using all data from rubs, corrals, captures, and photographs we identified 41 different bears in the Cabinet-Yaak (14 Females : 27 males).

NCDE Trend Monitoring Project

We supported the Northern Continental Divide Ecosystem (NCDE) grizzly bear trend monitoring project by providing funding for one full time employee's salary and benefits. Lori Roberts is a research assistant working with Montana Fish, Wildlife & Parks doing database management and leading a trap team during the summer months. In 2021, we purchased two iridium grizzly bear radio collars and release mechanisms for use in the NCDE by Montana Fish, Wildlife & Parks. *Click here for the latest NCDE Grizzly Bear Population Monitoring Team Report.*

Conflict Prevention

In 2021, we supported numerous preventative projects throughout Montana. Preventive projects included electric fencing supplies, bear spray distribution, critter gitter devices, and bear-resistant garbage containers.

Defenders of Wildlife's 2021 Electric Fencing Incentive Program worked directly with individuals and communities, non-profit organizations, small businesses, and state, federal and tribal agencies to complete a wide variety of electric fence projects, primarily on private lands. We see tremendous conservation value in providing the financial support and technical expertise to build electric fence systems that effectively deter grizzly bears and other carnivores from accessing anthropogenic attractants. This program is designed to be proactive in preventing conflicts, though they give priority to those with previous or existing bear conflicts. Defenders saw a direct reduction in human-bear conflicts and other wildlife conflicts at these sites where fences are completed and maintained.

Since Defenders of Wildlife's fencing program began in 2010, they have completed 466 electric fences and provided over $149,000 in reimbursements and financial support to participants. In 2020, despite fieldwork limitations surrounding the Covid-19 pandemic, Defenders' 2020 fencing program assisted 54 landowners with technical assistance and reimbursements. *See attached report from 2021.*

Prevention Cost Share Projects with the Blackfoot Challenge

In 2021, the Blackfoot Challenge continued to build electric fences to reduce grizzly bear conflicts in the Blackfoot watershed. We supported multiple high priority electric fence projects. In addition to electric fence projects, we purchased 65 canisters of bear spray for the Blackfoot Challenge to distribute to local residents. The program has been very successful at reducing and preventing conflicts throughout the Blackfoot corridor. Cost share on these projects was made possible by landowner contributions, the Blackfoot Challenge, USFWS Partners Program, Vital Ground, Defenders of Wildlife, Western Bear Foundation and Montana Fish, Wildlife and Parks. *Visit the Blackfoot Challenge's website for all wildlife reports.*

People & Carnivores Electric Fencing Projects

Hilary add support details for Glen and Wise River Refuse Site

Grizzly Bear Use of Huckleberries

This project seeks to identify productive huckleberry shrubfields in the Cabinet-Yaak and Selkirk grizzly bear recovery areas via on-the-ground investigating of grizzly bear radio location data. Field staff conducted field sampling during 2018–2020. During 2021, program staff analyzed field-truthed data with resource selection function (RSF) methodology (logistic regression; "use" points versus "available" at 29 environmental and climatic variables). We have successfully developed a predictive model (AUC = 0.864; 0.7–0.9 indicates a good predictive model, > 0.9 is excellent) that combines 12 significant ($P < 0.05$) predictor variables. Currently, staff is 1) improving model fit with updated layers and 2) addressing publication-worthy model validation techniques and 3) incorporating suggestions from colleagues. Next steps include model finalization and extrapolation to sampled regions of the Cabinet-Yaak and Selkirk ecosystems, to identify important huckleberry habitat not visited by radio-collared bears. Management actions that produce or maintain predicted habitat (timber harvest, prescribed fire, etc.) may be identified for future management. We also plan to use our predictive model to address whether huckleberry habitat influences population productivity, space use, caloric capacity relative to recovery population targets, source/sink dynamics, dispersal, and habitat linkage. This project will be completed with existing staff, expectation of a publication-quality manuscript in late 2022.

Army Cutworm Moth Use by Grizzly Bears in the Greater Yellowstone Ecosystem

In cooperation with the Shoshone National Forest, this project is investigating the use of stable isotope analysis to assess the dietary importance of army cutworm moths to grizzly bears in the Greater Yellowstone Ecosystem. Since the late 1990s, use of army cutworm moths have been monitored via aerial observations of grizzly bears at confirmed moth sites to measure trends in grizzly bear presence at moth sites. Stable isotope analysis will allow us to estimate the proportion of the assimilated diet that is composed of moths compared to other meat (e.g., other insects and ungulates) and plant matter. Food items and grizzly bear hair were collected in 2020 and analyzed in 2021. Moths were collected from more peaks during 2020 and 2021 for expanded analysis. In addition, grizzly bear hair collected in 2021 is being analyzed over winter for DNA analysis and then will be sent for stable isotope analysis in 2022.

Teton County, WY conflict managment

Outreach & Education

The mission of **Swan Valley Bear Resources** (SVBR) is to provide community resources to promote coexistence between people and bears. SVBR is a collaborative working group including local non-profit conservation/education organization Swan Valley Connections (SVC) and community members working in partnership with the U.S. Forest Service, Montana Fish, Wildlife & Parks, the U.S. Fish & Wildlife Service and other natural resource entities. By pooling resources, experience, and expertise SVBR provides place-based solutions for minimizing bear conflicts on private and public property in the Swan Valley. To learn more about SVBR's 2020 bear-resistant garbage container loaner, electric fencing program, and outreach and education efforts *see attached report.*

UM Graduate Committees and Lectures

Jennifer Fortin-Noreus and Hilary Cooley are both affiliate faculty at UM and serve on graduate committees and give guest lectures and seminars on campus. During this reporting period, Jennifer served on one graduate committee and Jennifer gave a lecture in a Careers class.

Final Narrative Report: Grizzly Bear Recovery – Implementation, Monitoring, Research, Education & Conservation

The University of Montana: Cooperative Agreement Award F15AC01157
Reporting Period: 10/1/2019 – 9/30/2020

Program Accomplishments

Surveys for grizzly bears in peripheral portions of their range

We planned to use digital cameras and hair snares to look for the presence of grizzly bears in southwest Montana, outside the normal range of the species to document range expansion. However, COVID-19 protocols relating to numbers of people in vehicles and housing caused us to postpone this program during 2020. This year, we developed a database for verified sightings within the peripheral portion of the current range of bears. These verified sightings will provide the basis for sample sites in future surveys.

Monitoring of grizzly bears in the Cabinet-Yaak and Selkirk ecosystems

We continue to actively monitor vital rates (survival, cub production), population trend, and distribution of the small grizzly population in the Cabinet-Yaak and Selkirk ecosystems using radio collars, hair snaring, and rub trees. Our field efforts during 2020 were limited due to COVID-19 protocols requiring only one person per vehicle and in housing. We captured and radio-collared 9 grizzly bears in these two recovery areas during the 2020 field season. We monitored 10 grizzly bears with radio collars on both sides of the US/Canada border in the Cabinet-Yaak area and 7 grizzly bears on both sides of the US/Canada border in the Selkirk Mountains area. This included three augmentation bears released in 2018 and 2019 in the Cabinet Mountains. During 2020, we placed 134 hair snare corral/camera sites and collected hair at 447 rub tree sites in the Selkirk Mountains. Trail cameras produced grizzly bear photographs at 49 sites, identifying four females with cubs. In the Cabinet-Yaak, we placed 27 corral/camera sites and collected hair at 345 rub trees. Camera photographs identified grizzly bears at 15 sites including one female with cubs and one female with a yearling. We have been monitoring huckleberry production for more than 25 years in the Cabinet-Yaak ecosystem and expanded the effort to the Selkirk Mountains during 2014. We sampled 5 sites in the Selkirks and 15 sites in the Cabinet-Yaak and found average huckleberry production during 2020.
2019 annual reports can be found at the following links:
https://www.fws.gov/mountain-prairie/es/species/mammals/grizzly/CabYaak2019annualreport.pdf
https://www.fws.gov/mountain-prairie/es/species/mammals/grizzly/Selkirk2019annualreport.pdf

Evaluation of the use of DNA collected at bear rub trees and corrals to estimate the grizzly population

Genetic sample results from the laboratory are not complete until the summer after collection and therefore our results here reflect samples collected in 2019. We sampled 413 rub trees and 118 corrals in the Selkirk Mountains during 2019. Genetic analysis indicated that rub trees produced grizzly bear hair from 26 individuals and corrals produced hair from 23 individuals. Some individuals were identified at both

rubs and corrals. Using all data from rubs, corrals, captures, and photographs we identified 37 different individuals in the Selkirks (20 Females : 17 Males). We sampled 857 rub trees and 29 corrals in the Cabinet-Yaak during 2019. Genetic analysis resulted in the identification of 30 individuals at rubs and 6 individuals at corrals. Some individuals were identified at both rubs and corrals. Using all data from rubs, corrals, captures, and photographs we identified 39 different bears in the Cabinet-Yaak (9 Females : 30 males).

NCDE Trend Monitoring Project

We supported the Northern Continental Divide Ecosystem (NCDE) grizzly bear trend monitoring project by providing funding for one full time employee's salary and benefits. Lori Roberts is a research assistant working with Montana Fish, Wildlife & Parks doing database management and leading a trap team during the summer months. In 2020, we purchased two iridium grizzly bear radio collars and release mechanisms for use in the NCDE by Montana Fish, Wildlife & Parks. *The latest report for this project is attached.*

Conflict Prevention

In 2020, we supported numerous preventative projects throughout Montana, from the East Front to the Northwest corner of the state. Support for state agency, tribal, and non-profit preventative projects totaled more than $60,000. Preventive projects included electric fencing, bear spray distribution, critter gitter devices, and bear-resistant garbage containers.

Defenders of Wildlife's 2020 Electric Fencing Incentive Program worked directly with individuals and communities, non-profit organizations, small businesses, and state, federal and tribal agencies to complete a wide variety of electric fence projects, primarily on private lands. We see tremendous conservation value in providing the financial support and technical expertise to build electric fence systems that effectively deter grizzly bears and other carnivores from accessing anthropogenic attractants. This program is designed to be proactive in preventing conflicts, though they give priority to those with previous or existing bear conflicts. Defenders saw a direct reduction in human-bear conflicts and other wildlife conflicts at these sites where fences are completed and maintained.

Since Defenders of Wildlife's fencing program began in 2010, they have completed 466 electric fences and provided over $149,000 in reimbursements and financial support to participants. In 2020, despite fieldwork limitations surrounding the Covid-19 pandemic, Defenders' 2020 fencing program assisted 54 landowners with technical assistance and reimbursements. *See attached report from 2020.*

Prevention Cost Share Projects with the Blackfoot Challenge

In 2020, the Blackfoot Challenge continued to build electric fences to reduce grizzly bear conflicts in the Blackfoot watershed. We supported four high priority electric fence projects. In addition to electric fence projects, we purchased nine 95-gallon Kodiak bear-resistant garbage containers for the Blackfoot Challenge to distribute to local residents that have experienced grizzly bears in their garbage or would like to prevent grizzly bears getting into their garbage. The program has been very successful at reducing and preventing conflicts throughout the Blackfoot corridor. Cost share on these projects was made possible by landowner contributions, the Blackfoot Challenge, USFWS Partners Program, Vital Ground, Defenders of Wildlife,

Western Bear Foundation and Montana Fish, Wildlife and Parks. *Attached are the latest wolf and bear activity reports.*

Masters Student Project: Grizzly Bear Use of Huckleberries

This project seeks to identify productive huckleberry shrubfields in the Cabinet-Yaak and Selkirk grizzly bear recovery areas by investigating grizzly bear radio location data. The project will develop a predictive model to identify additional productive shrubfields not visited by radio-collared bears. Management actions that produce or maintain the utilized shrubfields (timber harvest, prescribed fire, etc.) may be identified for future management. The graduate student that was enrolled at the University to conduct this research has left the program prematurely and other field staff continued the sampling during 2020. We plan to continue this program with existing staff with completion expected in 2022.

Army Cutworm Moth Use by Grizzly Bears in the Greater Yellowstone Ecosystem

In cooperation with the Shoshone National Forest, this project is investigating the use of stable isotope analysis to assess the dietary importance of army cutworm moths to grizzly bears in the Greater Yellowstone Ecosystem. Since the late 1990s, use of army cutworm moths have been monitored via aerial observations of grizzly bears at confirmed moth sites to measure trends in grizzly bear presence at moth sites. Stable isotope analysis will allow us to estimate the proportion of the assimilated diet that is composed of moths compared to other meat (e.g., other insects and ungulates) and plant matter. Food items and grizzly bear hair were collected in 2020 and will be analyzed in 2021. Moths will be collected from more peaks during 2020 for expanded analysis.

Outreach & Education

The **Be Bear Aware Campaign** educates the public about living with bears and about bear avoidance in order to minimize human-bear conflicts. In 2020, the Be Bear Aware Campaign hosted 50 informal bear avoidance safety seminars and many of these events included its bear spray demonstration course. Be Bear Aware also greatly expanded its outreach and education efforts through new website presentations, YouTube videos, a radio public service announcement, and materials distributed. *See attached for Be Bear Aware Campaign's full 2020 report.*

The mission of **Swan Valley Bear Resources** (SVBR) is to provide community resources to promote coexistence between people and bears. SVBR is a collaborative working group including local non-profit conservation/education organization Swan Valley Connections (SVC) and community members working in partnership with the U.S. Forest Service, Montana Fish, Wildlife & Parks, the U.S. Fish & Wildlife Service and other natural resource entities. By pooling resources, experience, and expertise SVBR provides place-based solutions for minimizing bear conflicts on private and public property in the Swan Valley. To learn more about SVBR's 2020 bear-resistant garbage container loaner, electric fencing program, and outreach and education efforts s*ee attached report.*

We supported the **Blackfoot Challenge Range Rider Program** during this reporting period. The Range Rider Program offers an array of services that include: keeping track of grizzly bear activity on private ranch and agricultural properties; following and monitoring cattle on private lands and federal and state livestock allotments on the summer ranges in order to prevent and document grizzly bear depredation; assisting with monitoring radio collared bears and wolves; and providing support to MFWP's bear /wolf specialist management team during research and management trapping efforts. The Range Rider also assists with the area-wide livestock carcass pick-up program, community bear awareness and education, setting up and educating the public on the use of electric fencing, and grizzly bear management calls involving residential/agricultural attractants. As a result of these efforts, livestock depredations and conflicts and grizzly bear deaths related to improper management of garbage and other attractants have been greatly reduced.

UM Graduate Committees and Lectures

Jennifer Fortin-Noreus and Hilary Cooley are both affiliate faculty at UM and serve on graduate committees and give guest lectures and seminars on campus. During this reporting period, Jennifer and Hilary each served on one graduate committee and Hilary gave a lecture in Careers and TWS.

NORTHERN CONTINENTAL DIVIDE ECOSYSTEM

GRIZZLY BEAR POPULATION MONITORING TEAM

ANNUAL REPORT – 2019



Prepared by:

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This annual report summarizes data collection efforts to date. It is not a peer-reviewed document, and data summaries and interpretations are subject to change.

Suggested Citation:
Costello, C.M., and L.L. Roberts. 2020. Northern Continental Divide Ecosystem Grizzly Bear Monitoring Team Annual Report, 2019. Montana Fish, Wildlife & Parks, 490 N. Meridian Road, Kalispell, MT 59901. Unpublished data.

This Annual Report is available on the web at:
http://fwp.mt.gov/fishAndWildlife/management/grizzlyBear/monitoring.html

ABSTRACT

A program to monitor the population trend of grizzly bears in the Northern Continental Divide Ecosystem (NCDE) of Montana was initiated in 2004. The goal of this program is to estimate population trend by monitoring the survival and reproductive rates of radio-marked grizzly bears with the Demographic Monitoring Area (DMA). The DMA is composed of the Primary Conservation Area (PCA; equivalent to the Recovery Zone) and Zone 1 (a buffer area around the PCA). This report summarizes field accomplishments during 2019. During 2019, we captured 28 grizzly bears (13F, 15M) for trend monitoring. An additional 40 bears (16F, 24M) were captured for management or other purposes. Including bears captured in previous years, we monitored 73 bears (50F, 23M) with radio-telemetry for research or management. We documented the deaths of 8 radio-marked bears (3F, 5M). All radio-marked deaths involved bears captured for management. Reproductive status was documented for 28 radio-marked adult females and included 9 with cubs, 8 with yearlings, 3 with 2-year-old offspring, and 7 with no offspring. Survival of accompanying dependent offspring was monitored for 10 females. We documented 4 known or presumed mortalities among 5 cub litters and 2 known mortalities among 5 yearling litters. Including unmarked bears, 51 known or probable mortalities of grizzly bears were documented within the NCDE population. We evaluated various demographic parameters relative to thresholds set forth in the 2018 Conservation Strategy. During the 6-year period of 2014–2019, 22 of 23 BMUs within the PCA and all 7 OUs within Zone 1 were occupied by females with offspring during at least one year, above the minimum thresholds of 21 BMUs and 6 OUs. For the 6-year period 2014–2019, we estimated an annual survival rate of 0.94 (± 0.01 SE) for independent females within the DMA, above the minimum threshold rate of 0.93. Within the DMA, we documented 12 and 17 mortalities of independent (≥2 years old) bears for females and males, respectively. From these, we estimated 16 total reported and unreported (TRU) mortalities for independent females and 26 TRU mortalities for independent males. During 2014–2019, the 6-year average of TRU mortalities for independent females within the DMA was 16, which fell below the maximum threshold of 23. The 6-year average for independent males was 21, which fell below the maximum threshold of 29. Based on radio-monitoring or genotypes for bears sampled through 2018, we found no new evidence of immigration from the Cabinet-Yaak or Selkirk Ecosystems. To date, we have not detected evidence of immigration into the NCDE from the Greater Yellowstone Ecosystem (GYE) or emigration from the NCDE into the GYE.

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1. INTRODUCTION AND STATEMENT OF NEED

The grizzly bear (*Ursus arctos horribilis*) was listed as threatened under the Endangered Species Act in 1975 for lack of information on its population status and habitat requirements. The NCDE has the largest population of grizzly bears in the lower 48 states; population size during 2004 was estimated to be 765 bears (Kendall et al. 2009). Managers and the public agree that information on both population size and trend is needed. Having these estimates will greatly improve our collective knowledge of grizzly bear ecology and provide more measurable and precise information with which to judge the status of the grizzly population in the NCDE. Therefore, in 2004 Montana Fish, Wildlife & Parks (MFWP), in cooperation with other state, federal, and tribal agencies, established a team to monitor the population trend of grizzly bears in the NCDE. The purpose of this long-term program is to monitor grizzly bear survival rates, reproductive rates, and population trend primarily by radio-monitoring grizzly bears, particularly females.

2. PROGRAM OBJECTIVES

The primary objective of this program is to monitor the population trend of grizzly bears in the NCDE using known-fate estimators of survival and documentation of reproductive rates of radio-transmitted grizzly bears. The ultimate responsibility of the monitoring team is to collect life history data on grizzly bears in western Montana and summarize findings in a comprehensive annual report. Major population monitoring categories will initially include:

- population trend,
- grizzly bear survival rates,
- grizzly bear reproductive rates,
- grizzly bear movements and habitat selection,
- grizzly bear distribution in western Montana,
- mortality levels in the NCDE, and
- levels of unreported mortality.

The 2018 Conservation Strategy detailed demographic monitoring protocols and management objectives developed by an interagency team to maintain and enhance a recovered grizzly bear population in the NCDE. It set forth 3 demographic objectives and associated thresholds. Although the Conservation Strategy is intended to take effect upon removal of the NCDE grizzly bear population from threatened status under the Endangered Species Act, the objectives and thresholds represent the most recent monitoring methodologies, therefore we report on these objectives using field data obtained through 2019.

3. GEOGRAPHIC SCOPE OF THE MONITORING PROGRAM

Our trend monitoring program is focused within the Demographic Monitoring Area (DMA; Fig. 1), which encompasses the 23,119-km^2 Primary Conservation Area (PCA: equivalent to the Federal Recovery Zone) and the 19,460-km^2 Zone 1, which roughly correlates to a 10-mile buffer surrounding the PCA (USFWS 1993, NCDE Subcommittee 2018). The DMA includes Glacier National Park, parts of five National Forests (Flathead, Helena, Kootenai, Lewis and Clark, and Lolo); parts of the Blackfeet and Flathead Reservations; Bureau of Land Management lands; state lands, and private lands. The NCDE grizzly bear population is also contiguous with those in the Canadian provinces of British Columbia and Alberta, therefore some captures and monitoring occur north of the United States in Canada. Within the DMA, we designated 9 subunits for localized analyses, based on distinct land ownerships and grizzly bear population management authorities.

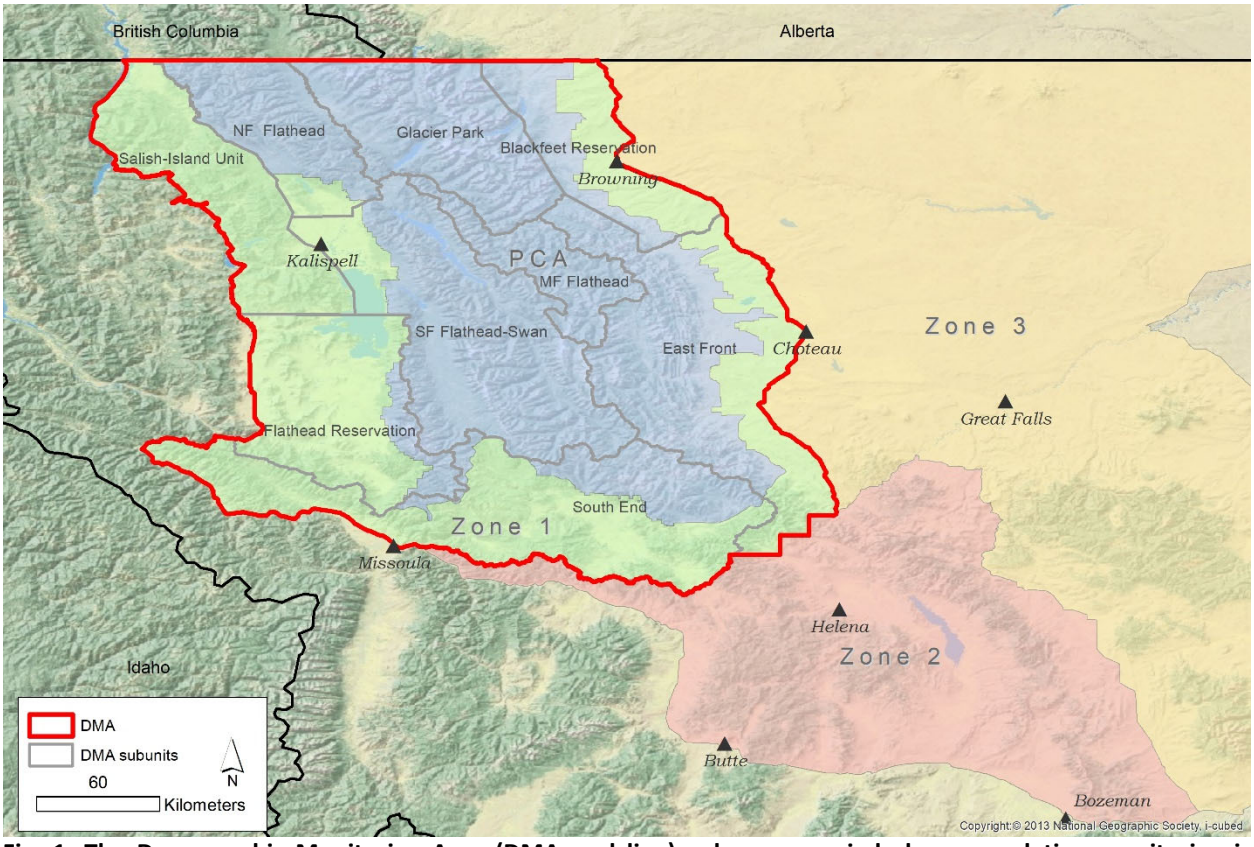


Fig. 1. The Demographic Monitoring Area (DMA; red line), where our grizzly bear population monitoring is conducted, consists of the Primary Conservation Area (PCA; blue) and Zone 1 (green). The DMA is divided into subunits (gray lines) for localized population analyses. Zone 2 (pink) is the area of potential genetic connectivity between the NCDE and the Greater Yellowstone Ecosystem. Zone 3 (orange) is an area occupied by grizzly bears which does not provide habitat linkage to other populations.

Although our focus for trend monitoring is the DMA, we also document mortalities and other observations outside of the DMA. Notable areas include: Zone 2, an area of potential connectivity between the NCDE and the Greater Yellowstone Ecosystem (GYE); and Zone 3, an area occupied by grizzly bears which does not provide habitat linkage to other grizzly bear populations (NCDE Subcommittee 2018).

4. FIELD ACTIVITIES

Methods

Each year, we capture grizzly bears primarily using leg-hold snares and culvert traps. We follow the handling and immobilization procedures found in the Montana Animal Care and Use Committee protocols for grizzly bears and black bears (Montana Fish, Wildlife and Parks 2004). We tag all bears subcutaneously with passive transponder tags and pull a pre-molar tooth for age determination (Stoneberg and Jonkel 1966). We radio-mark most females and a sample of males using a variety of transmitters, including: very high frequency (VHF) neck-mounted collars (Telonics, Inc., Mesa, AZ); VHF ear-tag transmitters (Advanced Telemetry Systems, Inc., Isanti, MN); store-on-board global positioning system (GPS) collars (TGW-4500; Telonics, Inc.); Argos GPS collars (Models TGW-3580 and TGW-3583; Telonics, Inc.); spread-spectrum GPS collars (TGW-3690; Telonics, Inc.), and Iridium GPS collars (TGW-4570-3; Telonics, Inc.). We capture research bears throughout the study area. We attempt to distribute our sample of research females in proportion to relative grizzly bear density, based on the distribution of female bears detected at DNA hair traps in 2004 (Kendall et al. 2009). Grizzly bears are also captured and radio-marked for management purposes. Individual bears are classified as either research bears or management bears using the terminology of Mace et al. (2012).

We monitor survival and reproduction using aerial telemetry flights conducted monthly and by remote downloads of GPS data. We attempt to investigate mortality signals within 2 weeks to ascertain whether the bear died or shed its collar. If a dead bear is found, we conduct preliminary necropsies in the field and collect relevant samples for laboratory analyses. In early spring, when bears are beginning to emerge from dens, we conduct observation flights for adult female bears to ascertain reproductive status, and age of offspring and litter size (if present). We continue to conduct monthly telemetry flights throughout the active season, when possible, to document survival of dependent offspring.

We record and report known and probable mortalities of marked and unmarked grizzly bears each year. Known mortalities involve a carcass or parts which substantiate death; probable mortalities lack a carcass but involve strong evidence that a bear died (e.g., blood loss).

Results

In 2019, we captured 70 individuals during 77 capture occasions (7 recaptures). We captured 28 individuals for trend monitoring purposes (Table 1), including 13 females and 15 males. Eleven females and 2 males were fitted with radio-transmitters. In addition to research captures, bears were captured in association with management actions, although some were non-target individuals. These captures included 16 females and 24 males, and 10 females and 9 males were fitted with radio-transmitters. Trapping for individuals to augment the population in the Cabinet-Yaak Ecosystem (CYE) was also conducted during 2019. One male and one female were captured and translocated to the CYE.

Including bears collared during previous years, we radio-monitored 50 independent female grizzly bears during all or part of 2019: 28 females monitored for trend research and 22 females monitored for bear-human conflict management. We also radio-monitored 1 cub for management. We radio-monitored 23 independent males during 2019: 7 for trend research and 18 for conflict management. We documented the deaths of 3 radio-marked females during 2019: 1 automobile collisions and 2 agency removals. We documented the deaths of 5 radio-marked males during 2019: 2 agency removals and 3 from undetermined cause. All radio-marked deaths involved bears captured for management purposes. No deaths were documented among the research sample. A summary of the fates of radio-marked bears during 2019 are presented in Appendix A.

We recorded the reproductive status of 28 adult females during 2019, including 9 with cubs, 8 with yearlings, 3 with 2-year-old offspring, and 7 with no offspring. First observations for reproductive status ranged from March 14 (ground observation) to October 7 (new capture) and averaged June 4. We documented 5 litters with 1 cub, 3 litters with 2 cubs, and 1 litter with 3 cubs. First observations for these litters ranged from April 16 (flight observation) to October 7 (new capture). Mean date of first verified litter size was June 19. We monitored survival of 5 cub litters (9 cubs) and 5 yearling litters (9 yearlings) through repeated observations during the year. We documented 4 presumed or known cub mortalities and 2 known yearling mortalities. A summary of the reproductive observations of radio-marked females are presented in Appendix B.

Fifty-one known or probable grizzly bear mortalities were documented in the NCDE during 2019 (Table 2). Forty-six occurred within the DMA: 26 inside the PCA and 20 within Zone 1 (Fig. 2). Seven mortalities occurred outside the DMA: 3 in Zone 3 and 2 in Canada. The two mortalities in Canada were included because they were bears captured and radio-marked in Montana and were collared at the time of death. Among 33 mortalities of independent bears, causes of death were: agency removal due to conflict (14); agency removal for augmentation of the Cabinet-Yaak populations (2); agency humane

removal (1); agency handling mortality (1); defense of life kill (2); automobile collision (3); poaching/malicious kill (1); train collision (4); and undetermined or under investigation (5). Eighteen dependent bear mortalities included individuals that died, individuals that were orphaned and then captured and moved to zoos, or cubs that were orphaned and assumed dead (if fate is unknown, cubs are assumed dead). Causes of death were: automobile collision (4); train collision (4); agency removal due to conflict (4); agency removal due to orphaning (2); assumed dead due to orphaning (1); natural (2); and illegal defense of property (1). Two mortalities documented in 2019 involved orphaned offspring that were originally counted as probable mortalities in 2018. There were an additional 2 mortalities that were discovered or reported in 2019, but occurred in 2018. These included an adult that died of undetermined cause and a yearling male killed in defense of life. A summary of all documented mortalities in the NCDE during 2019 is reported in Appendix C.

Table 1. Number of individual grizzly bears captured and fitted with radio-transmitters in the NCDE, 2019.

	Captured			Radio-marked		
Type	Female	Male	Total	Female	Male	Total
Research	13	15	28	11	2	13
Management	16	24	40	10	9	19
Augmentation	1	1	2	0	0	0
Total	30	40	70	21	11	32

Table 2. Number of documented known or probable mortalities of grizzly bears in the NCDE, 2019.

		Sex			
	Ageclass	Female	Male	Unknown	Total
Inside DMA	Dependent	7	8	2	17
	Independent	11	15	3	29
	Total	18	22	5	46
Outside DMA	Dependent	1	0	0	1
	Independent	0	4	0	4
	Total	1	4	0	5

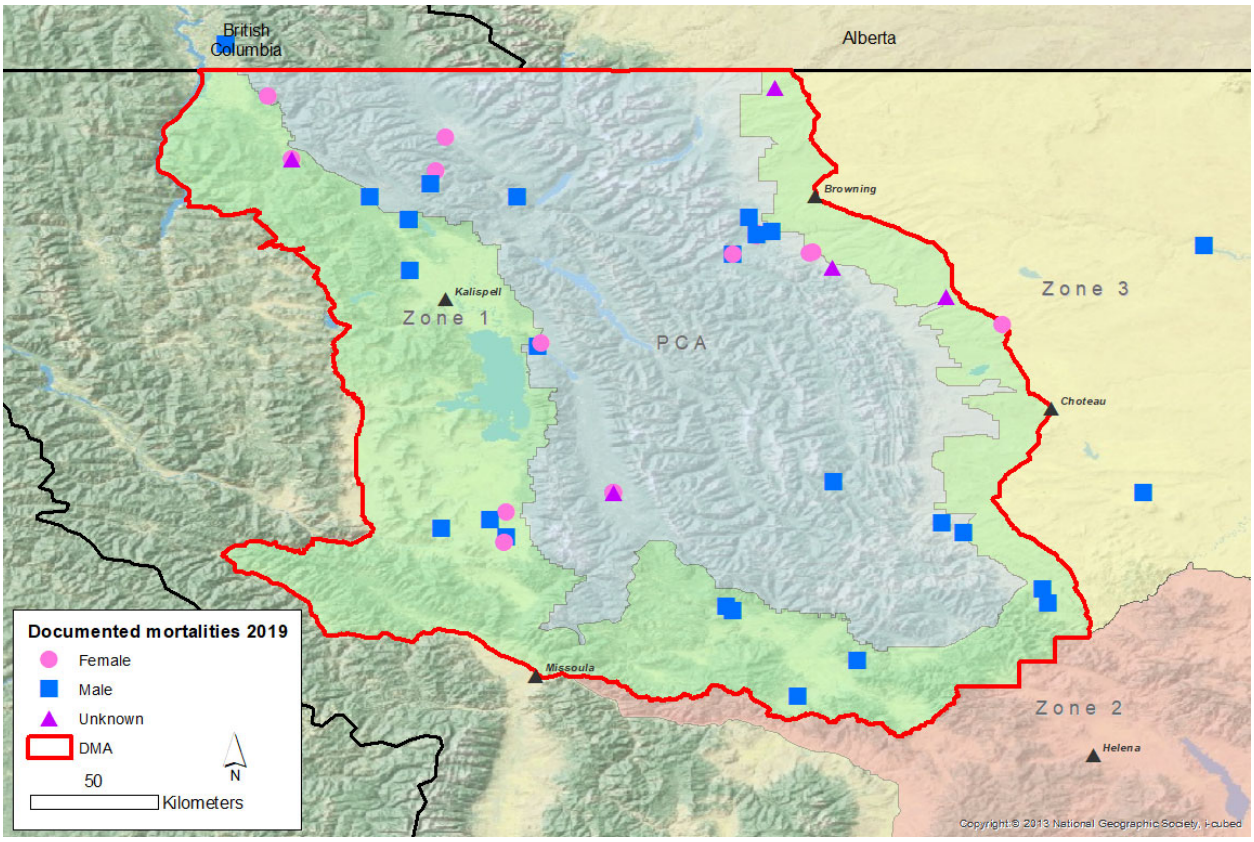


Fig. 2. Location of known and probable grizzly bear mortalities in the NCDE, 2019. Zones as described in Fig. 1.

5. CONSERVATION STRATEGY OBJECTIVES AND THRESHOLDS

The NCDE Conservation Strategy (NCDE Subcommittee 2018) articulated an overarching management goal to maintain a recovered, genetically diverse grizzly bear population throughout the DMA while maintaining demographic and genetic connections with Canadian populations and providing the opportunity for demographic and/or genetic connectivity with other ecosystems, with the following objectives and thresholds:

Objective 1: Maintain a well-distributed grizzly bear population within the DMA

- Occupancy threshold: Maintain the documented presence of females with offspring in at least 21 of 23 BMUs of the PCA and in at least 6 of 7 occupancy units of Zone 1 at least every 6 years.

Objective 2: Manage mortalities from all sources to support a ≥90% estimated probability that the grizzly bear population within the DMA remains above 800 bears, considering the uncertainty associated with all the demographic parameters.

- Independent female survival threshold: Using a 6-year running average, maintain estimated annual survival of independent females within the DMA to: (a) a rate of ≥ 0.90; and (b) a rate at or above the minimum level consistent with a projected ≥90% probability that the population within the DMA will remain above 800 bears based on population modeling.
- Independent female mortality threshold: Using a 6-year running average, limit annual estimated number of total reported and unreported (TRU) mortalities of independent females within the DMA to: (a) a number that is ≤10% of the number of independent females estimated within the DMA based on population modeling; and (b) a number that is at or below the maximum level consistent with a projected ≥90% probability that the population within the DMA will remain above 800 bears based on population modeling.
- Independent male mortality threshold: Using a 6-year running average, limit annual estimated number of TRU mortalities of independent males within the DMA to a number that is ≤15% of the number of independent males estimated within the DMA based on population modeling.

Objective 3: Monitor demographic and genetic connectivity among populations

- Estimate spatial distribution of the NCDE grizzly bear population biennially.
- Identify the population of origin for individuals sampled inside and outside of the DMA to detect movements of individuals to and from other populations or recovery areas.

Methods

Each year, we document presence of females with cub, yearling, or 2-year-old offspring within units, based on visual observations obtained from radio-marked females; verified remote camera photos; other verified visual observations; known or probable mortalities of family units (death of the mother, dependent young, or both); and telemetry or GPS locations of radio-marked females known to have offspring. The PCA component of the threshold represents a continuation of the occupancy targets established within the Recovery Zone prior to delisting (USFWS 1993) and utilizes the same BMUs (Fig. 3). The Zone 1 component utilizes Occupancy Units (OUs) demarcated using established political boundaries (i.e., state/tribal boundaries and FWP regional boundaries) and the boundaries of the two Demographic Connectivity Areas (NCDE Subcommittee 2018).

We estimate survival of independent females within the DMA based on known-fate analysis of data collected from radio-marked female bears within the DMA (Costello et al. 2016). Analysis incorporates the time series of survival data from known-fate monitoring since 2004 and differentiates the most recent 6 years of data to compare to the threshold. Based on the number of known and probable mortalities recorded each year, and the human reporting rate observed among radio-marked bears (Costello et al. 2016), we estimate numbers of TRU mortalities of independent female and male grizzly bears within the DMA and assess the female and male mortality thresholds using an average for the last 6 years. We previously developed thresholds for a 6-year management period during 2019–2023 (NCDE Subcommittee 2018). Thresholds were developed by simulating population growth using current estimates of vital rates (Costello et al. 2016) to year 2012 and then projecting another 25 years to predict effects of changing female and male independent bear survival. Under this scenario, and assuming selection of a 6-year management period of 2019–2023, the minimum threshold for independent female survival was 0.93, the maximum threshold for the number of independent female mortalities was 23, and the maximum threshold for the number of independent male mortalities was 29.

We estimate the distribution of the NCDE grizzly bear population biennially, by applying zonal analysis and ordinary kriging (Bjornlie et al. 2014) to 7-km x 7-km cells with verified grizzly bear locations documented during a 10-year window up to the current year. Verified locations are collected from GPS transmitters; VHF telemetry flights; capture and mortality locations; grizzly bear-human conflict sites; observations (sightings or tracks) or remote camera photos confirmed by agency personnel; and opportunistic samples of grizzly bear hair, blood, scat, or tissue confirmed by DNA analysis. DNA samples obtained during captures or at any of verified grizzly bear sites are analyzed for population of origin to document movement of individuals to and from other populations or recovery areas (Haroldson et al. 2010). Genetic samples are not submitted until the end of each field season and take some time to analyze, therefore there is typically a 1-year lag in reporting results for population of origin.

Results

During 2019, we verified presence of reproductive females within 18 of 23 BMUs (78%) and within 7 of 7 supplementary BMUs (100%; Fig. 3). For the 6-year period 2014–2019, 22 of 23 BMUS were occupied by females with offspring, thus exceeding the objective of 21 of 23 BMUs occupied (Appendix D). All OUs were occupied during the last 6 years, exceeding the objective of 6 of 7 OUs occupied. Using the 6-year tally, the occupancy thresholds for the PCA and Zone 1 have been met each year since 2006.

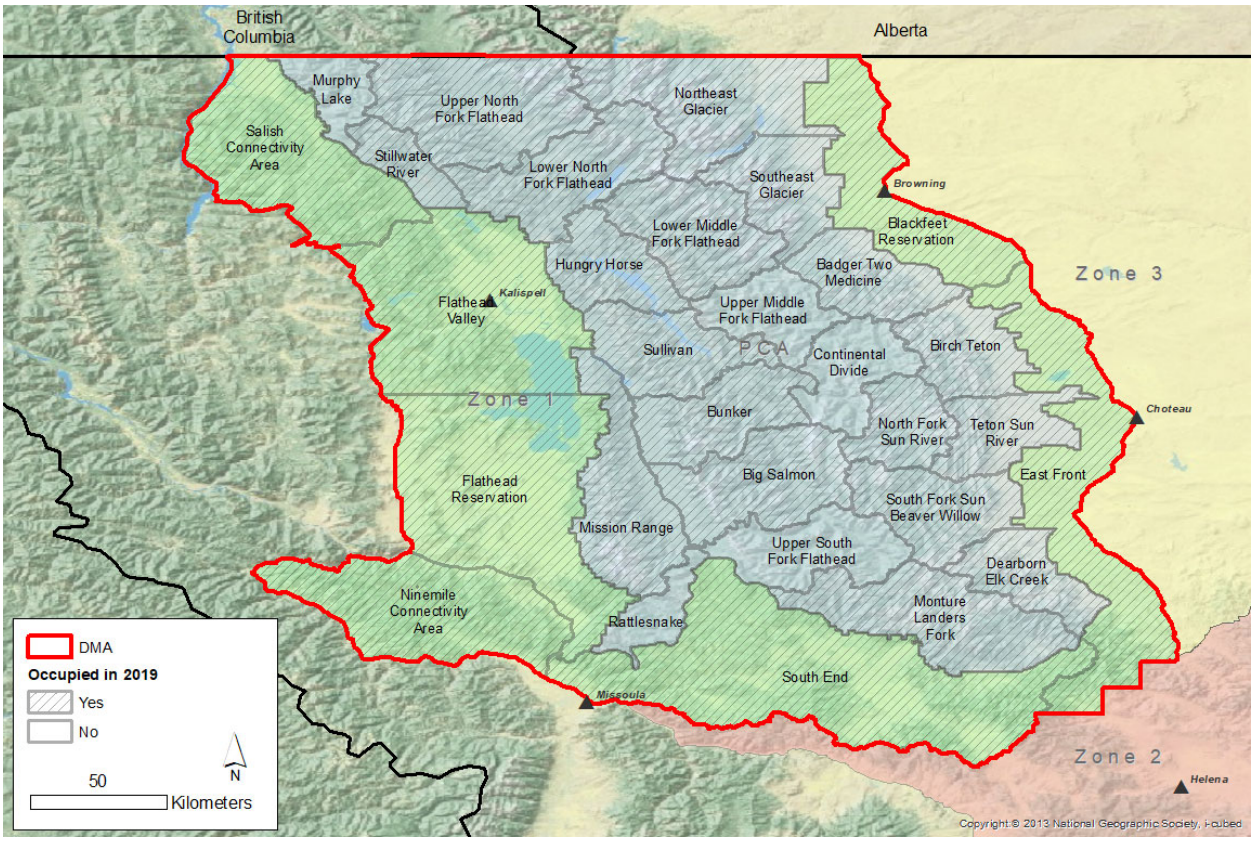


Fig. 3. Documented occupancy of female grizzly bears with offspring in 23 BMUs of the PCA and 7 OU of Zone 1 during 2019. Occupancy has been documented in all units during the last 6 years, except for the Continental Divide BMU in the Bob Marshall Wilderness. Zones as described in Fig. 1.

For the 6-year period 2014–2019, we estimated an annual survival rate of 0.94 (± 0.01 SE) for independent females within the DMA, which meets the minimum threshold rate of 0.93 (Fig. 2; NCDE Subcommittee 2018).

Within the DMA, there were 12 and 17 known mortalities reported for independent females and independent males, respectively (Fig. 2). We estimated the number of total reported and unreported (TRU) mortalities of independent bears within the DMA using these numbers and the reporting rates observed among radio-marked bears. We estimated 16 TRU mortalities of independent females and 26 TRU mortalities of independent males within the DMA (Table 3). During 2014–2019, the 6-year average of TRU mortalities for independent females within the DMA was 16, which falls below the maximum threshold of 23 (NCDE Subcommittee 2018). The 6-year average for independent males was 21, falling

below the maximum threshold of 29 (NCDE Subcommittee 2018). An updated summary of all demographic parameters documented during the 6-year period 2014–2019 are reported in Appendix E.

The biennial population distribution analysis was completed for the 2018 report, therefore we did not update the analysis for this report. Based on genotypes for bears sampled through 2018 (genotypes from 2019 are not yet available), we have not detected evidence of immigration into the NCDE from the GYE or emigration from the NCDE into the GYE.

Table 3. Summary of independent grizzly bear mortalities within the DMA, NCDE, 2019.

	Documented mortalities by method of discovery				Estimated reported and unreported[e]	Estimated total mortality
Sex	Agency removal[a] (A)	Telemetry[b] (B)	Reported[c] (high)	Reported[d] (low)	(C)	(A + B + C)
Female	5	1	5	1	10	16
Male	11	1	3	2	14	26
Total	16	2	8	3	24	42

[a] Count of agency-sanctioned removals, including those involving radio-marked bears

[b] Count of deaths for bears wearing functional radio-transmitters, except for agency removals

[c] Count of non-radioed bear deaths reported by the public or discovered by agency personnel with high reporting rates (illegal defense-of-property, defense-of-life, train collision, automobile collisions, illegal hunting-misidentification)

[d] Count of non-radioed bear deaths reported by the public or discovered by agency personnel with low reporting rates (poaching/malicious, natural, undetermined)

[e] Bayesian estimate of the total number of reported and unreported deaths of non-radioed bears, predicted from the number of reported deaths of non-radioed bears in the high- and low-reporting rate categories (as per Cherry et al. 2002 and Costello et al. 2016).

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Appendix A. Fate of radio-marked grizzly bears monitored with radio-telemetry in the NCDE, 2019.

Sex	Capture type	DMA subunit	Bear ID	Fate
Female	Research	Blackfeet Reservation	81289535	Censored
Female	Research	Blackfeet Reservation	81278116	Alive
Female	Research	Blackfeet Reservation	839821018	Censored
Female	Research	Blackfeet Reservation	839845540	Alive
Female	Research	East Front	41375278	Censored
Female	Research	Flathead Reservation	41299353	Censored
Female	Research	Flathead Reservation	41519364	Alive
Female	Research	Flathead Reservation	79558051	Censored
Female	Research	Flathead Reservation	79558279	Alive
Female	Research	Flathead Reservation	41089770	Censored
Female	Research	Glacier National Park	10876305	Alive
Female	Research	Glacier National Park	36554783	Alive
Female	Research	Glacier National Park	41078883	Alive
Female	Research	Glacier National Park	41515561	Alive
Female	Research	Glacier National Park	839846062	Alive
Female	Research	Glacier National Park	842018043	Alive
Female	Research	Multiple subunits	839828530	Censored
Female	Research	Multiple subunits	839822818	Alive
Female	Research	North Fork Flathead	11052544	Alive
Female	Research	North Fork Flathead	67006850	Censored
Female	Research	North Fork Flathead	79570382	Alive
Female	Research	North Fork Flathead	601618304	Alive
Female	Research	South End	11018035	Alive
Female	Research	South End	11065603	Alive
Female	Research	South Fork Flathead River-Swan Valley	55598849	Alive
Female	Research	South Fork Flathead River-Swan Valley	79050043	Censored
Female	Research	South Fork Flathead River-Swan Valley	839826876	Alive
Female	Research	South Fork Flathead River-Swan Valley	601609326	Alive
Female	Research	South Fork Flathead River-Swan Valley	839839014	Alive
Female	Management	Blackfeet Reservation	11044088	Alive
Female	Management	Blackfeet Reservation	41090260	Alive
Female	Management	Blackfeet Reservation	81279041	Censored
Female	Management	Blackfeet Reservation	839823853	Alive
Female	Management	Blackfeet Reservation	839824884	Alive
Female	Management	Blackfeet Reservation	839828868	Censored
Female	Management	Blackfeet Reservation	839841332	Censored
Female	Management	East Front	39086301	Censored
Female	Management	East Front	39088331	Alive
Female	Management	East Front	41532565	Alive
Female	Management	East Front	41623606	Alive
Female	Management	Multiple subunits	41261364	Dead
Female	Management	Multiple subunits	839825532	Alive

Sex	Capture type	DMA subunit	Bear ID	Fate
Female	Management	North Fork Flathead	11032039	Censored
Female	Management	North Fork Flathead	55577095	Censored
Female	Management	Outside DMA	81289829	Censored
Female	Management	Outside DMA	839815522	Censored
Female	Management	Outside DMA	839825561	Alive
Female	Management	South Fork Flathead River-Swan Valley	41379363	Censored
Female	Management	South Fork Flathead River-Swan Valley	841893590	Alive
Female	Management	South Fork Flathead River-Swan Valley	842005026	Dead
Female	Management	South Fork Flathead River-Swan Valley	839828828	Dead
Male	Research	East Front	41360823	Censored
Male	Research	East Front	41638038	Censored
Male	Research	East Front	41779283	Alive
Male	Research	Glacier National Park	11022885	Censored
Male	Research	South End	41086114	Alive
Male	Research	South End		Censored
Male	Research	South Fork Flathead River-Swan Valley	41382533	Censored
Male	Management	Blackfeet Reservation	11003083	Dead
Male	Management	Blackfeet Reservation	41365620	Censored
Male	Management	Blackfeet Reservation	839824321	Alive
Male	Management	Blackfeet Reservation	11009019	Alive
Male	Management	East Front	41546593	Alive
Male	Management	North Fork Flathead River	80626085	Censored
Male	Management	North Fork Flathead River	55576046	Dead
Male	Management	North Fork Flathead River	601608324	Dead
Male	Management	North Fork Flathead River	601619778	Alive
Male	Management	Outside DMA	11029050	Dead
Male	Management	Outside DMA	839841348	Censored
Male	Management	Outside DMA	839820364	Alive
Male	Management	Outside DMA	839832101	Censored
Male	Management	Outside DMA	839843617	Alive
Male	Management	South End	55584076	Censored
Male	Management	South Fork Flathead River-Swan Valley	601608564	Alive
Male	Management	South Fork Flathead River-Swan Valley	601620113	Dead
Male	Management	South Fork Flathead River-Swan Valley	842010334	Alive

Appendix B. Observed reproductive status and fate of offspring for adult female grizzly bears monitored with radio-telemetry in the NCDE, 2019.

Capture type	DMA subunit	Bear ID	Status	Litter size	Offspring mortality
Management	Blackfeet Reservation	11044088	Yearlings	2	
Research	Blackfeet Reservation	81278116	Cubs	1	
Research	Blackfeet Reservation	839845540	Cubs	1	
Management	Blackfeet Reservation	839841332	Yearlings	1	
Management	East Front	39086301	None		
Management	East Front	41532565	Two-year-olds	1	
Management	East Front	41623606	Cubs	1	
Research	Flathead Reservation	79558279	Yearlings	3	
Research	Glacier National Park	36554783	Cubs	2	1
Research	Glacier National Park	10876305	None		
Research	Glacier National Park	41078883	Yearlings	2	
Research	Glacier National Park	839846062	Yearlings	2	
Research	Glacier National Park	842018043	Cubs	2	
Research	Multiple subunits	839828530	None		
Management	North Fork Flathead River	11032039	Yearlings	2	2
Research	North Fork Flathead River	11052544	Two-year-olds	2	
Research	North Fork Flathead River	79570382	Two-year-olds	2	1
Research	North Fork Flathead River	601618304	Yearlings	2	
Management	Outside DMA	81289829	None		
Research	South End	11065603	Yearlings	1	
Research	South Fork Flathead River-Swan Valley	79050043	None		
Research	South Fork Flathead River-Swan Valley	839826876	None		
Management	South Fork Flathead River-Swan Valley	842005026	Cubs	1	
Research	South Fork Flathead River-Swan Valley	55598849	Cubs	1	
Research	South Fork Flathead River-Swan Valley	601609326	Cubs	2	
Management	South Fork Flathead River-Swan Valley	839828828	Cubs	3	3
Research	South Fork Flathead River-Swan Valley	839839014	None		

Appendix C. Summary of known and probable grizzly bear mortalities in the NCDE, 2019.

Date	Date accuracy	Certainty of death	DMA[1]	Sex[2]	Age Class[3]	Bear ID	Collared[1]	Cause
4/13/2019	Week	Known	Y	M	SA		N	Defense of life
4/22/2019	Day	Known	Y	F	SA		N	Capture mortality
4/23/2019	Day	Known	Y	M	SA		N	Agency (livestock)
5/1/2019	Day	Known	N	M	SA		N	Agency (livestock)
5/6/2019	Day	Known	N	F	CB		N	Automobile
5/2/2019	Day	Known	Y	M	YR	41298369[4]	N	Agency (livestock)
5/3/2019	Week	Known	Y	F	YR	601604350	N	Natural
5/12/2019	Day	Known	Y	M	SA		N	Agency (site conflict)
5/30/2019	Day	Known	Y	M	SA		N	Agency (livestock)
5/30/2019	Day	Known	Y	M	YR	79579003[4]	N	Agency (livestock)
6/1/2019	Day	Known	Y	M	AD		N	Automobile
6/6/2019	Day	Known	Y	F	AD	28517094	N	Train
6/6/2019	Day	Known	Y	M	YR		N	Train
6/6/2019	Day	Known	Y	F	YR		N	Train
6/12/2019	Day	Known	Y	M	YR	601603326	N	Agency (site conflict)
6/12/2019	Day	Known	Y	M	YR	55598300	N	Agency (site conflict)
6/14/2019	Day	Known	Y	M	CB		N	Illegal defense of property
6/5/2019	Month	Known	Y	U	SA		N	Undetermined
7/12/2019	Day	Known	Y	F	SA	72258821	N	Agency (augment)
7/14/2019	Day	Known	Y	M	SA	72107089	N	Agency (augment)
7/18/2019	Day	Known	Y	M	SA	11029050	Y	Agency (site conflict)
7/19/2019	Day	Known	N	M	SA		N	Agency (livestock)
6/15/2019	Season	Known	Y	U	SA		N	Poached/malicious
8/5/2019	Day	Known	Y	M	AD	232	N	Agency (livestock)
8/12/2019	Day	Known	Y	M	AD		N	Agency (livestock)
7/20/2019	Day	Known	Y	M	AD	11003083	Y	Undetermined
9/7/2019	Day	Known	Y	M	SA		N	Agency (site conflict)
9/10/2019	Day	Known	Y	F	AD	839828828	Y	Agency (site conflict)
9/5/2019	Day	Known	Y	F	CB	601625009	N	Agency (orphaned)
9/6/2019	Day	Known	Y	F	CB	842007844	N	Agency (orphaned)
9/10/2019	Day	Probable	Y	U	CB	839828828	N	Orphaned
9/24/2019	Day	Known	Y	F	SA		N	Automobile
9/23/2019	Day	Known	Y	M	SA		N	Agency (humane)
10/1/2019	Day	Known	Y	F	SA		N	Train
10/4/2019	Day	Known	Y	F	CB		N	Automobile
10/6/2019	Day	Known	Y	F	SA		N	Train
10/6/2019	Day	Known	Y	F	SA	41261364	Y	Automobile
10/6/2019	Day	Known	Y	M	SA		N	Train
5/14/2019	Day	Known	Y	F	AD		N	Agency (livestock)
4/18/2019	Year	Known	Y	U	SA		N	Undetermined
10/7/2019	Day	Known	Y	M	AD	11033809	N	Agency (livestock)

Date	Date accuracy	Certainty of death	DMA[1]	Sex[2]	Age Class[3]	Bear ID	Collared[1]	Cause
10/11/2019	Day	Known	N	M	SA	55576046	Y	Under investigation
10/11/2019	Day	Known	N	M	SA	601608324	Y	Under investigation
10/14/2019	Day	Known	Y	F	CB		N	Train
10/14/2019	Day	Known	Y	U	CB		N	Train
10/25/2019	Day	Known	Y	F	AD	842005026	Y	Agency (site conflict)
11/5/2019	Day	Known	Y	M	CB		N	Automobile
11/7/2019	Day	Known	Y	F	AD	41549027	N	Defense of life
11/8/2019	Day	Known	Y	M	SA	601620113	Y	Agency (site conflict)
11/9/2019	Week	Known	Y	M	CB		N	Natural
11/11/2019	Week	Known	Y	F	CB		N	Automobile
7/25/2018[5]	Year	Known	Y	M	YR		N	Defense of life
11/15/2018[5]	Year	Known	Y	M	AD		N	Undetermined

[1] Y = Yes, N = No

[2] F = female, M = male, U = unknown sex

[3] AD = adult (≥5 years old), SA = subadult (2-4 years old), YR = yearling (1 year old), CB = cub (<1 year old)

[4] Known mortalities of orphaned offspring originally counted as probable mortalities in 2018

[5] 2018 mortalities that were discovered or reported in 2019

Appendix D. Observed occupancy of 23 Bear Management Units within the PCA and 7 Occupancy Units within Zone 1 by female grizzly bears with offspring, 2014–2019. Units known occupied during a given year are signified by the symbol ×. Twenty-two of 23 BMUs and 7 of 7 OUs were occupied during a 6-year period ending with 2019.

Bear Management Unit (PCA)	2014	2015	2016	2017	2018	2019
Murphy Lake	×			×		
Upper North Fork Flathead	×	×	×	×		×
Northeast Glacier	×	×	×	×	×	×
Stillwater River	×				×	×
Lower North Fork Flathead	×	×	×	×	×	×
Hungry Horse	×	×	×	×	×	×
Lower Middle Fork Flathead	×	×	×	×	×	×
Southeast Glacier	×	×	×	×	×	×
Sullivan	×	×	×	×	×	×
Upper Middle Fork Flathead	×	×	×	×	×	
Badger Two Medicine	×	×	×	×	×	×
Mission Range	×	×	×	×	×	×
Bunker	×	×	×	×	×	×
Continental Divide						
Birch Teton		×	×	×	×	×
Big Salmon	×				×	×
North Fork Sun River				×	×	×
Teton Sun River	×	×		×		×
Rattlesnake	×		×			
Upper South Fork Flathead	×			×		
South Fork Sun Beaver Willow		×		×	×	×
Monture Landers Fork	×	×	×	×		×
Dearborn Elk Creek				×		×
Occupied during year	18	15	14	19	15	18
Occupied during last 6 years	23	23	23	23	22	22
Occupancy Unit (Zone 1)						
Salish Connectivity Area	×		×	×	×	×
Flathead Valley	×	×	×	×	×	×
Flathead Reservation	×	×	×	×	×	×
Ninemile Connectivity Area					×	×
South End	×	×	×	×	×	×
East Front		×	×	×	×	×
Blackfeet Reservation	×	×	×	×	×	×
Occupied during year	5	5	6	6	7	7
Occupied during last 6 years	7	7	7	7	7	7

Appendix E. Thresholds and observed estimates for demographic parameters described in the 2018 Conservation Strategy including: occupancy of females with offspring within 23 Bear Management Units (BMUs) in the Primary Conservation Area (PCA) and 7 Occupancy Units (OUs) in Zone 1, tallied over the last 6 years; survival rate of independent females within the Demographic Monitoring Area (DMA) averaged over the last 6 years; and numbers of total reported and unreported (TRU) mortalities of independent female and male grizzly bears within the DMA averaged over the last 6 years.

			Year					
Parameter	Area/Sex	Criteria/observed	2014	2015	2016	2017	2018	2019
Occupancy	PCA (BMUs)	Minimum threshold	21	21	21	21	21	21
		Observed	23	23	23	23	22	22
	Zone 1 (OUs)	Minimum threshold	6	6	6	6	6	6
		Observed	7	7	7	7	7	7
Survival rate	Female	Minimum threshold	0.93	0.93	0.93	0.93	0.93	0.93
		Observed	0.95	0.96	0.95	0.95	0.93	0.94
TRU mortalities	Female	Maximum threshold	22	22	22	22	22	23
		Observed	14	14	16	14	15	16
	Male	Maximum threshold	28	28	28	28	28	29
		Observed	16	16	15	19	21[1]	21

[1] Parameter was recalculated based on the additional mortality of an independent male bear discovered in 2019, but assumed to have died in 2018.

Defenders of Wildlife

Electric Fencing Incentive Program

Defenders of Wildlife is dedicated to long term grizzly bear recovery in the lower 48 states. Conflict with people is a major cause of grizzly bear mortality and reduces human tolerance for the species. Defenders' Electric Fencing Incentive Program provides financial and technical assistance to help landowners minimize conflict by securing their livestock, beehives, gardens or other bear attractants. Our program field staff work directly with communities and landowners to improve awareness and implement conflict reduction measures across recovery areas in five grizzly bear ecosystems: Greater Yellowstone, Northern Continental Divide, Cabinet-Yaak, Selkirk and Bitterroot.

In addition to individuals and communities, Defenders collaborates with nonprofit organizations, small businesses, and state, federal and tribal agencies to complete a wide variety of electric fence projects, primarily on private lands. We provide the financial support and technical expertise to build electric fence systems that effectively deter grizzly bears and other carnivores from accessing human-related attractants.

Program Summary

Defenders' electric fencing program is designed to proactively prevent conflicts, with priority given to landowners with past bear problems. At sites with completed fences that are maintained, we see a direct reduction in human-bear and other wildlife conflicts.

Initially, we reimbursed landowners $100 of the cost to install an electric fence around an identified grizzly bear attractant. In 2012, we improved the program to reimburse 50% of the cost of electric fencing around any grizzly bear attractant within priority counties, up to a maximum incentive of $500 per landowner.

This year marks the 10th anniversary of our fencing program, from its humble beginnings in 2010. The popularity and visibility of the program continue to grow, as it now reaches Montana, Idaho, Wyoming and Washington.

Our total number of completed projects since the program began is now 466 electric fences (see the spatial and temporal map of all projects completed to date on page 4) and over $149,000 in reimbursements and financial support to participants. For more information, visit the grizzly bear section of our interactive web feature, Storymapping Coexistence Across the Country.)



Above: Defenders and USDA Wildlife Services staff complete a high tensile, eight-strand electric fence around a calving pasture in Northwest Montana experiencing grizzly bear and wolf activity.

2020 Results

Despite fieldwork limitations surrounding the Covid-19 pandemic, the program directly assisted 54 landowners with technical assistance and reimbursements. Our ongoing partnership with USDA Wildlife Services – Montana yielded an additional 20 projects where we provided materials support. The combined total of 74 completed electric fence projects is a record annual

total for the program. The reimbursements and materials costs totaled $18,743.

We conducted nine site visits with participants, including several direct responses to ongoing bear conflicts. We also attended six outreach events to promote the use of electric fencing to reduce conflicts and contacted well over 100 landowners and livestock producers. Many of these contacts are anticipated to carry over into 2021 as future projects.

Average reimbursement (2020)

- $290 per project

Fence type (2020)

- 72% of participants built permanent fences.
- 17% of participants built semi-permanent fences.
- 11% of participants built temporary fences.

Attractants secured

- In 2020, protecting livestock was the top reason for installing a fence, followed by chickens, bees and fruit trees (Fig. 1).

Program awareness

- In 2020, Wildlife Services was the most commonly cited source of initial information on the program, followed by word of mouth and state and tribal wildlife managers (Fig. 2).

Fig. 1: Percentage of fence projects by type of attractant secured (2020)

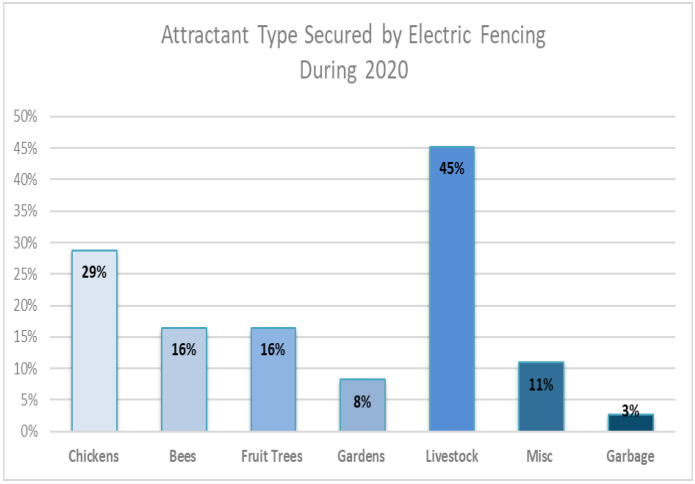
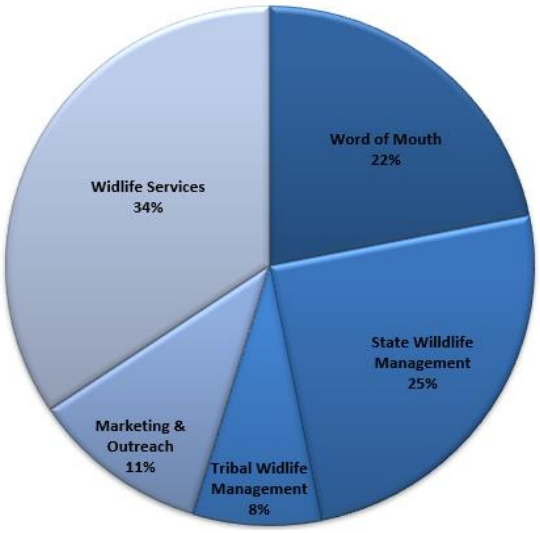


Fig. 2: How participants heard about the program (2020)



2010-2018 Participant Survey Highlights

Defenders monitors pre- and post-fencing success related to human-bear conflicts on private lands by annually surveying participants with electric fences in use for one or more years. Since 2012, we have also been collecting a variety of participant and project data.

Of the 145 participants surveyed to date:

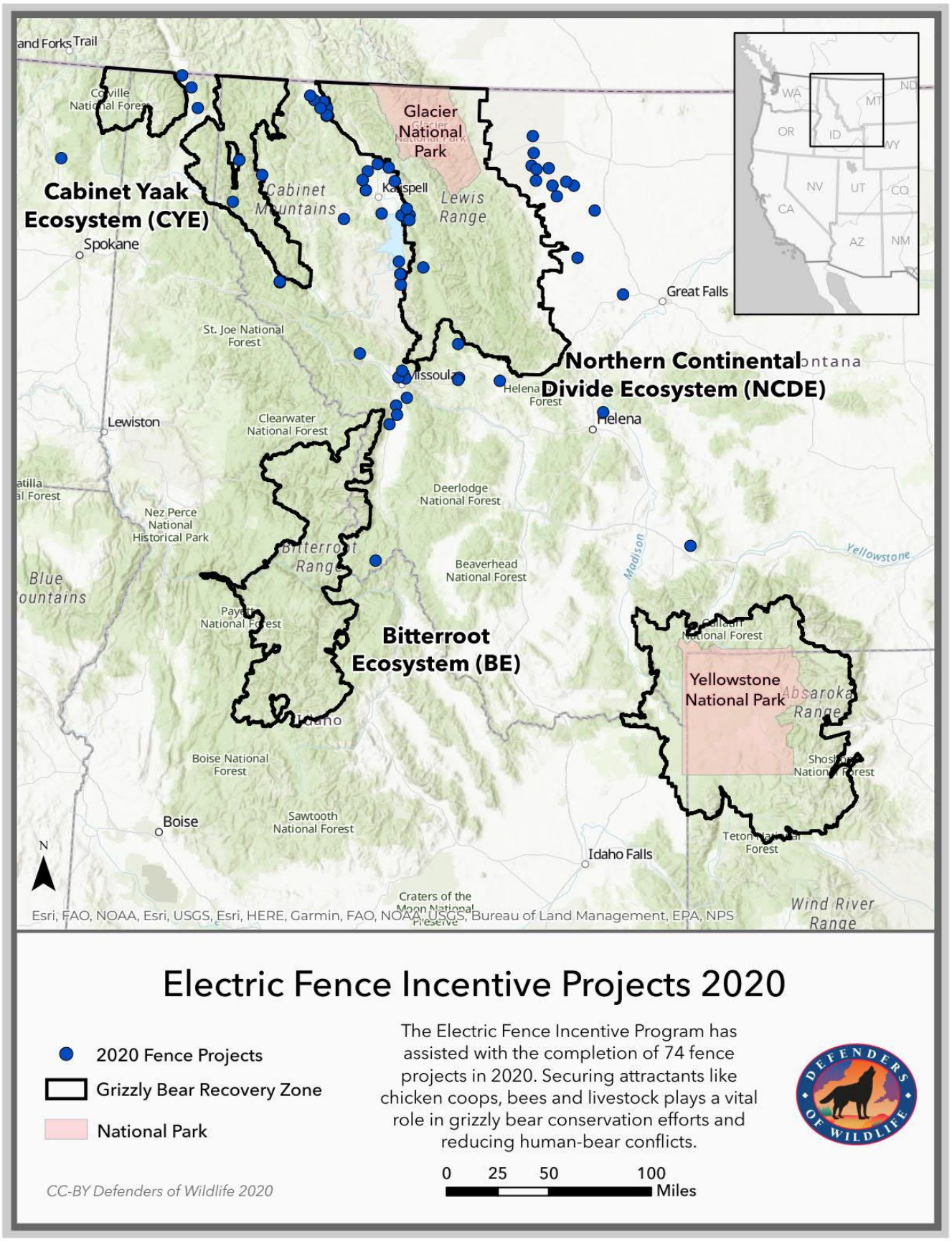
- 51% experienced past bear conflicts at their site.
- 94% report their electric fences are still in use.
- 99% report that their fence has successfully protected the intended attractant.
- 3% report experiencing some type of fence failure resulting in a conflict; each failure was attributed to technical difficulties and/or user error.
- 25% have improved or expanded their fences since the time of installation.

Participant testimonials

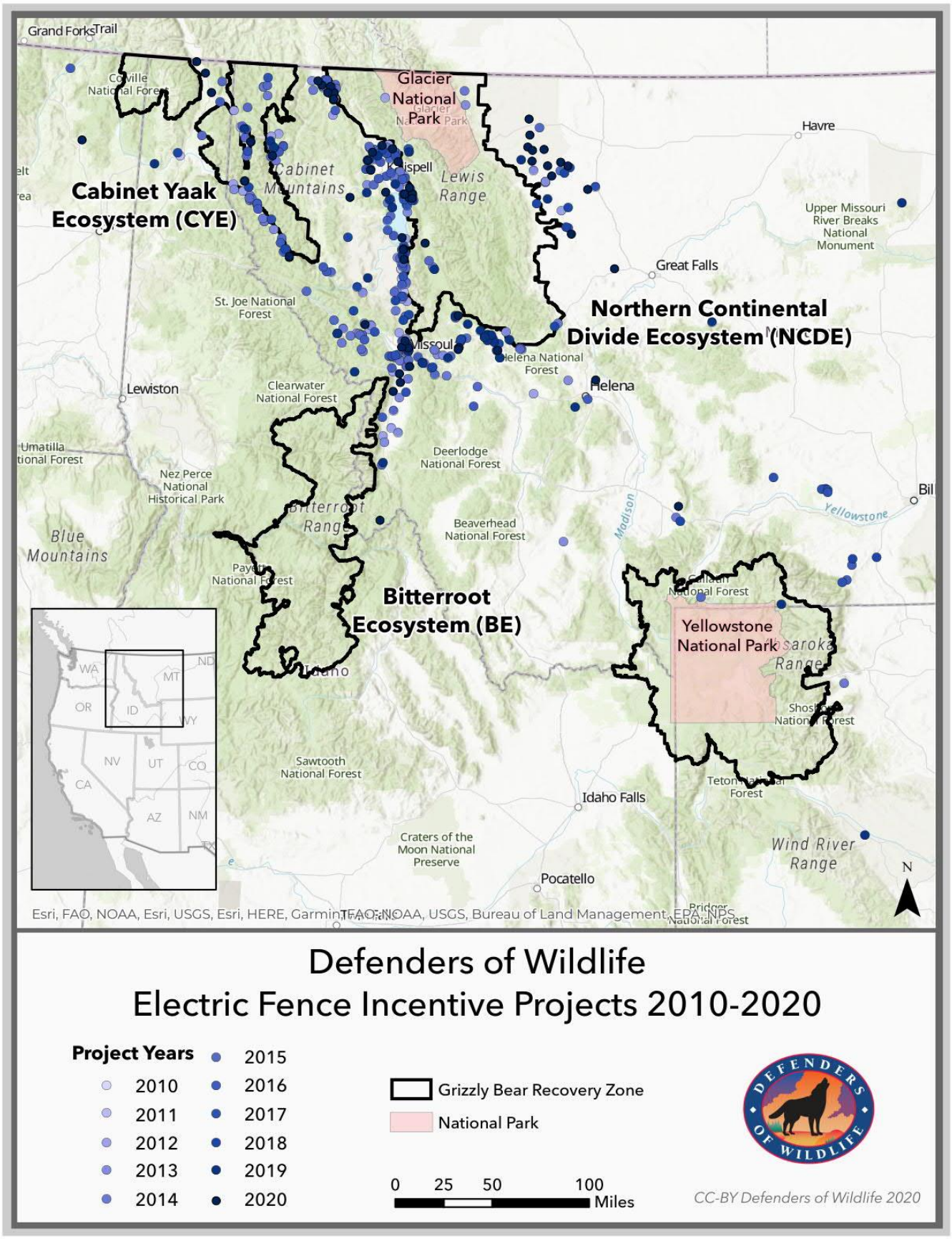
"We know it's working because we've seen bears hit it and move on. They tried climbing in, got shocked, and never came back."
– R. S., Kalispell, MT, 2016 participant

"I believe this support of landowners who might be directly impacted by grizzly bears is an important part of keeping bears out of trouble. Thank you for your work."
– M. G., Roberts, MT, 2018 participant

Erin Edge, Rockies and Plains Representative, eedge@defenders.org, 406-728-9436
Russ Talmo, Rockies and Plains Associate, rtalmo@defenders.org, 406-728-8800



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THE BLACKFOOT WATERSHED WOLF AND BEAR ACTIVITY REPORT FALL 2019/SPRING 2020

In coordination with Montana Fish, Wildlife and Parks (FWP) Region 2 (R2), the Blackfoot Challenge (BC) produces this wolf and bear activity report. These reports are typically compiled during our range rider season in the spring, summer and fall. We were unable to complete a report last fall so that information has been included in this spring update for wolf and bear activity in the Blackfoot watershed.

Most of the grizzly bear management, prevention work and grizzly bear research trapping are handled by Eli Hampson (FWP) and Eric Graham (BC). Jamie Jonkel (FWP) will assist as needed and will handle calls from the public and provide logistical support. We welcome Rory Trimbo who is a bear management technician stationed in the Deer Lodge Valley that will be assisting in the Blackfoot as well.

Wolf, lion and bear depredations or livestock loss reimbursement are handled by Wildlife Services (WS) and the Livestock Loss Board (LLB). When depredations are not an issue - Tyler Parks (FWP) handles all the wolf related management, wolf research trapping and reporting. Eli Hampson (FWP) handles mountain lion related management and black bear management along with (FWP) game wardens. Scott Eggeman (FWP) is the point person for all issues pertaining to elk and deer and all aspects of wildlife in the Blackfoot watershed.

We will continue to work with ranchers throughout the Blackfoot watershed to monitor predator activity, assist with monitoring livestock, communicate with local ranchers and continue operating the livestock carcass pickup program. A special thanks to our range riders – Sigrid Olson, Vicki Pocha and Jordan Mannix. The Blackfoot Challenge Range Rider Program was established in 2008 and is entering its 12th season. We also thank Dan Massee and Barry Gordon who pick up most of the carcasses associated with the carcass pickup program. The Blackfoot Challenge Carcass Pickup Program has been ongoing since 2003.

Thanks again to the ranchers and landowners that make these programs possible. We would like to recognize all of the partners that provide funding and technical assistance - FWP, the United States Fish and Wildlife Service (USFWS), Montana Department of Transportation (MDT), the Bureau of Land Management (BLM), The Nature Conservancy (TNC), the Livestock Loss Board, Defenders of Wildlife, Vital Ground, the Cross Charitable Foundation, Bunting Family Foundation, National Fish and Wildlife Foundation, the Western Bear Foundation and numerous individuals.

If you have any questions about any of the Blackfoot Challenge wildlife programs call the **Wildlife Committee Chair - Randy Gazda (406) 880-4386 or the main office at (406) 793-3900**

CONTACT INFORMATION FOR REPORTING WOLF, BEAR AND/OR LION ACTIVITY:

Jamie Jonkel – MFWP Bear Management Specialist (406) 544-1447
Eric Graham – Blackfoot Challenge Wildlife Program Coordinator (406) 240-3132
Eli Hampson---MFWP Bear/Lion Management Technician (406) 210-3213
Tyler Parks – MFWP Wolf Management Specialist (406) 531-4454
Rory Trimbo—MFWP Deer Lodge Bear Management Technician (406) 465-9343
Scott Eggeman – MFWP Blackfoot Area Wildlife Biologist (406) 542-5542

If you have a suspected livestock depredation, please notify USDA **Wildlife Services** as soon as possible to determine the cause of death. Regarding reimbursement for losses through the **Livestock Loss Board**: If you suspect a livestock loss due to mountain lion/wolf/grizzly bear predation, you can request an investigation to see if the losses were due to a confirmed or probable depredation. The Livestock Loss Board can pay only for confirmed or probable losses as determined by USDA-Wildlife Services (WS).

WS Powell County - Bart Smith (406) 660-0368
WS Missoula County - Ted North (406) 274-4856
WS Lewis & Clark County - John Meidtke (406) 855-8429
Department of Livestock - Livestock Loss Board (406) 444-5609

BLACKFOOT WATERSHED WOLF PACKS

Montana FWP uses a Patch Occupancy Model (POM) to estimate Montana's wolf population and track trends. Details on POM can be found in the Annual Wolf Report on the FWP website http://fwp.mt.gov/fishAndWildlife/management/wolf/. The transition to POM means that collecting minimum pack counts is no longer a high priority for monitoring wolf numbers. Therefore, the pack structure for most of the packs below is unknown. The rough numbers below are based largely on public reports and represent pack counts after the general hunting season, which ended on March 15th, 2020.

ARRASTRA CREEK PACK
Pack Structure: 3 to 4
Collared Wolf: No
Pack Report: Nothing new to report.

AVON PACK
Pack Structure: ~4
Collared Wolf: No
Pack Report: Nothing new to report.

BELMONT PACK
Pack Structure: ~4
Collared Wolf: No

Pack Report: This pack is thought to spend time on the Confederated Salish and Kootenai Tribe reservation.

BUGLE MOUNTAIN PACK
Backcountry

CHAMBERLAIN PACK
Pack Structure: 2
Collared Wolf: Yes (1)
Pack Report: Nothing new to report.

CONGER POINT PACK
Backcountry

HARDSCRABBLE
Pack Structure: 2
Collared Wolf: No
Pack Report: This pack was recognized in 2019 and frequents Alice Creek, Bartlett Creek, Cadotte Creek, and South of Hwy 200 North of Willow Creek.

HUMBUG PACK
Pack Structure: Unknown
Collared Wolf: Yes (1)
Pack Report: Nothing new to report.

INEZ PACK
Pack Structure: 3 Adults
Collared Wolf: No
Pack Report: Nothing new to report.

LANDERS FORK PACK
Pack Structure: Unknown
Collared Wolf: No
Pack Report: Nothing new to report.

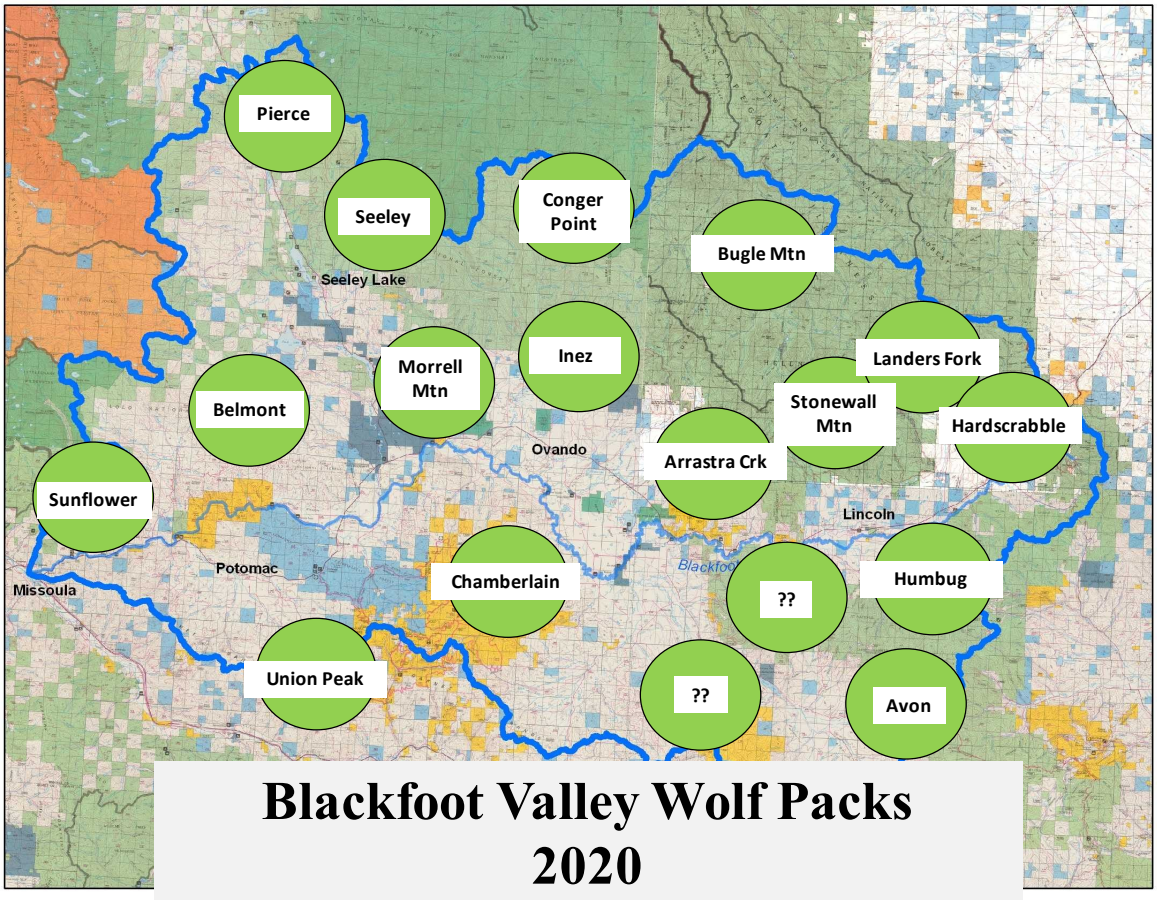
MORRELL MOUNTAIN PACK
Pack Structure: ~3 Adults
Collared Wolf: No
Pack Report: Nothing new to report.

SEELEY LAKE PACK
Pack Structure: ~4 or more Adults
Collared Wolf: No
Pack Report: Nothing new to report.

STONEWALL MOUNTAIN PACK
Pack Structure: ~4 Adults
Collared Wolf: Yes (1)
Pack Report: Nothing new to report.

SUNFLOWER PACK
Pack Structure: ~5 Adults
Collared Wolf: Yes (2)
Pack Report: Nothing new to report.

UNION PEAK PACK
Pack Structure: ~5 or more Adults
Collared Wolf: Yes (1)
Pack Report: Nothing new to report.



WOLF ACTIVITY 2019 SUMMARY

For 2019, in the Blackfoot watershed Wildlife Services confirmed 3 calves and 1 livestock guard dog that were injured by wolves and 5 calves and 4 sheep that were killed by wolves. WS radio collared 4 wolves and lethally removed 15 in response to confirmed wolf depredations. Eleven of the 15 wolves were removed from the chronically depredating Chamberlain wolf pack. Three wolves were removed from the Stonewall pack. A single wolf was removed west of Avon; its pack association is unknown. To assist with wolves around livestock FWP collared eight wolves in Region 2 in 2019, four of which were in the Blackfoot watershed.

UPDATES REGARDING GRIZZLY BEAR ACTIVITY IN THE BLACKFOOT WATERSHED

In 2018 the Blackfoot had its highest number of grizzly bear conflicts on record. In past years, we typically averaged four to five livestock depredations and 15 or so residential conflicts mostly involving uncontained garbage, bird feeders, fruit trees, freezers and grain. But, in 2018, there was an upsurge in conflicts involving uncontained residential and agricultural attractants. Approximately 80 grizzly-related conflicts were reported (six of which were verified livestock depredations and one depredation attempt). The 70 or so home site attractants mostly involved uncontained garbage, pet food, bird seed, chicken feed other livestock feed. As a result, a handful of grizzlies in 2018 learned that uncontained attractants were available, and in 2019 a few of those bears continued to exhibit "food conditioned behavior."

2019 SUMMARY

Through the year there were abundant reports and observations of grizzlies feeding in agricultural crops, traveling through and feeding on natural foods. But, compared to 2018, there was a reduction in the number of conflicts.

The grizzly season started out with grizzly tracks being observed in the foothills and higher ridge lines as early as March 19th and by the end of March we were getting reports of grizzlies on ranch lands in the Blackfoot Valley and from snowmobilers throughout the Clearwater drainage. During the spring we had good moisture and grizzlies were being observed throughout the Blackfoot watershed. In July and August, due to bountiful huckleberry, choke cherry and hawthorn production, sightings and conflicts remained low. But, as with most years, conflicts increased September through November. Historically the highest conflict period in the Blackfoot occurs in the fall. In 2019, there were a total of 47 reported residential conflicts and 4 depredations involving grizzlies. Note, most of the conflicts at residential sites were related to the radio-collared grizzly bear "Stevi" (discussed below) and the two grizzlies he was traveling with. There were, however, several other grizzlies in the Blackfoot valley and at least one lone grizzly and a family group in the Clearwater drainage that exhibited "food-conditioned behavior."

LIVESTOCK DEPREDATIONS AND ONE GRIZZLY EUTHANIZED

Between April and the end of July, the Department of Agriculture's Wildlife Services and FWP R2 responded to four verified livestock depredation incidents and a handful of additional calls about livestock where the cause of death or injury was natural, or not determined. Below is a synopsis of each of the incidents and management actions that occurred in the Blackfoot.

- On 4/19/19, Wildlife Services investigated wounds on a newborn calf at a ranch near Helmville, MT, and determined that the injury was grizzly-related. Due to the amount of time that had passed and the fact that the calf was recovering, trapping was not an option.

- On 4/20/19, Wildlife Services responded to a calf killed near Helmville, MT. During the investigation it was discovered that a second calf had gone missing. Culvert traps and snares were set at site. On the 23rd one of two grizzlies were captured. Even though this was the sub adult male's first offense, after close consultation with the USFWS, it was decided that due to chronic depredations occurring in the area, the 225-pound bear would be euthanized and the second bear was not captured. Adjacent to this ranch, in 2018, there were multiple calf depredations by grizzlies at the neighboring calving ground. Traps were set at this site last year on three occasions, but no bears were captured. For more information you can go to this link: https://www.blackfootvalleydispatch.com/story/2019/05/01/news/grizzly-euthanized-after-cattle-depredations-in-helmville-valley/1001.html

- On 5/23/19 two calves were killed by a grizzly at another ranch near Helmville, MT. Wildlife Services set traps at-site, but the bears had consumed the calves and did not return. Traps were closed after several days of trapping.

- On 6/15/19 another calf depredation was discovered near Helmville, MT. Wildlife Services determined the death to be grizzly related. But, due to the amount of time that had passed trapping was not an option.

- Last spring, Wildlife Services investigated 7 additional calf carcasses where it was determined the calves had died of natural causes and were scavenged on by grizzlies. Two of these incidents occurred in the Avon area. In addition, Wildlife Services documented one calf killed by coyotes that had been scavenged on by grizzlies. Wildlife Services also investigated a calf with a neck wound, near Avon, MT, that was determined to be related to an infection and not a bite wound. After June 15th, there were no additional depredations reported in the Blackfoot watershed.

RESIDENTIAL RELATED CONFLICTS AND TWO GRIZZLIES EUTHANIZED

Two grizzlies were euthanized in 2019 as a result of their extreme food conditioned behavior.

- The first of these bears was "Stevi," a sub adult male, captured the fall of 2018 after digging up worms at the Stevensville Golf Course. This male was translocated from the Bitterroot Valley to the headwaters of Belmont Creek adjacent to the Rattlesnake Wilderness. He came out of his den, located in the southern Mission Range, on March 17th. In mid-April he stumbled onto a residence north of Seeley Lake with a large accumulation of winter garbage. FWP assisted the family with the removal of the trash. But after that episode "Stevi" continued to seek out garbage, dog food, chicken feed and bird feeders. He was suspected to have damaged a house trailer on the Blackfoot Clearwater Game Range and entered open porches, sheds and buildings for garbage, grain, dog food and BBQ grills. He was documented at multiple residences in the Seeley Lake area, Clearwater Junction area, Ovando area and Woodworth area. On July 18th he was captured and euthanized after entering a building and accessing dog food on a porch at a ranch near Woodworth, MT. For more information you can go to this link: https://missoulian.com/news/local/grizzly-that-prowled-stevi-golf-course-euthanized-after-seeley-lake/article_6d24e8a2-2d9d-5565-bc1e-72cb9db35b6b.html

- The second grizzly, euthanized on May 12th, southeast of Seeley Lake in the Woodworth area, did not have a known history, but was observed on multiple occasions traveling with the radio-collared grizzly known as "Stevi". Because of this bear's extreme food-conditioned behavior, after consultation with the USFWS, it was decided to put this bear down after he was captured. This young 250-pound sub adult male grizzly broke a door open to access a secured barn in order to get grain. The bear had also been observed at adjacent home sites accessing unsecured grain, garbage, pet food, chickens and other attractants. Following the incident the landowner took it upon themselves to build bear resistant sliding doors on the barn to prevent future conflicts. It can be assumed that this bear is one of several grizzlies that learned "bad behavior" last year, as a result of some folks not having grain, garbage and other attractants secured. For more information you can go to this link: https://www.seeleylake.com/story/2019/05/30/news/fwp-euthanizes-two-bears-in-the-area-in-the-past-month/4868.html.

- There was a third grizzly traveling with the two bears mentioned above that continued seeking uncontained attractants in the Woodworth and Seeley Lake areas. This bear was not captured. FWP responded to several additional incidents that that involved chicken feed and a female grizzly with cubs. One or two additional grizzlies (may have been the same bear) were reported in the Blackfoot Canyon area west of Lincoln that was involved in several incidents at residential sites involving grain and butchering scraps. FWP responded and erected a temporary electric fence.

ROAD KILLED GRIZZLY BEAR

On 6/6/19 a 500-pound adult male grizzly was killed by a vehicle on Highway 200 near Patterson Prairie. This is the 12th grizzly killed by vehicles in the Blackfoot Valley since 2004. Eight of these grizzlies have been killed along Highway 200 in the Lincoln Canyon between Ovando and Lincoln, MT.

2020 SPRING GRIZZLY BEAR SUMMARY

The first grizzly tracks reported this year were on March 3rd in the Arrastra Creek area and the first grizzly sighting was March 18th east of Placid Lake. Since that time, tracks have been observed in both the Clearwater and Blackfoot drainages. Through April more bears emerged from their dens and traveled to the lower elevations with most females with young out of their dens the first week of May.

GRIZZLY CONFLICTS AND ONE BEAR EUTHANIZED SPRING 2020

On March 28th Wildlife Services investigated wounds on a newborn calf at a ranch near Helmville, MT, and determined that the injury was not grizzly-related.

Between April 10th and the 12th a lone grizzly killed and cached three calves in a pasture bordering a riparian area on the same ranch mentioned above. Due to cold weather and snow it was not feasible to re-locate the cow calf herd. On April 13th Wildlife Services captured a 452-pound adult male. After consultation with the U.S. Fish and Wildlife Service, in accordance with Interagency Grizzly Bear Committee guidelines, it was decided, that because multiple calves had been killed by this individual bear, it would be removed. The hide and skull were salvaged for education purposes and the Blackfoot Challenge has begun working with the ranch on a possible electric fence project.



This is a photo of the 452 pound male grizzly that was euthanized. Photo by Eric Graham

In mid-April there were several incidents of grizzlies in proximity to ranch compounds associated with livestock carcasses. The livestock carcasses were picked up as soon as the reports came in. FWP is recommending that after March all carcasses set aside for pickup, are stored away from ranch premises.

COLLARED GRIZZLY BEARS 2020

Here is a summary of the three radio collared grizzlies in the Blackfoot:

- On April 10th during the spring radio-tracking flight it was discovered that the research female grizzly bear "Silver Queen" had dropped her collar northwest of Silver King Mountain. She had been collared since July 2018. She was originally captured northeast of Lincoln and was observed last fall with her yearling in the headwaters of the Landers Fork of the Blackfoot. This bear spent most of her time ranging the south end of the Scapegoat Wilderness between the Landers Fork and McDonald Pass. "Silver Queen" is an older 245-pound adult female.

- On April 10th the female grizzly bear "Ursa" was located at her den site in the headwaters of Falls Creek on the edge of the Scapegoat Wilderness. "Ursa" was captured last year on August 26th northeast of Lincoln, MT in the Landers Fork. It is not known at this time if she is still with her two cubs. Last year she spent most of her time

ranging the south end of the Scapegoat Wilderness between the Landers Fork and McDonald Pass. “Ursa” is an older 250-pound adult female.

- “Walking Bear”, a 535- pound adult male, recaptured in July 2018, was observed from the air on April 10th. His den site was not determined, but in 2018 and 2019 he denned in Arrastra Creek. The collar has been malfunctioning but he continues to wear his radio collar and spends most of his time ranging the river bottoms around the Aunt Molly Wildlife Management Area, the Blackfoot Canyon and the mountains north and south of Lincoln, MT. In year’s past “Walking Bear” has made two trips from the Blackfoot Valley over the top of the Mission Mountains to visit the corn fields around Ronan, MT.



“Ursa.” Photo by Eric Graham

BLACK BEAR AND MOUNTAIN LION ACTIVITY

2019

Last fall black bear conflicts in the Potomac Valley and Seeley Lake were constant. In Seeley Lake, several lone black bears and a female with cubs were trapped and relocated in response to conflicts. Several black bears were euthanized and multiple other black bears were reported accessing uncontained garbage, bird seed, dog food, chicken feed and other residential attractants. Seeley Lake has an extreme issue with uncontained attractants and last fall black bears were observed accessing garbage and other attractants on a nightly basis.

Last summer in Potomac there was an extreme situation involving bears feeding on residential garbage. At the ends of county roads, multiple homes are required to bring garbage cans to certain sites for garbage service. Most of these cans are left out all week and as a result, resident black bears are obtaining garbage on a nightly basis. Since 2015, FWP has been working with the community to resolve the situation with very little progress. Last year several of these bears began visiting Potomac home sites for garbage and other attractants. In addition, there were multiple incidents of both lions and bears killing small livestock and fowl. Wildlife Services trapped and euthanized one black bear and a lion that killed goats.

Last fall FWP fielded multiple reports of lions throughout the Blackfoot and Clearwater valleys. Similar to year’s past, most of the reports came from the communities of Potomac, Seeley Lake

and Lincoln. These three communities are known for lion activity due to prime habitat and abundant deer. FWP also responded to a handful of lions in the Ninemile Prairie area that were near camp sites. There were four reports of mountain lion attacks on dogs from Placid, Seeley, and the Swan-Clearwater Divide. As a result, two mountain lions were lethally removed.

2020

Black bear activity has been minimal. FWP has fielded reports of tracks and one incident of a black bear accessing garbage in a burn barrel north of Seeley Lake.

Throughout the winter FWP fielded reports of lion activity throughout the Blackfoot and Clearwater valleys. There were a handful of incidents where lions were in proximity to home sites. Similar to year's past, most of the reports come from the communities of Potomac, Seeley Lake and Lincoln. This winter there were a handful of incidents of lions being captured in wolf traps in Region 2. One of these incidents occurred in the Placid Lake area and the lion was safely removed. There were several reports of lions killing house cats in the Potomac area and Wildlife Services removed one lion that killed a goat.

Please report black bear and mountain lion activity/incidents as quickly as possible to Eli Hampson (406-210-3213), Jamie Jonkel (406-544-1447) or Scott Eggeman (406-531-6759).

For detailed information on black bear and lion activity in and around Region 2 check out these two sites:

http://missoulabears.org/
https://www.facebook.com/missoulabears/

GRIZZLY BEAR RESEARCH TRAPPING

There are no plans for any grizzly bear research trapping in the Blackfoot watershed this season. Should one of the collared grizzly bears die or drop their collar, traps will be set for a new bear. However, some opportunistic research trapping may occur depending on resources and time. For more information related to the grizzly bear population monitoring go to:

http://fwp.mt.gov/fishAndWildlife/management/grizzlyBear/monitoring.html

GRIZZLY BEAR ADVISORY COUNCIL UPDATE

Grizzly bear management in Montana is complex. While they are at recovery levels in the Greater Yellowstone (GYE) and Norther Continental Divide Ecosystems (NCDE), they have yet to reach recovery goals in the Bitterroot and Cabinet-Yaak Recovery Zones. In places where bear numbers are on the rise, they are dispersing into places they haven't been for decades, sometimes causing conflicts with people and communities. Last year the Governor of Montana appointed members to the Grizzly Bear Advisory Council. The council has been working

diligently and will eventually have recommendations for grizzly bear management and conservation in Montana.

The Grizzly Bear Advisory Council is comprised of a broad cross section of Montanans with a diversity of views on grizzly bear management, conservation, and recovery. The Council has been tasked with considering broad strategic objectives, such as:

- Maintaining and enhancing human safety
- Ensuring a healthy and sustainable grizzly bear population
- Improving timely and effective response to conflicts involving grizzly bears
- Engaging all partners in grizzly-related outreach and conflict prevention
- Improving intergovernmental, interagency, and tribal coordination

For more information on the advisory council check out this link:
http://fwp.mt.gov/fishAndWildlife/management/grizzlyBear/gbac.html

LIVESTOCK CARCASS PICKUP PROGRAM

The Blackfoot Challenge's Livestock Carcass Pick Up Program runs during calving season from mid-February through mid-May. Thereafter, carcasses in the Blackfoot Valley are picked up by FWP or the Blackfoot Challenge. In the spring of 2018, there were 5 incidents of grizzly bears venturing into ranch compounds to retrieve carcasses left out for the carcass pickup program. Dead calves were either left on the ground or placed on hay bales within high activity areas on the ranch and bears were lured in to feed on the carcasses. **As a result, the pickup protocol was re-evaluated and it is now recommending that starting April 1st all carcasses set aside for pickup be stored away from ranch premises by at least 400 yards.** Carcasses should be stored away from human and livestock activity at an accessible site with good visibility. If needed, the ranch can also call any of the numbers mentioned above for emergency pickup. If there is concern that a carcass will lure in bears before pick up, there is always the option of personally hauling the carcass to the Clearwater Compost site.

CONTACT INFORMATION FOR CARCASS PICKUP

DURING CALVING SEASON:
Dan Massee (406) 793-5639

OUTSIDE OF CALVING SEASON:
Jamie Jonkel (406) 544-1447
Barry Gordon (406) 541-1078
Eric Graham (406) 240-3132
Eli Hampson (406) 210-3213

The carcass will be taken to the compost site near Clearwater Junction to help prevent conflicts with bears and wolves. To learn more about this program, watch "Living with Carnivores: Boneyards, Bear & Wolves." Click here: https://vimeo.com/131528982.

And for information on how to avoid either directly or indirectly feeding wildlife in Montana, visit:
http://fwp.mt.gov/fishAndWildlife/livingWithWildlife/feeding/default.html

ELECTRIC FENCE COST SHARE PROJECTS

Multiple fencing projects have occurred at various ranches and residential sites across the watershed. Over the last two summers the Blackfoot Challenge has assisted multiple families with electrified residential containment fences. In years past the Blackfoot Challenge secured funds to electrify the Helmville Dump, the Ovando Dump, the Seeley Lake Dump and the Clearwater Junction Compost Site. These electric fences have proven effective at deterring bears.



This is an example of a 5 wire electric fence that was built in the Blackfoot to keep grizzly bears out of calving yards and residential home sites. Photo by Eric Graham

Electric fence is an excellent way to protect livestock, fowl and contain residential attractants. Electric fence is a method of ensuring that bears or other predators that check out yard areas will not come back again. A good shock is the best way to teach bears to keep away. Contact Jamie Jonkel (406) 544-1447 or Eric Graham (406) 240-3132 if you would like to talk about cost share programs to install electric fence around home sites, livestock holding pens, chickens,

cattle, pigs, goats, sheep, bee yards, fruit orchards, gardens and other sites that might attract bears or other wildlife. For information on electric fence and another option for cost sharing on electric fence check out this website:
https://defenders.org/got-grizzlies

THE BLACKFOOT WATERSHED WOLF AND BEAR ACTIVITY REPORT SUMMER 2020

In coordination with Montana Fish, Wildlife and Parks (FWP) Region 2 (R2), the Blackfoot Challenge (BC) produces this wolf and bear activity report. These reports are compiled during our range rider season in the spring, summer and fall.

BACKGROUND & CONTACT INFORMATION:

Bear management, preventative management and grizzly bear research trapping are handled by Eli Hampson (FWP) and Eric Graham (BC). Jamie Jonkel (FWP) assists as needed, handles calls from the public and provides logistical support. Rory Trimbo (FWP), who is a bear management technician stationed in the Deer Lodge Valley, assists in the Blackfoot as needed. At this time, we would also like to welcome and introduce Jake Barzen, the new Seeley Lake FWP Game Warden. Jake replaced Game Warden Bill Koppen, who retired last fall.

Wolf, lion and bear depredations or livestock loss reimbursement are handled by Wildlife Services (WS). See WS contact information below. Tyler Parks (FWP) handles all other wolf related management, wolf research trapping and reporting. Eli Hampson (FWP) handles mountain lion-related management. Scott Eggeman (FWP) is the point person for all issues pertaining to elk and deer and all aspects of wildlife in the Blackfoot watershed. And for any other wildlife-related matters and hunting issues needing the attention of a game warden contact Jake Barzen or Ezra Schwalm.

Thanks to the Blackfoot Challenge Range Riders – Sigrid Olson, Jordan Mannix and Vicki Pocha -- who assist with monitoring predator activity. To learn more about our team of range riders, visit the Blackfoot Challenge's blog. We also thank Dan Massee and Barry Gordon who pick up most of the carcasses through the carcass pickup program. The Blackfoot Challenge Range Rider Program was established in 2008 and the Blackfoot Challenge Carcass Pickup Program has been ongoing since 2004.

Thanks again to the many Blackfoot residents that make these programs possible. We would also like to recognize all of the individuals, agencies and foundations that provide funding and technical assistance.

If you have any questions about the wildlife committee or this range rider program call the Blackfoot Challenge **Wildlife Committee Chair Randy Gazda (406) 880-4386.**

TO REPORT WOLF, BEAR AND LION ACTIVITY:

Eric Graham – Blackfoot Challenge Wildlife Coordinator (406) 240-3132
Jamie Jonkel – FWP Bear Management Specialist (406) 544-1447
Eli Hampson---FWP Bear/Lion Management Technician (406) 210-3213

Tyler Parks – FWP Wolf Management Specialist (406) 531-4454
Rory Trimbo—FWP Deer Lodge Bear Management Technician (406) 465-9343
Scott Eggeman – FWP Blackfoot Area Wildlife Biologist (406) 542-5542

TO REPORT A SUSPECTED LIVESTOCK DEPREDATION:

Notify USDA Wildlife Services (WS) as soon as possible to determine the cause of death. Regarding reimbursement for losses through the Livestock Loss Board: If you suspect a livestock loss due to mountain lion/wolf/grizzly bear predation, you can request an investigation. The Livestock Loss Board can pay only for confirmed or probable losses as determined by WS.

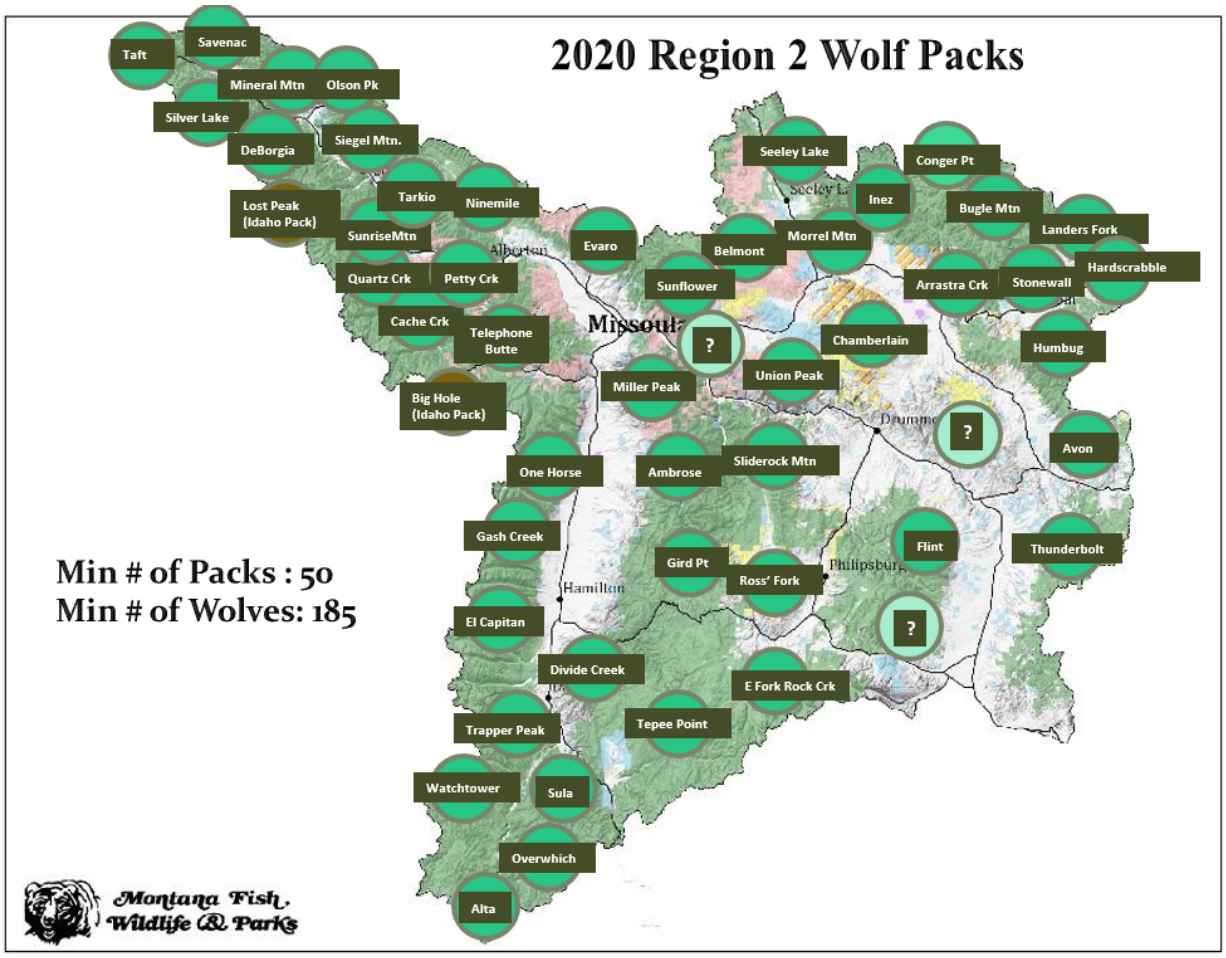
WS Powell County - Bart Smith (406) 660-0368
WS Missoula County - Ted North (406) 274-4856
WS Lewis & Clark County - John Meidtke (406) 855-8429
Western Montana District Supervisor- Kraig Glazier (406) 458-0106
Department of Livestock - Livestock Loss Board (406) 444-5609

For any other wildlife-related matters needing the attention of a **GAME WARDEN**:

Ezra Schwalm– FWP Lincoln Game Warden (406) 438-3666
Jake Barzen – FWP Seeley Lake Game Warden (406) 210-1299

BLACKFOOT WATERSHED WOLF PACKS:

Montana FWP uses a Patch Occupancy Model (POM) to estimate Montana's wolf population and track trends. Details on POM can be found in the Annual Wolf Report on the FWP website (http://fwp.mt.gov/fishAndWildlife/management/wolf/). The transition to POM means that collecting minimum pack counts is no longer a high priority for monitoring wolf numbers. Therefore, the pack structure for most of the packs below is unknown. The rough numbers are based largely on public reports and summer trapping/scouting efforts.



ARRASTRA CREEK PACK

Pack Structure: 3 to 4 Adults, 3 Pups (one report of 7 pups was received, but only 3 pups have been documented using trail cameras)
Collared Wolf: No
Pack Report: Nothing new to report.

AVON PACK

Pack Structure: ~4
Collared Wolf: No
Pack Report: Nothing new to report.

BELMONT PACK

Pack Structure: ~4 Adults, Pups yes but number unknown
Collared Wolf: No
Pack Report: This pack is thought to spend time on the Confederated Salish and Kootenai Tribe reservation. Pup activity was found while scouting for radio collar trapping efforts. The total number of pups is unknown.

BUGLE MOUNTAIN PACK
Backcountry

CHAMBERLAIN PACK
Pack Structure: Unknown
Collared Wolf: No
Pack Report: Involved in multiple livestock depredations this summer.

CONGER POINT PACK
Backcountry

HARDSCRABBLE PACK
Pack Structure: Unknown
Collared Wolf: 1 Possibly from Lander's Fork Pack
Pack Report: Possibly involved in three livestock depredation events this summer. The depredations occurred on the boundary of two packs, the Landers Fork pack may be responsible for the depredations. Wildlife Services collared one wolf and removed two wolves in response.

HUMBUG PACK
Pack Structure: Unknown
Collared Wolf: Yes (1) VHF collar missing (possibly dispersed)
Pack Report: Nothing new to report.

INEZ PACK
Pack Structure: 3 Adults, 3 Pups
Collared Wolf: No
Pack Report: Two pups were collared by FWP this summer. One pup dropped the padded collar that was fitted for an adult and the other was hit and killed by vehicle on Highway 200.

LANDERS FORK PACK
Pack Structure: Unknown
Collared Wolf: No
Pack Report: Possibly involved in three livestock depredation events this summer (see Hardscrabble Pack report).

MORRELL MOUNTAIN PACK
Pack Structure: ~3 Adults
Collared Wolf: No
Pack Report: Nothing new to report.

SEELEY LAKE PACK
Pack Structure: ~4 or more Adults
Collared Wolf: No
Pack Report: Nothing new to report.

STONEWALL MOUNTAIN PACK
Pack Structure: Unknown
Collared Wolf: No
Pack Report: Nothing new to report.

SUNFLOWER PACK
Pack Structure: ~5 Adults, Pups unknown
Collared Wolf: Yes (2)
Pack Report: Nothing new to report.

UNION PEAK PACK
Pack Structure: 3 or more Adults, 2 Pups
Collared Wolf: Yes (1)
Pack Report: Involved in two depredation events this summer. Wildlife Services collared one adult and removed 4 wolves in response.



Trail camera photo of three pups (foreground) and an adult in the Arrastra Creek Pack. Photo courtesy Tyler Parks.

2020 Wolf Depredations and Collar Update (April 26 – Sep 10):

In the Blackfoot watershed, WS confirmed 10 calves and one ewe that were killed by wolves this summer (April 26 to September 10). The Chamberlain, Union Peak, Lander's Fork, Hardscrabble, and Thunderbolt wolf packs were all likely involved in the depredation events. WS radio-collared two wolves and lethally removed seven wolves in response to the confirmed wolf depredations. To assist with wolf monitoring around livestock, FWP collared 5 wolves in Region 2 in 2020, two of which were in the Blackfoot watershed.

2020 GRIZZLY BEAR ACTIVITY:

SUMMARY:

We have had an exceptional year of berry production. As a result, FWP R2 is fielding lots of reports of both black and grizzly bears feeding on chokecherry, serviceberry and hawthorn in the foothill regions, along stream bottoms and in the riparian zones along the rivers throughout the Blackfoot and Clearwater drainages. Huckleberry production in the higher elevations has been excellent. Residents as well as recreationists should use caution and carry bear spray when traveling through areas with abundant berries.

Throughout the spring and summer there have been abundant reports and observations of grizzlies feeding in crops and traveling through and feeding on natural foods. However, compared to past years there has been a reduction in the number of conflicts.

The first grizzly tracks reported this year were on 3/3/20 in the Arrastra Creek area and the first grizzly sighting was 3/18/20 east of Placid Lake. In April, more bears emerged from their dens and traveled to lower elevations. Most of the females with young were out of their dens by the first week of May. During the early spring we had good moisture and grizzlies were being observed throughout the Blackfoot drainage. In July and August, due to bountiful huckleberry, chokecherry and hawthorn berry production, sightings and conflicts remained low. Conflicts are expected to increase September through November -- historically the highest conflict period in the Blackfoot occurs in the fall.

LIVESTOCK DEPREDATIONS: One grizzly euthanized and two bears relocated

Between March and the end of August, the WS and FWP R2 responded to six verified livestock depredation incidents and a handful of additional calls about livestock where cause of death or injury was either natural or not determined.

1. On 3/28/20 WS investigated wounds on a newborn calf at a ranch east of Ovando and determined that the injury was not grizzly-related.

2. From April 10 to 12, a lone grizzly killed and cached three calves, and may have killed a fourth calf, in a pasture bordering a riparian area on the same ranch mentioned above. Due to cold weather and snow it was not feasible to relocate the cow/calf herd. On April 13, WS captured a 452-pound adult male. After consultation with the U.S. Fish and Wildlife Service, and in accordance with Interagency Grizzly Bear Committee guidelines, it was decided that because multiple calves had been killed by this individual bear, it would be euthanized. The hide and skull were salvaged for education purposes and the Blackfoot Challenge has begun working with the ranch on an electric fence project.
3. On 5/6/20, WS responded to a calf being killed near Helmville. Remote cameras on site indicated that multiple grizzlies and wolves were frequenting the area. WS, with the assistance of FWP, set two culvert traps and one snare. On 5/7/20 two grizzlies – a 680-pound adult male and a sub-adult male – were captured. A third grizzly bear, most likely another sub adult, was observed but not captured. Due to the number of bears at site and the inability to determine which of the three bears might have been involved, both bears were relocated. The large adult male, now known as "Wales," was collared and relocated to the Whitefish Range west of Glacier National Park. The second grizzly, a research bear known as "Landers", originally captured in 2019 during a research trapping effort northeast of Lincoln, was recollared and relocated to Glacier National Park.
4. On 5/11/20, WS set two culvert traps for a grizzly that killed a calf NW of Helmville. No bears were captured.
5. On 7/16/20, WS investigated a sheep depredation SW of Helmville. Due to lack of evidence the species of bear was not determined. Traps were set but no bears were captured.
6. On 8/9/20, WS set a snare for a grizzly involved in a calf depredation north of Drummond. Traps were set but no bears were captured.
7. WS investigated additional carcasses where it was determined the livestock had died of natural causes and were scavenged by grizzlies.
8. Note, one additional calf was killed on 5/16/20 in an incident that involved a grizzly bear mortality north of Lubrecht Experimental Forest. But this case is under investigation by the USFWS and cannot be discussed at this time.

AGRICULTURAL AND RESIDENTIAL CONFLICTS:

In mid-April there were several incidents of grizzlies in proximity to ranch compounds. Several of these incidents were associated with livestock carcasses and they were picked up as soon as the reports came in. FWP and the Blackfoot Challenge are recommending that after March all carcasses set aside for pickup be stored away from ranch premises if possible. Most of the residential related conflicts are associated with a grizzly bear accessing garbage in the Seeley Lake area, but there have been a handful of additional incidents:

1. During the month of May multiple grizzlies were observed around Helmville. Residents observed and photographed several lone grizzlies, several grizzly pairs and at least one family group. On 5/11/20 a trap was set for a large adult male grizzly that came into a

ranch compound to feed on a cow carcass. The carcass was removed immediately but the bear continued to be in the area and travel through the ranch compound during calving season. A temporary electric fence was erected around some attractants and no bears were captured.

2. On multiple occasions a lone grizzly and a female with yearlings accessed uncontained grain and pet food and damaged an ATV at a ranch north of Helmville. Traps were set on 7/15/20, but no bears were captured.
3. As mentioned above, most of this year's conflicts are associated with a grizzly hitting the Seeley Lake area. This bear may very well be the same bear that was seeking uncontained attractants in the Woodworth and Seeley Lake areas last year. This bear has obtained garbage from unsecured garbage cans, from improperly locked bear-resistant dumpsters and may have gotten into an outside freezer. The bear was first reported in early July and continues to access garbage at private resorts, rental cabins, businesses and various administrative sites and campgrounds. FWP is actively trapping for this grizzly.

GRIZZLY BEAR MORTALITIES:

In 2020 there have been three confirmed grizzly bear mortalities:

1. The 452-pound adult male captured on 4/13/20 as mentioned above.
2. On 5/3/20, a sub adult male was killed west of Lincoln. This incident is under investigation and cannot be discussed at this time.
3. On 5/16/20, a 660-pound adult male was killed north of Lubrecht Experimental Forest. This incident is under investigation by the USFWS and cannot be discussed at this time.
4. On 7/10/20, FWP received multiple reports of a grizzly struck by a vehicle on Highway 200 near the North Fork of the Blackfoot River. FWP and the USFS responded but no carcass was located. Note, it is legal to retrieve road-killed deer, elk and moose in the state of Montana, but not black bears or grizzlies. For more information on the laws pertaining to salvaging road-kill check out this FWP news release: https://bit.ly/3k9tkBz

COLLARED GRIZZLY BEARS:

1. On April 10 during the spring radio-tracking flight it was discovered that the research female grizzly bear "Silver Queen" had dropped her collar northwest of Silver King Mountain. She had been collared since July 2018. She was originally captured northeast of Lincoln and was observed last fall with her yearling in the headwaters of the Landers Fork of the Blackfoot. This bear spent most of her time ranging the south end of the Scapegoat Wilderness between the Landers Fork and McDonald Pass. "Silver Queen" is an older 245-pound adult female.
2. "Walking Bear", a 535-pound adult male, recaptured last July 2018, was observed from the air on April 10 but he has not been located on subsequent flights. His den site was not determined this spring, but in 2018 and 2019 he denned in Arrastra Creek. He continues to wear his malfunctioning radio collar and spends most of his time ranging

the river bottoms around the Aunt Molly Wildlife Management Area, the Blackfoot Canyon and the mountains north and south of Lincoln, MT. In year's past "Walking Bear" has made two tremendous fast paced trips from the Blackfoot Valley over the top of the Mission Mountains to visit the corn fields around Ronan, MT.

3. On 5/6/20, WS and FWP set several traps at a calf depredation near Helmville and recaptured the research grizzly known as "Landers". Landers was originally captured in 2019 in the headwaters of the Landers Fork. It was difficult to determine if "Landers" was involved in the calf depredation, so he was recollared and relocated on 5/8/20 to Glacier National Park. He spent the summer in Glacier National Park and dropped his collar near the end of July five miles east of Duck Lake on the Blackfoot Indian Reservation, Squaw Flat along the north fork of the Milk River not far from the Canadian Border.
4. On 5/6/20, WS and FWP set several traps at a calf depredation near Helmville and captured a 680-pound adult male grizzly. It was difficult to determine if this new bear, now known as "Wales," was involved in the calf depredation so he was collared and relocated on 5/8/20 to the Whitefish Range West of Glacier National Park. "Wales" dropped his collar in late June north of the Canadian Border and east of Waterton Park along the Belly River.



The 680 pound male grizzly bear named "Wales" in a culvert trap. Photo by Lennie Phillips.

5. On 6/7/20, the Flathead Indian Reservation agreed to have a Blackfoot Reservation grizzly relocated to the Upper Jocko Valley. The collared female grizzly known as "Sue" spent a little bit of time in and around the Swan-Clearwater Divide and was most recently located in the Bob Marshal Wilderness in the central portions of the South Fork

of the Flathead Basin. “Sue” has no management history and was captured and relocated to get her away from some home sites near East Glacier where her chances of survival were limited.

6. On 6/10/20, the female grizzly bear “Ursa” and her two yearlings were in Alice Creek in the headwaters of the Blackfoot River near the Continental Divide. “Ursa” was captured last year on August 26 up the Landers Fork northeast of Lincoln. She spends most of her time ranging the south end of the Scapegoat Wilderness between the Landers Fork and McDonald Pass. “Ursa” is an older 250-pound adult female.
7. On 8/5/20, a sub adult grizzly known as “Trapper” was re-captured for research purposes in the headwaters of Boles Creek west of Placid Lake. The young bear was not collared and was released at site. “Trapper” was originally handled in the late fall of 2018 where he was captured in a leghold trap set for coyotes. To free the cub a helicopter was used to haze the cub’s mother and siblings. The cub was then darted and the trap was removed to allow him to rejoin his mother and siblings.

2020 BLACK BEAR AND MOUNTAIN LION ACTIVITY:

Black bear conflicts in the Seeley Lake have been constant this year. So far three black bears have been captured and euthanized. All three bears were exhibiting extreme food-conditioned behavior and had been observed accessing uncontained attractants at multiple businesses and homesites. At the time of capture the bears were approaching occupied camps and eating food from coolers and BBQ cookouts. Multiple other black bears have been reported accessing uncontained garbage, bird seed and other attractants in and around Seeley Lake. Black bears in the community of Seeley Lake have been regularly observed accessing garbage and other uncontained attractants throughout the bear season. The Potomac Valley and Lincoln area have had very few black bear issues so far this season.

This summer FWP fielded multiple reports of lions throughout the Blackfoot and Clearwater Valleys. Similar to year’s past, most of the reports were from the communities of Potomac, Seeley Lake and Lincoln. These three communities are known for lion activity due to prime habitat and abundant deer. In Seeley Lake, FWP responded to several reports of mountain lions involving attacks on dogs, cats or in proximity to people. Four sub adult mountain lions have been removed this summer from Seeley Lake. There were several reports of lions frequenting homesites in the Potomac area and WS removed one lion that killed a goat.

Please report black bear and mountain lion activity and incidents as quickly as possible to FWP.

For detailed information on black bear and lion activity in and around FWP Region 2, visit:

http://missoulabears.org/ and https://www.facebook.com/missoulabears/

GRIZZLY BEAR RESEARCH TRAPPING

Research trapping for a female grizzly has been ongoing for most of the summer. No new female grizzlies have been captured. "Trapper," a non-target male grizzly, was captured and released. Trapping efforts were focused near the Rattlesnake Wilderness Area and will continue next season. For more information related to the grizzly bear population monitoring, go to: http://fwp.mt.gov/fishAndWildlife/management/grizzlyBear/monitoring.html



Eli Hampson, FWP, with "Trapper". Photo by Eric Graham.

GRIZZLY BEAR ADVISORY COUNCIL UPDATE:

Grizzly bear management in Montana is complex. While grizzly bears are at recovery levels in the Greater Yellowstone (GYE) and Norther Continental Divide Ecosystems (NCDE), they have yet to reach recovery goals in the Bitterroot and Cabinet-Yaak Recovery Zones. In places where bear numbers are on the rise, they are dispersing into places they haven't been for decades, sometimes causing conflicts with people and communities. Last year the Governor of Montana appointed members to the Grizzly Bear Advisory Council. The council has been working diligently and will eventually have recommendations for grizzly bear management and conservation in Montana.

The Grizzly Bear Advisory Council is comprised of a broad cross section of Montanans with a diversity of views on grizzly bear management, conservation, and recovery. The Council has been tasked with considering broad strategic objectives, such as:

1. Maintaining and enhancing human safety
2. Ensuring a healthy and sustainable grizzly bear population
3. Improving timely and effective response to conflicts involving grizzly bears
4. Engaging all partners in grizzly-related outreach and conflict prevention
5. Improving intergovernmental, interagency, and tribal coordination

For more information about the Grizzly Bear Advisory Council: http://fwp.mt.gov/fishAndWildlife/management/grizzlyBear/gbac.html

LIVESTOCK CARCASS PICKUP PROGRAM:

The Blackfoot Challenge's Livestock Carcass Pick Up and Removal Program runs during calving season from mid-February through mid-May. Thereafter, carcasses in the Blackfoot watershed are picked up by FWP or BC employees. The carcass will be taken to the compost site near Clearwater Junction to help prevent conflicts with bears and wolves.

To arrange for carcass pickup during calving season call Dan Massee 793-5639 and for carcass pickup outside of calving season call Jamie Jonkel 544-1447 or Barry Gordon 241-1078.

Due to issues with grizzlies being lured into several ranch compounds for livestock carcasses in past years, it is recommended that after April 1st carcasses be stored at a minimum of 400 yards from human and livestock activity at an accessible site with good visibility. Make sure the carcasses are still convenient for carcass pickup. If possible, place carcass on top of an old hay bale. If there is concern that a carcass will lure in bears before pick up, there is always the option of personally hauling the carcass to the Clearwater Compost site.

To learn more about this program, watch "Living with Carnivores: Boneyards, Bear & Wolves" -- https://vimeo.com/131528982.

Note: Prior to having a horse or livestock animal put down, please consult with your veterinarian about not using pentobarbital based euthanasia drugs if the carcass is being taken to the compost site. Horses, cattle or other livestock put down with barbiturates cannot be taken to the livestock composting site. Instead they must be hauled to the Missoula or Deer Lodge landfill and be buried. Advanced notice is necessary to arrange for an animal to be buried at the Missoula landfill.

Prior to butchering cattle or other livestock be sure to have a tub or bucket available for the guts and be prepared to assist the driver with loading. In some cases the Blackfoot Challenge may be able to provide a container.

SECURING RESIDENTIAL AND AGRICULTURAL ATTRACTANTS:

As detailed above, there are a few grizzlies in the Blackfoot watershed that have developed bad habits in past years. In 2018, for example, a handful of bears learned that homesites and ranches are good places to find unsecured food. Several of these grizzlies were removed in 2019, but any uncontained attractants can train up new bears. Therefore, it is always best to lock up all sheds and barns where garbage, grain and other attractants are stored. If you need additional alarm devices, bear spray, electric fence materials or energizers for containing carcasses or other bear attractants (grain, sweet licks, garbage, etc.) call Eric Graham or James Jonkel.

And for information on how to avoid either directly or indirectly feeding wildlife in Montana, visit: http://fwp.mt.gov/fishAndWildlife/livingWithWildlife/feeding/default.html

ELECTRIC FENCE COST SHARE:

Multiple fencing projects have occurred at various ranches and residential sites across the watershed. Over the last three summers, the Blackfoot Challenge has assisted multiple families with electrified residential containment fences. In years past the Blackfoot Challenge secured funds to electrify the Helmville Dump, the Ovando Dump, the Seeley Lake Dump and the Clearwater Junction Compost Site. These electric fences have proven effective at deterring bears.

Electric fencing is an excellent way to protect livestock, fowl and contain residential attractants. Electric fence is a method of ensuring that bears or other predators that check out yard areas will not come back again. A good shock is the best way to teach bears to keep away. Contact Jamie Jonkel or Eric Graham if you would like to talk about cost share programs to install electric fence around home sites, livestock holding pens, chickens, cattle, pigs, goats, sheep, bee yards, fruit orchards, gardens and other sites that might attract bears or other wildlife. For information on electric fence and another option for cost sharing on electric fence check out this website: https://defenders.org/got-grizzlies



The new electric fence at the compost site near Clearwater Junction. Photo by Eric Graham.

Be Bear Aware Campaign
P.O. Box 7487 • Missoula, Montana • 59807 • 406-239-2315
Email: bearinfo@cfwi.org • **Website:** bebearaware.org • facebook.com/bebearaware

2020 EDUCATIONAL OUTREACH REPORT

Safety for People, Safety for Bears



Missoula Parks & Recreation Summer Camp

2020 Bear Avoidance Safety Seminars and Bear Spray Demonstrations looked a little different this year.

We also had to be creative in getting our safety messages out resulting in virtual seminars, a host of new materials, and a much stronger on-line presence.

Even with the challenges of Covid-19 we did great work for bears and are very proud of our educational outreach accomplishments.

SUMMARY OF 2020 EDUCATIONAL OUTREACH PROGRAM

The start of 2020 was a record year for the Be Bear Aware Campaign. By February we had already scheduled 28 hands-on bear avoidance and bear spray presentations in the states of Montana, Washington, and Idaho. It was our strongest start to a new year and the interest continued to fill our calendar. We couldn't have been more excited.

As our momentum and educational outreach schedule grew, word of the virus would be cancelling large gatherings became a reality. Unfortunately, the Covid-19 pandemic stepped in and caused a rush of cancellations. A lot of good opportunities to reach a diverse audience were lost for 2020.

We realized that in order to make the most of what turned out to be a very challenging year for people and businesses alike, we were going to have to adapt and change the way we reached the public with our Be Bear Aware safety message. And we did.



Small Groups at Travelers Rest



Drive-By Setup in Center of Lolo

We made a strong presence at popular trailheads, along major thorough fares in targeted communities. These areas were selected because of new grizzly bear activities where the grizzly bears had expanded into places such as Seeley Lake, Lolo Hot Springs, Lolo, and Darby. These are areas where citizens were concerned because of recent sightings and encounters. We kept the bear avoidance trailer on the road by placing it in these communities and at trailheads.

Major Bear Avoidance and Bear Spray Training Events



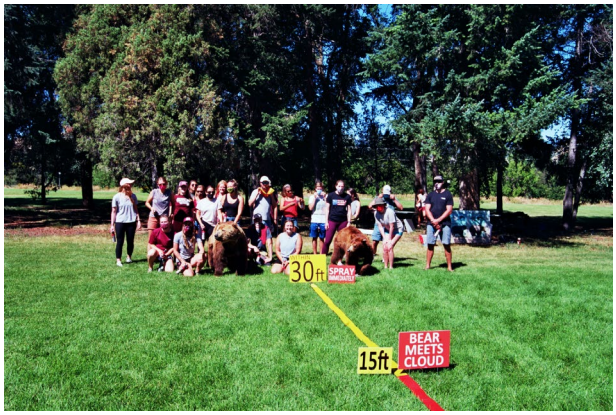
- AmeriCorps Montana Parks
- Fort Owens Youth Expo
- Spokane Great Outdoors Expo
- Missoula Bike Club
- BLM Dillon Youth Day
- BLM Malta
- Missoula Youth Shooting Sports & Outdoor Expo
- NineMile Ranger District Field Training
- BLM Dillon Orientation
- Missoula Parks & Recreation
- Buffalo Jump State Park
- Recon Montana at University of MT
- University of MT Recreation Dept
- Pend Oreille Fair
- BLM Lewistown Chokecherry Festival



Lewis & Clark Visitor Center

UM Wildlife Society Students at Hawthorne Elementary





University of Montana Recreation Department

Informal Presentations & Bear Spray Demonstrations

The Be Bear Aware Campaign conformed to Covid-19 restrictions by separating our educational tables and bear mounts in order to keep visiting groups small. We hosted 50 informal bear avoidance safety seminars and many of these events included our bear spray demonstration course. We even had a black bear run through as we were setting up our bear spray course!

New Products & Special Services Provided in 2020

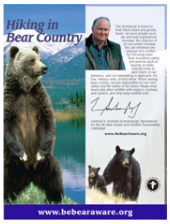
1) We developed a customizable virtual bear avoidance safety presentation and was able to use an on-line forum to keep some events from cancelling for the year. We also provided the presentations to teachers, youth group leaders, and individuals for use in classrooms or at-home learning. https://www.youtube.com/watch?v=JBqi9HoS7RM



2) We were successful in distributing 30,000 black bear-grizzly bear identification cards from our bear avoidance educational set ups. We also distributed them to local businesses, including resorts, lodges, sporting goods stores, and lodges.
https://bebearaware.org/files/2020/08/Bear_ID_4_x_6_Bear_ID.pdf



3) We distributed 10,000 grizzly bear-black bear six-panel brochures listing the various categories for safety in bear country from residential to backcountry camps.
https://bebearaware.org/files/2020/03/HikingInGrizCountry_GrizzlyBear.pdf



4) We developed a new video: Bear Spray Scenarios & Demonstration that has already received 44,000 views on YouTube in four months. It focuses on how to be prepared and properly deploy bear spray in the four most common charging scenarios - when a bear charges from 60 feet, 30 feet, and two 15-foot scenarios.
https://www.youtube.com/watch?v=TZ5HJHZ8Mfw



5) We created a new guide: Deploying Bear Spray Against a Highly Agitated Charging Bear. This is a companion to the video but also includes guidelines for purchasing a quality bear spray; proper way to hold and deploy bear spray; how bear spray effects a bear; and tips for avoiding close encounters.
https://bebearaware.org/files/2020/02/BearGuide8Aug42019.pdf



6) We redeveloped our website to be more user friendly and offer more educational information. We have posted a majority of our educational brochures, cards, posters, instructor's guides, wildlife stewardship guides, and PowerPoint presentations for on-demand viewing, downloading, and printing. We are thrilled to be receiving inquiries from as far away as New England, Florida, New Mexico, Illinois, along with a more local audience. https://bebearaware.org



7) We strengthened our presence on YouTube by adding numerous bear avoidance and bear spray educational videos, along with some fun bear scenarios captured on video. We have also developed educational playlists for recreationists, hunters, teachers, etc. and are still in the process of improving our channel with additional educational materials. youtube.com/bebearaware

8) We created a radio public service announcement that aired on four popular Montana radio stations this summer and is also posted on our YouTube site. https://www.youtube.com/watch?v=RWdYlxSAiMk

9) We conducted numerous television and newspaper interviews focused on hiking safely in bear country, the importance of bear spray and how to properly use it, and also regarding the UDAP bear spray recall due to damaged spray triggers and the flawed recommendation to test your can before heading out.



10) Set up photoshoots to emphasize bear activity signs that joggers, bikers, and hikers may encounter along trails. Our surveys have shown that very few recreationists realized that while we were interviewing them, they were standing right next to a bear sign.



Swan Valley Bear Resources 2020 Annual Report

The mission of Swan Valley Bear Resources (SVBR) is to provide community resources to promote coexistence between people and bears. Since 2007, SVBR has been a collaborative working group including local non-profit conservation/education organization Swan Valley Connections (SVC) and community members working in partnership with the U.S. Forest Service (USFS), Montana Fish, Wildlife & Parks (FWP), U.S. Fish & Wildlife Service (USFWS) and other natural resource entities. By pooling resources, experience, and expertise SVBR provides place-based solutions for minimizing bear conflicts on private and public property in the Swan Valley.

Private Property Projects:

SVBR focuses on private property projects that provide interested residents with materials, information, and conflict response needed to secure bear attractants and minimize risk of bear conflicts. SVBR creates site-specific solutions for each situation, and our collaboration with private property owners may come by a variety of different means such as landowner interest or response to a bear conflict. Some on-going examples of collaboration with private property owners in the Swan Valley include: providing advice on securing bear attractants, loaning bear-resistant garbage containers, helping build electric fences around attractants, removing animal carcasses, helping remove ripe fruit from trees, installing motion-sensor activated cameras to monitor bear conflicts, and contacting FWP management specialists in the event of a conflict. In 2020, SVBR staff provided numerous private property consultations that involved different methods for securing bear attractants.

Bear-Resistant Garbage Container Loaner Program

SVBR's Bear-Resistant Garbage Container Loaner Program allows community members to check out bear-resistant garbage containers for free and on an indefinite basis, with a suggested donation. Bear-resistant containers are also available for purchase. SVBR purchases containers for the program with a combination of funds pooled from SVC, the USFWS Grizzly Bear Recovery Program, the USFS, Defenders of Wildlife, and private donors. The loaner container program provides local residents a means to securely store garbage. SVBR staff will deliver containers to residents' properties free of charge and take the opportunity to offer advice on how to secure other bear attractants that may be present. In 2020, SVBR distributed 28 bear-resistant garbage containers to local residents. Currently, 300 containers and 28 dumpsters have been distributed to community members or businesses as part of the program throughout the Swan Valley. SVBR also worked with FWP grizzly bear management specialists to distribute several bear-resistant garbage containers to residents during a timeframe when FWP did not have any available. In addition, SVBR assisted three landowners needing help to fix or replace their broken bear-resistant dumpsters.

Electric Fencing Program

From 2009 to 2019, SVBR assisted 26 private landowners with construction of permanent electric bear exclusion fences. SVBR assists with the entire fence building process including site identification, fence design, technical specifications, help to secure funding sources, purchase of materials, and final hands-on fence construction. Fencing projects are done opportunistically with interested landowners as needs and opportunities arise. SVBR has seen an increase in residents raising small livestock in the Swan Valley, and this has led to an increasing need for electric fencing projects to minimize bear conflicts.

In 2020, SVBR assisted five residents with construction of permanent electric fences. For three of the resident locations, SVBR built electric fences that had experienced previous bear conflicts due to chickens, small livestock, livestock grain, and orchard fruit, while the other two locations included residents eager to take proactive preventative measures. SVBR also provided three property consultations for residents seeking to build electric fences without SVBR staff, and our advice helped them to do so according with the best

technical specifications and practices. Finally, SVBR helped four residents fix their electric fences that had been damaged from windthrow or improper maintenance.

Attractants that have been secured by these 31 permanent electric fence projects are: chickens, turkeys, ducks, goats, sheep, pigs, rabbits, bees, miniature horses, outside chest freezers, livestock grain, orchard trees, compost bins, and gardens. Partners on these projects have included: SVBR, USFWS' Partners for Fish and Wildlife Program, FWP, Defenders of Wildlife, and the landowners.

Educational Events:

Every year SVBR partners with various agencies, organizations, and businesses to provide educational events aimed at promoting human-bear coexistence. Unfortunately, COVID-19 interrupted our plans for public events in 2020. In April, in lieu of our annual Spring Bear Wake-Up Social, SVBR produced an educational video reminding residents of SVBR's services and empowering their own efforts to contain their bear attractants as bears emerged from hibernation. The video was posted on SVC's website and on our social media platforms. The video can be viewed at: https://www.swanvalleyconnections.org/swan-valley-bear-resources.

In lieu of hosting an annual Bear Fair, SVBR organized a Zoom presentation by Confederated Salish and Kootenai Tribes Wildlife Biologist, Kari Eneas. 100 people attended this online event, which featured educational information on bear ecology, behavior, research, conservation, conflict management, and different resources available to secure bear attractants. SVC staff recorded the event so that it can remain available for others to view. The event is currently available to be viewed on SVC's Facebook page, and will be posted on our webpage soon.

Outreach and Education:

In addition to educational events, SVBR also provides outreach through other avenues. SVBR annually publishes Swan Valley Bear News, included in SVC's fall newsletter, which reaches nearly 2,000 of SVC's subscribers. Swan Valley Bear News typically includes articles written by SVBR staff or local agency bear management specialists concerning annual natural bear food availability, research, biology, conflict management, new data, interesting bear stories, or SVBR activities. The goal of the publication is to provide another form of outreach to educate people about living in bear country.

SVC's Visitor Center contains a mounted grizzly bear, Counter Assault pepper spray, bear-related books for sale, and free SVBR brochures and pamphlets. SVC's full-time Office Manager staffs the Visitor Center year-round, providing answers to many bear-related questions, and tips about how to safely recreate, store food, and camp in bear country. New residents that stop by the Visitor Center can receive a free 'Living with Wildlife' packet that contains information about living in bear country, securing attractants, and resources available for minimizing bear conflicts. With help from SVBR staff, inert cans of bear pepper spray are also available for visitors to get hands-on experience with proper deployment. Some SVBR staff have office space in the Visitor Center and are readily available to answer any bear-related questions that may arise from visitors.

SVBR also provides ongoing outreach through SVC's social media channels and website https://www.swanvalleyconnections.org/swan-valley-bear-resources/.

FY21 expenses for year 1 narrative report: M62067

2021 field season - Travel, salary		
Kate Smith salary		
Lori Roberts salary		
Mark Drew, bear handlers meeting	$ 1,500	
WSU Pullman	$ 589	
Beaverhead County	$ 4,500	Wise River Refuse Site via Kim Johnston, People & Carnivores (another $1500 paid through FWS)
Telonics - March 2021	$ 4,816	2 collars and release mechanisms for L Roberts, FWP
Anderson Fencing	$ 3,312	Electric fencing project in Glen via Kim Johnston, P&C
Murdochs - Manley	$ 1,600	Energizers for FWP - 10 total
Murdochs - People & Carnivores (P&C)	$ 1,728	Fencing supplies for P&C - project in the Pistol Creek Hills near Arlee
American Grazinglands - P&C	$ 1,588	Fencing supplies for P&C - project in the Pistol Creek Hills near Arlee
Blackfoot Challenge	$ 500	Shipping container for Heart bar heart - BC
Dell computer - field tech Libby, MT	$ 1,206	
Supplies	$ 106	
Bear spray for Blackfoot Challenge	$ 1,374	25 via REI and an additional 40 through Counter Assault below = 65 total
Mountain West Coop 7/23	$ 2,000	Helmville ranch fencing after GB depredation
Murdochs 7/23	$ 123	
Pfendler Post - Meilar fence/Blackfoot Challenge	$ 1,500	Meilar fence project in Ovando
Advanced Products (counter assault)	$ 1,693	Bear spray for BC and program
Margo Supplies	$ 157	Togwotee Pass
Integrity Balistics	$ 181	Togwotee Pass
CHS Mountain West Coop 9/27 - Meilar Fence/Blackfoot Challenge	$ 3,494	Meilar fence project in Ovando
Microdaq	$ 213	
Togwottee Pass - Travel, salary		
IBA Conference - planning committee		

From:	Crowser, Vivaca
To:	Arnold, Randy; Thompson, Michael; hilary_cooley@fws.gov; Crowser, Vivaca
Subject:	draft Stevi grizzly bear news
Date:	Thursday, July 18, 2019 4:51:31 PM
Attachments:	Grizzly Bear Euthanized After History of Searching for Food Near Homes and Recreation Areas.doc

Hi, all-
Please see the attached draft news release for your review.

Thanks,
Vivaca

Vivaca Crowser
Information and Education Program Manager
Montana Fish, Wildlife & Parks; Region 2

3201 Spurgin Rd
Missoula, MT 59804
O: (406) 542-5518 | C: (406) 240-2004
Montana FWP | Montana Outdoors Magazine



THE **OUTSIDE** IS IN US ALL.

FWP NEWS RELEASE

Region 2 Headquarters
3201 Spurgin Road • Missoula, MT 59804
Media Contact: Vivaca Crowser • 406.542.5518 • Vcrowser@mt.gov

THE **OUTSIDE** IS IN US ALL.

Draft not FOR IMMEDIATE RELEASE—July 18, 2019

Grizzly Bear Euthanized After History of Searching for Food Near Homes and Recreation Areas

Montana Fish, Wildlife & Parks (FWP) euthanized a male grizzly bear today, following a history of breaking into outbuildings and dumpsters and pursuing other attractants around homes and recreation areas, most recently in the Seeley Lake area.

FWP bear management specialist, Jamie Jonkel, said the bear was exhibiting food-conditioned behavior. Once bears become conditioned to attractants like garbage it is hard to break those behavior patterns, and they often remain in the area, near homes and places where people frequent, becoming bolder and more aggressive.

“If bears are able to find uncontained attractants like garbage, grain and even birdseed, then they tend to stay in the area looking for more and it is extremely hard to break that behavior pattern,” Jonkel said.

This sub-adult male grizzly bear was first captured on the on the Whitetail Golf Course in the Bitterroot Valley north of Stevensville last October, following several weeks of digging and causing damage to the golf course. FWP relocated the bear to a remote area in the lower Blackfoot Valley with hopes that it would stay away from populated areas and return to natural food sources.

This spring and summer, however, the grizzly traveled to the Seeley Lake area where it found garbage and broke into a garage and outbuildings in search of grain and other food, continuing to spend time near homes and recreation areas, including Placid Lake.

“Sometimes it only takes one exposure to something like garbage to encourage a bear to stay near places where we live, looking for easy food sources. The best thing we can do for bears and people is to keep those things secure and out of a bear’s reach.” Jonkel said.

FWP recommends keeping garbage in a bear resistant container or indoors and to make sure other attractants such as barbecue grills, compost piles, pet and livestock food, and chickens, are inside a secure structure or behind an electric fence.

FWP captured the bear Wednesday night. FWP made the decision to euthanize it in consultation with the U.S. Fish and Wildlife Service and in accordance with Interagency Grizzly Bear Committee guidelines.

-fwp-

From: Frey, Kevin
To: Cooley, Hilary
Subject: Final BOR 4-15-21
Date: Wednesday, August 4, 2021 5:01:05 PM
Attachments: Baker"s Hole Fatality - final.pdf

Yee-haw…..we are done other than you/Jen posting it.
Thanks HC!

Let me know if this does not come thru clear enough or diff to post…..I had to save as a pdf…….word doc got too big….14.4MB and system will not send it today.

From: Cooley, Hilary <hilary_cooley@fws.gov>
Sent: Wednesday, August 4, 2021 2:50 PM
To: Frey, Kevin <KFrey@mt.gov>
Subject: Re: [EXTERNAL] BOR recommendations……

INVESTIGATION REPORT

The subsequent fatality of Mr. Charles (Carl) Wesley Mock from a grizzly bear attack on 15 April 2021 near Baker's Hole Campground on the Custer Gallatin National Forest

Hilary Cooley – *Grizzly Bear Recovery Coordinator, United States Fish Wildlife Service, Missoula. Montana*
Brian Debolt - *Large Carnivore Section Conflict Coordinator, Wyoming Game & Fish, Lander, Wyoming*
Kevin Frey – *Grizzly Bear Management Specialist, Montana Fish Wildlife & Parks, Bozeman, Montana*
Kerry Gunther - *Bear Management Biologist, Yellowstone National Park, Mammoth, Wyoming*
Mark Haroldson - *Supervisory Wildlife Biologist, U.S. Geological Survey, Interagency Grizzly Bear Study Team, Bozeman, Montana*
Jeremy Nicholson - *Wildlife Biologist, Idaho Fish and Game, Island Park, Idaho*
Dan Thompson - *Large Carnivore Section Supervisor, Wyoming Game & Fish, Lander, Wyoming*
Dan Tyers - *GYE Grizzly Bear Habitat Coordinator, United States Forest Service, Bozeman, Montana*

SUMMARY:

On the afternoon of 15 April 2021, a lone 40-year-old male resident of West Yellowstone, Montana had gone hiking at nearby Baker's Hole Campground on the Custer Gallatin National Forest (CGNF) to either fish, take photographs or both. At approximately 3:45 pm, the man called 911, connecting to the West Yellowstone Police Department Dispatch reporting he had been mauled by a grizzly bear. Search and rescue were immediately implemented. The victim, Mr. Charles (Carl) Wesley Mock was found severely injured by search and rescue personnel. Mr. Mock was given medical attention in the field, taken to an ambulance, and transported to Idaho Falls, Idaho Regional Medical Center. The following day, 16 April investigation team members were charged by a bear near the site where Mr. Mock had been mauled. Investigators killed the bear during the encounter. Unfortunately on Saturday, 17 April 2021, Mr. Mock died from complications from the severe wounds to his head and neck caused by a grizzly bear attack. Mr. Mock was a West Yellowstone resident and guide for Back Country Adventures.

Format of report:

A board of review (BOR) is required after any human fatality caused by a grizzly bear as per the Interagency Grizzly Bear Guidelines (p 59). This report is based on the investigations, personal statements, and documentations of personnel with the Gallatin County Sheriff's Office, West Yellowstone Police

Department, United States Forest Service, Gallatin County Search and Rescue, Hebgen Basin Fire and Montana Fish Wildlife & Parks. Gallatin County Sheriff's Office (Deputy Mike Gavagan) report of Mr. Mock's rescue and Montana Fish Wildlife & Parks enforcement division (Warden Robert Pohle) overall reports are attached in Appendix A. This report is written in sections of occurrence and with an investigative conclusion at the end of the report. To avoid

unwarranted speculation as to how this attack and resulting fatality occurred, only information gathered and documented during the investigations is contained in this report.

Note: There are several minor discrepancies between this investigation report and officers Gavagan's and Pohle's reports. Those minor discrepancies are footnoted below their reports. The information in this investigation report is correct.

Baker's Hole Campground:

Baker's Hole Campground is located on the Hebgen Ranger District, Custer Gallatin National Forest. The campground is located within a lodgepole pine (LPP) forest with willows along the southeast side. The campground is east of U.S. highway 191, west of the Madison River, approximately 2.5 miles north of West Yellowstone, Montana and approximately 200 yards west of the Yellowstone National Park boundary.
The campground has 73 campsites within the 3 campsite loops. The campground is annually closed to camping from October 1 to May 1 but the area is open to recreationists year-round. People also use the campground to access the Madison River for fishing and wildlife viewing as the area is known for its use by bears, moose, elk, ospreys, eagles, waterfowl, and bison. Baker's Hole Campground is very well posted with permanent wooden or metal signs at the entrance and on kiosks among the campsite loops informing the public of grizzly bear presence in the area and of food storage order requirements (Photos 1 & 2). An image of the attack site in relation to Baker's Hole Campground, West Yellowstone and Yellowstone National Park is shown in Figure 1.



Photo 1. Grizzly Bear awareness signs at Baker's Hole Campground



Photo 2. Grizzly Bear awareness and food storage sign at Baker's Hole Campground



Figure 1. Baker's Hole Campground in relation to West Yellowstone and Yellowstone National Park

04-15-2021

SEARCH and RESCUE:

15:42 hours - West Yellowstone Police Department (WYPD) Dispatch received a call from a 40-year-old male reporting he has been mauled by a grizzly bear approximately 200 yards from CGNF Baker's Hole Campground.
West Yellowstone PD, Gallatin County Sheriff's Deputy (GCSO), US Forest Service law enforcement (USFS LEO), Gallatin County SAR (GC SAR) and Hebgen Basin Fire are immediately dispatched to respond. Hebgen Basin EMS was then dispatched to Baker's Hole Campground to wait for rescue of the victim.
Secondary information from WYPD Dispatch was issued to Search and Rescue (SAR) that the victim reported he had facial injuries, was laying on the ground, there was one bear and to go to the closed campground main entrance.

15:52 hours -approximately
*GCSO, USFS LEO, WYPD, Hebgen Basin Fire and GC SAR arrive at Baker's Hole Campground to begin the search. Initially human footprints were searched for in the snow near hiking trails towards the Madison River.

*Hebgen Basin Fire was instructed by GCSO to assume incident command.

*Dispatch was unable to triangulate or ping a location of the victim's cell phone. His phone was not active, 911emergency call capacity only. Though found by SAR relatively quickly the phone's status had delayed SAR from finding the victim sooner.

*Although seriously injured, the victim was able to communicate with WYPD dispatch before he was found by SAR.

*Hebgen Basin Fire activated sirens, which victim told dispatch he could hear the sirens. He then told dispatch he was about ¼ mile from campers (camp host) in campground, towards town (south of main entrance).

*The victim then relayed he was off the blue diamond ski trail.

*With this information SAR was then able to focus on an area.

*Incident command requested West Yellowstone based Air Idaho (helicopter) to aid in support and search. Also a SAR page was sent out for a backcountry rescue.

*GC SAR and USFS LEO proceeded on the ski trail out of campground, followed within minutes by 2 officers with GCSO and WYPD.

*These 2 officers were joined by another WYPD officer after they stopped hiking due to sighting a grizzly bear approximately 80 yards east of the ski trail. The bear was standing on hind legs and making huffing sounds. The bear dropped to all 4 feet and charged towards the officers, breaking of the charge after 30 yards.
Dispatch relayed that the victim could hear the officers yelling and that the bear was very close to him.

*The search party then turned east off the ski trail, down an old logging spur in the direction of the bear.

*Approximately 70 yards down the old logging spur the victim was found lying on the ground.

*The bear continued to aggressively move around the rescue party in a half circle, at a distance varying 20 to 70 yards.

*The bear continued to stalk the rescuers and victim, making another bluff charge while initial medical attention was being given to the victim.

*Emergency medical (EMS) and Air Idaho personnel hiked into the site of the injured man.

*Two GC SAR members arrived with snowmobiles and a rescue toboggan.

*EMS was able to bandage the victim and carry him up to the ski trail to the SAR rescue toboggan. The victim was transported to the EMS ambulance in the campground and was then transported to the Regional Medical Center in Idaho Falls, Idaho. *Poor weather conditions prohibited victim transport via helicopter.*

16:54 hours – Montana Fish Wildlife & Parks (MTFWP) Warden arrived at campground.
*Two WYPD officers, 1 GCSO deputy, 1 USFS LEO and the MTFWP warden went back to the site to get coordinates and take initial pictures of the incident scene. The victim's personal items including an empty can of bear spray were noted and photographed. The initial investigation group then left the scene. The bear was not encountered during this brief investigation.

**A digital camera with a telephoto lens was found within 4 feet of where the victim had been laying when found by rescuers. The camera was secured in the victim's vehicle at the entrance gate to the Baker's Hole Campground when the victim was transferred to the ambulance. A friend of the victim took possession of the vehicle and investigators did not have opportunity to examine the camera.*

The moose carcass **was not noticed by SAR or by the helicopter during the rescue recovery of the victim.*

1830 hours – USFS HEBGEN RANGER DISTRICT posts closure signs of area.

04-16-2021

1000 hours - Official order from the Custer Gallatin Forest Supervisor was signed and posted.

SITE INVESTIGATION and BEAR MORTALITY:

1400 hours –

***** An investigation team consisting of two USFS LEOs, three MTFWP Wardens and two MTFWP Bear Specialists with one dog meet at USFS/MTFWP residential site north of Baker's Hole. It was required and imperative to investigate the attack site due to its proximity to a public campground, cabin area and well used hiking trails.

The overall investigation, methodology of approach/hike, individual duties at the site and considering the bear's aggressive behavior during the victim's rescue, the bear may still be present and potentially charge were all discussed. Additionally, if the bear was present and would not "bump off" and did charge, it would have to be killed.

The investigation party then drove to Baker's Hole Campground proceeding to the south end of the south campground loop and ski trail.

*The investigation team began hiking south along the ski trail towards the mauling site. After approximately 45 yards of hiking, the team stopped, firing 2 cracker rounds and hollered. The dog began barking and alerted that it could smell a bear. One of the team members said he had seen something moving approximately 50 yards away in the trees east of the team and ski trail and stated it could be a bear. The dog was now growling and barking indicating a bear was close. The bear was travelling in a parallel direction to the team as they hiked south.

*The team waited a few minutes, then a proceeded another 80 yards, stopping to fire 3 additional cracker rounds. Members of the team alternated yelling during the entire hike to the site. The team again waited a few minutes and there were no other sightings or indications the bear was near or approaching. Though the dog was barking, the investigation team did not know if the bear had possibly moved out of the area or if it was still nearby.

*The team then hiked to where the old spur logging trail forked off the ski trail, downhill in a southeasterly direction. This junction is approximately 200 yards along the ski trail south of the campground loop. Upon stopping, 2 more cracker rounds were fired. Again, there was no indication the bear was nearby. Team members yelled as the dog continued to bark while they slowly walked down the spur trail towards the attack site. The trail had intermittent deadfall trees across it.

*Approximately 50 yards down the spur trail, several team members said they could see some brush and a small conifer move, indicating towards the northeast across an open boggy wet area.
All members stopped and readied in case it was the bear and it charged. Within seconds the bear silently charged out of the brush, head down, ears back and running full out. The bear crossed the open wet area and continued charging towards the team members, running into a patch of deep rotten snow in the willows. The bear floundered in the deep snow, dug its way clear and begin to charge again. At this point the decision was made to shoot the bear.

1435 hours - Multiple members shot at once killing the bear instantly.

*The bear was checked to confirm it was dead and to see if it had been previously captured or marked.

*A submerged, cached/buried moose carcass was found nearby.

*All scenes associated with the incidences were photographed.
*Distances between key locations were measured.
*Mr. Mock's personal items were collected as were items left by first responder medical staff.
*GC SAR was contacted, bringing a tracked ATV to move the bear carcass to vehicles in the campground.

1630 hours - All personnel and the bear carcass at vehicles in the campground.

INVESTIGATION FINDINGS:

The site of where the grizzly bear attacked Mr. Mock was investigated 3 times, on 15 April during an initial investigative overview after Mr. Mock had been recovered by SAR, on 16 April during the actual site investigation and on 21 April during the removal of the moose carcass.

Following the ski trail from the south end loop of Baker's Hole Campground and then the old logging spur trail, it is approximately 270 yards to the attack site.

The attack site was approximately 70 yards down an old logging spur trail running southeasterly from the ski trail. The site is at the end of the old logging spur located in mature LPP timber and at the edge of a boggy wet area.

Personal items found at the attack site area belonging to Mr. Mock included one muck-type boot, sunglasses, small plastic fishing tackle box, a winter cap, an empty can of bear spray* & holster, safety lock from bear-spray cannister, fishing pole and a half-empty juice container.
*The can of bear spray was the UDAP brand, 7.9ounce, Expiration 12/2023 S/N P1711-071135).

It was later discovered that a digital camera was found near Mr. Mock during the rescue but the camera was taken into the possession of Mr. Mock's friends. On 17 April, a MTFWP warden was able to view the memory card from the camera and did not find any pictures from the Baker's Hole area or from the day of the attack.

After the investigation team had to kill the bear on 16 April, a moose carcass was discovered cached in the water (Photo 3) near the site where Mr. Mock had been attacked. It was 47 yards from the cached moose carcass to the attack site. Searching the area around the moose carcass it was evident that a bear had been feeding on the moose for numerous days due to multiple and drying bear scats. It could not be determined what caused the death of the moose. Common causes of moose deaths are predation, ticks, winterkill (poor nutrition), meningeal artery worms and vehicle strikes. There were no broken long bones observed on the moose that are normally associated with a vehicle strike from nearby US Highway 191.



Photo 3. Moose carcass cached in water near the attack site.

The bear-spray safety lock, fishing pole and a half empty juice contains were discovered where it was determined Mr. Mock had been and first reacted defensively due to the bear. The bear-spray safety lock and juice container were 1 to 2 feet E x NE of the fishing pole. The fishing pole was approximately 6 feet away (NE) from where Mr. Mock had obviously been mauled. At the mauling site Mr. Mock's boot, tackle box, sunglasses, knit cap and empty bear-spay were found scattered in the snow. A diagram of Mr. Mock's personal items at the attack site can be viewed in Figure 2. The bear-spray can was empty and investigators assumed Mr. Mock had likely sprayed the entire can of bear-spray.

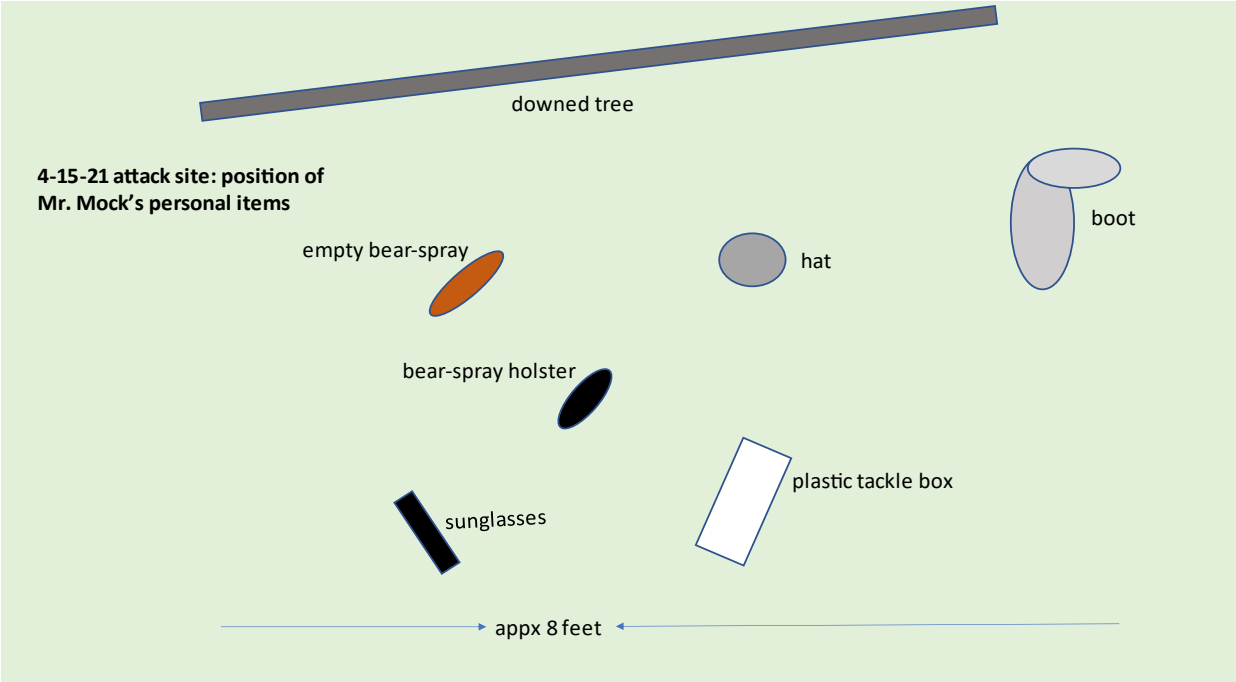


Figure 2. Position of personal items belonging to Mr. Mock found at the attack site.

Search and Rescue had found Mr. Mock 12 feet up the logging spur trail from where he had been attacked.

A diagram of the distances and location of moose carcass, attack site, bear and investigative team are shown in Figure 3. A satellite image of the locations and relationship of attack site to campground (south loop visible in upper left) and US Highway 191 are shown in Figure 4 and a closer view of the attack area is shown in Figure 5.

Anecdotal information from a friend in West Yellowstone of Mr. Mock's stated that he had talked with Carl Mock in the early afternoon (1342 hours) of 15 April. Mr. Mock said he was going home to get lunch and go back out that afternoon. This information indicates Mr. Mock had only been in the Baker's Hole area for a relatively short time before the bear attack occurred.

Mr. Mock's 911 call to WYPD was recorded. The 911 call lasted for 49 minutes and 47 seconds, 27 minutes into the call at 1609 hours, the dispatcher asked him (Mr. Mock) if he was out fishing. He responded "No, I was taking pictures (with moaning in that statement)" She asked him, "You were out taking pictures?" He then moans with an unintelligible response.

BEAR FINDINGS:

The bear was 20 yards northeast of the unknown moose carcass when it charged the investigation team, who were 57 yards from the bear across the boggy wet area.

The bear was killed 24 yards from the investigative team who were approximately 37 yards from the unknown cached moose carcass.

FIELD:
Examination of the bear revealed tattoos were visible in both upper inside lips.
No ear tags were present.
Overall body condition was a 4 on a scale of 1 to 5.
No visible recent wounds or injuries.
Teeth were worn with lower canine teeth broken and worn. Incisor teeth were worn smooth with some missing as is normal with aged bears. Field estimate of age was around 20 years old.
Tattoos were noted in both inside upper lips.
When the bear was loaded into a vehicle at the campground, it was evident the bear had been bear-sprayed by Mr. Mock during the attack as personnel began coughing from the bear-spray residue becoming airborne from handling the bear.

LABORATORY:
During the examination of the bear at MTFWP Region 3 Headquarters in Bozeman the bear-spray residue again physically affected investigators.

The bear weighed 411 pounds.

The tattoo was read as 504 in both upper inside lips. Tattoo 504 identified the bear as bear number 449 in the Inter-agency Grizzly Bear Study Team (IGBST) database for the Yellowstone Ecosystem.
Bear 449 was 6 years old when captured on 9/21/2003 at Cascade Creek, YNP by the IGBST during research capture efforts. Bear 449 had been lip tattooed in both upper lips with green ink, number 504 inside both upper lips (Photo 4.), ear tagged, fitted with a GPS/VHF radio-collared and implanted with a micro-chip at that time. Last known location of bear 449 was on 2/22/2004 at his den site near Nymph Lake, YNP. It was deemed a collar failure as the signal had been intermittent since the bear had been captured, collared, and released on site.



Photo 4. Tattoo number 504 in upper lip of bear 449.

Overtime, male bears are prone to losing ear tags and radio-collars when fighting with other male bears, plus radio-collars are designed to drop off bears.
No functioning micro-chip could be located on bear 449 during laboratory examination, which was not surprising after nearly 18 years since the chip was implanted.

Bear 449 had no previous conflict management captures or history.

A gastro-intestinal examination of bear 449 was conducted revealing moose hair, trachea cartilage, and muscle tissue along with grass/dirt debris. A piece of tissue that was suspected as skin and cartilage that was not identifiable or consistent with other tissues in the stomach was collected and submitted to the Wyoming Game and Fish Forensics Laboratory in Laramie, Wyoming for identification as to origin of tissue. Results were received 14 June 2021. The tissue was identified as originating from a grizzly bear (Ursus arctos). See Appendix B.

*The unknown grizzly bear tissue and its location in the lower stomach portion of bear 449 indicates 449 had possibly been in a very recent fight with another grizzly bear defending the moose carcass or fought taking the moose carcass from another grizzly bear. If this were the case, those interactions could have contributed to bear 449's overall aggressive defense of the moose carcass towards Mr. Mock, initial SAR and the Investigation Team.

Muscle (meat) tissue can persist for 14+ hours in the digestive tract of fully active and feeding brown (Ursus arctos) bears (Elfstro"m et al. 2013). Skin and cartilage tissue can persist longer due to slower gastro-intestinal digestion of the tissue and tissues could also persist longer if a bear was not actively consuming amounts of foods to move previously ingested food through the digestive tract. Skin and cartilage could persist in the digestive tract at an outside time of 2 to 3 days (pers. comm. Charlie Robbins Ph.D. -Washington State University, Pullman, WA.)

The skull/brain of bear 449 was submitted for rabies testing to the Montana Department of Livestock, Montana Veterinary Diagnostic Laboratory in Bozeman, Montana. The results were negative for rabies. See Appendix C.

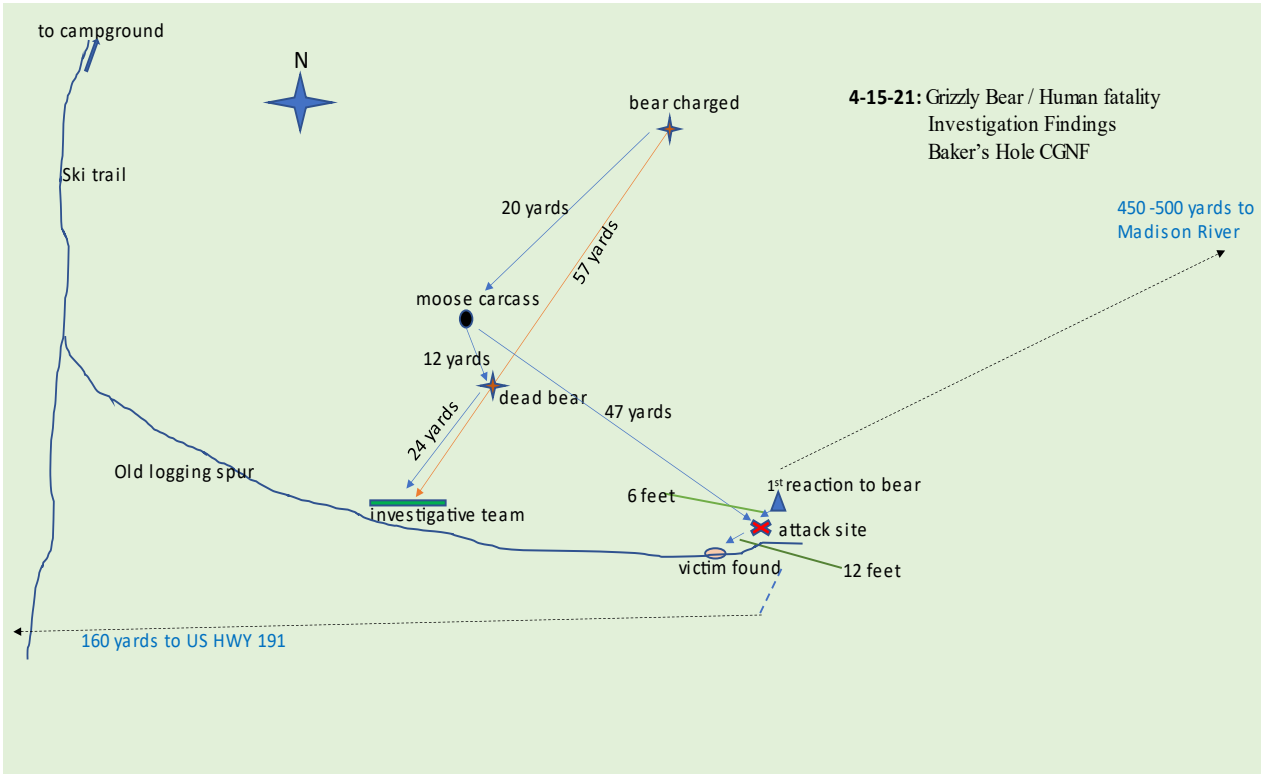


Figure 3. Distances and location of moose carcass, attack site, bear and investigative team near Baker's Hole Campground.



Figure 4. View of the relationship between the attack area, south end loop of Baker's Hole Campground and US Highway 191.

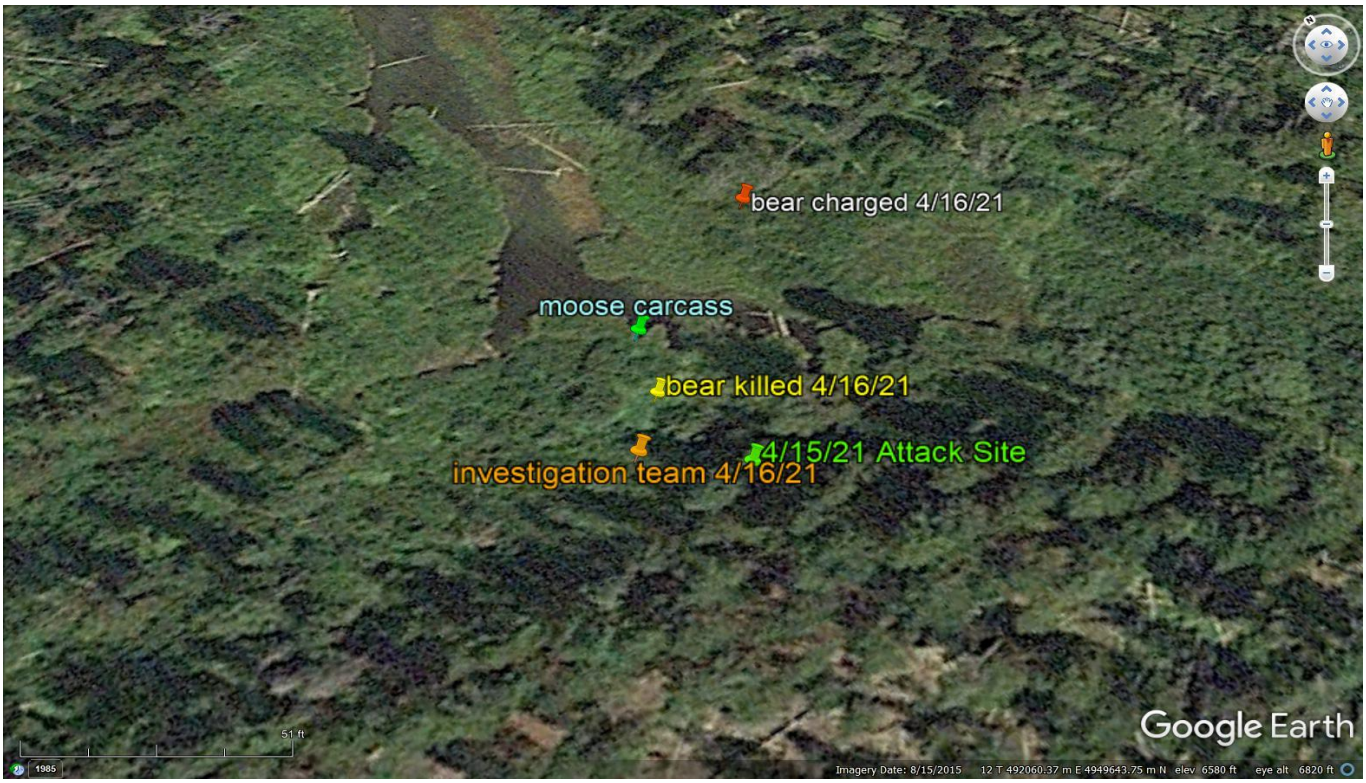


Figure 5. Closer view of the attack area and locations of significant points.

04-19-2021

CGNF Hebgen Basin District and MTFWP Bear Management discuss the known moose carcass, its potential to attract other bears, proximity to campground, hiking trails and the options for its removal. Dragging the moose carcass out of area would create a scent trail for other bears to follow to the campground and feasibility of doing so did not exist due to boggy wet area. Hebgen Basin District decided to use explosives for removal and would handle all logistics in the removal of the moose carcass.

04-21-21

REMOVAL (explosives) OF MOOSE CARCASS:

Personnel from the Hebgen Basin District CGNF, Bozeman District CGNF, Cody, Wyoming Bureau Land Management (BLM), MTFWP, GCSO and WYPD were all involved in the removal of the carcass.
The BLM flew a drone over the area for possible detection of another bear on or near the moose carcass. No bears were observed and the carcass did not appear to have been recently fed on. A USFS LEO and two MTFWP personnel provided security. CGNF field staff and certified explosive blasters were responsible for actual moose carcass positioning and blasting.

The moose carcass was successfully exploded into obscurity. The area remained closed to the public to allow for scavengers to utilize any small pieces of the moose and for the scent to dissipate.

04-30-2021 Custer Gallatin National Forest lifts closure and re-opens the area to public use.

CONCLUSION:

On 15 April 2021 prior to 1542 hours Mr. Charles (Carl) Wesley Mock was attacked by a grizzly bear near Baker's Hole Campground on the CGNF. When rescued Mr. Mock was found severely injured 12 feet west of the mauling site. Mr. Mock did not give statements or communicate with SAR as to the grizzly bear attack. Once in medical care Mr. Mock did not speak or was in condition to talk about the attack. Unfortunately, Mr. Mock died from the complications of his sustained severe head and neck injuries on 17 April 2021.

Alone, Mr. Mock had parked his vehicle at the entrance of CGNF Baker's Hole Campground to begin his hike and activities. The campground and entry are well posted with grizzly bear information.

It cannot be determined if Mr. Mock purposely or randomly went to the site of the attack. Mr. Mock was in possession of fishing gear and a telephoto lens camera. The closest point to the Madison River is approximately 400 yards northeast of the attack site.
From information provided by Mr. Mock's friend it is estimated Mr. Mock was in the Baker's Hole area for less than 1.5 hours. However, it cannot be determined exactly how much time Mr. Mock had been at the site area prior to being attacked.

Considering field investigation findings of the locations of the attack site, the cached moose carcass and the old logging spur trail, it seems apparent that Mr. Mock had walked along the ice packed ski trail and then down the logging spur trail, passing within 37 yards of the moose carcass to the location of the bear attack site. Either he had done so without being noticed by the bear or the bear came to the moose carcass after Mr. Mock had reached the area of the attack site, which was 47 yards from the moose carcass. The old logging spur/trail basically ends at the attack site.

Though Mr. Mock had told 911 dispatch that he was taking pictures, it cannot be confirmed what Mr. Mock was doing prior to the bear detecting and then attacking him, but the half empty juice container suggests Mr. Mock had likely stopped at the location before the bear detected him.

Field investigation and examination of Mr. Mock's fishing gear did not indicate he was or had been actively fishing when the attack occurred. Mr. Mock was in possession of a valid Montana fishing license, purchased March 10, 2021. Mr. Mock had not purchased a YNP fishing license on-line and vendors in West Yellowstone were not yet in possession of 2021 fishing licenses to sell. Fishing in YNP opened May 29th.

Due to the empty cannister of bear-spray and the bear-spray residue on the bear carcass (hair), Mr. Mock had obviously been aware of possible grizzly bear encounters in the area and had deployed his bear-spray at the bear. It is not known if he bear-sprayed towards the bear prior to the bear contacting him or at what points during the attack he used the spray. During field and lab investigations, it was confirmed that the bear had substantial bear-spray residue on its hair. Additionally, the overall effects of the bear-spray to the bear are not known but the bear had quit attacking Mr. Mock, indicating the bear was affected by the bear-spray. After the bear stopped attacking, Mr. Mock was able to move a short distance and call 911 emergency. However, the bear remained agitated, close to the attack site and near the moose carcass, which was unknown to rescuers during the initial SAR and again the next day (16 April) during the team investigation of the attack site area, when the male bear was killed as it charged the investigation team.

The tragic event of Mr. Mock being attacked by an adult male grizzly bear and subsequently dying from the attack, was the direct result of Mr. Mock's own purposeful or random placed proximity to a moose carcass that an adult male bear had cached and was actively feeding on. A short time before the adult male bear attacked Mr. Mock it may have defended or claimed the moose carcass from another grizzly bear. If so, this would have contributed to the bear's extended aggressive defense of the moose carcass.

BOR Recommendations:

The unfortunate subsequent death of Mr. Charles (Carl) Mock caused by a grizzly bear attack on 15 April 2021, reinforces the inherent possibility of people being involved in a serious grizzly bear encounter and the need for individuals to know and try to follow known safety recommendations.

Due to an increase in human use, bear population numbers and geographic grizzly bear distribution, more people are encountering grizzly bears. These encounters can and have resulted in human injuries or death. Multi-agency bear managers and researchers have conducted a continuous examination of these events. The goal is to provide public information to help reduce dangerous encounters and increase human safety in grizzly bear country.

There are standard grizzly bear safety messages for different public users and private landowners that can help minimize surprise encounters with grizzly bears, thereby reducing human injuries and possible death.

Some of the base safety messages are:

* Be constantly alert

* Hike or hunt with a partner(s)

* Make noise, if possible, to help avoid surprising a bear

* Secure food attractants at camps, homes, and work sites

* Do not run if you encounter a bear

* Avoid animal carcasses -watch for concentrations of scavengers (i.e. ravens)

* Carry and know how to use self-defense….bear-spray and or firearms

It is always recommended to carry bear-spray even if individuals carry firearms.

Kevin Frey – Grizzly Bear Specialist, Montana Fish Wildlife & Parks

References:

Elfstro¨m, M., Støen, O-G., Zedrosser, A., Warrington, I., Swenson, J.E. 2013: Gut retention time in captive brown bears Ursus arctos - Wildlife Biology 19: 317-324

Appendix A:

OFFICE OF THE SHERIFF / CORONER
GALLATIN COUNTY, MONTANA

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Jeremy Kopp
Undersheriff

Randy Jones
Chaplain

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On April 15, 2021 at approximately 1543 hours, I was dispatched by the West Yellowstone Police Department dispatch center to the report of a 40 year old male who reported he had been attacked by a bear. Dispatch reported the male was approximately 200 yards from the front entrance to the Bakers Hole Campground and was off trail. The male was later identified as Charles Wesley Mock of West Yellowstone.

I instructed dispatch to page out Hebgen Basin EMS and have them stage at the front entrance to the campground. An update from dispatch informed responding units that Mock had sustained facial injuries, was laying on the ground, there was only one bear and responders should go right at the main entrance.

I arrived on scene approximately 10 minutes after the initial dispatch. Also arriving on scene were Forest Service LEO Ryan Linhart (FS72), West Yellowstone PD officer Neil Courtis (686), Hebgen Basin Fire Chief Shane Grube (36) and Gallatin County SAR member Travis Mann. We all started a hasty search of the area, looking for foot prints in the snow near popular hiking areas. WYPD officer Leonel Sosa arrived a short time later and joined us in the search.

I assigned Chief Grube to take over Incident Command and help coordinate our search efforts. With a lot of ground to try to cover, more information was requested from dispatch. Unfortunately they were unable to triangulate the 911 call, but were still on the phone with Mock. Mock was able to communicate with dispatch, although garbled and hard to understand. Grube activated his siren in hopes that Mock would be able to hear it and possibly guide us closer. Mock was able to tell dispatch that he could hear the siren and that he was about ¼ away from the campers in the campground, toward town. He then said he was off the blue diamond ski trail.

This information gave us a definitive area to focus the search in. Grube asked Air Idaho in West Yellowstone to add some aerial search support and they launched. He also sent out a Search & Rescue page for a backcountry rescue. Linhart and Mann were closest to the trailhead at the southern part of the campground and immediately headed up the trail. Courtis and I followed behind, roughly three minutes behind them. We were joined by Sosa later, after Courtis and I stopped, having spotted the bear.

Approximately 200 yards south of the campground on the blue diamond trail, I spotted a bear that was about 80 yards east of our location. The bear was standing on its hind legs

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and making huffing noises at us. The bear then dropped to all fours and charged us, breaking off his charge after about 30 yards. We were yelling and hollering at the bear as he charged. Dispatch notified us that Mock could hear us yelling at the bear and he said the bear was very close to him. I notified other search units to respond to our location, knowing we were very close to Mock.

We proceeded south on the trail about another 20 yards until we discovered human footprints in the snow, heading east toward the location of the bear. We started following the footprints east and hollering at the bear who was still aggressively pacing the area and watching us. Approximately 70 yards later, we found Mock laying on the ground. He was seriously injured, having suffered significant head and facial injuries. The bear continued to stalk us, aggressively moving around us in a half circle at a distance of approximately 40 – 70 yards.

Courtis, Sosa and Mann provided scene security for us while Linhart and I provided medical care to Mock. None of the responders on scene had any medical gear with us. Linhart and I determined that we needed to somehow stop the large amount of blood that Mock was losing. Linhart took off his uniform top and removed his t-shirt while I continued to support Mock. Linhart wrapped the t-shirt around Mock's head and applied direct compression. Mock was having difficulty talking and breathing due to the amount of blood in his mouth. We made the decision to move him into the recovery position with Linhart supporting his head & neck and me rolling his body onto his side. This seemed to allow Mock better breathing.

The bear continued to stalk the group and made another false charge. At this point, I turned patient care over to Linhart while grabbing my rifle and providing additional security against the bear. Emergency medical personnel from Hebgen Basin and Air Idaho were able to hike into our location while we provided protection from the bear. Two Gallatin County Sheriff SAR members arrived on scene with two snowmobiles and a rescue toboggan. EMS personnel were able to bandage and wrap Mock's head, they placed him on a backboard and carried him the 70 yards uphill to the SAR rescue personnel and gear.

Mock was then transported to the ambulance at the entrance to the campground. The armed first responders then escorted the EMS crew out of the area and back to the campground. Due to snow and bad weather that had moved in during this incident, Air

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Idaho was unable to fly Mock to the hospital, so he was transported to Eastern Idaho Regional Medical Center in Idaho Falls by ambulance.

Fish, Wildlife and Parks LEO Robert Pohle (FG32) arrived. Officers Courtis, Sosa, Linhart and I escorted him back in to the scene of the attack so that he could take some quick pictures and log an accurate GPS location of the attack. The incident happened at 44.70002, -111.10018

Initial investigation at the scene indicated that Mock was likely attacked 15 feet east of the location he was laying at when we found him. It appeared that Mock was able to retrieve his bear spray from its holder and was able to deploy it (can was empty). Additional items on scene were a digital camera with a large telephoto lens, spin fishing rod, small plastic box of lures, and a backpack.

The following day on April 16, personnel from the Forest Service and FWP reentered the location of the bear attack and were charged by a bear. Even with seven people yelling, shooting explosive noise making shotgun rounds, and a dog barking at the bear; the bear continued to charge the group. They were forced to shoot the bear and killed it.

An investigation of the area revealed a large moose which had been buried and cached by the bear. This moose was about 35 – 40 yards away from the location where Mock was attacked. Forest Service requested an agency assist from me, requesting equipment and help removing the bear carcass from the woods. I arrived on scene with a tracked four-wheeler with attached winch. We were able to winch the moose up a short hill and drag it out to the campground across the snow covered trail. The bear was loaded into the back of a truck and taken by FWP for further evaluation and research.

Case closed – Search & Rescue and Agency Assist

Michael P. Gavagan

Deputy Mike Gavagan – Badge #635
Gallatin County Sheriff's Office

Footnote: it was the bear carcass that was winched up a short hill, not the moose carcass.

FWP21CAD001860 Robert Pohle

On April 15, 2021 at approximately 1630 hours, I, Game Warden (GW) Robert Pohle was home off shift when I received a Gallatin County Search and Rescue page on my personal phone requesting help searching for a 40 year old male who had been attacked by a bear. The location of the attack was Bakers Hole. Upon seeing this I called the West Yellowstone Police Department (WYPD) to let them know I was responding, inquiring if the attack occurred inside Yellowstone National Park (YNP) or the county. I was told dispatch was having a difficult time locating the victim, later identified as Charles (Carl) Wesley Mock (DOB 03/24/2981). **Note:** Due to some technical issue, Carl's phone was not providing coordinates to the 911 system allowing for a back trace. After hanging up with WYPD, I called Montana Fish Wildlife & Parks (FWP) Bear Management Specialist (BMS) Kevin Frey, leaving him a voice mail notifying him of the incident. As my Sergeant was away, I called Warden Captain Adam Pankratz leaving him a voice mail as well. My final call was to Sergeant Coy Kline in Butte, Montana, so I was able to directly notify a supervisor of the incident.

After gearing up, I responded, lights and siren to the Bakers Hole area. While en route I called Montana Highway Patrol (MHP) dispatch to have a call for service started. Captain Pankratz returned my call and after relaying the limited information I had, we agreed if I saw a bear in the vicinity of Bakers Hole, it was to be dispatched.

As I arrived to the Bakers Hole area, I radioed Hebgen Basin Fire Chief Shane Grube who was Incident Commander (IC), requesting info on where other responders were. I was instructed to come to the south loop of Bakers Hole United States Forest Service (USFS) campground where IC was staged. Chief Grube let me know Carl had been located and was in the process of being extricated by law enforcement and medical staff.

I met the group of first responders as they were exfiltrating from the attack location with Carl. Carl was heavily bandaged, being towed on a Search and Rescue (SAR) sled behind a snowmobile. Gallatin County Sheriffs Office (GCSO) Deputy Mike Gavagan, WYPD Officers Leonel Sosa and Neil Courtis, and USFS Law Enforcement Officer (LEO) Ryan Linhart gave me a quick brief of the situation. The officers stated they encountered the bear several times during the search for Carl. During the first encounter the bear bluff charged the group of officers several times at approximately 100 yards. During this first encounter, they noticed what appeared to be blood on the head/mouth of the bear. As they continued to search for Carl, they stated the bear hung out in the area refusing to leave, even while medics worked on Carl and the snowmobiles moved in to extract Carl. This information was concerning to me, as with that much human activity, it is not normal behavior for a bear to continue to hang out. **Note:** I learned several days later that while searching for Carl, a SAR helicopter was flying low over the area assisting in the search. Upon hearing the bear was still in the area, I went back to the attack scene with Officers Sosa, Courtis and Deputy Gavagan, with the intent to dispatch the bear.

When we arrived at the attack scene, I observed no indication that a bear was in the immediate area. Not identifying an immediate threat, I took several photos to

document the scene and used my OnX hunt maps to get Global Positioning System (GPS) coordinates of that location. The location of the scene is 44.70002, -111.10018.
The scene consisted of a patch of snow soaked in what appeared to be blood. A rubber boot, fishing tackle box, sun glasses and a blood soaked beanie cap were strewn about the patch of snow. A blood splattered can of bear spray and holster, later determined to be empty, laid on the edge of the snow. The orange safety cap from the bear spray was several feet away in the grass. A fishing pole and juice bottle lay off to the south east. North west of the snow was the area where medical staff performed first aid. There was various medical packaging littering the ground, clothing that had been cut off Carl and used bandages. After quick photographic documentation of the site, all units returned to the IC.
Note: The can of bear spray was the UDAP brand, 7.9ounce, Expiration 12/2023 S/N P1711-071135).
After returning to the IC, I met with USFS District Ranger (DR) Jason Brey, Chief Grube and USFS LEO Linhart to discuss what the preliminary plan was for public safety due to the popularity the location held for recreationists. DR Brey stated the USFS was closing the area and evacuating the few campground hosts who were prepping the facility for opening. Chief Grube informed me that Carl had been transported via ground ambulance to Idaho Falls, due to weather the helicopter was grounded. The helicopters medical crew however was in the ambulance providing patient care to Carl. I cleared the scene while calling in updates to the BMS while the USFS put up barricades and signs stating bear in area and closure information.
Since Carl was going to a hospital in Idaho, I contacted an Idaho Fish and Game (IDFG) Warden requesting assistance. I requested a Warden meet Carl at the hospital to collect clothing and if possible, take photos of the injuries and conduct a quick interview as is standard procedure in a Wildlife Human Attack (WHART) incident. I was later notified by IDFG they had been unable to interview Carl or take photos as he was on a ventilator and rushed straight into the doctors. IDFG were able to collect Carl's pants which medical crews had cut off of him. **Note:** I met IDFG Investigator Lauren Lane on April 17th, 2021 in Ashton ID to collect that item.
With night approaching, I talked with BMS Frey and discussed the next steps for the following morning. As I headed home, I came across a vehicle parked inside the USFS emergency closure. I notified WYPD dispatch I would be out looking for the occupants as we did not know the circumstances behind the bear attack and could not leave them in the area without notification of the incident and closure. After finding the individual had been fishing outside of closure on the Madison River, it was determined his car had been parked there before the closure went into effect. He left the scene without incident. Clearing that contact LEO Linhart and I observed another vehicle attempt to enter the closure by the means of the FWP driveway before backing out heading south on US HWY191 where they turned into the Bakers Hole Campground drive. USFS LEO Linhart and I contacted that individual to advise them of the closure and they commented they had heard of a bear attack and were out looking to take pictures of the bear.

Footnote: A fishing pole and juice bottle lay off to the northwest. West of the snow was the area…..

Note: Between the attack and when investigators returned to the scene the following day, law enforcement made multiple contacts of people trying to access the closure area. A white Ford F150 with ID license plates stopped by my residence before the attack, while I was off shift. The 2 male occupants of that Ford inquired about a sow grizzly and 2 cubs they had heard were active in the Basin which I was unaware of. They were wearing camo clothing and had a camera with large lenses on the center console. This indicated to me they were wildlife photographers looking for bears. I observed that vehicle along US HWY191 when I initially responded to the scene and then again turning into the Bakers Hole Campground drive as units were clearing. When I last saw that vehicle, USFS personnel were talking to the occupants.

The following morning, April 16, 2021, I was contacted by Captain Pankratz. He informed me to hold off going to the Bozeman Regional Office (BRO) as he was headed down to West Yellowstone, that he would contact Bear Management and we would then plan to meet and return to the attack scene. My decision to return to the scene was made due to the following considerations;

- Without being able to interview Carl, it was unknown what precipitated the attack. We did not know if it was a predatory attack, defensive attack or surprise encounter.
- We had no time line of when an interview with Carl may take place.
- No evidence was collected the day of the attack except for photos and the pants which IDFG retrieved from the hospital.
- It was forecast to start snow/rain in a couple days which would diminish any evidence on scene.
- The area the attack took place is a "high use" recreation area. It is common for anglers, hikers, campers and skiers to frequent the Bakers hole area.
- As noted earlier, multiple law enforcement contacts had been made concerning individuals trying to take pictures of bears. News of bear activity was drawing them in.
- This close to a weekend, we could expect a significant number of recreationists wanting to use the area. This would be compounded by the opening of Yellowstone National Park (YNP) for the summer season and news of a bear active in the area.
- It was imperative that we find out what precipitated the attack. While it was likely guarding a carcass, it was equally likely it was a surprise encounter, it was a bear with cubs or it was a predatory attack. Especially given the volume of human activity in the area while rescuing Carl did not scare the animal away.

After careful consideration, it was decided the significant risk to public safety resulting from the unknown causation of the attack outweighed the risk of a potential bear encounter from a re-entry to the scene. Phone calls were made and a team of seven (7) plus one (1) bear dog was assembled. We met at approximately 1400 hours and after a quick briefing on the situation entered Bakers Hole Campground.

Note: The team consisted of Captain Pankratz, GW Daven Thorne, GW Robert Pohle, USFS LEO Noah Pieprzyca, USFS LEO Linhart, BMS Frey (K9 Loki) and BMS

Jeremiah Smith. All team members were armed with lethal firepower and we had bear spray available.
We began our entry to the attack site, following the Boundary Ski trail that exits out of the south loop of Bakers Hole Campground. All members yelled out randomly making noise to alert a bear, humans were present. K9 Loki added to the noise barking loudly. At approximately the same location responders observed the bear the day prior, USFS LEO Pieprzyca alerted the team he saw something brown moving south towards the attack site. The movement came to the east of our location in a marshy area. It was unknown at that point if it was a bear as there were fresh bison tracks in the snow and mud. The team held that position as multiple cracker shells were fired and more yelling was made in attempts to haze the animal away. After several minutes holding that position and not seeing further movement, we continued down the trail. Along the way the team continued yelling and more cracker shells were fired. Specialist Frey alerted the team that the behavior and loud incessant barking from K9 Loki indicated a bear was nearby. **Note:** We were walking into a northerly breeze which would bring any bear scent directly to K9 Loki.
The attack site is approximately 50 yards to the south east of the main Boundary Ski trail down an old, over grown USFS road. That road had multiple downed trees laying across it and others growing through the former road bed. As we turned that way, we got approximately 30 yards from the attack site when BMS Smith alerted us to a bear. The bear was east of our location, at the edge of a small marshy clearing. It was moving south east before it stopped. At that point the bear looked at us for a split second before immediately changing directions and charging directly towards the team. The bear had to clear the marshy area before encountering willows partially buried in snow. As the bear cleared the marshy area, it hit the snow in the willows and was slowed due to the depth and softness. We held fast yelling as the bear kept pushing through the deep snow in a fashion similar to the way a dog runs through deep snow in a field. As the bear continued, it quickly became apparent this was not a bluff charge. The snow while deepest where the bear was currently located, began to thin before disappearing the closer you got towards the team's location. In the event the bear cleared the deep snow and regained traction, there would be no time for the team to react before contact was made with a human, resulting in serious injury or death.
In the split second it took to process what was taking place, I made the decision I was going to engage the bear and shoot it before it was able to gain traction again. I called out loud that I was taking a shot, before firing my shotgun. Afterwards I learned both Specialist Frey and Smith called out to shoot as well. Multiple shots were fired and I could see the impact of several rounds on the bear's body as they hit. The bear slumped down in the snow before moving again. USFS LEO Pieprzyca was armed with an issued 45/70 government rifle and heavy 540 grain bullets designed for penetration. At the instruction of Specialist Frey, USFS LEO Pieprzyca fired a couple rounds into the bear. **Note:** Once shot, it is absolutely imperative to prevent unnecessary pain and suffering of the bear and for public safety, we ensure the bear is deceased. After the bear stopped moving, the other team members covered Specialist Smith and I as we

Footnote: We were walking into a southerly breeze. The bear was northeast of our location…
It was moving southwest before it stopped.

approached the bear to check it's status. As we still did not know the sex of the bear, we approached ready to engage another animal should it have been a female with cubs. Once confirmed dead, I assisted Specialist Smith in rolling the bear over where we discovered it was an adult male. While others maintained a security perimeter and Bear Management began their checks on the bear, I took pictures of the scene, only to discover that during the charge the bear had run over a cached moose carcass, buried in the marshy area. It was difficult to see the moose as it was mostly buried and I could not smell anything that would indicate there was a carcass there.

I used my OnX Hunt maps to get GPS coordinates of the following locations;

- 44.70168, -111.10067 -- Location of the south loop of Bakers Hole Campground.
- 44.69999, -111.10053 -- Location I was standing at when I shot the charging bear.
- 44.70010, -111.10025 -- Location of deceased bear once rolled over.
- 44.70017, -111.10021 -- Location of cached moose carcass.
- 44.70002, -111.10018 -- Location of the attack site from 04/15/2021.

A brief conversation occurred with BMS Frey and it was evident that the primary causation of the bear attack on Carl was the defense of a food source. It is unknown if Carl knew the carcass was there or why he was in that location. The articles of clothing and Carl's possessions left on scene were collected. The only items retained for evidence were the discharged can of bear spray, a bloody beanie soft cap and the pants collected by IDFG. Reports indicated the attack focused on Carl's head, resulting in major head trauma with very little injury to other parts of his body. As such it is unlikely that the bear would have left any saliva or blood on other articles clothing in significant volume to provide any useable evidence to identify an individual animal. The fact the WHART team experienced a strikingly similar encounter less than 24 hours after the initial attack, resulting in a dead male bear leads one to believe the deceased bear was responsible for the attack. It would be unlikely to have multiple dominate male bears so close to such a valuable food source coexisting as the more dominate would chase the lesser male away.

USFS LEO Linhart arranged for Deputy Gavagan to bring a tracked All Terrain Vehicle (ATV) to retrieve the dead bear, as well as USFS Sawyer to clear the path. The ATV's winch was used to retrieve the bear where it was loaded into Captain Pankratz truck and taken to the BRO. While loading the bear, I noticed a burning, tingling sensation in my nose and lungs, coughing several times. That sensation was consistent with past exposure I have had to bear spray, albeit at a much lower dose. Later, while going through Carl's belongings collected from the attack site, I experienced the same sensation of burning and coughing. This indicates bear spray was discharged some time during the attack, consistent with the empty canister of bear spray found. Whether the spray was successfully deployed on the bear, or if the residue on the bear and Carl's belongings was the result of cross contamination, will forever be unknown.

Note: I was notified there had been a digital camera with Carl after the fact. That camera was passed off to his friends before my arrival during the initial rescue. On April 17, 2021, I met Keith Johnson (DOB 06/15/1985) at Back Country Adventures in West Yellowstone and was able to view the pictures on the memory card for the month of April 2021. I did not observe any pictures on that card similar to the attack site. Whether any pictures were removed before my observation is unknown, as control was lost over the camera.

I was notified the morning of April 17, 2021 by Captain Pankratz that Carl had succumbed to his injuries while in the hospital. As a result, investigators will never know for certain the events that led up to this bear attack.

No Further Action Taken. Robert Pohle FG32

Appendix B:

WYOMING GAME AND FISH DEPARTMENT 5400 Bishop Blvd. Cheyenne, WY 82006 Phone: (307) 777-4600 Fax: (307) 777-4699 wgfd.wyo.gov **GOVERNOR** MARK GORDON **DIRECTOR** BRIAN R. NESVIK **COMMISSIONERS** PETER J. DUBE – President GAY LYNN BYRD – Vice President RALPH BROKAW MARK JOLOVICH RICHARD LADWIG ASHLEE LUNDVALL KENNETH D. ROBERTS

Wyoming Game and Fish Wildlife Forensic and Fish Health Laboratory
1212 South Adams Street
Laramie, WY 82070
Phone: (307) 721-1921

FORENSIC LABORATORY EXAMINATION REPORT LAB NO.
21-27-W-CAF

DATE:
June 14, 2021

SUBMITTERS: Kevin Frey
Grizzly Bear Specialist
AGENCY:
Montana Fish, Wildlife and Parks
1400 South 19th
Bozeman, MT 59718

EXAMINER: Tasha Bauman
Lauren Schumacher
CASE NO.: 2021-04
PURPOSE: Species identification of the submitted item.

EVIDENCE RECEIVED:
Tasha Bauman, Forensic Specialist, received the following item via Federal Express on May 7, 2021:
Item #1: "Possible skin/cartilage tissue from stomach of grizzly bear"

EXAMINATIONS CONDUCTED:
Tests for species and family level identification were performed using serological and enzymatic electrophoretic techniques. Species identification was also performed using an amplified portion of the mitochondrial DNA cytochrome b gene and subsequent sequencing of the amplicon (mcb398 and mcb869). The sequence obtained was matched against sequences in the National Center for Biotechnology Information DNA database (www.ncbi.nlm.hih.gov).

RESULTS:
1) Species identification, by serological and enzymatic electrophoretic techniques, of item #1 was non-reactive.
2) The sequence of item #1 is 99% (max identity) to grizzly bear (*Ursus arctos*) sequences in the GenBank database over (395/401) base pairs indicating the sample originated from grizzly bear.

CONCLUSIONS:
1) Item #1 originated from grizzly bear.

DISPOSITION OF SAMPLES:
The item was retained in the custody of the examiners.

SEROLOGY AND DNA EXAMINER:_____
Tasha Bauman, M.S.
Forensic Specialist

SEROLOGY AND DNA EXAMINER:_____
Lauren Schumacher, M.S.
Forensic Analyst

Appendix C:

MONTANA VETERINARY DIAGNOSTIC LABORATORY

PHONE: (406) 994-4885
FAX: (406) 994-6344
WEBSITE: www.liv.mt.gov/lab
WEB RESULTS: https://mvdl.mt.gov
E-MAIL: mvdl@mt.gov

1911 WEST LINCOLN STREET
BOZEMAN, MT 59718

JENNIFER RAMSEY DVM FW & P
1400 S. 19TH AVE
BOZEMAN MT 59718

CASE:21-18156
Name/ID: FWP Grizzly
Species: Brown Bear (Grizzly)

Sex: Unknown **Age:** 20 Years

Owner: Montana FWP

COMPLETE REPORT 04/19/21

Sample Collection: 04/16/21
Accession: 04/19/21

Case Coordinator Authorization: SH

Previous Reports
04/19/21
04/19/21
04/19/21

RABIES

Rabies	Brain	Verified on: 04/19/21 by: SH
Animal ID	Test	Result
FWP Grizzly	Condition	Fair
	Human Exposure	Yes
	Rabies Final Result	**Negative**

From: Fortin-Noreus, Jennifer K
To: Cooley, Hilary
Subject: FW: [EXTERNAL] annual report 2021
Date: Tuesday, January 4, 2022 12:04:49 PM
Attachments: Sarmento Annual Report 2021.pdf

In case he didn't send it to you too.

From: Sarmento, Wesley <Wesley.Sarmento@mt.gov>
Sent: Tuesday, January 4, 2022 8:47 AM
To: Fortin-Noreus, Jennifer K <jennifer_fortin-noreus@fws.gov>
Subject: [EXTERNAL] annual report 2021

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Happy new year Jennifer,

Here is my annual report for 2021. Please let me know if you have any questions or concerns.

Thanks for all your help,
Wesley

2021 - Grizzly Bear Management Efforts – Region 4 Conrad Office

Period Covered: 01/01/2021 – 12/31/2021

Wesley Sarmento, Bear Management Specialist
Jack Austin, Bear Management Technician
Montana Fish, Wildlife and Parks
514 S. Front Street, Suite C. Conrad, MT 59425. 406-450-1097

Synopsis

The 2021 work season differed from past efforts because FWP administrative Region 4 was not divided into two separate grizzly bear management districts. This year, both bear managers shared the entire region, with whoever closest and available responding to bear calls. Thus, these summary statistics don't necessarily provide the whole representation of bear management efforts across the region, but instead reflect the work coordinated by the Conrad field office. Grizzly bears in the area remain federally protected via the Endangered Species Act, thus final management authority is under the United States Fish and Wildlife Service.



Figure 1: Public meeting and safety training in the town of Big Sandy, following observations of grizzlies in the area.

Conflict Prevention and Response Efforts

- Participated in 10 organized education events involving over 364 people, including public meetings in Lewistown and Big Sandy, where grizzlies are just showing up (Fig. 1)
- Provided bear spray training to over 160 people
- Donated ≥ 33 bear sprays to public
- Installed 16 new steel bear aware signs
- Communicated 156 bear aware alerts to let people know about bear presence

- Established first call tree for Dupuyer
- Answered 144 service requests, 208 contacts for information, 49 bear observations, & 44 bear complaints (445 phone contacts total)
- Helped create a bird hunter bear aware video
- Removed the carcasses of 45 dead animals
- Supervised carcass driver who picked up 96 dead animals for 34 producers
- Cleaned up >19,596 lbs. of spilled grain (Fig. 2)
- Provided 1 bear proof garbage can
- Distributed 5 air horns
- Provided 1 guard dog to grain producer for conflict prevention and research project (Fig.3)
- Deployed ≥ 56 scare devices
- Deployed ≥ 65 trail cameras
- Helped obtain a $4,000 Vital Ground grant for new Choteau bear team
- Loaned out grain vacuum trailer to Choteau team and Blackfeet Fish and Wildlife
- Obtained 12 grizzly bear DNA samples
- Lent one paintball marker
- 279 trap nights total for capturing grizzly bears
- Hazed grizzly bears 22 times with 54 cracker-shells, > 50 paintballs, and 3 rubber bullets
- Built 10 permanent electric fences, 5 temporary electric fences, and repaired 4 fences
- Helped identify grizzly bear relocation sites for public comment and commission review
- Coordinated FWP R4 maintenance team building/installing 1 bear-proof grain bin door
- Helped establish range rider pilot program on Upper Dupuyer Creek
- Coauthored successful $70k Safari Club International grant for conflict preventionist
- Grizzlies detected for the first time in the Upper Missouri Breaks National Monument



Figure 2: Thousands of pounds of spilled grain that we removed, then donated to neighbor for feed (was e-fenced).



Figure 3: Livestock guard dog deployed at farm with grain spills to test its deterrence efficacy.

Human-Grizzly Bear Complaints

2021 was a relatively mild year for grizzly bear conflicts. We received 44 complaints about bears this year, of which nine were transferred to the Choteau team, and 33 were confirmed as bear issues by the Conrad team (Fig 4). Of those confirmed bear issues, 20 were conflicts where bears caused property damage or obtained reasonably secured attractants, while 13 complaints were preemptive responses where bears were near people or obtaining unsecured attractants (Fig. 5). Of the conflicts, there were 15 livestock depredations and five property damage complaints. Livestock loss caused by grizzlies totaled ten calves, two cows, one beehive, and four sheep.

Complaint type	Number
Cattle	12
Near people	5
Property damage	5
Harvested grain	3
Garbage	2
Birdseed	2
Sheep	2
Beehives	1
Encounter	1
Total	**33**

Figure 4: Bear complaints confirmed by Conrad team in 2021.

Most of the livestock loss occurred on Dupuyer creek (Fig. 6). Bears caused property damage on; two grain bags, one haylage bag, two bird coops. For bears using unsecured food – twice each for birdseed and garbage, and three times for grain spills. There were no attacks this year, but one encounter – people bumped a bear at close range and it ran off. We received five complaints about bears near people without any attractant being acquired. We responded to all calls as quickly as possible, with most of our bear complaint responses occurring within 30 minutes.

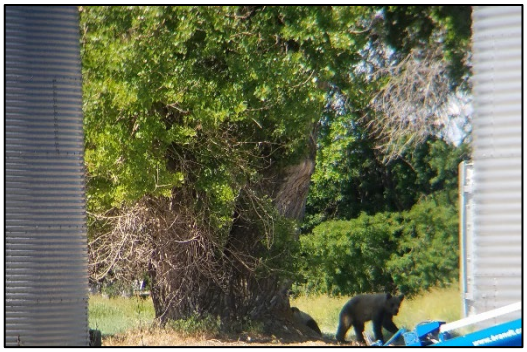


Figure 5: Two yearling grizzlies at unoccupied farm eating spilled grain.

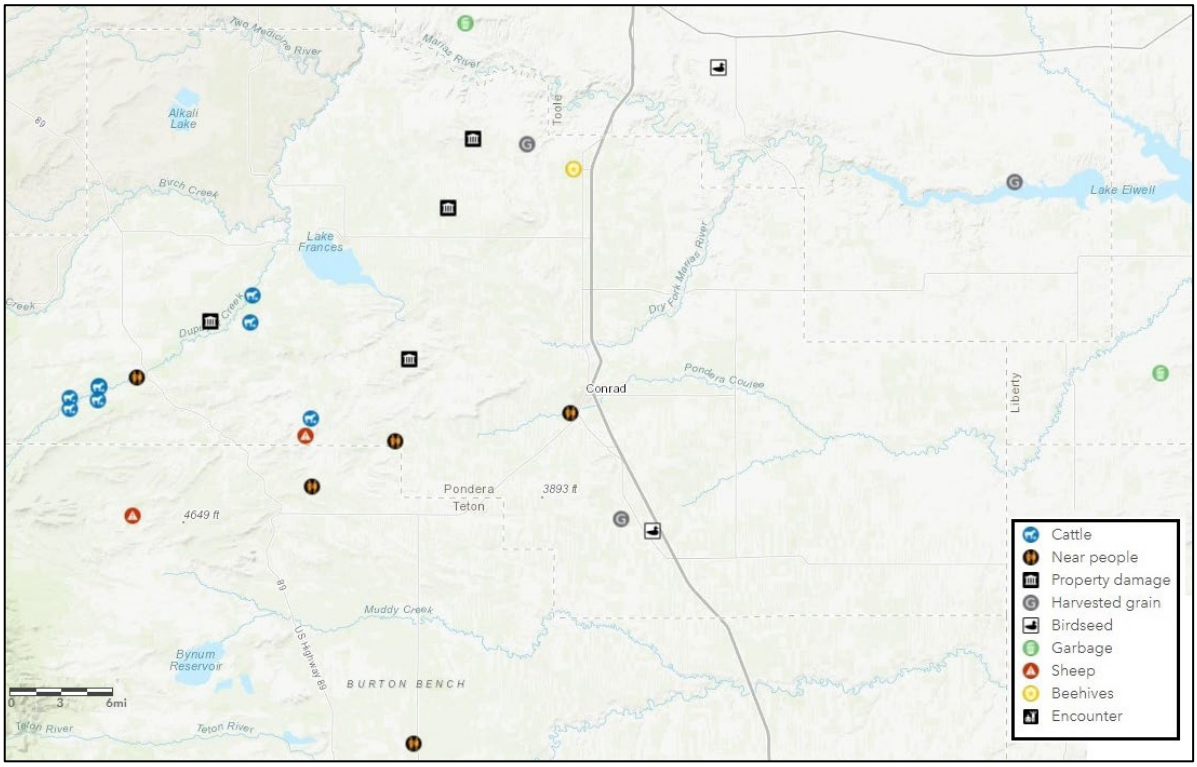


Figure 6. Map of 2021 grizzly bear complaints. Six complaints are outside map area, including two calf depredations near Augusta, two cow depredations in the Big Snowy mountains, and one bird coop damage and encounter near Sun River.

Grizzly Bear Captures

1) In conjunction with USDA, a non-target adult female captured on Dupuyer Creek and relocated to Glacier National Park (4/28).
2) In conjunction with USDA, an adult male euthanized in Fergus County due to depredation on two adult cows, as relocation wouldn't have reasonably eliminated the issue (5/12).
3) In conjunction with USDA, an adult male euthanized on Dupuyer Creek for several calf depredations, as relocation would not have reasonably eliminated the threat (5/26).
4) Yearling male caught south of Conrad for accessing spilled grain near residence and not responding to hazing or conflict prevention equipment (6/23). Relocated to Pike Creek.
5) Subadult female caught for a research project testing if guard dogs are an effective bear deterrent for farmsteads with abundant grain spills (8/20).

6) Subadult female for a research project testing if guard dogs are an effective bear deterrent for farmsteads with abundant grain spills (8/29).
7) Subadult male caught for a research project testing if guard dogs are an effective bear deterrent for farmsteads with abundant grain spills (9/6).
8) An adult male caught for a research project testing if guard dogs are an effective bear deterrent for farmsteads with abundant grain spills (9/14).
9) An adult female caught for a research project testing if guard dogs are an effective bear deterrent for farmsteads with abundant grain spills (9/16).
10) A subadult female caught for a research project testing if guard dogs are an effective bear deterrent for farmsteads with abundant grain spills (10/16).

Grizzly Bear Mortalities

1) Adult male euthanized in the Big Snowy Mountains (Fergus County) due to depredation on two adult cows (5/12).
2) Adult male euthanized on Dupuyer Creek for several calf depredations (5/26).
3) Adult male bear was found dead near Marias River (10/20). Death under investigation.

Acknowledgements

Support for conflict prevention work was provided by Western Bear Foundation, Vital Ground Foundation, Defenders of Wildlife, United States Fish and Wildlife Service, Utah State University, Conservation Collaborative, Natural Resources Defense Council, and Montana Outdoor Legacy Foundation. We greatly appreciate USDA Wildlife Services management efforts – Skippy Sims, John/Kurt Miedtke, Glenn Hall, Luke Peebles, Dymond Running-Crane, Kraig Glazier, and Dr. Young. Big thanks to our call coordinators for keeping communities informed. We also thank local and county law enforcement for their assistance. We appreciate people inviting us out to give presentations. Also, thanks to the folks who proactively prevent bears from coming near residences, and for communicating with us nicely when they do. Thanks to producers for their patience, allowing conflict prevention work, and for coordination with Rocky Mountain Front Ranchlands group and Marias River Livestock Association. Additionally, we thank FWP biologists, managers, wardens, maintenance crew (George Larson), and support staff for their assistance with resolving human-bear conflicts. Thanks to the NCDE bear management team – John Waller, Tim Manley, Jamie Jonkel, Chad White, Daniel McHugh, Cecily Costello, Lori Roberts, Hilary Cooley, et al. Thanks to Glacier Park and US Forest Service for relocation sites. We appreciate the collaborative efforts with Blackfeet Fish and Wildlife. Thanks to our guard dog technician, Ali Morgan, for her work and our range rider, Preston Spotted Eagle, for his (Fig 6). Thanks to Sarah Zielke and other volunteers for their responsive efforts. Thanks to the carcass pickup driver. Finally, a special thanks to Rock Creek Airedales for donating a dog.



Figure 6: Dupuyer creek range rider, Preston Spotted Eagle, saddles up for a ride with our wolf management specialist, Ty Smucker.

From: Kasworm, Wayne
To: Cooley, Hilary; Fortin-Noreus, Jennifer K
Subject: FW: [EXTERNAL] annual report 2021
Date: Tuesday, January 4, 2022 12:27:07 PM
Attachments: Sarmento Annual Report 2021.pdf

Don't know if you got this or not?

Wayne

From: Sarmento, Wesley <Wesley.Sarmento@mt.gov>
Sent: Tuesday, January 4, 2022 9:14 AM
To: Kasworm, Wayne <wayne_kasworm@fws.gov>
Subject: [EXTERNAL] annual report 2021

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Hey Wayne,

Here is my annual report for 2021. Please let me know if you have any questions or concerns.

Happy new year.

As always thanks for all your help,
Wesley

2021 - Grizzly Bear Management Efforts – Region 4 Conrad Office

Period Covered: 01/01/2021 – 12/31/2021

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Synopsis

The 2021 work season differed from past efforts because FWP administrative Region 4 was not divided into two separate grizzly bear management districts. This year, both bear managers shared the entire region, with whoever closest and available responding to bear calls. Thus, these summary statistics don't necessarily provide the whole representation of bear management efforts across the region, but instead reflect the work coordinated by the Conrad field office. Grizzly bears in the area remain federally protected via the Endangered Species Act, thus final management authority is under the United States Fish and Wildlife Service.



Figure 1: Public meeting and safety training in the town of Big Sandy, following observations of grizzlies in the area.

Conflict Prevention and Response Efforts

- Participated in 10 organized education events involving over 364 people, including public meetings in Lewistown and Big Sandy, where grizzlies are just showing up (Fig. 1)
- Provided bear spray training to over 160 people
- Donated ≥ 33 bear sprays to public
- Installed 16 new steel bear aware signs
- Communicated 156 bear aware alerts to let people know about bear presence

- Established first call tree for Dupuyer
- Answered 144 service requests, 208 contacts for information, 49 bear observations, & 44 bear complaints (445 phone contacts total)
- Helped create a bird hunter bear aware video
- Removed the carcasses of 45 dead animals
- Supervised carcass driver who picked up 96 dead animals for 34 producers
- Cleaned up >19,596 lbs. of spilled grain (Fig. 2)
- Provided 1 bear proof garbage can
- Distributed 5 air horns
- Provided 1 guard dog to grain producer for conflict prevention and research project (Fig.3)
- Deployed ≥ 56 scare devices
- Deployed ≥ 65 trail cameras
- Helped obtain a $4,000 Vital Ground grant for new Choteau bear team
- Loaned out grain vacuum trailer to Choteau team and Blackfeet Fish and Wildlife
- Obtained 12 grizzly bear DNA samples
- Lent one paintball marker
- 279 trap nights total for capturing grizzly bears
- Hazed grizzly bears 22 times with 54 cracker-shells, > 50 paintballs, and 3 rubber bullets
- Built 10 permanent electric fences, 5 temporary electric fences, and repaired 4 fences
- Helped identify grizzly bear relocation sites for public comment and commission review
- Coordinated FWP R4 maintenance team building/installing 1 bear-proof grain bin door
- Helped establish range rider pilot program on Upper Dupuyer Creek
- Coauthored successful $70k Safari Club International grant for conflict preventionist
- Grizzlies detected for the first time in the Upper Missouri Breaks National Monument



Figure 2: Thousands of pounds of spilled grain that we removed, then donated to neighbor for feed (was e-fenced).



Figure 3: Livestock guard dog deployed at farm with grain spills to test its deterrence efficacy.

Human-Grizzly Bear Complaints

2021 was a relatively mild year for grizzly bear conflicts. We received 44 complaints about bears this year, of which nine were transferred to the Choteau team, and 33 were confirmed as bear issues by the Conrad team (Fig 4). Of those confirmed bear issues, 20 were conflicts where bears caused property damage or obtained reasonably secured attractants, while 13 complaints were preemptive responses where bears were near people or obtaining unsecured attractants (Fig. 5). Of the conflicts, there were 15 livestock depredations and five property damage complaints. Livestock loss caused by grizzlies totaled ten calves, two cows, one beehive, and four sheep.

Complaint type	Number
Cattle	12
Near people	5
Property damage	5
Harvested grain	3
Garbage	2
Birdseed	2
Sheep	2
Beehives	1
Encounter	1
Total	**33**

Figure 4: Bear complaints confirmed by Conrad team in 2021.

Most of the livestock loss occurred on Dupuyer creek (Fig. 6). Bears caused property damage on; two grain bags, one haylage bag, two bird coops. For bears using unsecured food – twice each for birdseed and garbage, and three times for grain spills. There were no attacks this year, but one encounter – people bumped a bear at close range and it ran off. We received five complaints about bears near people without any attractant being acquired. We responded to all calls as quickly as possible, with most of our bear complaint responses occurring within 30 minutes.

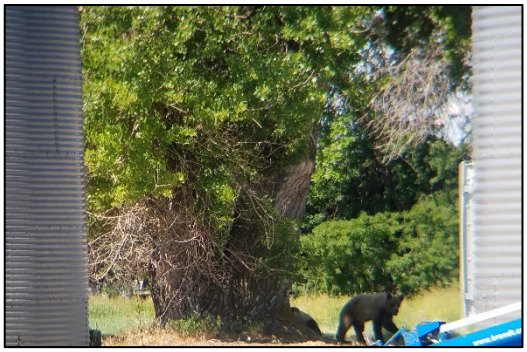


Figure 5: Two yearling grizzlies at unoccupied farm eating spilled grain.

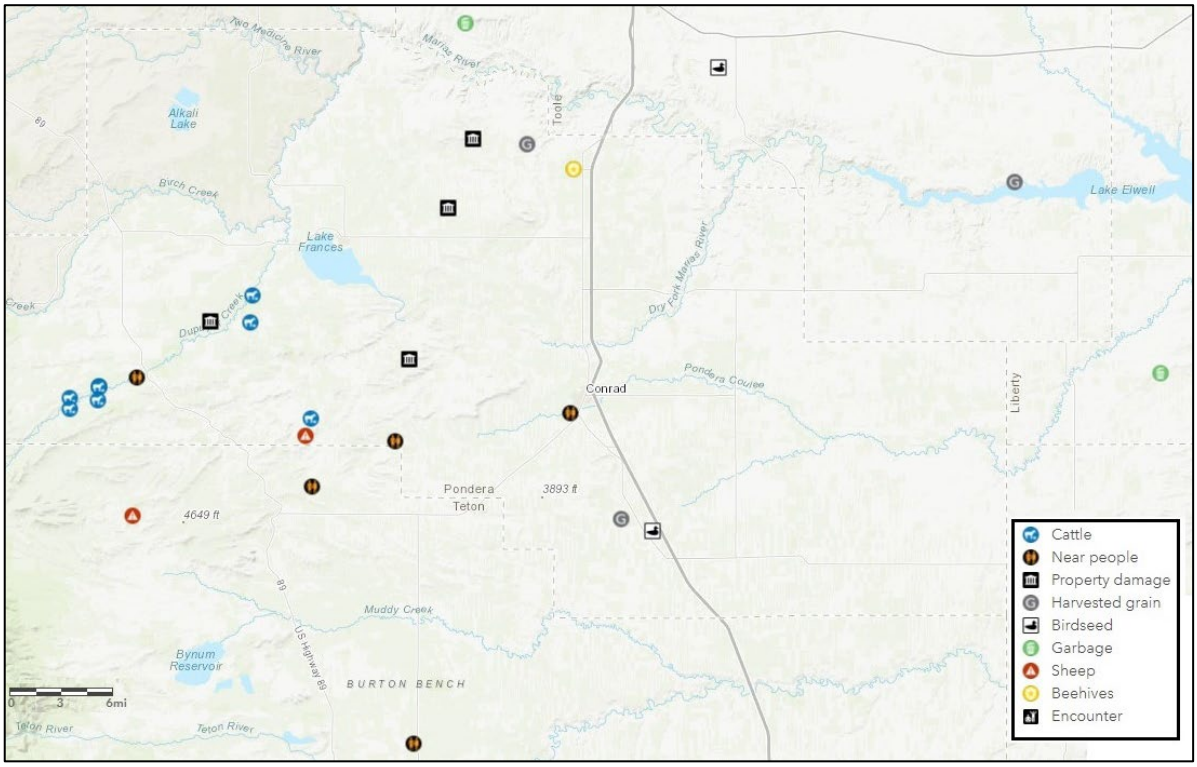


Figure 6. Map of 2021 grizzly bear complaints. Six complaints are outside map area, including two calf depredations near Augusta, two cow depredations in the Big Snowy mountains, and one bird coop damage and encounter near Sun River.

Grizzly Bear Captures

1) In conjunction with USDA, a non-target adult female captured on Dupuyer Creek and relocated to Glacier National Park (4/28).
2) In conjunction with USDA, an adult male euthanized in Fergus County due to depredation on two adult cows, as relocation wouldn't have reasonably eliminated the issue (5/12).
3) In conjunction with USDA, an adult male euthanized on Dupuyer Creek for several calf depredations, as relocation would not have reasonably eliminated the threat (5/26).
4) Yearling male caught south of Conrad for accessing spilled grain near residence and not responding to hazing or conflict prevention equipment (6/23). Relocated to Pike Creek.
5) Subadult female caught for a research project testing if guard dogs are an effective bear deterrent for farmsteads with abundant grain spills (8/20).

6) Subadult female for a research project testing if guard dogs are an effective bear deterrent for farmsteads with abundant grain spills (8/29).
7) Subadult male caught for a research project testing if guard dogs are an effective bear deterrent for farmsteads with abundant grain spills (9/6).
8) An adult male caught for a research project testing if guard dogs are an effective bear deterrent for farmsteads with abundant grain spills (9/14).
9) An adult female caught for a research project testing if guard dogs are an effective bear deterrent for farmsteads with abundant grain spills (9/16).
10) A subadult female caught for a research project testing if guard dogs are an effective bear deterrent for farmsteads with abundant grain spills (10/16).

Grizzly Bear Mortalities

1) Adult male euthanized in the Big Snowy Mountains (Fergus County) due to depredation on two adult cows (5/12).
2) Adult male euthanized on Dupuyer Creek for several calf depredations (5/26).
3) Adult male bear was found dead near Marias River (10/20). Death under investigation.

Acknowledgements

Support for conflict prevention work was provided by Western Bear Foundation, Vital Ground Foundation, Defenders of Wildlife, United States Fish and Wildlife Service, Utah State University, Conservation Collaborative, Natural Resources Defense Council, and Montana Outdoor Legacy Foundation. We greatly appreciate USDA Wildlife Services management efforts – Skippy Sims, John/Kurt Miedtke, Glenn Hall, Luke Peebles, Dymond Running-Crane, Kraig Glazier, and Dr. Young. Big thanks to our call coordinators for keeping communities informed. We also thank local and county law enforcement for their assistance. We appreciate people inviting us out to give presentations. Also, thanks to the folks who proactively prevent bears from coming near residences, and for communicating with us nicely when they do. Thanks to producers for their patience, allowing conflict prevention work, and for coordination with Rocky Mountain Front Ranchlands group and Marias River Livestock Association. Additionally, we thank FWP biologists, managers, wardens, maintenance crew (George Larson), and support staff for their assistance with resolving human-bear conflicts. Thanks to the NCDE bear management team – John Waller, Tim Manley, Jamie Jonkel, Chad White, Daniel McHugh, Cecily Costello, Lori Roberts, Hilary Cooley, et al. Thanks to Glacier Park and US Forest Service for relocation sites. We appreciate the collaborative efforts with Blackfeet Fish and Wildlife. Thanks to our guard dog technician, Ali Morgan, for her work and our range rider, Preston Spotted Eagle, for his (Fig 6). Thanks to Sarah Zielke and other volunteers for their responsive efforts. Thanks to the carcass pickup driver. Finally, a special thanks to Rock Creek Airedales for donating a dog.



Figure 6: Dupuyer creek range rider, Preston Spotted Eagle, saddles up for a ride with our wolf management specialist, Ty Smucker.

From: Cooley, Hilary
To: Kasworm, Wayne
Subject: Fw: [EXTERNAL] Boards of Review
Date: Tuesday, July 6, 2021 8:31:09 PM

FYI...

From: Servheen, Chris <chris.servheen@mso.umt.edu>
Sent: Tuesday, July 6, 2021 5:40 PM
To: Cooley, Hilary <hilary_cooley@fws.gov>
Subject: Re: [EXTERNAL] Boards of Review

We always selected people based on their knowledge of grizzly attacks on humans and experience with bears and especially past experience with human fatality investigations, not on who they worked for. That's why we had Steve Herrero and Gordon Stenhouse on past BORs. Of course, I was not an agency person when I chaired the Brad Treat BOR. Things have changed I guess...

From: Cooley, Hilary <hilary_cooley@fws.gov>
Sent: Tuesday, July 6, 2021 2:49 PM
To: Servheen, Chris <chris.servheen@mso.umt.edu>
Subject: Re: [EXTERNAL] Boards of Review

Hi Chris,
Thanks for the note. I agree that BORs are important and we plan on doing BORs for both attacks.
The Carl Mock took a while to compile initial investigations but is scheduled for next week.
There is a desire by several to keep the review internal to state and federal agencies and I should have notified you of this earlier. Apologize for my delay in that.
I hope you are doing well,
Hilary

From: Servheen, Chris <chris.servheen@mso.umt.edu>
Sent: Tuesday, July 6, 2021 1:55 PM
To: Cooley, Hilary <hilary_cooley@fws.gov>; Hilary Cooley <hilarycooley@gmail.com>
Subject: [EXTERNAL] Boards of Review

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Hi Hilary,
As you know, I have tried to stay out of your business since you took over. However, with your forgiveness I would like to make an unsolicited "editorial" to you about something. Since 2016 there have been no Boards of Review established to review bear-caused human fatalities in the lower 48 states. I believe this is a serious problem that will only get worse over time unless this is addressed. I am not sure why there were no BORs for the fatalities of Mark Uptain in 2018 and Cark Mock in April of this year. And now we have another unfortunate case where a person was killed near Ovando early this morning. Perhaps it is state fish and game department pushback? Or territoriality between state and federal agencies?

The reason I believe that a BOR is necessary is to have one source of complete and authoritative information on each fatality that re-creates the incident and details what happened and why. BOR reports provide the authoritative summary of everything we know about each incident in one report, and the development of the BOR report helps us learn from each incident and try to reduce future incidents with the knowledge from each unfortunate fatality. Without a BOR for each fatality, the agencies are abdicating their responsibility to the public to detail and understand why these fatalities happen and if necessary, make recommendations on how to prevent similar incidents in the future. Unless the agencies complete a BOR, there is no source of information and a place to go to understand each fatality. Without a publicly released BOR, the only sources of information on these fatalities are newspaper reports and Wikipedia. These are poor, incomplete, and usually factually incorrect sources of information. The Interagency Grizzly Bear Guidelines require a factual and detailed incident report after each human fatality (p. 59). Since the Guidelines were written, we have expanded the approach for these reports and developed the BOR format. All BORs produced through 2016 are publicly available on the IGBC website and serve as the official interagency source of information on what happened, the agency response, and how to avoid similar fatalities in the future.

I have led the BORs starting with Timothy Hilston's death in 2001 through Brad Treat in 2016. I volunteer to help with future BORs to maintain their continuity and format and because this is a matter of interest for me. As I noted above, I am unsure what the problem is in empaneling BORs for the last two, and now 3 fatalities. If there is state agency resistance to having me involved for some reason, do it anyway without me. In each case through 2016, as Recovery Coordinator I pushed the need for a BOR and asked each agency to appoint 1-2 members. They did not do it without my leading them along as the Recovery Coordinator.

Remember that the BOR is not the members of the WART team because the WART warden-law enforcement team that does the immediate response and is not made up

of biologists and those who can/will write a detailed BOR report. As to the timing of the BOR, sometimes it takes several months to get the BOR selected and for them to have their first meeting (which might be by zoom these days). Usually, the BOR waits for all the relevant information like the reports developed by the wardens, the police, and the autopsy report. The BOR can do a site visit, but this does not always happen, and they use photos and descriptions from the first responders instead of a site visit. The report is usually written by the chair who drafts a report and circulates it to all members for review and edits. This review and finalization process can take a month or more depending on many factors.

In closing, I really believe the agencies are dropping the ball by failing to empanel a BOR for each human fatality. My suggestion is for the recovery office to lead the establishment of a BOR by asking each agency (and the IGBST for the Yellowstone ecosystem) for 1-2 BOR members and appoint a chair to lead the process. If an agency refuses to participate, then complete the BOR without them. A chair is necessary for each BOR to assure that someone is responsible for completing the BOR report in a timely manner.

Please consider the importance of these BORs to grizzly management, agency credibility, public perception, public safety, and the continuity and availability of credible information on how and why humans are killed by grizzly bears. It is obvious now that without FWS leadership in establishing a BOR for each fatality, a BOR will not happen.

I apologize for getting into your business, but I think this is way too important to just let it go.

My best,
Chris

From: Cooley, Hilary
To: Fortin-Noreus, Jennifer K
Cc: Kasworm, Wayne; Radandt, Thomas; Teisberg, Justin E
Subject: Fw: [EXTERNAL] Final BOR 4-15-21
Date: Wednesday, August 4, 2021 6:20:40 PM
Attachments: Baker"s Hole Fatality - final.pdf

Jennifer -
WOuld you please post the West Yellowstone BOR on our website?

Thanks

From: Frey, Kevin <KFrey@mt.gov>
Sent: Wednesday, August 4, 2021 3:00 PM
To: Cooley, Hilary <hilary_cooley@fws.gov>
Subject: [EXTERNAL] Final BOR 4-15-21

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Yee-haw…..we are done other than you/Jen posting it.
Thanks HC!

Let me know if this does not come thru clear enough or diff to post…..I had to save as a pdf…….word doc got too big….14.4MB and system will not send it today.

From: Cooley, Hilary <hilary_cooley@fws.gov>
Sent: Wednesday, August 4, 2021 2:50 PM
To: Frey, Kevin <KFrey@mt.gov>
Subject: Re: [EXTERNAL] BOR recommendations……

INVESTIGATION REPORT

The subsequent fatality of Mr. Charles (Carl) Wesley Mock from a grizzly bear attack on 15 April 2021 near Baker's Hole Campground on the Custer Gallatin National Forest

Hilary Cooley – *Grizzly Bear Recovery Coordinator, United States Fish Wildlife Service, Missoula. Montana*
Brian Debolt - *Large Carnivore Section Conflict Coordinator, Wyoming Game & Fish, Lander, Wyoming*
Kevin Frey – *Grizzly Bear Management Specialist, Montana Fish Wildlife & Parks, Bozeman, Montana*
Kerry Gunther - *Bear Management Biologist, Yellowstone National Park, Mammoth, Wyoming*
Mark Haroldson - *Supervisory Wildlife Biologist, U.S. Geological Survey, Interagency Grizzly Bear Study Team, Bozeman, Montana*
Jeremy Nicholson - *Wildlife Biologist, Idaho Fish and Game, Island Park, Idaho*
Dan Thompson - *Large Carnivore Section Supervisor, Wyoming Game & Fish, Lander, Wyoming*
Dan Tyers - *GYE Grizzly Bear Habitat Coordinator, United States Forest Service, Bozeman, Montana*

SUMMARY:

On the afternoon of 15 April 2021, a lone 40-year-old male resident of West Yellowstone, Montana had gone hiking at nearby Baker's Hole Campground on the Custer Gallatin National Forest (CGNF) to either fish, take photographs or both. At approximately 3:45 pm, the man called 911, connecting to the West Yellowstone Police Department Dispatch reporting he had been mauled by a grizzly bear. Search and rescue were immediately implemented. The victim, Mr. Charles (Carl) Wesley Mock was found severely injured by search and rescue personnel. Mr. Mock was given medical attention in the field, taken to an ambulance, and transported to Idaho Falls, Idaho Regional Medical Center. The following day, 16 April investigation team members were charged by a bear near the site where Mr. Mock had been mauled. Investigators killed the bear during the encounter. Unfortunately on Saturday, 17 April 2021, Mr. Mock died from complications from the severe wounds to his head and neck caused by a grizzly bear attack. Mr. Mock was a West Yellowstone resident and guide for Back Country Adventures.

Format of report:

A board of review (BOR) is required after any human fatality caused by a grizzly bear as per the Interagency Grizzly Bear Guidelines (p 59). This report is based on the investigations, personal statements, and documentations of personnel with the Gallatin County Sheriff's Office, West Yellowstone Police

Department, United States Forest Service, Gallatin County Search and Rescue, Hebgen Basin Fire and Montana Fish Wildlife & Parks. Gallatin County Sheriff's Office (Deputy Mike Gavagan) report of Mr. Mock's rescue and Montana Fish Wildlife & Parks enforcement division (Warden Robert Pohle) overall reports are attached in Appendix A. This report is written in sections of occurrence and with an investigative conclusion at the end of the report. To avoid

unwarranted speculation as to how this attack and resulting fatality occurred, only information gathered and documented during the investigations is contained in this report.

Note: There are several minor discrepancies between this investigation report and officers Gavagan's and Pohle's reports. Those minor discrepancies are footnoted below their reports. The information in this investigation report is correct.

Baker's Hole Campground:

Baker's Hole Campground is located on the Hebgen Ranger District, Custer Gallatin National Forest. The campground is located within a lodgepole pine (LPP) forest with willows along the southeast side. The campground is east of U.S. highway 191, west of the Madison River, approximately 2.5 miles north of West Yellowstone, Montana and approximately 200 yards west of the Yellowstone National Park boundary.
The campground has 73 campsites within the 3 campsite loops. The campground is annually closed to camping from October 1 to May 1 but the area is open to recreationists year-round. People also use the campground to access the Madison River for fishing and wildlife viewing as the area is known for its use by bears, moose, elk, ospreys, eagles, waterfowl, and bison. Baker's Hole Campground is very well posted with permanent wooden or metal signs at the entrance and on kiosks among the campsite loops informing the public of grizzly bear presence in the area and of food storage order requirements (Photos 1 & 2). An image of the attack site in relation to Baker's Hole Campground, West Yellowstone and Yellowstone National Park is shown in Figure 1.



Photo 1. Grizzly Bear awareness signs at Baker's Hole Campground



Photo 2. Grizzly Bear awareness and food storage sign at Baker's Hole Campground



Figure 1. Baker's Hole Campground in relation to West Yellowstone and Yellowstone National Park

04-15-2021

SEARCH and RESCUE:

15:42 hours - West Yellowstone Police Department (WYPD) Dispatch received a call from a 40-year-old male reporting he has been mauled by a grizzly bear approximately 200 yards from CGNF Baker's Hole Campground.
West Yellowstone PD, Gallatin County Sheriff's Deputy (GCSO), US Forest Service law enforcement (USFS LEO), Gallatin County SAR (GC SAR) and Hebgen Basin Fire are immediately dispatched to respond. Hebgen Basin EMS was then dispatched to Baker's Hole Campground to wait for rescue of the victim.
Secondary information from WYPD Dispatch was issued to Search and Rescue (SAR) that the victim reported he had facial injuries, was laying on the ground, there was one bear and to go to the closed campground main entrance.

15:52 hours -approximately
*GCSO, USFS LEO, WYPD, Hebgen Basin Fire and GC SAR arrive at Baker's Hole Campground to begin the search. Initially human footprints were searched for in the snow near hiking trails towards the Madison River.

*Hebgen Basin Fire was instructed by GCSO to assume incident command.

*Dispatch was unable to triangulate or ping a location of the victim's cell phone. His phone was not active, 911emergency call capacity only. Though found by SAR relatively quickly the phone's status had delayed SAR from finding the victim sooner.

*Although seriously injured, the victim was able to communicate with WYPD dispatch before he was found by SAR.

*Hebgen Basin Fire activated sirens, which victim told dispatch he could hear the sirens. He then told dispatch he was about ¼ mile from campers (camp host) in campground, towards town (south of main entrance).

*The victim then relayed he was off the blue diamond ski trail.

*With this information SAR was then able to focus on an area.

*Incident command requested West Yellowstone based Air Idaho (helicopter) to aid in support and search. Also a SAR page was sent out for a backcountry rescue.

*GC SAR and USFS LEO proceeded on the ski trail out of campground, followed within minutes by 2 officers with GCSO and WYPD.

*These 2 officers were joined by another WYPD officer after they stopped hiking due to sighting a grizzly bear approximately 80 yards east of the ski trail. The bear was standing on hind legs and making huffing sounds. The bear dropped to all 4 feet and charged towards the officers, breaking of the charge after 30 yards.
Dispatch relayed that the victim could hear the officers yelling and that the bear was very close to him.

*The search party then turned east off the ski trail, down an old logging spur in the direction of the bear.

*Approximately 70 yards down the old logging spur the victim was found lying on the ground.

*The bear continued to aggressively move around the rescue party in a half circle, at a distance varying 20 to 70 yards.

*The bear continued to stalk the rescuers and victim, making another bluff charge while initial medical attention was being given to the victim.

*Emergency medical (EMS) and Air Idaho personnel hiked into the site of the injured man.

*Two GC SAR members arrived with snowmobiles and a rescue toboggan.

*EMS was able to bandage the victim and carry him up to the ski trail to the SAR rescue toboggan. The victim was transported to the EMS ambulance in the campground and was then transported to the Regional Medical Center in Idaho Falls, Idaho. *Poor weather conditions prohibited victim transport via helicopter.*

16:54 hours – Montana Fish Wildlife & Parks (MTFWP) Warden arrived at campground.
*Two WYPD officers, 1 GCSO deputy, 1 USFS LEO and the MTFWP warden went back to the site to get coordinates and take initial pictures of the incident scene. The victim's personal items including an empty can of bear spray were noted and photographed. The initial investigation group then left the scene. The bear was not encountered during this brief investigation.

**A digital camera with a telephoto lens was found within 4 feet of where the victim had been laying when found by rescuers. The camera was secured in the victim's vehicle at the entrance gate to the Baker's Hole Campground when the victim was transferred to the ambulance. A friend of the victim took possession of the vehicle and investigators did not have opportunity to examine the camera.*

The moose carcass **was not noticed by SAR or by the helicopter during the rescue recovery of the victim.*

1830 hours – USFS HEBGEN RANGER DISTRICT posts closure signs of area.

04-16-2021

1000 hours - Official order from the Custer Gallatin Forest Supervisor was signed and posted.

SITE INVESTIGATION and BEAR MORTALITY:

1400 hours –

***** An investigation team consisting of two USFS LEOs, three MTFWP Wardens and two MTFWP Bear Specialists with one dog meet at USFS/MTFWP residential site north of Baker's Hole. It was required and imperative to investigate the attack site due to its proximity to a public campground, cabin area and well used hiking trails.

The overall investigation, methodology of approach/hike, individual duties at the site and considering the bear's aggressive behavior during the victim's rescue, the bear may still be present and potentially charge were all discussed. Additionally, if the bear was present and would not "bump off" and did charge, it would have to be killed.

The investigation party then drove to Baker's Hole Campground proceeding to the south end of the south campground loop and ski trail.

*The investigation team began hiking south along the ski trail towards the mauling site. After approximately 45 yards of hiking, the team stopped, firing 2 cracker rounds and hollered. The dog began barking and alerted that it could smell a bear. One of the team members said he had seen something moving approximately 50 yards away in the trees east of the team and ski trail and stated it could be a bear. The dog was now growling and barking indicating a bear was close. The bear was travelling in a parallel direction to the team as they hiked south.

*The team waited a few minutes, then a proceeded another 80 yards, stopping to fire 3 additional cracker rounds. Members of the team alternated yelling during the entire hike to the site. The team again waited a few minutes and there were no other sightings or indications the bear was near or approaching. Though the dog was barking, the investigation team did not know if the bear had possibly moved out of the area or if it was still nearby.

*The team then hiked to where the old spur logging trail forked off the ski trail, downhill in a southeasterly direction. This junction is approximately 200 yards along the ski trail south of the campground loop. Upon stopping, 2 more cracker rounds were fired. Again, there was no indication the bear was nearby. Team members yelled as the dog continued to bark while they slowly walked down the spur trail towards the attack site. The trail had intermittent deadfall trees across it.

*Approximately 50 yards down the spur trail, several team members said they could see some brush and a small conifer move, indicating towards the northeast across an open boggy wet area.
All members stopped and readied in case it was the bear and it charged. Within seconds the bear silently charged out of the brush, head down, ears back and running full out. The bear crossed the open wet area and continued charging towards the team members, running into a patch of deep rotten snow in the willows. The bear floundered in the deep snow, dug its way clear and begin to charge again. At this point the decision was made to shoot the bear.

1435 hours - Multiple members shot at once killing the bear instantly.

*The bear was checked to confirm it was dead and to see if it had been previously captured or marked.

*A submerged, cached/buried moose carcass was found nearby.

*All scenes associated with the incidences were photographed.
*Distances between key locations were measured.
*Mr. Mock's personal items were collected as were items left by first responder medical staff.
*GC SAR was contacted, bringing a tracked ATV to move the bear carcass to vehicles in the campground.

1630 hours - All personnel and the bear carcass at vehicles in the campground.

INVESTIGATION FINDINGS:

The site of where the grizzly bear attacked Mr. Mock was investigated 3 times, on 15 April during an initial investigative overview after Mr. Mock had been recovered by SAR, on 16 April during the actual site investigation and on 21 April during the removal of the moose carcass.

Following the ski trail from the south end loop of Baker's Hole Campground and then the old logging spur trail, it is approximately 270 yards to the attack site.

The attack site was approximately 70 yards down an old logging spur trail running southeasterly from the ski trail. The site is at the end of the old logging spur located in mature LPP timber and at the edge of a boggy wet area.

Personal items found at the attack site area belonging to Mr. Mock included one muck-type boot, sunglasses, small plastic fishing tackle box, a winter cap, an empty can of bear spray* & holster, safety lock from bear-spray cannister, fishing pole and a half-empty juice container.
*The can of bear spray was the UDAP brand, 7.9ounce, Expiration 12/2023 S/N P1711-071135).

It was later discovered that a digital camera was found near Mr. Mock during the rescue but the camera was taken into the possession of Mr. Mock's friends. On 17 April, a MTFWP warden was able to view the memory card from the camera and did not find any pictures from the Baker's Hole area or from the day of the attack.

After the investigation team had to kill the bear on 16 April, a moose carcass was discovered cached in the water (Photo 3) near the site where Mr. Mock had been attacked. It was 47 yards from the cached moose carcass to the attack site. Searching the area around the moose carcass it was evident that a bear had been feeding on the moose for numerous days due to multiple and drying bear scats. It could not be determined what caused the death of the moose. Common causes of moose deaths are predation, ticks, winterkill (poor nutrition), meningeal artery worms and vehicle strikes. There were no broken long bones observed on the moose that are normally associated with a vehicle strike from nearby US Highway 191.



Photo 3. Moose carcass cached in water near the attack site.

The bear-spray safety lock, fishing pole and a half empty juice contains were discovered where it was determined Mr. Mock had been and first reacted defensively due to the bear. The bear-spray safety lock and juice container were 1 to 2 feet E x NE of the fishing pole. The fishing pole was approximately 6 feet away (NE) from where Mr. Mock had obviously been mauled. At the mauling site Mr. Mock's boot, tackle box, sunglasses, knit cap and empty bear-spay were found scattered in the snow. A diagram of Mr. Mock's personal items at the attack site can be viewed in Figure 2. The bear-spray can was empty and investigators assumed Mr. Mock had likely sprayed the entire can of bear-spray.

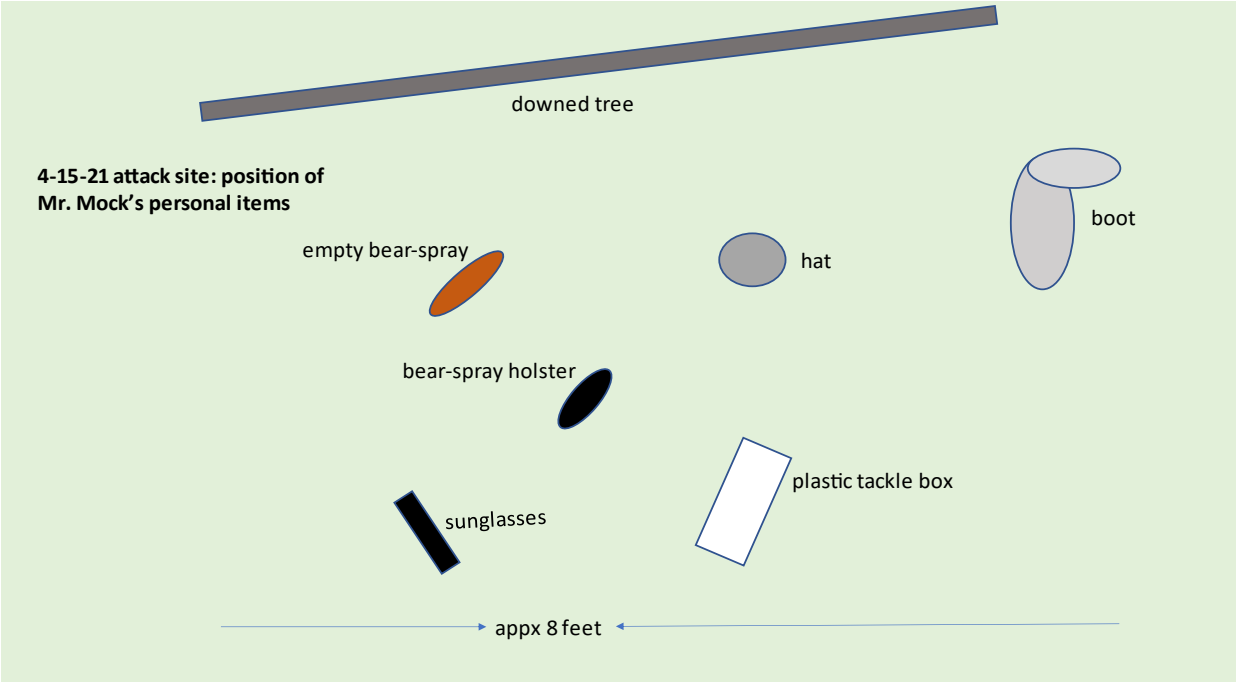


Figure 2. Position of personal items belonging to Mr. Mock found at the attack site.

Search and Rescue had found Mr. Mock 12 feet up the logging spur trail from where he had been attacked.

A diagram of the distances and location of moose carcass, attack site, bear and investigative team are shown in Figure 3. A satellite image of the locations and relationship of attack site to campground (south loop visible in upper left) and US Highway 191 are shown in Figure 4 and a closer view of the attack area is shown in Figure 5.

Anecdotal information from a friend in West Yellowstone of Mr. Mock's stated that he had talked with Carl Mock in the early afternoon (1342 hours) of 15 April. Mr. Mock said he was going home to get lunch and go back out that afternoon. This information indicates Mr. Mock had only been in the Baker's Hole area for a relatively short time before the bear attack occurred.

Mr. Mock's 911 call to WYPD was recorded. The 911 call lasted for 49 minutes and 47 seconds, 27 minutes into the call at 1609 hours, the dispatcher asked him (Mr. Mock) if he was out fishing. He responded "No, I was taking pictures (with moaning in that statement)" She asked him, "You were out taking pictures?" He then moans with an unintelligible response.

BEAR FINDINGS:

The bear was 20 yards northeast of the unknown moose carcass when it charged the investigation team, who were 57 yards from the bear across the boggy wet area.

The bear was killed 24 yards from the investigative team who were approximately 37 yards from the unknown cached moose carcass.

FIELD:
Examination of the bear revealed tattoos were visible in both upper inside lips.
No ear tags were present.
Overall body condition was a 4 on a scale of 1 to 5.
No visible recent wounds or injuries.
Teeth were worn with lower canine teeth broken and worn. Incisor teeth were worn smooth with some missing as is normal with aged bears. Field estimate of age was around 20 years old.
Tattoos were noted in both inside upper lips.
When the bear was loaded into a vehicle at the campground, it was evident the bear had been bear-sprayed by Mr. Mock during the attack as personnel began coughing from the bear-spray residue becoming airborne from handling the bear.

LABORATORY:
During the examination of the bear at MTFWP Region 3 Headquarters in Bozeman the bear-spray residue again physically affected investigators.

The bear weighed 411 pounds.

The tattoo was read as 504 in both upper inside lips. Tattoo 504 identified the bear as bear number 449 in the Inter-agency Grizzly Bear Study Team (IGBST) database for the Yellowstone Ecosystem.
Bear 449 was 6 years old when captured on 9/21/2003 at Cascade Creek, YNP by the IGBST during research capture efforts. Bear 449 had been lip tattooed in both upper lips with green ink, number 504 inside both upper lips (Photo 4.), ear tagged, fitted with a GPS/VHF radio-collared and implanted with a micro-chip at that time. Last known location of bear 449 was on 2/22/2004 at his den site near Nymph Lake, YNP. It was deemed a collar failure as the signal had been intermittent since the bear had been captured, collared, and released on site.



Photo 4. Tattoo number 504 in upper lip of bear 449.

Overtime, male bears are prone to losing ear tags and radio-collars when fighting with other male bears, plus radio-collars are designed to drop off bears.
No functioning micro-chip could be located on bear 449 during laboratory examination, which was not surprising after nearly 18 years since the chip was implanted.

Bear 449 had no previous conflict management captures or history.

A gastro-intestinal examination of bear 449 was conducted revealing moose hair, trachea cartilage, and muscle tissue along with grass/dirt debris. A piece of tissue that was suspected as skin and cartilage that was not identifiable or consistent with other tissues in the stomach was collected and submitted to the Wyoming Game and Fish Forensics Laboratory in Laramie, Wyoming for identification as to origin of tissue. Results were received 14 June 2021. The tissue was identified as originating from a grizzly bear (Ursus arctos). See Appendix B.

*The unknown grizzly bear tissue and its location in the lower stomach portion of bear 449 indicates 449 had possibly been in a very recent fight with another grizzly bear defending the moose carcass or fought taking the moose carcass from another grizzly bear. If this were the case, those interactions could have contributed to bear 449's overall aggressive defense of the moose carcass towards Mr. Mock, initial SAR and the Investigation Team.

Muscle (meat) tissue can persist for 14+ hours in the digestive tract of fully active and feeding brown (Ursus arctos) bears (Elfstro"m et al. 2013). Skin and cartilage tissue can persist longer due to slower gastro-intestinal digestion of the tissue and tissues could also persist longer if a bear was not actively consuming amounts of foods to move previously ingested food through the digestive tract. Skin and cartilage could persist in the digestive tract at an outside time of 2 to 3 days (pers. comm. Charlie Robbins Ph.D. -Washington State University, Pullman, WA.)

The skull/brain of bear 449 was submitted for rabies testing to the Montana Department of Livestock, Montana Veterinary Diagnostic Laboratory in Bozeman, Montana. The results were negative for rabies. See Appendix C.

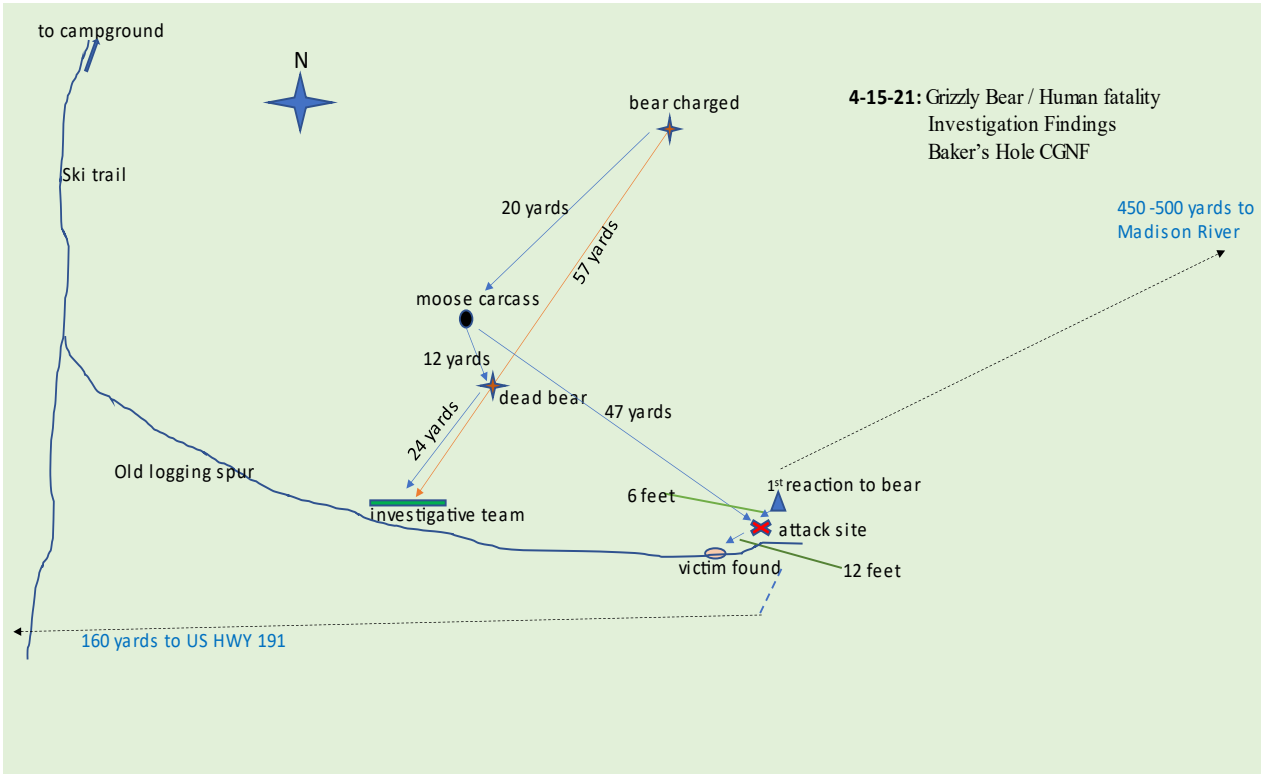


Figure 3. Distances and location of moose carcass, attack site, bear and investigative team near Baker's Hole Campground.



Figure 4. View of the relationship between the attack area, south end loop of Baker's Hole Campground and US Highway 191.

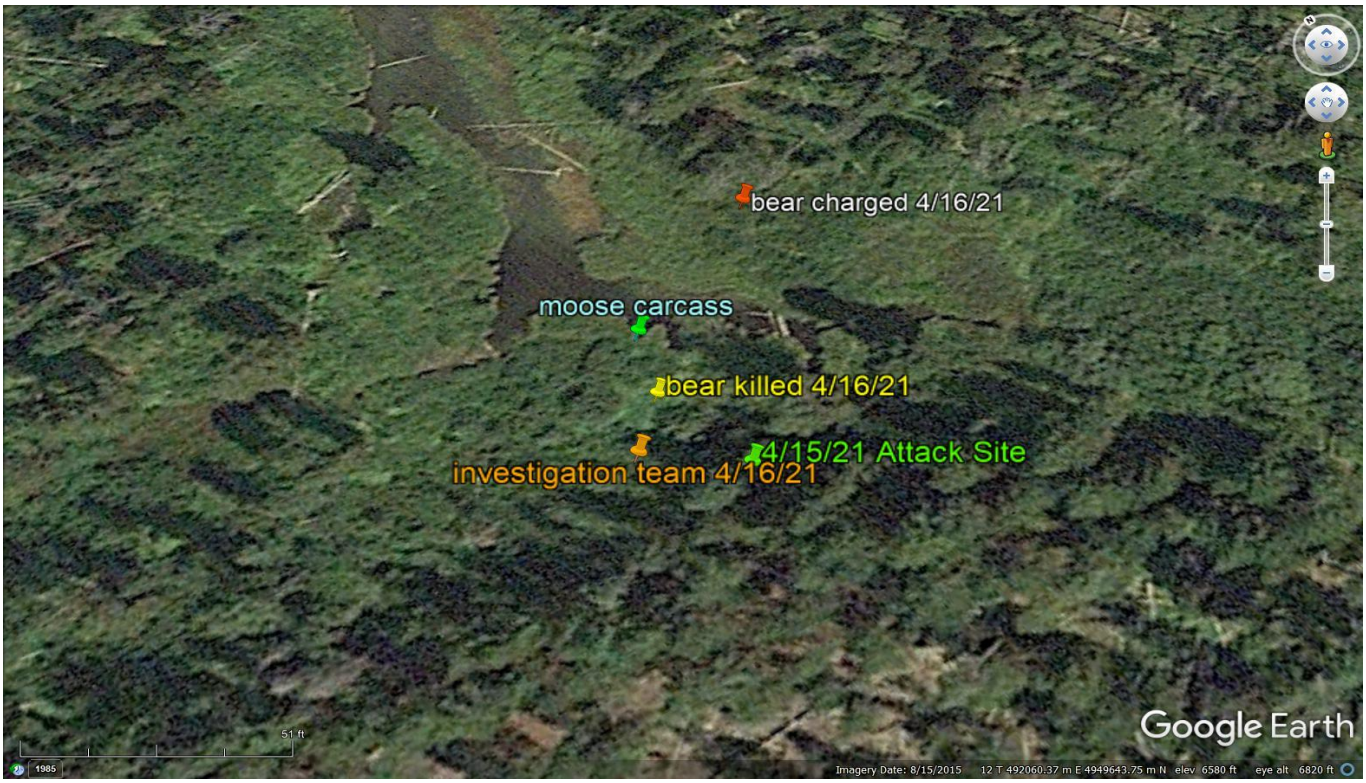


Figure 5. Closer view of the attack area and locations of significant points.

04-19-2021

CGNF Hebgen Basin District and MTFWP Bear Management discuss the known moose carcass, its potential to attract other bears, proximity to campground, hiking trails and the options for its removal. Dragging the moose carcass out of area would create a scent trail for other bears to follow to the campground and feasibility of doing so did not exist due to boggy wet area. Hebgen Basin District decided to use explosives for removal and would handle all logistics in the removal of the moose carcass.

04-21-21

REMOVAL (explosives) OF MOOSE CARCASS:

Personnel from the Hebgen Basin District CGNF, Bozeman District CGNF, Cody, Wyoming Bureau Land Management (BLM), MTFWP, GCSO and WYPD were all involved in the removal of the carcass.
The BLM flew a drone over the area for possible detection of another bear on or near the moose carcass. No bears were observed and the carcass did not appear to have been recently fed on. A USFS LEO and two MTFWP personnel provided security. CGNF field staff and certified explosive blasters were responsible for actual moose carcass positioning and blasting.

The moose carcass was successfully exploded into obscurity. The area remained closed to the public to allow for scavengers to utilize any small pieces of the moose and for the scent to dissipate.

04-30-2021 Custer Gallatin National Forest lifts closure and re-opens the area to public use.

CONCLUSION:

On 15 April 2021 prior to 1542 hours Mr. Charles (Carl) Wesley Mock was attacked by a grizzly bear near Baker's Hole Campground on the CGNF. When rescued Mr. Mock was found severely injured 12 feet west of the mauling site. Mr. Mock did not give statements or communicate with SAR as to the grizzly bear attack. Once in medical care Mr. Mock did not speak or was in condition to talk about the attack. Unfortunately, Mr. Mock died from the complications of his sustained severe head and neck injuries on 17 April 2021.

Alone, Mr. Mock had parked his vehicle at the entrance of CGNF Baker's Hole Campground to begin his hike and activities. The campground and entry are well posted with grizzly bear information.

It cannot be determined if Mr. Mock purposely or randomly went to the site of the attack. Mr. Mock was in possession of fishing gear and a telephoto lens camera. The closest point to the Madison River is approximately 400 yards northeast of the attack site.
From information provided by Mr. Mock's friend it is estimated Mr. Mock was in the Baker's Hole area for less than 1.5 hours. However, it cannot be determined exactly how much time Mr. Mock had been at the site area prior to being attacked.

Considering field investigation findings of the locations of the attack site, the cached moose carcass and the old logging spur trail, it seems apparent that Mr. Mock had walked along the ice packed ski trail and then down the logging spur trail, passing within 37 yards of the moose carcass to the location of the bear attack site. Either he had done so without being noticed by the bear or the bear came to the moose carcass after Mr. Mock had reached the area of the attack site, which was 47 yards from the moose carcass. The old logging spur/trail basically ends at the attack site.

Though Mr. Mock had told 911 dispatch that he was taking pictures, it cannot be confirmed what Mr. Mock was doing prior to the bear detecting and then attacking him, but the half empty juice container suggests Mr. Mock had likely stopped at the location before the bear detected him.

Field investigation and examination of Mr. Mock's fishing gear did not indicate he was or had been actively fishing when the attack occurred. Mr. Mock was in possession of a valid Montana fishing license, purchased March 10, 2021. Mr. Mock had not purchased a YNP fishing license on-line and vendors in West Yellowstone were not yet in possession of 2021 fishing licenses to sell. Fishing in YNP opened May 29th.

Due to the empty cannister of bear-spray and the bear-spray residue on the bear carcass (hair), Mr. Mock had obviously been aware of possible grizzly bear encounters in the area and had deployed his bear-spray at the bear. It is not known if he bear-sprayed towards the bear prior to the bear contacting him or at what points during the attack he used the spray. During field and lab investigations, it was confirmed that the bear had substantial bear-spray residue on its hair. Additionally, the overall effects of the bear-spray to the bear are not known but the bear had quit attacking Mr. Mock, indicating the bear was affected by the bear-spray. After the bear stopped attacking, Mr. Mock was able to move a short distance and call 911 emergency. However, the bear remained agitated, close to the attack site and near the moose carcass, which was unknown to rescuers during the initial SAR and again the next day (16 April) during the team investigation of the attack site area, when the male bear was killed as it charged the investigation team.

The tragic event of Mr. Mock being attacked by an adult male grizzly bear and subsequently dying from the attack, was the direct result of Mr. Mock's own purposeful or random placed proximity to a moose carcass that an adult male bear had cached and was actively feeding on. A short time before the adult male bear attacked Mr. Mock it may have defended or claimed the moose carcass from another grizzly bear. If so, this would have contributed to the bear's extended aggressive defense of the moose carcass.

BOR Recommendations:

The unfortunate subsequent death of Mr. Charles (Carl) Mock caused by a grizzly bear attack on 15 April 2021, reinforces the inherent possibility of people being involved in a serious grizzly bear encounter and the need for individuals to know and try to follow known safety recommendations.

Due to an increase in human use, bear population numbers and geographic grizzly bear distribution, more people are encountering grizzly bears. These encounters can and have resulted in human injuries or death. Multi-agency bear managers and researchers have conducted a continuous examination of these events. The goal is to provide public information to help reduce dangerous encounters and increase human safety in grizzly bear country.

There are standard grizzly bear safety messages for different public users and private landowners that can help minimize surprise encounters with grizzly bears, thereby reducing human injuries and possible death.

Some of the base safety messages are:

* Be constantly alert

* Hike or hunt with a partner(s)

* Make noise, if possible, to help avoid surprising a bear

* Secure food attractants at camps, homes, and work sites

* Do not run if you encounter a bear

* Avoid animal carcasses -watch for concentrations of scavengers (i.e. ravens)

* Carry and know how to use self-defense….bear-spray and or firearms

It is always recommended to carry bear-spray even if individuals carry firearms.

Kevin Frey – Grizzly Bear Specialist, Montana Fish Wildlife & Parks

References:

Elfstro¨m, M., Støen, O-G., Zedrosser, A., Warrington, I., Swenson, J.E. 2013: Gut retention time in captive brown bears Ursus arctos - Wildlife Biology 19: 317-324

Appendix A:

OFFICE OF THE SHERIFF / CORONER
GALLATIN COUNTY, MONTANA

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Jeremy Kopp
Undersheriff

Randy Jones
Chaplain

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On April 15, 2021 at approximately 1543 hours, I was dispatched by the West Yellowstone Police Department dispatch center to the report of a 40 year old male who reported he had been attacked by a bear. Dispatch reported the male was approximately 200 yards from the front entrance to the Bakers Hole Campground and was off trail. The male was later identified as Charles Wesley Mock of West Yellowstone.

I instructed dispatch to page out Hebgen Basin EMS and have them stage at the front entrance to the campground. An update from dispatch informed responding units that Mock had sustained facial injuries, was laying on the ground, there was only one bear and responders should go right at the main entrance.

I arrived on scene approximately 10 minutes after the initial dispatch. Also arriving on scene were Forest Service LEO Ryan Linhart (FS72), West Yellowstone PD officer Neil Courtis (686), Hebgen Basin Fire Chief Shane Grube (36) and Gallatin County SAR member Travis Mann. We all started a hasty search of the area, looking for foot prints in the snow near popular hiking areas. WYPD officer Leonel Sosa arrived a short time later and joined us in the search.

I assigned Chief Grube to take over Incident Command and help coordinate our search efforts. With a lot of ground to try to cover, more information was requested from dispatch. Unfortunately they were unable to triangulate the 911 call, but were still on the phone with Mock. Mock was able to communicate with dispatch, although garbled and hard to understand. Grube activated his siren in hopes that Mock would be able to hear it and possibly guide us closer. Mock was able to tell dispatch that he could hear the siren and that he was about ¼ away from the campers in the campground, toward town. He then said he was off the blue diamond ski trail.

This information gave us a definitive area to focus the search in. Grube asked Air Idaho in West Yellowstone to add some aerial search support and they launched. He also sent out a Search & Rescue page for a backcountry rescue. Linhart and Mann were closest to the trailhead at the southern part of the campground and immediately headed up the trail. Courtis and I followed behind, roughly three minutes behind them. We were joined by Sosa later, after Courtis and I stopped, having spotted the bear.

Approximately 200 yards south of the campground on the blue diamond trail, I spotted a bear that was about 80 yards east of our location. The bear was standing on its hind legs

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and making huffing noises at us. The bear then dropped to all fours and charged us, breaking off his charge after about 30 yards. We were yelling and hollering at the bear as he charged. Dispatch notified us that Mock could hear us yelling at the bear and he said the bear was very close to him. I notified other search units to respond to our location, knowing we were very close to Mock.

We proceeded south on the trail about another 20 yards until we discovered human footprints in the snow, heading east toward the location of the bear. We started following the footprints east and hollering at the bear who was still aggressively pacing the area and watching us. Approximately 70 yards later, we found Mock laying on the ground. He was seriously injured, having suffered significant head and facial injuries. The bear continued to stalk us, aggressively moving around us in a half circle at a distance of approximately 40 – 70 yards.

Courtis, Sosa and Mann provided scene security for us while Linhart and I provided medical care to Mock. None of the responders on scene had any medical gear with us. Linhart and I determined that we needed to somehow stop the large amount of blood that Mock was losing. Linhart took off his uniform top and removed his t-shirt while I continued to support Mock. Linhart wrapped the t-shirt around Mock's head and applied direct compression. Mock was having difficulty talking and breathing due to the amount of blood in his mouth. We made the decision to move him into the recovery position with Linhart supporting his head & neck and me rolling his body onto his side. This seemed to allow Mock better breathing.

The bear continued to stalk the group and made another false charge. At this point, I turned patient care over to Linhart while grabbing my rifle and providing additional security against the bear. Emergency medical personnel from Hebgen Basin and Air Idaho were able to hike into our location while we provided protection from the bear. Two Gallatin County Sheriff SAR members arrived on scene with two snowmobiles and a rescue toboggan. EMS personnel were able to bandage and wrap Mock's head, they placed him on a backboard and carried him the 70 yards uphill to the SAR rescue personnel and gear.

Mock was then transported to the ambulance at the entrance to the campground. The armed first responders then escorted the EMS crew out of the area and back to the campground. Due to snow and bad weather that had moved in during this incident, Air

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Idaho was unable to fly Mock to the hospital, so he was transported to Eastern Idaho Regional Medical Center in Idaho Falls by ambulance.

Fish, Wildlife and Parks LEO Robert Pohle (FG32) arrived. Officers Courtis, Sosa, Linhart and I escorted him back in to the scene of the attack so that he could take some quick pictures and log an accurate GPS location of the attack. The incident happened at 44.70002, -111.10018

Initial investigation at the scene indicated that Mock was likely attacked 15 feet east of the location he was laying at when we found him. It appeared that Mock was able to retrieve his bear spray from its holder and was able to deploy it (can was empty). Additional items on scene were a digital camera with a large telephoto lens, spin fishing rod, small plastic box of lures, and a backpack.

The following day on April 16, personnel from the Forest Service and FWP reentered the location of the bear attack and were charged by a bear. Even with seven people yelling, shooting explosive noise making shotgun rounds, and a dog barking at the bear; the bear continued to charge the group. They were forced to shoot the bear and killed it.

An investigation of the area revealed a large moose which had been buried and cached by the bear. This moose was about 35 – 40 yards away from the location where Mock was attacked. Forest Service requested an agency assist from me, requesting equipment and help removing the bear carcass from the woods. I arrived on scene with a tracked four-wheeler with attached winch. We were able to winch the moose up a short hill and drag it out to the campground across the snow covered trail. The bear was loaded into the back of a truck and taken by FWP for further evaluation and research.

Case closed – Search & Rescue and Agency Assist

Michael P. Gavagan

Deputy Mike Gavagan – Badge #635
Gallatin County Sheriff's Office

Footnote: it was the bear carcass that was winched up a short hill, not the moose carcass.

FWP21CAD001860 Robert Pohle

On April 15, 2021 at approximately 1630 hours, I, Game Warden (GW) Robert Pohle was home off shift when I received a Gallatin County Search and Rescue page on my personal phone requesting help searching for a 40 year old male who had been attacked by a bear. The location of the attack was Bakers Hole. Upon seeing this I called the West Yellowstone Police Department (WYPD) to let them know I was responding, inquiring if the attack occurred inside Yellowstone National Park (YNP) or the county. I was told dispatch was having a difficult time locating the victim, later identified as Charles (Carl) Wesley Mock (DOB 03/24/2981). **Note:** Due to some technical issue, Carl's phone was not providing coordinates to the 911 system allowing for a back trace. After hanging up with WYPD, I called Montana Fish Wildlife & Parks (FWP) Bear Management Specialist (BMS) Kevin Frey, leaving him a voice mail notifying him of the incident. As my Sergeant was away, I called Warden Captain Adam Pankratz leaving him a voice mail as well. My final call was to Sergeant Coy Kline in Butte, Montana, so I was able to directly notify a supervisor of the incident.

After gearing up, I responded, lights and siren to the Bakers Hole area. While en route I called Montana Highway Patrol (MHP) dispatch to have a call for service started. Captain Pankratz returned my call and after relaying the limited information I had, we agreed if I saw a bear in the vicinity of Bakers Hole, it was to be dispatched.

As I arrived to the Bakers Hole area, I radioed Hebgen Basin Fire Chief Shane Grube who was Incident Commander (IC), requesting info on where other responders were. I was instructed to come to the south loop of Bakers Hole United States Forest Service (USFS) campground where IC was staged. Chief Grube let me know Carl had been located and was in the process of being extricated by law enforcement and medical staff.

I met the group of first responders as they were exfiltrating from the attack location with Carl. Carl was heavily bandaged, being towed on a Search and Rescue (SAR) sled behind a snowmobile. Gallatin County Sheriffs Office (GCSO) Deputy Mike Gavagan, WYPD Officers Leonel Sosa and Neil Courtis, and USFS Law Enforcement Officer (LEO) Ryan Linhart gave me a quick brief of the situation. The officers stated they encountered the bear several times during the search for Carl. During the first encounter the bear bluff charged the group of officers several times at approximately 100 yards. During this first encounter, they noticed what appeared to be blood on the head/mouth of the bear. As they continued to search for Carl, they stated the bear hung out in the area refusing to leave, even while medics worked on Carl and the snowmobiles moved in to extract Carl. This information was concerning to me, as with that much human activity, it is not normal behavior for a bear to continue to hang out. **Note:** I learned several days later that while searching for Carl, a SAR helicopter was flying low over the area assisting in the search. Upon hearing the bear was still in the area, I went back to the attack scene with Officers Sosa, Courtis and Deputy Gavagan, with the intent to dispatch the bear.

When we arrived at the attack scene, I observed no indication that a bear was in the immediate area. Not identifying an immediate threat, I took several photos to

document the scene and used my OnX hunt maps to get Global Positioning System (GPS) coordinates of that location. The location of the scene is 44.70002, -111.10018.
The scene consisted of a patch of snow soaked in what appeared to be blood. A rubber boot, fishing tackle box, sun glasses and a blood soaked beanie cap were strewn about the patch of snow. A blood splattered can of bear spray and holster, later determined to be empty, laid on the edge of the snow. The orange safety cap from the bear spray was several feet away in the grass. A fishing pole and juice bottle lay off to the south east. North west of the snow was the area where medical staff performed first aid. There was various medical packaging littering the ground, clothing that had been cut off Carl and used bandages. After quick photographic documentation of the site, all units returned to the IC.
Note: The can of bear spray was the UDAP brand, 7.9ounce, Expiration 12/2023 S/N P1711-071135).
After returning to the IC, I met with USFS District Ranger (DR) Jason Brey, Chief Grube and USFS LEO Linhart to discuss what the preliminary plan was for public safety due to the popularity the location held for recreationists. DR Brey stated the USFS was closing the area and evacuating the few campground hosts who were prepping the facility for opening. Chief Grube informed me that Carl had been transported via ground ambulance to Idaho Falls, due to weather the helicopter was grounded. The helicopters medical crew however was in the ambulance providing patient care to Carl. I cleared the scene while calling in updates to the BMS while the USFS put up barricades and signs stating bear in area and closure information.
Since Carl was going to a hospital in Idaho, I contacted an Idaho Fish and Game (IDFG) Warden requesting assistance. I requested a Warden meet Carl at the hospital to collect clothing and if possible, take photos of the injuries and conduct a quick interview as is standard procedure in a Wildlife Human Attack (WHART) incident. I was later notified by IDFG they had been unable to interview Carl or take photos as he was on a ventilator and rushed straight into the doctors. IDFG were able to collect Carl's pants which medical crews had cut off of him. **Note:** I met IDFG Investigator Lauren Lane on April 17th, 2021 in Ashton ID to collect that item.
With night approaching, I talked with BMS Frey and discussed the next steps for the following morning. As I headed home, I came across a vehicle parked inside the USFS emergency closure. I notified WYPD dispatch I would be out looking for the occupants as we did not know the circumstances behind the bear attack and could not leave them in the area without notification of the incident and closure. After finding the individual had been fishing outside of closure on the Madison River, it was determined his car had been parked there before the closure went into effect. He left the scene without incident. Clearing that contact LEO Linhart and I observed another vehicle attempt to enter the closure by the means of the FWP driveway before backing out heading south on US HWY191 where they turned into the Bakers Hole Campground drive. USFS LEO Linhart and I contacted that individual to advise them of the closure and they commented they had heard of a bear attack and were out looking to take pictures of the bear.

Footnote: A fishing pole and juice bottle lay off to the northwest. West of the snow was the area…..

Note: Between the attack and when investigators returned to the scene the following day, law enforcement made multiple contacts of people trying to access the closure area. A white Ford F150 with ID license plates stopped by my residence before the attack, while I was off shift. The 2 male occupants of that Ford inquired about a sow grizzly and 2 cubs they had heard were active in the Basin which I was unaware of. They were wearing camo clothing and had a camera with large lenses on the center console. This indicated to me they were wildlife photographers looking for bears. I observed that vehicle along US HWY191 when I initially responded to the scene and then again turning into the Bakers Hole Campground drive as units were clearing. When I last saw that vehicle, USFS personnel were talking to the occupants.

The following morning, April 16, 2021, I was contacted by Captain Pankratz. He informed me to hold off going to the Bozeman Regional Office (BRO) as he was headed down to West Yellowstone, that he would contact Bear Management and we would then plan to meet and return to the attack scene. My decision to return to the scene was made due to the following considerations;

- Without being able to interview Carl, it was unknown what precipitated the attack. We did not know if it was a predatory attack, defensive attack or surprise encounter.
- We had no time line of when an interview with Carl may take place.
- No evidence was collected the day of the attack except for photos and the pants which IDFG retrieved from the hospital.
- It was forecast to start snow/rain in a couple days which would diminish any evidence on scene.
- The area the attack took place is a "high use" recreation area. It is common for anglers, hikers, campers and skiers to frequent the Bakers hole area.
- As noted earlier, multiple law enforcement contacts had been made concerning individuals trying to take pictures of bears. News of bear activity was drawing them in.
- This close to a weekend, we could expect a significant number of recreationists wanting to use the area. This would be compounded by the opening of Yellowstone National Park (YNP) for the summer season and news of a bear active in the area.
- It was imperative that we find out what precipitated the attack. While it was likely guarding a carcass, it was equally likely it was a surprise encounter, it was a bear with cubs or it was a predatory attack. Especially given the volume of human activity in the area while rescuing Carl did not scare the animal away.

After careful consideration, it was decided the significant risk to public safety resulting from the unknown causation of the attack outweighed the risk of a potential bear encounter from a re-entry to the scene. Phone calls were made and a team of seven (7) plus one (1) bear dog was assembled. We met at approximately 1400 hours and after a quick briefing on the situation entered Bakers Hole Campground.

Note: The team consisted of Captain Pankratz, GW Daven Thorne, GW Robert Pohle, USFS LEO Noah Pieprzyca, USFS LEO Linhart, BMS Frey (K9 Loki) and BMS

Jeremiah Smith. All team members were armed with lethal firepower and we had bear spray available.
We began our entry to the attack site, following the Boundary Ski trail that exits out of the south loop of Bakers Hole Campground. All members yelled out randomly making noise to alert a bear, humans were present. K9 Loki added to the noise barking loudly. At approximately the same location responders observed the bear the day prior, USFS LEO Pieprzyca alerted the team he saw something brown moving south towards the attack site. The movement came to the east of our location in a marshy area. It was unknown at that point if it was a bear as there were fresh bison tracks in the snow and mud. The team held that position as multiple cracker shells were fired and more yelling was made in attempts to haze the animal away. After several minutes holding that position and not seeing further movement, we continued down the trail. Along the way the team continued yelling and more cracker shells were fired. Specialist Frey alerted the team that the behavior and loud incessant barking from K9 Loki indicated a bear was nearby. **Note:** We were walking into a northerly breeze which would bring any bear scent directly to K9 Loki.
The attack site is approximately 50 yards to the south east of the main Boundary Ski trail down an old, over grown USFS road. That road had multiple downed trees laying across it and others growing through the former road bed. As we turned that way, we got approximately 30 yards from the attack site when BMS Smith alerted us to a bear. The bear was east of our location, at the edge of a small marshy clearing. It was moving south east before it stopped. At that point the bear looked at us for a split second before immediately changing directions and charging directly towards the team. The bear had to clear the marshy area before encountering willows partially buried in snow. As the bear cleared the marshy area, it hit the snow in the willows and was slowed due to the depth and softness. We held fast yelling as the bear kept pushing through the deep snow in a fashion similar to the way a dog runs through deep snow in a field. As the bear continued, it quickly became apparent this was not a bluff charge. The snow while deepest where the bear was currently located, began to thin before disappearing the closer you got towards the team's location. In the event the bear cleared the deep snow and regained traction, there would be no time for the team to react before contact was made with a human, resulting in serious injury or death.
In the split second it took to process what was taking place, I made the decision I was going to engage the bear and shoot it before it was able to gain traction again. I called out loud that I was taking a shot, before firing my shotgun. Afterwards I learned both Specialist Frey and Smith called out to shoot as well. Multiple shots were fired and I could see the impact of several rounds on the bear's body as they hit. The bear slumped down in the snow before moving again. USFS LEO Pieprzyca was armed with an issued 45/70 government rifle and heavy 540 grain bullets designed for penetration. At the instruction of Specialist Frey, USFS LEO Pieprzyca fired a couple rounds into the bear. **Note:** Once shot, it is absolutely imperative to prevent unnecessary pain and suffering of the bear and for public safety, we ensure the bear is deceased. After the bear stopped moving, the other team members covered Specialist Smith and I as we

Footnote: We were walking into a southerly breeze. The bear was northeast of our location…
It was moving southwest before it stopped.

approached the bear to check it's status. As we still did not know the sex of the bear, we approached ready to engage another animal should it have been a female with cubs. Once confirmed dead, I assisted Specialist Smith in rolling the bear over where we discovered it was an adult male. While others maintained a security perimeter and Bear Management began their checks on the bear, I took pictures of the scene, only to discover that during the charge the bear had run over a cached moose carcass, buried in the marshy area. It was difficult to see the moose as it was mostly buried and I could not smell anything that would indicate there was a carcass there.

I used my OnX Hunt maps to get GPS coordinates of the following locations;

- 44.70168, -111.10067 -- Location of the south loop of Bakers Hole Campground.
- 44.69999, -111.10053 -- Location I was standing at when I shot the charging bear.
- 44.70010, -111.10025 -- Location of deceased bear once rolled over.
- 44.70017, -111.10021 -- Location of cached moose carcass.
- 44.70002, -111.10018 -- Location of the attack site from 04/15/2021.

A brief conversation occurred with BMS Frey and it was evident that the primary causation of the bear attack on Carl was the defense of a food source. It is unknown if Carl knew the carcass was there or why he was in that location. The articles of clothing and Carl's possessions left on scene were collected. The only items retained for evidence were the discharged can of bear spray, a bloody beanie soft cap and the pants collected by IDFG. Reports indicated the attack focused on Carl's head, resulting in major head trauma with very little injury to other parts of his body. As such it is unlikely that the bear would have left any saliva or blood on other articles clothing in significant volume to provide any useable evidence to identify an individual animal. The fact the WHART team experienced a strikingly similar encounter less than 24 hours after the initial attack, resulting in a dead male bear leads one to believe the deceased bear was responsible for the attack. It would be unlikely to have multiple dominate male bears so close to such a valuable food source coexisting as the more dominate would chase the lesser male away.

USFS LEO Linhart arranged for Deputy Gavagan to bring a tracked All Terrain Vehicle (ATV) to retrieve the dead bear, as well as USFS Sawyer to clear the path. The ATV's winch was used to retrieve the bear where it was loaded into Captain Pankratz truck and taken to the BRO. While loading the bear, I noticed a burning, tingling sensation in my nose and lungs, coughing several times. That sensation was consistent with past exposure I have had to bear spray, albeit at a much lower dose. Later, while going through Carl's belongings collected from the attack site, I experienced the same sensation of burning and coughing. This indicates bear spray was discharged some time during the attack, consistent with the empty canister of bear spray found. Whether the spray was successfully deployed on the bear, or if the residue on the bear and Carl's belongings was the result of cross contamination, will forever be unknown.

Note: I was notified there had been a digital camera with Carl after the fact. That camera was passed off to his friends before my arrival during the initial rescue. On April 17, 2021, I met Keith Johnson (DOB 06/15/1985) at Back Country Adventures in West Yellowstone and was able to view the pictures on the memory card for the month of April 2021. I did not observe any pictures on that card similar to the attack site. Whether any pictures were removed before my observation is unknown, as control was lost over the camera.

I was notified the morning of April 17, 2021 by Captain Pankratz that Carl had succumbed to his injuries while in the hospital. As a result, investigators will never know for certain the events that led up to this bear attack.

No Further Action Taken. Robert Pohle FG32

Appendix B:

WYOMING GAME AND FISH DEPARTMENT 5400 Bishop Blvd. Cheyenne, WY 82006 Phone: (307) 777-4600 Fax: (307) 777-4699 wgfd.wyo.gov **GOVERNOR** MARK GORDON **DIRECTOR** BRIAN R. NESVIK **COMMISSIONERS** PETER J. DUBE – President GAY LYNN BYRD – Vice President RALPH BROKAW MARK JOLOVICH RICHARD LADWIG ASHLEE LUNDVALL KENNETH D. ROBERTS

Wyoming Game and Fish Wildlife Forensic and Fish Health Laboratory
1212 South Adams Street
Laramie, WY 82070
Phone: (307) 721-1921

FORENSIC LABORATORY EXAMINATION REPORT LAB NO.
21-27-W-CAF

DATE:
June 14, 2021

SUBMITTERS: Kevin Frey
Grizzly Bear Specialist
AGENCY:
Montana Fish, Wildlife and Parks
1400 South 19th
Bozeman, MT 59718

EXAMINER: Tasha Bauman
Lauren Schumacher
CASE NO.: 2021-04
PURPOSE: Species identification of the submitted item.

EVIDENCE RECEIVED:
Tasha Bauman, Forensic Specialist, received the following item via Federal Express on May 7, 2021:
Item #1: "Possible skin/cartilage tissue from stomach of grizzly bear"

EXAMINATIONS CONDUCTED:
Tests for species and family level identification were performed using serological and enzymatic electrophoretic techniques. Species identification was also performed using an amplified portion of the mitochondrial DNA cytochrome b gene and subsequent sequencing of the amplicon (mcb398 and mcb869). The sequence obtained was matched against sequences in the National Center for Biotechnology Information DNA database (www.ncbi.nlm.hih.gov).

RESULTS:
1) Species identification, by serological and enzymatic electrophoretic techniques, of item #1 was non-reactive.
2) The sequence of item #1 is 99% (max identity) to grizzly bear (*Ursus arctos*) sequences in the GenBank database over (395/401) base pairs indicating the sample originated from grizzly bear.

CONCLUSIONS:
1) Item #1 originated from grizzly bear.

DISPOSITION OF SAMPLES:
The item was retained in the custody of the examiners.

SEROLOGY AND DNA EXAMINER:_____
Tasha Bauman, M.S.
Forensic Specialist

SEROLOGY AND DNA EXAMINER:_____
Lauren Schumacher, M.S.
Forensic Analyst

Appendix C:

MONTANA VETERINARY DIAGNOSTIC LABORATORY

PHONE: (406) 994-4885
FAX: (406) 994-6344
WEBSITE: www.liv.mt.gov/lab
WEB RESULTS: https://mvdl.mt.gov
E-MAIL: mvdl@mt.gov

1911 WEST LINCOLN STREET
BOZEMAN, MT 59718

JENNIFER RAMSEY DVM FW & P
1400 S. 19TH AVE
BOZEMAN MT 59718

CASE:21-18156
Name/ID: FWP Grizzly
Species: Brown Bear (Grizzly)

Sex: Unknown **Age:** 20 Years

Owner: Montana FWP

COMPLETE REPORT 04/19/21

Sample Collection: 04/16/21
Accession: 04/19/21

Case Coordinator Authorization: SH

Previous Reports
04/19/21
04/19/21
04/19/21

RABIES

Rabies	Brain	Verified on: 04/19/21 by: SH
Animal ID	Test	Result
FWP Grizzly	Condition	Fair
	Human Exposure	Yes
	Rabies Final Result	**Negative**

From: Smith, Kate
To: "hilary_cooley@fws.gov"
Subject: FW: Blackfoot Watershed Wolf & Bear Activity Report: Fall 2019 - Spring 2020
Date: Tuesday, May 5, 2020 1:17:44 PM
Attachments: Wolf Bear Report Fall 2019-Spring 2020.pdf

Hilary – See attached. Apologies if you get this report directly.

Kate

.....

Kate Smith
FWS Grizzly Bear Recovery Program
W.A. Franke College of Forestry & Conservation | University of Montana
University Hall, Room 309
Missoula, MT 59812
phone: (406)243-4903

From: Sara Schmidt [mailto:sara@blackfootchallenge.org]
Sent: Tuesday, May 5, 2020 11:08 AM
Subject: Blackfoot Watershed Wolf & Bear Activity Report: Fall 2019 - Spring 2020

Greetings Blackfoot Challenge Wildlife Committee Members, Blackfoot Producers, and Interested Parties:

Please find attached **the Blackfoot Watershed Wolf and Bear Activity Report for Fall 2019 and Spring 2020**, compiled by Blackfoot Challenge and Montana Fish, Wildlife & Parks.

If you have any questions about the program or would like more information, please contact Wildlife Committee Coordinator Eric Graham at eric@blackfootchallenge.org or 406-240-3132 or Wildlife Committee Chair Randy Gazda at Randy_Gazda@fws.gov or 406-880-4386.

Thank you for your participation.

Sara
--
Sara N. Schmidt
Communications Manager, Blackfoot Challenge
PO Box 103 | 405 Main Street | Ovando, MT 59854
Office: (406)793-3900 | Cell: (406)529-2822
www.blackfootchallenge.org

THE BLACKFOOT WATERSHED WOLF AND BEAR ACTIVITY REPORT FALL 2019/SPRING 2020

In coordination with Montana Fish, Wildlife and Parks (FWP) Region 2 (R2), the Blackfoot Challenge (BC) produces this wolf and bear activity report. These reports are typically compiled during our range rider season in the spring, summer and fall. We were unable to complete a report last fall so that information has been included in this spring update for wolf and bear activity in the Blackfoot watershed.

Most of the grizzly bear management, prevention work and grizzly bear research trapping are handled by Eli Hampson (FWP) and Eric Graham (BC). Jamie Jonkel (FWP) will assist as needed and will handle calls from the public and provide logistical support. We welcome Rory Trimbo who is a bear management technician stationed in the Deer Lodge Valley that will be assisting in the Blackfoot as well.

Wolf, lion and bear depredations or livestock loss reimbursement are handled by Wildlife Services (WS) and the Livestock Loss Board (LLB). When depredations are not an issue - Tyler Parks (FWP) handles all the wolf related management, wolf research trapping and reporting. Eli Hampson (FWP) handles mountain lion related management and black bear management along with (FWP) game wardens. Scott Eggeman (FWP) is the point person for all issues pertaining to elk and deer and all aspects of wildlife in the Blackfoot watershed.

We will continue to work with ranchers throughout the Blackfoot watershed to monitor predator activity, assist with monitoring livestock, communicate with local ranchers and continue operating the livestock carcass pickup program. A special thanks to our range riders – Sigrid Olson, Vicki Pocha and Jordan Mannix. The Blackfoot Challenge Range Rider Program was established in 2008 and is entering its 12th season. We also thank Dan Massee and Barry Gordon who pick up most of the carcasses associated with the carcass pickup program. The Blackfoot Challenge Carcass Pickup Program has been ongoing since 2003.

Thanks again to the ranchers and landowners that make these programs possible. We would like to recognize all of the partners that provide funding and technical assistance - FWP, the United States Fish and Wildlife Service (USFWS), Montana Department of Transportation (MDT), the Bureau of Land Management (BLM), The Nature Conservancy (TNC), the Livestock Loss Board, Defenders of Wildlife, Vital Ground, the Cross Charitable Foundation, Bunting Family Foundation, National Fish and Wildlife Foundation, the Western Bear Foundation and numerous individuals.

If you have any questions about any of the Blackfoot Challenge wildlife programs call the **Wildlife Committee Chair - Randy Gazda (406) 880-4386 or the main office at (406) 793-3900**

CONTACT INFORMATION FOR REPORTING WOLF, BEAR AND/OR LION ACTIVITY:

Jamie Jonkel – MFWP Bear Management Specialist (406) 544-1447
Eric Graham – Blackfoot Challenge Wildlife Program Coordinator (406) 240-3132
Eli Hampson---MFWP Bear/Lion Management Technician (406) 210-3213
Tyler Parks – MFWP Wolf Management Specialist (406) 531-4454
Rory Trimbo—MFWP Deer Lodge Bear Management Technician (406) 465-9343
Scott Eggeman – MFWP Blackfoot Area Wildlife Biologist (406) 542-5542

If you have a suspected livestock depredation, please notify USDA **Wildlife Services** as soon as possible to determine the cause of death. Regarding reimbursement for losses through the **Livestock Loss Board**: If you suspect a livestock loss due to mountain lion/wolf/grizzly bear predation, you can request an investigation to see if the losses were due to a confirmed or probable depredation. The Livestock Loss Board can pay only for confirmed or probable losses as determined by USDA-Wildlife Services (WS).

WS Powell County - Bart Smith (406) 660-0368
WS Missoula County - Ted North (406) 274-4856
WS Lewis & Clark County - John Meidtke (406) 855-8429
Department of Livestock - Livestock Loss Board (406) 444-5609

BLACKFOOT WATERSHED WOLF PACKS

Montana FWP uses a Patch Occupancy Model (POM) to estimate Montana's wolf population and track trends. Details on POM can be found in the Annual Wolf Report on the FWP website http://fwp.mt.gov/fishAndWildlife/management/wolf/. The transition to POM means that collecting minimum pack counts is no longer a high priority for monitoring wolf numbers. Therefore, the pack structure for most of the packs below is unknown. The rough numbers below are based largely on public reports and represent pack counts after the general hunting season, which ended on March 15th, 2020.

ARRASTRA CREEK PACK
Pack Structure: 3 to 4
Collared Wolf: No
Pack Report: Nothing new to report.

AVON PACK
Pack Structure: ~4
Collared Wolf: No
Pack Report: Nothing new to report.

BELMONT PACK
Pack Structure: ~4
Collared Wolf: No

Pack Report: This pack is thought to spend time on the Confederated Salish and Kootenai Tribe reservation.

BUGLE MOUNTAIN PACK
Backcountry

CHAMBERLAIN PACK
Pack Structure: 2
Collared Wolf: Yes (1)
Pack Report: Nothing new to report.

CONGER POINT PACK
Backcountry

HARDSCRABBLE
Pack Structure: 2
Collared Wolf: No
Pack Report: This pack was recognized in 2019 and frequents Alice Creek, Bartlett Creek, Cadotte Creek, and South of Hwy 200 North of Willow Creek.

HUMBUG PACK
Pack Structure: Unknown
Collared Wolf: Yes (1)
Pack Report: Nothing new to report.

INEZ PACK
Pack Structure: 3 Adults
Collared Wolf: No
Pack Report: Nothing new to report.

LANDERS FORK PACK
Pack Structure: Unknown
Collared Wolf: No
Pack Report: Nothing new to report.

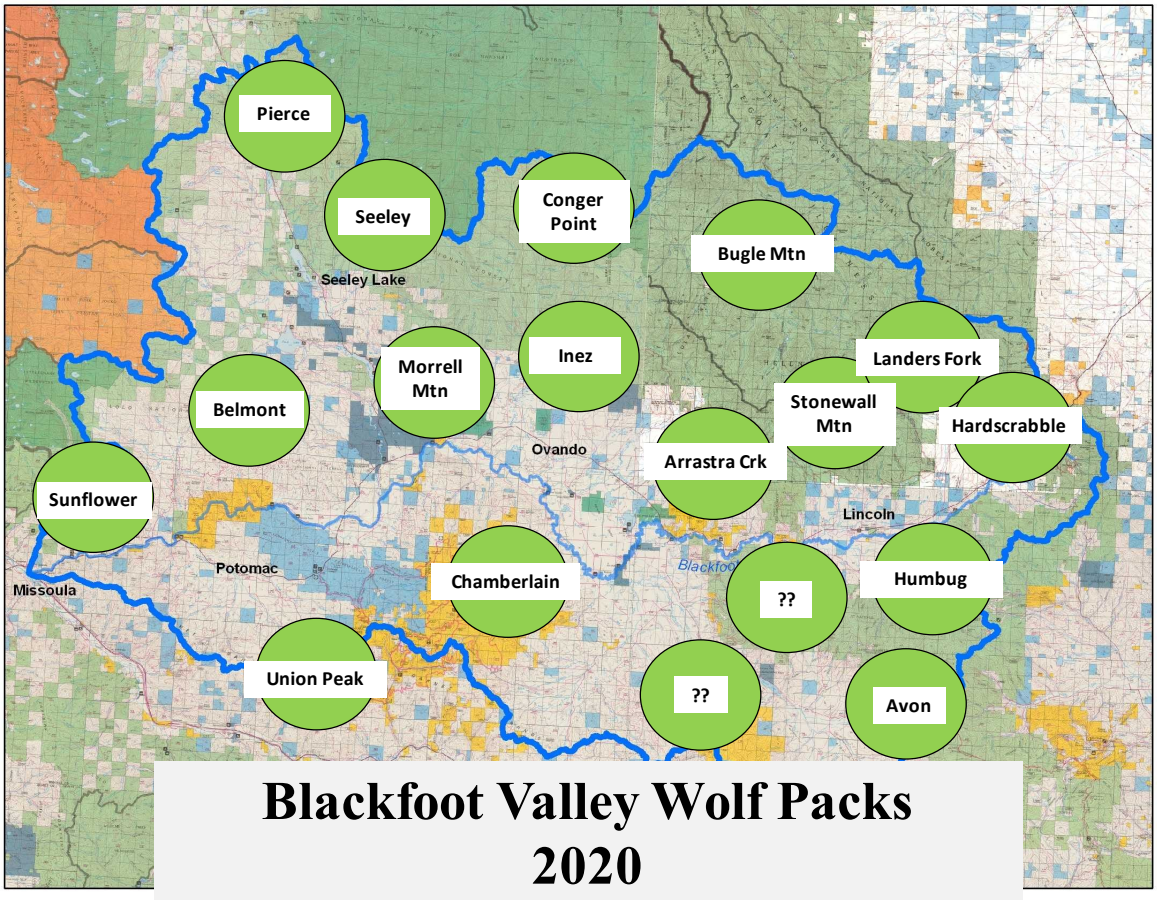
MORRELL MOUNTAIN PACK
Pack Structure: ~3 Adults
Collared Wolf: No
Pack Report: Nothing new to report.

SEELEY LAKE PACK
Pack Structure: ~4 or more Adults
Collared Wolf: No
Pack Report: Nothing new to report.

STONEWALL MOUNTAIN PACK
Pack Structure: ~4 Adults
Collared Wolf: Yes (1)
Pack Report: Nothing new to report.

SUNFLOWER PACK
Pack Structure: ~5 Adults
Collared Wolf: Yes (2)
Pack Report: Nothing new to report.

UNION PEAK PACK
Pack Structure: ~5 or more Adults
Collared Wolf: Yes (1)
Pack Report: Nothing new to report.



WOLF ACTIVITY 2019 SUMMARY

For 2019, in the Blackfoot watershed Wildlife Services confirmed 3 calves and 1 livestock guard dog that were injured by wolves and 5 calves and 4 sheep that were killed by wolves. WS radio collared 4 wolves and lethally removed 15 in response to confirmed wolf depredations. Eleven of the 15 wolves were removed from the chronically depredating Chamberlain wolf pack. Three wolves were removed from the Stonewall pack. A single wolf was removed west of Avon; its pack association is unknown. To assist with wolves around livestock FWP collared eight wolves in Region 2 in 2019, four of which were in the Blackfoot watershed.

UPDATES REGARDING GRIZZLY BEAR ACTIVITY IN THE BLACKFOOT WATERSHED

In 2018 the Blackfoot had its highest number of grizzly bear conflicts on record. In past years, we typically averaged four to five livestock depredations and 15 or so residential conflicts mostly involving uncontained garbage, bird feeders, fruit trees, freezers and grain. But, in 2018, there was an upsurge in conflicts involving uncontained residential and agricultural attractants. Approximately 80 grizzly-related conflicts were reported (six of which were verified livestock depredations and one depredation attempt). The 70 or so home site attractants mostly involved uncontained garbage, pet food, bird seed, chicken feed other livestock feed. As a result, a handful of grizzlies in 2018 learned that uncontained attractants were available, and in 2019 a few of those bears continued to exhibit "food conditioned behavior."

2019 SUMMARY

Through the year there were abundant reports and observations of grizzlies feeding in agricultural crops, traveling through and feeding on natural foods. But, compared to 2018, there was a reduction in the number of conflicts.

The grizzly season started out with grizzly tracks being observed in the foothills and higher ridge lines as early as March 19th and by the end of March we were getting reports of grizzlies on ranch lands in the Blackfoot Valley and from snowmobilers throughout the Clearwater drainage. During the spring we had good moisture and grizzlies were being observed throughout the Blackfoot watershed. In July and August, due to bountiful huckleberry, choke cherry and hawthorn production, sightings and conflicts remained low. But, as with most years, conflicts increased September through November. Historically the highest conflict period in the Blackfoot occurs in the fall. In 2019, there were a total of 47 reported residential conflicts and 4 depredations involving grizzlies. Note, most of the conflicts at residential sites were related to the radio-collared grizzly bear "Stevi" (discussed below) and the two grizzlies he was traveling with. There were, however, several other grizzlies in the Blackfoot valley and at least one lone grizzly and a family group in the Clearwater drainage that exhibited "food-conditioned behavior."

LIVESTOCK DEPREDATIONS AND ONE GRIZZLY EUTHANIZED

Between April and the end of July, the Department of Agriculture's Wildlife Services and FWP R2 responded to four verified livestock depredation incidents and a handful of additional calls about livestock where the cause of death or injury was natural, or not determined. Below is a synopsis of each of the incidents and management actions that occurred in the Blackfoot.

- On 4/19/19, Wildlife Services investigated wounds on a newborn calf at a ranch near Helmville, MT, and determined that the injury was grizzly-related. Due to the amount of time that had passed and the fact that the calf was recovering, trapping was not an option.

- On 4/20/19, Wildlife Services responded to a calf killed near Helmville, MT. During the investigation it was discovered that a second calf had gone missing. Culvert traps and snares were set at site. On the 23rd one of two grizzlies were captured. Even though this was the sub adult male's first offense, after close consultation with the USFWS, it was decided that due to chronic depredations occurring in the area, the 225-pound bear would be euthanized and the second bear was not captured. Adjacent to this ranch, in 2018, there were multiple calf depredations by grizzlies at the neighboring calving ground. Traps were set at this site last year on three occasions, but no bears were captured. For more information you can go to this link: https://www.blackfootvalleydispatch.com/story/2019/05/01/news/grizzly-euthanized-after-cattle-depredations-in-helmville-valley/1001.html

- On 5/23/19 two calves were killed by a grizzly at another ranch near Helmville, MT. Wildlife Services set traps at-site, but the bears had consumed the calves and did not return. Traps were closed after several days of trapping.

- On 6/15/19 another calf depredation was discovered near Helmville, MT. Wildlife Services determined the death to be grizzly related. But, due to the amount of time that had passed trapping was not an option.

- Last spring, Wildlife Services investigated 7 additional calf carcasses where it was determined the calves had died of natural causes and were scavenged on by grizzlies. Two of these incidents occurred in the Avon area. In addition, Wildlife Services documented one calf killed by coyotes that had been scavenged on by grizzlies. Wildlife Services also investigated a calf with a neck wound, near Avon, MT, that was determined to be related to an infection and not a bite wound. After June 15th, there were no additional depredations reported in the Blackfoot watershed.

RESIDENTIAL RELATED CONFLICTS AND TWO GRIZZLIES EUTHANIZED

Two grizzlies were euthanized in 2019 as a result of their extreme food conditioned behavior.

- The first of these bears was "Stevi," a sub adult male, captured the fall of 2018 after digging up worms at the Stevensville Golf Course. This male was translocated from the Bitterroot Valley to the headwaters of Belmont Creek adjacent to the Rattlesnake Wilderness. He came out of his den, located in the southern Mission Range, on March 17th. In mid-April he stumbled onto a residence north of Seeley Lake with a large accumulation of winter garbage. FWP assisted the family with the removal of the trash. But after that episode "Stevi" continued to seek out garbage, dog food, chicken feed and bird feeders. He was suspected to have damaged a house trailer on the Blackfoot Clearwater Game Range and entered open porches, sheds and buildings for garbage, grain, dog food and BBQ grills. He was documented at multiple residences in the Seeley Lake area, Clearwater Junction area, Ovando area and Woodworth area. On July 18th he was captured and euthanized after entering a building and accessing dog food on a porch at a ranch near Woodworth, MT. For more information you can go to this link: https://missoulian.com/news/local/grizzly-that-prowled-stevi-golf-course-euthanized-after-seeley-lake/article_6d24e8a2-2d9d-5565-bc1e-72cb9db35b6b.html

- The second grizzly, euthanized on May 12th, southeast of Seeley Lake in the Woodworth area, did not have a known history, but was observed on multiple occasions traveling with the radio-collared grizzly known as "Stevi". Because of this bear's extreme food-conditioned behavior, after consultation with the USFWS, it was decided to put this bear down after he was captured. This young 250-pound sub adult male grizzly broke a door open to access a secured barn in order to get grain. The bear had also been observed at adjacent home sites accessing unsecured grain, garbage, pet food, chickens and other attractants. Following the incident the landowner took it upon themselves to build bear resistant sliding doors on the barn to prevent future conflicts. It can be assumed that this bear is one of several grizzlies that learned "bad behavior" last year, as a result of some folks not having grain, garbage and other attractants secured. For more information you can go to this link: https://www.seeleylake.com/story/2019/05/30/news/fwp-euthanizes-two-bears-in-the-area-in-the-past-month/4868.html.

- There was a third grizzly traveling with the two bears mentioned above that continued seeking uncontained attractants in the Woodworth and Seeley Lake areas. This bear was not captured. FWP responded to several additional incidents that that involved chicken feed and a female grizzly with cubs. One or two additional grizzlies (may have been the same bear) were reported in the Blackfoot Canyon area west of Lincoln that was involved in several incidents at residential sites involving grain and butchering scraps. FWP responded and erected a temporary electric fence.

ROAD KILLED GRIZZLY BEAR

On 6/6/19 a 500-pound adult male grizzly was killed by a vehicle on Highway 200 near Patterson Prairie. This is the 12th grizzly killed by vehicles in the Blackfoot Valley since 2004. Eight of these grizzlies have been killed along Highway 200 in the Lincoln Canyon between Ovando and Lincoln, MT.

2020 SPRING GRIZZLY BEAR SUMMARY

The first grizzly tracks reported this year were on March 3rd in the Arrastra Creek area and the first grizzly sighting was March 18th east of Placid Lake. Since that time, tracks have been observed in both the Clearwater and Blackfoot drainages. Through April more bears emerged from their dens and traveled to the lower elevations with most females with young out of their dens the first week of May.

GRIZZLY CONFLICTS AND ONE BEAR EUTHANIZED SPRING 2020

On March 28th Wildlife Services investigated wounds on a newborn calf at a ranch near Helmville, MT, and determined that the injury was not grizzly-related.

Between April 10th and the 12th a lone grizzly killed and cached three calves in a pasture bordering a riparian area on the same ranch mentioned above. Due to cold weather and snow it was not feasible to re-locate the cow calf herd. On April 13th Wildlife Services captured a 452-pound adult male. After consultation with the U.S. Fish and Wildlife Service, in accordance with Interagency Grizzly Bear Committee guidelines, it was decided, that because multiple calves had been killed by this individual bear, it would be removed. The hide and skull were salvaged for education purposes and the Blackfoot Challenge has begun working with the ranch on a possible electric fence project.



This is a photo of the 452 pound male grizzly that was euthanized. Photo by Eric Graham

In mid-April there were several incidents of grizzlies in proximity to ranch compounds associated with livestock carcasses. The livestock carcasses were picked up as soon as the reports came in. FWP is recommending that after March all carcasses set aside for pickup, are stored away from ranch premises.

COLLARED GRIZZLY BEARS 2020

Here is a summary of the three radio collared grizzlies in the Blackfoot:

- On April 10th during the spring radio-tracking flight it was discovered that the research female grizzly bear "Silver Queen" had dropped her collar northwest of Silver King Mountain. She had been collared since July 2018. She was originally captured northeast of Lincoln and was observed last fall with her yearling in the headwaters of the Landers Fork of the Blackfoot. This bear spent most of her time ranging the south end of the Scapegoat Wilderness between the Landers Fork and McDonald Pass. "Silver Queen" is an older 245-pound adult female.

- On April 10th the female grizzly bear "Ursa" was located at her den site in the headwaters of Falls Creek on the edge of the Scapegoat Wilderness. "Ursa" was captured last year on August 26th northeast of Lincoln, MT in the Landers Fork. It is not known at this time if she is still with her two cubs. Last year she spent most of her time

ranging the south end of the Scapegoat Wilderness between the Landers Fork and McDonald Pass. “Ursa” is an older 250-pound adult female.

- “Walking Bear”, a 535- pound adult male, recaptured in July 2018, was observed from the air on April 10th. His den site was not determined, but in 2018 and 2019 he denned in Arrastra Creek. The collar has been malfunctioning but he continues to wear his radio collar and spends most of his time ranging the river bottoms around the Aunt Molly Wildlife Management Area, the Blackfoot Canyon and the mountains north and south of Lincoln, MT. In year’s past “Walking Bear” has made two trips from the Blackfoot Valley over the top of the Mission Mountains to visit the corn fields around Ronan, MT.



“Ursa.” Photo by Eric Graham

BLACK BEAR AND MOUNTAIN LION ACTIVITY

2019

Last fall black bear conflicts in the Potomac Valley and Seeley Lake were constant. In Seeley Lake, several lone black bears and a female with cubs were trapped and relocated in response to conflicts. Several black bears were euthanized and multiple other black bears were reported accessing uncontained garbage, bird seed, dog food, chicken feed and other residential attractants. Seeley Lake has an extreme issue with uncontained attractants and last fall black bears were observed accessing garbage and other attractants on a nightly basis.

Last summer in Potomac there was an extreme situation involving bears feeding on residential garbage. At the ends of county roads, multiple homes are required to bring garbage cans to certain sites for garbage service. Most of these cans are left out all week and as a result, resident black bears are obtaining garbage on a nightly basis. Since 2015, FWP has been working with the community to resolve the situation with very little progress. Last year several of these bears began visiting Potomac home sites for garbage and other attractants. In addition, there were multiple incidents of both lions and bears killing small livestock and fowl. Wildlife Services trapped and euthanized one black bear and a lion that killed goats.

Last fall FWP fielded multiple reports of lions throughout the Blackfoot and Clearwater valleys. Similar to year’s past, most of the reports came from the communities of Potomac, Seeley Lake

and Lincoln. These three communities are known for lion activity due to prime habitat and abundant deer. FWP also responded to a handful of lions in the Ninemile Prairie area that were near camp sites. There were four reports of mountain lion attacks on dogs from Placid, Seeley, and the Swan-Clearwater Divide. As a result, two mountain lions were lethally removed.

2020

Black bear activity has been minimal. FWP has fielded reports of tracks and one incident of a black bear accessing garbage in a burn barrel north of Seeley Lake.

Throughout the winter FWP fielded reports of lion activity throughout the Blackfoot and Clearwater valleys. There were a handful of incidents where lions were in proximity to home sites. Similar to year's past, most of the reports come from the communities of Potomac, Seeley Lake and Lincoln. This winter there were a handful of incidents of lions being captured in wolf traps in Region 2. One of these incidents occurred in the Placid Lake area and the lion was safely removed. There were several reports of lions killing house cats in the Potomac area and Wildlife Services removed one lion that killed a goat.

Please report black bear and mountain lion activity/incidents as quickly as possible to Eli Hampson (406-210-3213), Jamie Jonkel (406-544-1447) or Scott Eggeman (406-531-6759).

For detailed information on black bear and lion activity in and around Region 2 check out these two sites:

http://missoulabears.org/
https://www.facebook.com/missoulabears/

GRIZZLY BEAR RESEARCH TRAPPING

There are no plans for any grizzly bear research trapping in the Blackfoot watershed this season. Should one of the collared grizzly bears die or drop their collar, traps will be set for a new bear. However, some opportunistic research trapping may occur depending on resources and time. For more information related to the grizzly bear population monitoring go to:

http://fwp.mt.gov/fishAndWildlife/management/grizzlyBear/monitoring.html

GRIZZLY BEAR ADVISORY COUNCIL UPDATE

Grizzly bear management in Montana is complex. While they are at recovery levels in the Greater Yellowstone (GYE) and Norther Continental Divide Ecosystems (NCDE), they have yet to reach recovery goals in the Bitterroot and Cabinet-Yaak Recovery Zones. In places where bear numbers are on the rise, they are dispersing into places they haven't been for decades, sometimes causing conflicts with people and communities. Last year the Governor of Montana appointed members to the Grizzly Bear Advisory Council. The council has been working

diligently and will eventually have recommendations for grizzly bear management and conservation in Montana.

The Grizzly Bear Advisory Council is comprised of a broad cross section of Montanans with a diversity of views on grizzly bear management, conservation, and recovery. The Council has been tasked with considering broad strategic objectives, such as:

- Maintaining and enhancing human safety
- Ensuring a healthy and sustainable grizzly bear population
- Improving timely and effective response to conflicts involving grizzly bears
- Engaging all partners in grizzly-related outreach and conflict prevention
- Improving intergovernmental, interagency, and tribal coordination

For more information on the advisory council check out this link:
http://fwp.mt.gov/fishAndWildlife/management/grizzlyBear/gbac.html

LIVESTOCK CARCASS PICKUP PROGRAM

The Blackfoot Challenge's Livestock Carcass Pick Up Program runs during calving season from mid-February through mid-May. Thereafter, carcasses in the Blackfoot Valley are picked up by FWP or the Blackfoot Challenge. In the spring of 2018, there were 5 incidents of grizzly bears venturing into ranch compounds to retrieve carcasses left out for the carcass pickup program. Dead calves were either left on the ground or placed on hay bales within high activity areas on the ranch and bears were lured in to feed on the carcasses. **As a result, the pickup protocol was re-evaluated and it is now recommending that starting April 1st all carcasses set aside for pickup be stored away from ranch premises by at least 400 yards.** Carcasses should be stored away from human and livestock activity at an accessible site with good visibility. If needed, the ranch can also call any of the numbers mentioned above for emergency pickup. If there is concern that a carcass will lure in bears before pick up, there is always the option of personally hauling the carcass to the Clearwater Compost site.

CONTACT INFORMATION FOR CARCASS PICKUP

DURING CALVING SEASON:
Dan Massee (406) 793-5639

OUTSIDE OF CALVING SEASON:
Jamie Jonkel (406) 544-1447
Barry Gordon (406) 541-1078
Eric Graham (406) 240-3132
Eli Hampson (406) 210-3213

The carcass will be taken to the compost site near Clearwater Junction to help prevent conflicts with bears and wolves. To learn more about this program, watch "Living with Carnivores: Boneyards, Bear & Wolves." Click here: https://vimeo.com/131528982.

And for information on how to avoid either directly or indirectly feeding wildlife in Montana, visit:
http://fwp.mt.gov/fishAndWildlife/livingWithWildlife/feeding/default.html

ELECTRIC FENCE COST SHARE PROJECTS

Multiple fencing projects have occurred at various ranches and residential sites across the watershed. Over the last two summers the Blackfoot Challenge has assisted multiple families with electrified residential containment fences. In years past the Blackfoot Challenge secured funds to electrify the Helmville Dump, the Ovando Dump, the Seeley Lake Dump and the Clearwater Junction Compost Site. These electric fences have proven effective at deterring bears.



This is an example of a 5 wire electric fence that was built in the Blackfoot to keep grizzly bears out of calving yards and residential home sites. Photo by Eric Graham

Electric fence is an excellent way to protect livestock, fowl and contain residential attractants. Electric fence is a method of ensuring that bears or other predators that check out yard areas will not come back again. A good shock is the best way to teach bears to keep away. Contact Jamie Jonkel (406) 544-1447 or Eric Graham (406) 240-3132 if you would like to talk about cost share programs to install electric fence around home sites, livestock holding pens, chickens,

cattle, pigs, goats, sheep, bee yards, fruit orchards, gardens and other sites that might attract bears or other wildlife. For information on electric fence and another option for cost sharing on electric fence check out this website:
https://defenders.org/got-grizzlies

From:	Davis, Ellen -FS
To:	Alec.Dale@gov.bc.ca; Buchanan, Jacqueline A -FS; Claudia Regan; Dawe, Christine -FS; Ed Schriever; Davis, Ellen -FS; Farnsworth, Mary -FS; Frank van Manen; Hilary Cooley; Jackson, Scott -FS; Jeff Mow; Jennifer Psyllakis@gov.bc.ca; jiwilliams@mt.gov; Johnston, Eric - FS; Karen_Taylor-Goodrich@nps.gov; Kate Norman; Mark Deleray; Mark, Chuck -FS; Martha Williams; Farnsworth, Mary -FS; Matt Hogan; Mike Philbin; Patrick Walsh; Paul Frame; Penny Becker; Richard Hotaling; Richardson, Leslie (Renee) - FS; Rollie White; Savage, Christopher S -FS; Schmid, David - FS; Scott.talbott@wyo.gov; Stephanie Potter; Tim Woolley; Whittington, Tamara - FS
Cc:	Colleen Matt (colleenamatt@gmail.com); csmithwmi@msn.com
Subject:	FW: Grizzly Bear in Stevi
Date:	Monday, October 29, 2018 3:11:05 PM
Attachments:	image001.png image002.png image003.png image004.png

Wow, see story in link below in Ravalli Republic today. Just a matter of time!

Ellen Davis
IGBC Executive Coordinator

Forest Service
Northern Region, Regional Office

p: 406-329-3434
f: 406-329-3171
ellendavis@fs.fed.us

26 Fort Missoula Road
Missoula, MT 59804
www.fs.fed.us

Caring for the land and serving people

From: McKay, Tod G -FS
Sent: Monday, October 29, 2018 12:50 PM
To: fredweis@cybernet1.com; Chuck Bartlebaugh <bearinfo@cfwi.org>; Beckwith, Nathan - FS <nbeckwith@fs.fed.us>
Cc: Strayer, Erica L -FS <estrayer@fs.fed.us>; Gale, Debra D -FS <ddgale@fs.fed.us>; Baumer, Amy E -FS <abaumer@fs.fed.us>; Mark, Chuck -FS <cmark@fs.fed.us>; Davis, Ellen -FS <ellendavis@fs.fed.us>
Subject: RE: Grizzly Bear in Stevi

https://ravallirepublic.com/news/local/article_10f3f415-9cc5-5df4-91f8-2bc045650fdc.html#tracking-source=home-top-story

---

From: McKay, Tod G -FS

Sent: Monday, October 29, 2018 12:34 PM
To: 'alfred weisbecker' <fredweis@cybernet1.com>; 'Chuck Bartlebaugh' <bearinfo@cfwi.org>; Beckwith, Nathan - FS <nbeckwith@fs.fed.us>
Cc: Strayer, Erica L -FS <estrayer@fs.fed.us>; Gale, Debra D -FS <ddgale@fs.fed.us>; Baumer, Amy E -FS <abaumer@fs.fed.us>; Mark, Chuck -FS <cmark@fs.fed.us>; Davis, Ellen -FS <ellendavis@fs.fed.us>
Subject: Grizzly Bear in Stevi

See photos of Grizzly trapped by FWP over the weekend on the Stevensville golf course, near Lee Metcalf NWR. This could be a game changer! Perry Backus (Ravalli Republic/Missoulian) is doing a story about this today.

Tod McKay
Public Affairs Officer

Forest Service
Bitterroot National Forest

p: 406-363-7122
c: 406-531-1130
tgmckay@fs.fed.us

1801 N. First
Hamilton, MT 59840
www.fs.usda.gov/bitterroot

Caring for the land and serving people

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From: Cooley, Hilary
To: Cecily Costello
Subject: Fwd: [EXTERNAL] draft Stevi grizzly bear news release
Date: Wednesday, October 31, 2018 12:50:16 PM
Attachments: image005.png
image006.png
image002.png
image003.png
image004.png
image001.png

FYI

_____

Hilary Cooley
Grizzly Bear Recovery Program
U.S. Fish & Wildlife Service
406-243-4903

---------- Forwarded message ----------
From: **Thompson, Michael** <mthompson@mt.gov>
Date: Mon, Oct 29, 2018 at 12:42 PM
Subject: RE: [EXTERNAL] draft Stevi grizzly bear news release
To: "Crowser, Vivaca" <Vcrowser@mt.gov>, Hilary Cooley <hilary_cooley@fws.gov>
Cc: "Jonkel, James" <JaJonkel@mt.gov>, "Arnold, Randy" <rarnold@mt.gov>, "Lemon, Greg" <GLemon@mt.gov>, "McDonald, Ken" <kmcdonald@mt.gov>

Vivaca, I advocate that the issue of alternatives for placing the bear takes us into a level of detail that we're not going to resolve in a brief news release. And we don't want to plant any seeds in people's minds and in the minds of Ravalli County Commissioners that would lead them to think that we might drop a bear somewhere unexpected (to them) without first having more directed dialogue. So, I ask, not now. That topic can come up in response to questions —and there are many to be asked—but I would not opt to prompt that discussion with this concise news that a bear was captured.

Mike Thompson

Region 2 Wildlife Program Manager

Montana Fish, Wildlife & Parks, Region 2

3201 Spurgin Rd

Missoula, MT 59804

O: (406) 542-5516

Montana FWP | Montana Outdoors Magazine



THE **OUTSIDE** IS IN US ALL.



From: Crowser, Vivaca
Sent: Monday, October 29, 2018 11:50 AM
To: Hilary Cooley <hilary_cooley@fws.gov>
Cc: Jonkel, James <JaJonkel@mt.gov>; Arnold, Randy <rarnold@mt.gov>; Lemon, Greg <GLemon@mt.gov>; McDonald, Ken <kmcdonald@mt.gov>; Thompson, Michael <mthompson@mt.gov>
Subject: RE: [EXTERNAL] draft Stevi grizzly bear news release

Thanks, Hilary. Good point. I spent quite a bit of time talking through your below point with folks this morning, getting ready for the follow-up questions that will likely come on that front. I ended up leaving it out of the release to keep it more to the point, but I don't feel strongly—I can certainly add something similar to the below if others would like.

Thanks,

Vivaca

From: Hilary Cooley <hilary_cooley@fws.gov>
Sent: Monday, October 29, 2018 11:48 AM
To: Crowser, Vivaca <Vcrowser@mt.gov>
Cc: Jonkel, James <JaJonkel@mt.gov>; Arnold, Randy <rarnold@mt.gov>; Lemon, Greg <GLemon@mt.gov>; McDonald, Ken <kmcdonald@mt.gov>; Thompson, Michael <mthompson@mt.gov>
Subject: Re: [EXTERNAL] draft Stevi grizzly bear news release

Thanks vivica. Seems like we're avoiding the obvious question of why bring the bear back to the ncde when we have a recovery zone right there? It would be good to acknowledge that the bitterroot is a recovery zone and that we want recovery there. It's just at this moment we don't have relocation sites identified and approved. But we will be working on for the future - particularly as gbear distribution in GYE and ncde is expanding.

Sent from my iPhone

On Oct 29, 2018, at 11:19 AM, Crowser, Vivaca <Vcrowser@mt.gov> wrote:

> Hi, all-
>
> I've attached a draft release for your review and input. As soon as I hear from you, I'll make any edits needed and then get this out the door and start returning phone calls, social media and email inquiries.
>
> Thanks,
>
> Vivaca

From: Jonkel, James
Sent: Sunday, October 28, 2018 1:52 PM
To: Arnold, Randy <rarnold@mt.gov>; Crowser, Vivaca <Vcrowser@mt.gov>
Cc: Hilary Cooley <hilary_cooley@fws.gov>
Subject: RE: G. Bear news release

Sub adult male. He weighed 249 pounds. Yellow ear tag number 2 green lip tattoo number 2 and iridium collar 164.460

Sent from my Verizon Wireless 4G LTE smartphone

-------- Original message --------

From: "Arnold, Randy" <rarnold@mt.gov>
Date: 10/28/2018 11:42 AM (GMT-07:00)
To: "Crowser, Vivaca" <Vcrowser@mt.gov>
Cc: "Jonkel, James" <JaJonkel@mt.gov>, Hilary Cooley <hilary_cooley@fws.gov>
Subject: G. Bear news release

Vivaca,

While visiting with Hilary Cooley today we were discussing news release. I advised you would be working with Jamie to get something out tomorrow. Hilary would like to have a chance to review the draft before we send it out.

Thanks!

Randy

Sent from my Verizon, Samsung Galaxy smartphone

<Grizzly Bear Captured Near Stevensville.doc>

From:	Marks, Kaimy J
To:	Cooley, Hilary
Cc:	Smith, Kate
Subject:	Fwd: [EXTERNAL] RE: MT FWP performance reports from GrantSolutions - F16AP00670
Date:	Thursday, June 3, 2021 5:45:09 PM
Attachments:	2020-annual-report-manley.pdf 2019-2014 R2 Grizzly Bear Management and Research Report.doc 2019 Annual Report Manley.pdf 2020 GYE-MT-Conflict.pdf

Hi Hilary-

See Ken's response, below.

From: McDonald, Ken <kmcdonald@mt.gov>
Sent: Thursday, June 3, 2021 3:28 PM
To: Marks, Kaimy J
Subject: [EXTERNAL] RE: MT FWP performance reports from GrantSolutions - F16AP00670

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Dear USFWS,

The funding provided by this grant is used exclusively for bear management and outreach work on the prairie portion of the Rocky Mountain Front, as described in the grant's budget narrative. That is why the report that was submitted was focused on the prairie portion of the RMF. Work completed in the Yellowstone Ecosystem is funded by FWP, and is done in collaboration with the interagency grizzly bear study team (IGBST). A powerpoint summary of conflict management work is attached. Summaries of work completed are incorporated into the annual IGBST annual report that can be accessed on the web at:

Annual Reports: https://www.usgs.gov/centers/norock/science/igbst-annual-reports?qt-science_center_objects=0#qt-science_center_objects

Mortality: https://www.usgs.gov/science/interagency-grizzly-bear-study-team?qt-science_center_objects=4#qt-science_center_objects

Similarly, griz bear management work in the western portion of the NCDE is funded by FWP and US Forest Service. I have attached reports from the NCDE West side for 2019 and 2020 and a summary report covering the south end of the NCDE for 2019.

Thank you,

Ken McDonald
Wildlife Division Administrator
Montana Fish, Wildlife & Parks
P.O. Box 200701
Helena, MT 59620-0701
Ph: (406) 444-5645
Email: kmcdonald@mt.gov



From: Marks, Kaimy J <kaimy_marks@fws.gov>
Sent: Thursday, June 3, 2021 1:43 PM
To: Dearing, Caryn <CDearing@mt.gov>
Cc: McDonald, Ken <kmcdonald@mt.gov>
Subject: [EXTERNAL] Fw: MT FWP performance reports from GrantSolutions - F16AP00670

Hi Caryn,

Hilary is asking for more information on these reports - please see her comment, below. I can't accept them in GrantSolutions until Hilary approves the content.

Thanks-
Kaimy Marks
Administrative Officer
MT Ecological Services Office
585 Shephard Way, Ste 1
Helena, MT
(406) 430-9006

From: Cooley, Hilary <hilary_cooley@fws.gov>
Sent: Thursday, June 3, 2021 1:35 PM
To: Marks, Kaimy J <kaimy_marks@fws.gov>
Cc: Smith, Kate <kate.smith@mso.umt.edu>
Subject: Re: MT FWP performance reports

Hi Kaimy,

Same issue as last year. The SOW includes both NCDE and GYE. This is a report from one small part of the NCDE. It is not acceptable.

From: Marks, Kaimy J <kaimy_marks@fws.gov>
Sent: Thursday, June 3, 2021 10:39 AM
To: Cooley, Hilary <hilary_cooley@fws.gov>
Cc: Smith, Kate <kate.smith@mso.umt.edu>
Subject: Fw: MT FWP performance reports

Hi Hilary,

I don't see a response from you on these yet. Are they acceptable?

Kaimy Marks
Administrative Officer
MT Ecological Services Office
585 Shephard Way, Ste 1
Helena, MT
(406) 430-9006

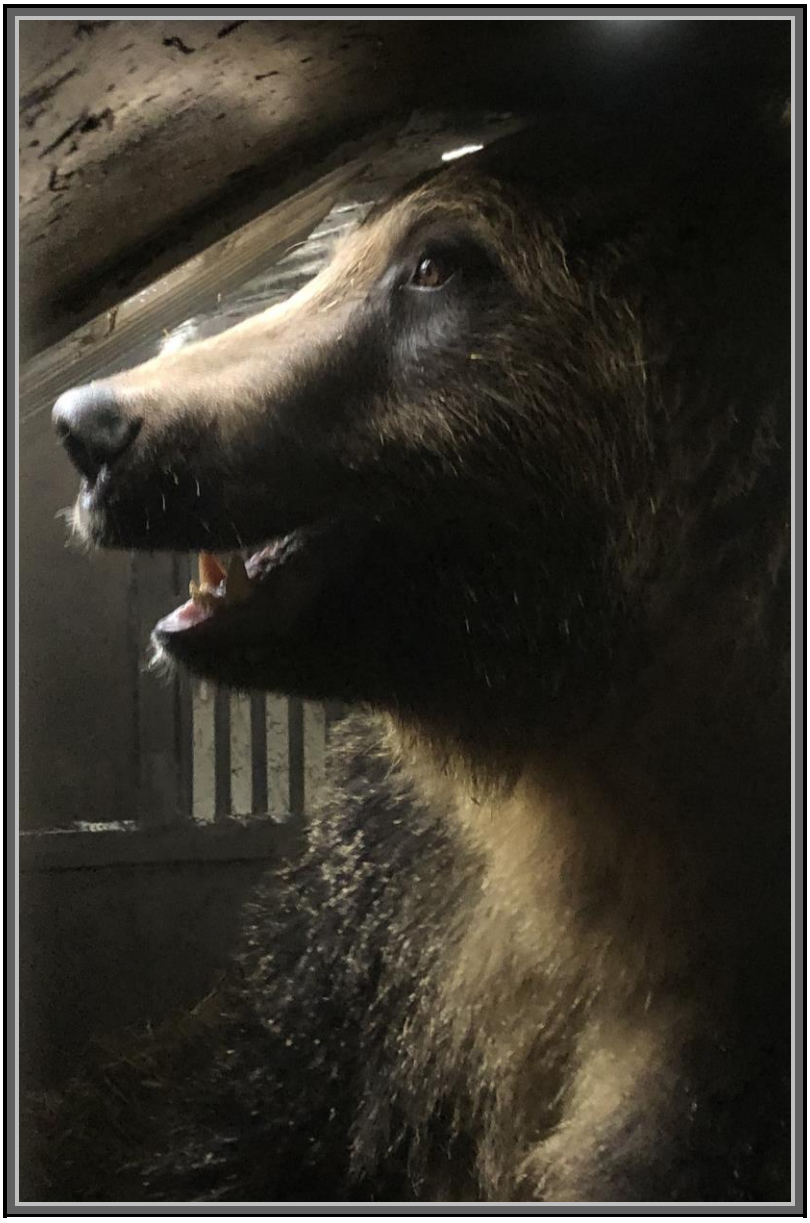
From: Marks, Kaimy J
Sent: Thursday, May 20, 2021 11:11 AM
To: Cooley, Hilary <hilary_cooley@fws.gov>
Cc: Smith, Kate <kate.smith@mso.umt.edu>
Subject: MT FWP performance reports

Hi Hilary,

I just found these two reports submitted in GrantSolutions and awaiting approval. Have you seen them? If so, are they acceptable?

Kaimy Marks
Administrative Officer
MT Ecological Services Office
585 Shephard Way, Ste 1
Helena, MT
(406) 430-9006

Grizzly Bear Management
2020 Annual Report
NCDE Portion of Region 1
Montana Fish, Wildlife & Parks



Madelon Martin photo.

Prepared by:
Tim Manley and Justine Vallieres
Grizzly Bear Management
Kalispell, Montana

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Grizzly bear looking for ducks in a shed. Remote camera photo.

Acknowledgements

Many people were essential to having a successful grizzly bear management program. Funding was provided by Montana Fish, Wildlife & Parks (MFWP), the Montana Outdoor Legacy Foundation (MTOLF), and Vital Ground Foundation and their Conflict Prevention program. Fundraising by Madelon Martin, and donations by other private individuals allowed for the purchase of additional field equipment. MFWP wildlife technician, Justine Vallieres, was hired again in May for a third season. The funding for her position was through the MTOLF. MFWP managers Neil Anderson, Jim Williams, and Ken McDonald supported management decisions. We coordinated and worked with bear managers and technicians Kim Annis and Amber Kornak (MFWP), Glen Hall (Blackfeet Tribe (BIR)), Stacy Courville and Kari Eneas (Confederated Salish & Kootenai Tribe (CSKT)), John Waller (Glacier National Park (GNP)), James Jonkel and Eli Hampson (MFWP), Mike Madel (MFWP), Wesley Sarmento (MFWP), Rory Trimbo (MFWP), Erik Wenum and Chad White (MFWP). MFWP game wardens Lee Anderson, Perry Brown, Ben Chappelow, Chris Crane, Nate Muhn, Chris Neu, John Obst, Wes Oedekoven, Nathan Reiner, Justin Slobuszewki, and Brian Sommers were extremely helpful in the reporting and investigation of bear conflicts, illegal feeding, bear mortalities, and handling bears. MFWP research biologists Cecily Costello and Lori Roberts provided equipment, database management, logistical support, and bear handling. MFWP helicopter pilot Rob Cherot, and Two Bear Air Rescue pilot Jim Pierce, provided safe and excellent service when tracking bears by helicopter. Wildlife Services employees Ted North responded to grizzly bear depredations on livestock and Adam Bacca assisted with preventative measures. U.S. Forest Service (USFS) personnel Rob Davies, Scott Snelson, Cas Waters, and Amy Jacobs made timely decisions on the relocation sites for bears on the Flathead NF. Kootenai NF personnel Bryan Donner and Lynn Johnson assisted with capture and release sites. USFS employees Cas Waters, Rachel Manley, Mark Ruby, and Jessica Swanson assisted greatly with monitoring and reporting potential problems on Forest Service lands. Dave Ring with the Montana Department of Natural Resources (DNRC) assisted with decisions regarding the trapping and releasing of grizzly bears on DNRC lands. Hilary Cooley and Wayne Kasworm with the U.S. Fish and Wildlife Service (USFWS), supported management decisions and coordinated on relocation sites. USFWS Special Agent Mona Iannelli investigated cases involving dead bears. BNSF employees were available and helpful when dealing with situations along the railroad tracks. A couple of NGOs have provided funding and on-the-ground assistance with prevention projects. Defenders of Wildlife personnel, Erin Edge and Russ Talmo, have been very supportive with electric fencing projects. Luke Lamar and Swan Valley Bear Resources have been very valuable helping residents in the Swan Valley install and maintain electric fencing. Bryce Andrews with People and Carnivores installed electric fencing. Several people have provided a large amount of time as volunteers. Chuck Cameron, Rachel Manley, Rob McGilvray, Madelon Martin, Gary Moses, Jim Pierce, Tim Thier, and Beth Vallieres were extremely dedicated and helpful. Central Valley Animal Clinic was generous in assisting with X-rays and euthanasia of bears when requested.

Introduction

Year 2020 was interesting and challenging. The Covid-19 pandemic did have some impact on our work. We were considered essential, so we continued to respond to grizzly bear conflict reports. We tried to address most of the issues over the phone, by text or email, but in many cases, it required a response in person.

We canceled most of our in-person presentations and conducted meetings by computer or conference calls. We continued to set traps, capture, handle, relocate or euthanize grizzly bears as necessary. We assisted landowners with electric fencing, set up remote cameras, loaned bear-resistant garbage containers, and deployed critter gitters.

In the past, we covered calls for the Eureka area, including Fortine, Trego and Stryker, all within Lincoln County and adjacent to the NCDE. Beginning in 2020, Kim Annis and her technician, Amber Kornak,

took over responding to calls and reports in that area. Kim is based in Libby and has worked closely with Lincoln County officials and landowners, so it made sense to have her cover that area also. We coordinated and worked together during the transition. Unfortunately, in October due to medical leave, Kim was not able to respond on the ground. Amber continued covering that area until she was done working November 1st. I continued receiving and responding to grizzly bear calls the remainder of 2020.

The grizzly bear trend monitoring program began in 2004 and continues today. The program is headed up by MFWP but is an Interagency effort. We have assisted with the capture, collaring, and monitoring of those trend bears when possible. We provide data on female grizzly bears with young, confirmed reports of grizzly bears outside the recovery zone, confirmed grizzly bear conflicts, and grizzly bear mortalities. Cecily Costello and Lori Roberts produce an annual report that can be found on the MFWP website.

In 2005, MFWP began an augmentation program of capturing grizzly bears with no history of conflict from the NCDE and releasing them into the Cabinet Mountains. We continue that effort annually.

This report is an overview of the work conducted during 2020 and a summary of management related captures since 1993. It includes prevention efforts, reported grizzly bear conflicts, management captures, releases, monitoring, mortality, and the Cabinet Mountains augmentation program.



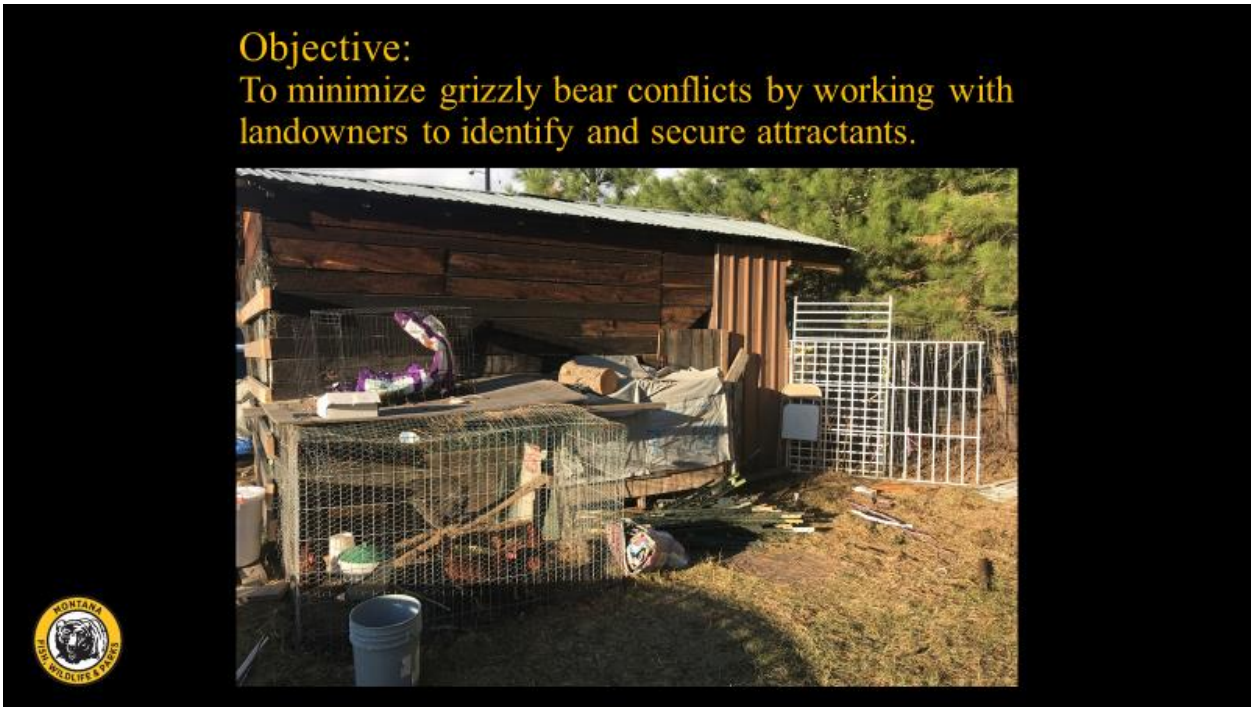
Goal and Objectives

Goal: Minimize conflicts between people and grizzly bears.



Objectives:

Objective - To minimize grizzly bear conflicts by working with landowners to identify, secure or remove attractants.



Objective - To work with agencies to promote food storage on public lands to minimize grizzly bear conflicts.



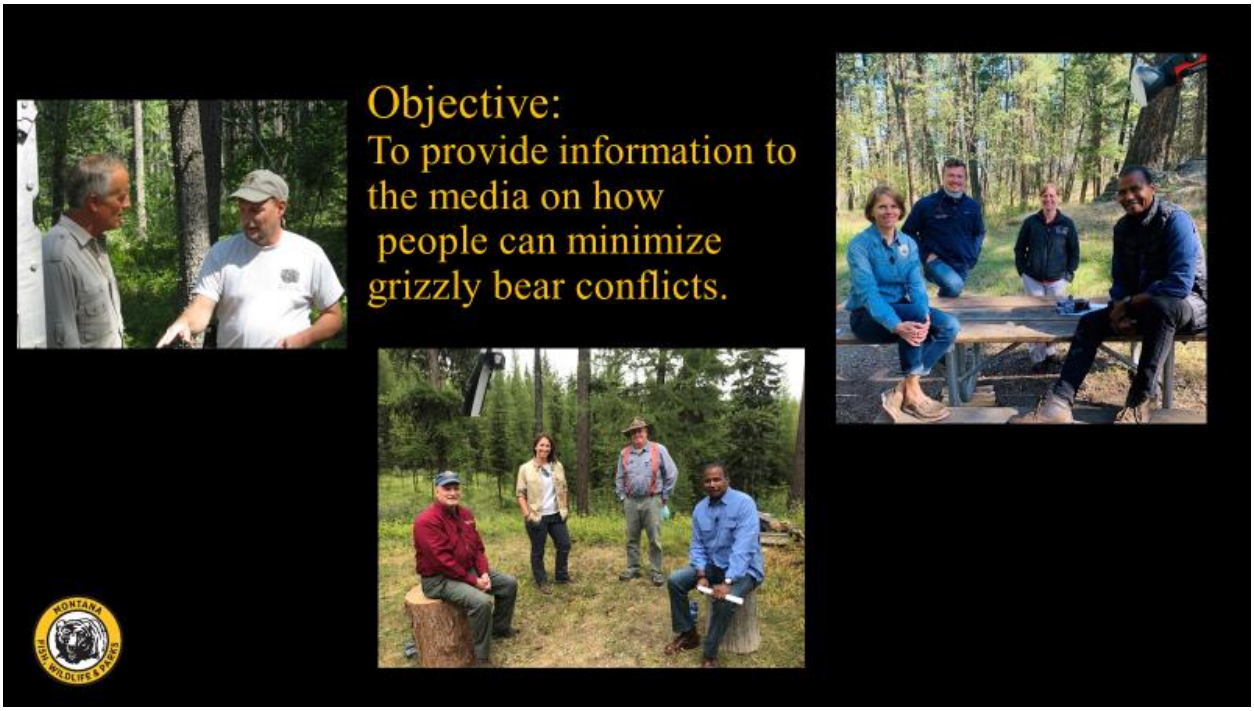
Over-filled bear-resistant dumpster (removed) and garbage that was left by campers on the Hungry Horse Ranger District (found and cleaned up by USFS Wildlife Technician).

Objective - To work with city, county, state, and federal governments to minimize grizzly bear conflicts.



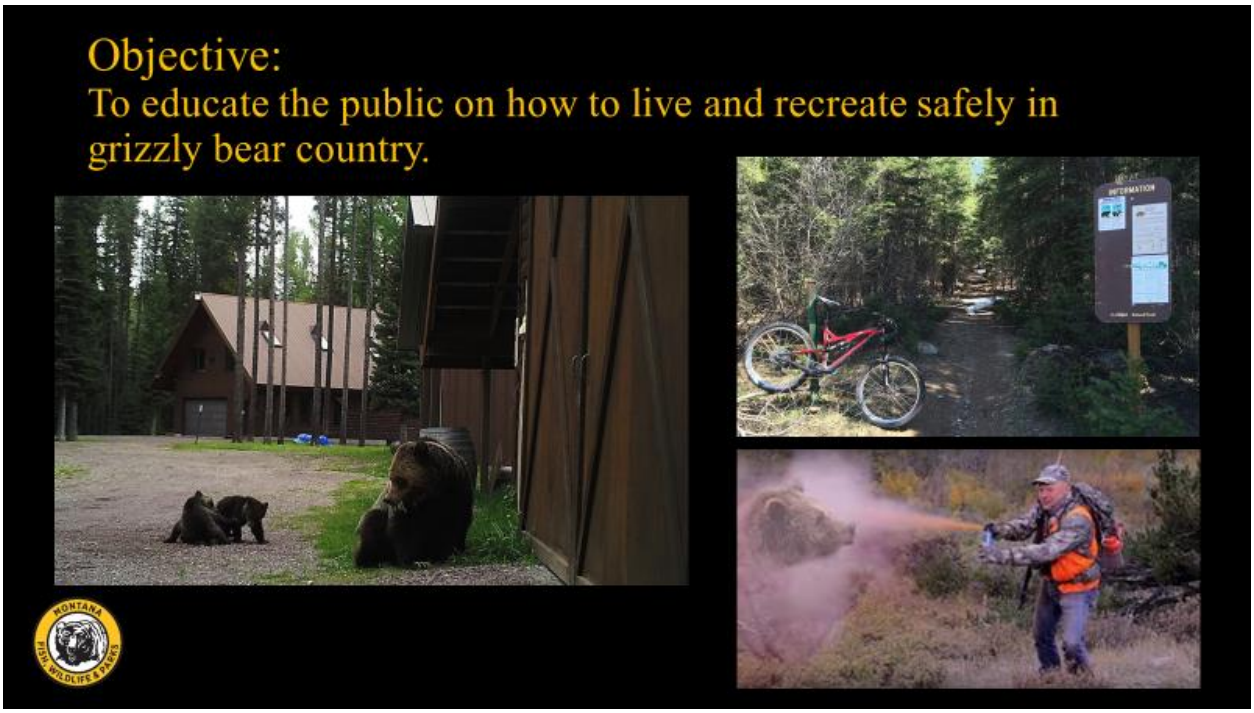
Garbage transfer stations and activity in four counties. Sites made bear-resistant (green), sites that need repair (yellow), sites that are not bear-resistant (red).

Objective - To provide information to the media on how people can prevent grizzly bear conflicts.



Media coverage by Jack Hanna and 60 Minutes.

Objective - To educate the public how to live and recreate safely in grizzly bear country.



Grizzly bears at a seasonal residence, informational signs for hikers and mountain bikers, and providing guidance on the use of bear pepper spray.

Objective - To respond to grizzly bear conflicts on private and public lands.



Objective - To develop relationships with the landowners, public, NGOs, and agency personnel to improve trust, coexistence, and tolerance.



We decided to add the last objective after attending some of the Governor's Grizzly Bear Council meetings. There was a lot of discussion about public trust, landowner tolerance of grizzly bears, and trying to coexist with grizzly bears when possible. Over the years, in many areas we have worked, we think the tolerance for grizzly bears has improved. Residents that live

in grizzly bear country expect them to be around and have learned or are learning how to coexist. The difficult areas are in those places where people do not expect to have grizzly bears around. It is important that we respond to grizzly bear reports and conflicts in a timely manner when possible. If a site visit isn't possible, we need to follow up with a phone call. Failing to contact the reporting party in a timely manner will only reduce trust in our management and will result in a decrease in the tolerance of grizzly bears, with possibly less reporting as a side effect of both.

Grizzly Bear Technician

The Montana Outdoor Legacy Foundation (MTOLF) again provided monies to fund a 6-month technician to work with the MFWP Grizzly Bear Management Specialist. This year, Justine Vallieres was hired for a third season and began work in May.

Over the last three field seasons, Justine has learned a lot and has become very confident and proficient in preventing and responding to grizzly bear conflicts. This involved working closely with landowners and agency personnel. Justine has become very competent with trapping, drugging, handling, and monitoring grizzly bears. All the captures and handling events were conducted in a safe and professional manner. Justine is also experienced with installing and maintaining electric fences, deploying critter gitters, remote cameras, and assisting landowners in identifying and securing attractants.



The grizzly bear technician position is an extremely important part of the grizzly bear management program. It provides additional personnel to respond to conflicts and to work with landowners on preventing conflicts.

Funding for the technician position has always been a challenge because it is funded with "soft" dollars. That means funds must be raised every year primarily through grants and donations.

Justine's last day of work was Nov 1, 2020. I was still getting grizzly bear reports into December.

Prevention

The best way to minimize conflicts between people and grizzly bears is to prevent conflicts from occurring in the first place.

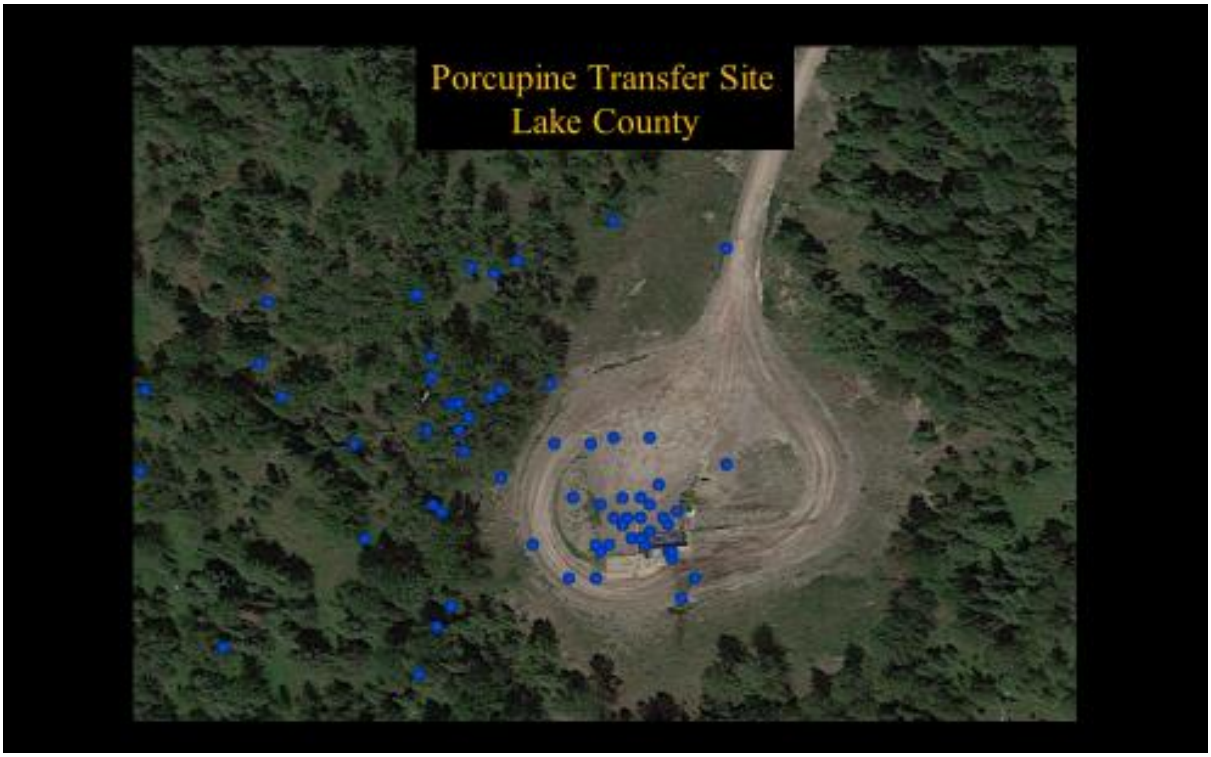
Prevention can include a wide range of options including education (brochures, press releases, presentations, Bear Fairs, social media, etc.), increasing human tolerance, installing and maintaining an effective electric fence, and using approved bear-resistant garbage containers. Perhaps the most effective, but also the most time-consuming option, is one-on-one communication with people that live and recreate in grizzly bear country. The one-on-one communication needs to be done before a conflict occurs. Unfortunately, most one-on-one communication tends to occur in response to a conflict that has already occurred. The Covid-19 pandemic certainly reduced the amount of contact we had with landowners which impacted our prevention efforts.

County Garbage Transfer Stations
We work with Flathead, Lake, Lincoln, and Missoula counties and the management of their garbage transfer stations or "green box sites" on how to make them bear-resistant. Flathead and Lincoln counties have put a lot of effort and money into making their garbage transfer stations bear-resistant.

Flathead County was the first to relocate and install electric fencing around their Coram transfer site. Since then, Flathead County put electric fencing around their other sites at Olney, Ashley Lake, Essex, and Bigfork. The Flathead National Forest and the Great Northern Environmental Stewardship Area (GNESA) were involved with logistics and funding for some of the sites.

Lincoln County has followed the Flathead County bear-resistant garbage transfer station design and efforts. Within and adjacent to the NCDE, they have protected their sites at Glen Lake, Pinkham, Trego, and in 2020, the Fortine site. Previously the county moved the dumpsters from Stryker to the fenced Trego site. Kim Annis, the Kootenai National Forest, and GNESA were very instrumental in working with Lincoln County in securing those sites.

Lake County operates two transfer stations in our area. One at Porcupine Creek, south of Swan Lake, and the Ferndale site, adjacent to Ferndale. Both sites have 40 cubic yard roll-off containers with hydraulic arms and screen tops. Both sites were modified so that the lids could be opened and closed by flipping a switch. Currently, only the Porcupine site is operating correctly, although in the fall of 2020, we did know of a radio-collared female grizzly with two cubs of the year that gained access to garbage at this site. The issue seemed to be a problem with the lid closing all the way. Lake County was notified and attempted to correct the problem. Unfortunately, the family group continued to visit the site prior to denning. Lake County is proposing to remove this transfer station for several different reasons and is holding community meetings to determine the fate of the site.



GPS locations of a female grizzly with two cubs at the Lake County Porcupine garbage transfer site south of Swan Lake.

Many years ago, the Ferndale site developed a leak in the buried hydraulic line and the county has yet to fix the problem. We have contacted Lake County numerous times about the situation at the Ferndale site and have asked landowners, who use the site to also contact the county about fixing the leak, so the lids can be opened and closed by users of the site. So far, no action has been taken by the county. The county did put up a chain link fence and a new gate around the site, but bears can easily climb the fence since there isn't any electric component to it. We will continue to work with Lake County Sanitation to resolve the issues.

Missoula County covers the Swan Valley near Condon. Presently, all garbage collection is done by a private company, Republic Services. There have been discussions about creating a bear-resistant transfer station near Condon, but nothing has occurred yet. Republic Services has replaced some bear-resistant dumpsters that have malfunctioned or rusted out. Swan Valley Bear Resources continues to monitor bear-resistant containers in the Swan and has been very helpful working with Republic Services.

City of Whitefish: For many years, Erik Wenum, has been working closely with the city of Whitefish regarding primarily black bear related conflicts. He was instrumental in getting the city to enact an ordinance that basically states that the residents and businesses within the city limits can not roll out their garbage until the morning of pickup unless it is in a bear-resistant container. MFWP and Whitefish City officials met in October 2019 to discuss the bear situation in Whitefish and lack of bear-resistant containers. There was an agreement made to remove fruit trees on city property and to work with the local hauler, Republic Services, to provide bear-resistant garbage containers (Kodiak cans) within the city limits. We will continue the effort of working with Whitefish and Republic Services in minimizing bear conflicts within the city of Whitefish.

We are hoping that Whitefish will be the example of a responsible "Bear Smart Community" for all communities in the region. The Interagency Grizzly Bear Committee and the Grizzly Bear Education and Outreach Committees are exploring the idea of working with interested communities and NGOs on establishing "Bear Smart Communities" throughout Montana.

Electric Fencing: Properly constructed and maintained electric fences are very effective at keeping bears from gaining access to attractants. Bear conflict specialist, Kim Annis, based in Libby, has developed an electric fencing guide that provides information on how to properly install and maintain an electric fence. We distribute that guide to landowners and provide them with a link to the Interagency Grizzly Bear Committee website for additional information. http://igbconline.org/wp-content/uploads/2016/03/MFWP Electric-Fencing-Guide_March-2017.pdf

A large part of our prevention work involved assisting landowners with protecting chickens, pigs, and fruit trees with electric fencing. We helped with the installation of 10 temporary and permanent electric fencing projects located near Columbia Falls, Whitefish, Creston, Bigfork, Ferndale, Swan Lake, and Eureka. We also have an electric fence loaner program. During 2020, eight electric fence energizers and net fences were loaned to landowners.

Electric Screens and Mats: For the past 13 years we have been utilizing pulsating electric fence energizers to electrify screens on rubber mats on the ground in front of doors, on screens stapled over windows and doors of chicken coops and sheds, metal grain barrels, and even metal doors on garages and shops. We use these techniques if we are unable to secure the attractants with conventional electric fencing. We have found these techniques are usually quick, easy to install, easy for landowners to use, and are effective in deterring grizzly bears.

In 2020, we continued to utilize some of these techniques to protect chicken coops, garage doors, and for the first time; on wooden pallets in front of three grain silo doors. Although we didn't get video footage of a grizzly touching the electrified screen on the pallets, we did get video of the grizzly visiting the grain

bins four different times and not getting into them again. We will continue to evaluate and modify the setup in 2021.

Justine and Dillon Tabish (MFWP) also designed and distributed posters to local businesses that sold poultry and electric fencing supplies. These posters suggested the use of electric fencing to protect poultry and chicken coops from bears.



Critter Gitters: Since 1994 we have been using motion-activated noise makers called Critter Gitters to temporarily keep bears away from attractants. The Critter Gitters are made by Amtek and are powered by a 9-volt transistor battery. We currently loan them out to landowners to put up on chicken coops, garages, fruit trees, porches, and any attractants that can't be quickly secured. We loaned critter gitters to 24 different locations.

Bear-resistant Containers: Since 2004, we have had a program established to loan bear-resistant roll out garbage containers to residents. We started with Unbearable bins and have now acquired Kodiak cans thanks to funding provided by the Montana Outdoor Legacy Foundation (MTOLF) and the National Fish and Wildlife Foundation (NFWF).



This loaner program has been very popular and currently 10 of these containers are on loan. Two of those were borrowed from Swan Valley Bear Resources. We have had to retire some of the containers due to age and damage by hauling companies when they empty them.

Fruit Gleaning and Bear Aware Programs: In the fall of 2019, Justine created a Facebook page called Flathead Fruit Gleaning. It was set up so that landowners who wanted fruit picked could connect with people who were willing to come pick fruit, give it to the landowner, keep it for themselves, and/or provide it to the food bank. The page is new, but there was certainly interest and use by both landowners

and the public and over 600 people were following the page by the end of 2020. The local food banks have expressed an interest in helping with the program and receiving excess fruit. In both 2019 and 2020 fruit donations could be dropped off at the Kalispell FWP office to be given to the Grizzly and Wolf Discovery Center in West Yellowstone. This provided the bears at the center with an adequate amount of food and seems to be a positive motivator for people to pick and donate their fruit.

On May 26, Justine created the Flathead Bear Aware Facebook page. The page was created to provide information to the public on preventing bear conflicts, information on electric fencing and provides updates on MFWP bear management activities in the Flathead area. By the end of the season, over 2300 people were following the page.

Bear Fairs and Wake-up Social: Several years ago, a group in the Swan Valley started a Bear Fair that was open to the public. Within a few years, it grew from 50 people to over 300 people attending. Due to the success of reaching out to residents, additional bear fairs were planned and hosted at the communities of Polebridge, Essex, Coram, and Ferndale.

In 2020, due to the Covid-19 pandemic, the Bear Fairs and Wake-up Social were canceled.

Presentations, Meetings, and Training

A large part of grizzly bear management involves interactions between the public and agency personnel. This includes formal presentations, meetings, workshops and training. Again, due to the Covid-19 pandemic, most in person presentations, meetings, and training sessions were either canceled or held remotely via computer or conference calls.

February:
Flathead Valley Community College Presentation. February 8. Public.
North Fork Interlocal Meeting in Kalispell. February 12. Agencies and Public.
Governor's Grizzly Bear Council Meeting in Libby. February 26-27. Council & Public.

April:
Whitefish Legacy Partners Presentation in Kalispell. April 23. Public & NGO.
Whitefish Legacy Partners Bear Aware Program in Whitefish. April 30. Presentation. Public.

May:
NCDE Subcommittee Virtual Meeting. May 29. Agencies & Public.
Montana Wilderness Association Webinar. Presentation. May 29. Public.

August:
Explorers Club Webinar. August 3. Bear Biologists & Public.

October:
Bob Marshall Wilderness Foundation. Webinar. October 22. Presentation. Public.

November:
NCDE Subcommittee Virtual Meeting. November 23. Presentation. Agencies & Public.

December:
IGBC Meeting via Zoom. December 11. Agencies & Public.
SVBR Meeting via Zoom. December 16. Agency & NGO.

Reported Grizzly Bear Conflicts

In 2020, we received 250 reports related to bears. Of those reports, 131 were classified as confirmed grizzly bear conflicts. Seventy-nine reports were not classified as conflicts and consisted of sightings, remote camera photos, or reports that could not be confirmed. The remaining 40 reports or calls were grizzly bear reports for different areas, black bear reports, or requests for information. Reports for Lincoln County were passed on to Kim Annis and Amber Kornak. Reports from the Flathead Indian Reservation were given to Stacy Courville. Black bear reports were provided to Erik Wenum and Chad White.



A grizzly bear broke into a shed in the Swan Valley to get horse feed (left). Swan Valley Bear Resources helped us electrify the shed doors and windows. The bear returned but the electric kept the bear out. A family group of grizzly bears in the Flathead Valley broke into a chicken coop to get chicken feed and killed chickens (center). The landowner put up electric fence and didn't have any more issues. A female grizzly and her cub of the year getting garbage off a porch in Columbia Falls (right). The residents removed the other garbage and were asked to put their freezer inside.

The two most common confirmed grizzly bear conflicts were bears killing poultry (34 reports) and getting into unsecured garbage (32 reports). Bears getting into wild bird feed (11 reports) and feed for poultry, pets, pigs, and horses were also reported conflicts. Property damage involved chicken coops, barbeque grills, a garage, vehicle, and trailer. Reported depredations in addition to poultry involved goats, pigs, llamas, and rabbits. Fruit trees were damaged in the fall. Grain was obtained at two farms with grain silos. Two hunters were injured by a female grizzly with two cubs. Other reported encounters that did not involve any human injuries occurred with mountain bikers, hikers, a landowner surprising a sow and her cub on his property, and a woman riding a horse. Numerous calls were received because bears were feeding on grass in yards and being seen next to homes.

We had many reports of grizzly bears feeding on domestic fruit. These reports were primarily from the Flathead Valley and included apples, plums, pears, and cherries. In some situations, we were able to install temporary electric fences to prevent the bears from accessing the fruit and causing damage to the trees. In a couple of situations, there was not a good way to use electric fencing because of the location of the trees, driveways, and other obstacles. In those situations, we tried to get the fruit picked and

monitored the bear activity with remote cameras or we installed critter gitters. We also provided information about our Flathead Fruit Gleaning page on Facebook.



Scat from a family group of grizzly bears in the Bigfork area. Carrots from a garden and apples from an orchard. Temporary electric fencing was put up around the sites with the help of Bryce Andrews with People and Carnivores.



After a grizzly bear broke into their chicken coop, these landowners along the Stillwater River put up a permanent electric fence to protect their chickens in the future.



Grizzly bear getting into unsecured garbage in Ferndale. Remote camera photo by landowner.

In previous years, the number of calls and reported grizzly bear conflicts ranged from 10 in 1993 to over 250 in 1998. Since 1993, the number of reports has averaged about 100 each year. The number of calls is not necessarily an accurate measure of the level of grizzly bear conflicts for a given year (e.g. one grizzly bear in a subdivision may elicit many phone calls as the bear moves from house to house).

Once a grizzly bear conflict report is received, an effort is made to contact the reporting party and determine if a site investigation is warranted. Once a site has been investigated, a determination is made as to what actions can be taken to prevent further conflicts. In most cases, identifying and properly securing the attractants takes care of the situation. In some cases, the decision is made to attempt to capture the grizzly bear, or bears, involved. The decision to capture the bear is not automatic and it is based on human safety, bear safety, the type of conflict, location, and behavior of the individual bear.

Trapping was not always an option especially not when we dealt with and female and cub(s). Attempting to capture family groups can be the most difficult. In many cases, we decided not to attempt trapping because the risk of capturing a grizzly bear cub and not the adult female could make the situation more dangerous. This a big concern in situations where the traps cannot be located a safe distance from residences or away from human activity.



Bear-resistant Kodiak garbage container that we loaned to a property owner in the Bigfork area to store chicken feed. The lid wasn't latched when the bear tipped it over (left). Female grizzly with cubs getting into a Toter can containing dog food near Eureka. The bear broke through the side of the container (right). That is why we use the term "bear-resistant".

Emphasis is placed on trying to find solutions that will prevent problems from occurring at the same site again. With the landowner, we walk the property identifying why the bear was attracted to the site and how that attractant can be secured so that this bear or other bears will not visit the site and repeat the problem. Many times, the solutions are simple, and the landowners are willing to assist us by securing the attractants. Bird feeders, pet food, fruit, garbage, and poultry are the primary attractants we deal with here in Region 1, and all are usually easily secured.

During the 2020 field season, in attempts to capture bears for management reasons, culvert traps and a few foot snares were set a total of 110 times for a total of 410 trap nights. A trap night is a common way to measure trapping effort. For example; one trap set for one night is one trap night. Three traps set for two nights are six trap nights. All the management traps were set on private property (Figure 1).

When multiple bears, including family groups, were involved in conflict situations, multiple traps were set. The family trap we share with Glacier National Park was used on several occasions to capture cubs when the adult female was captured.

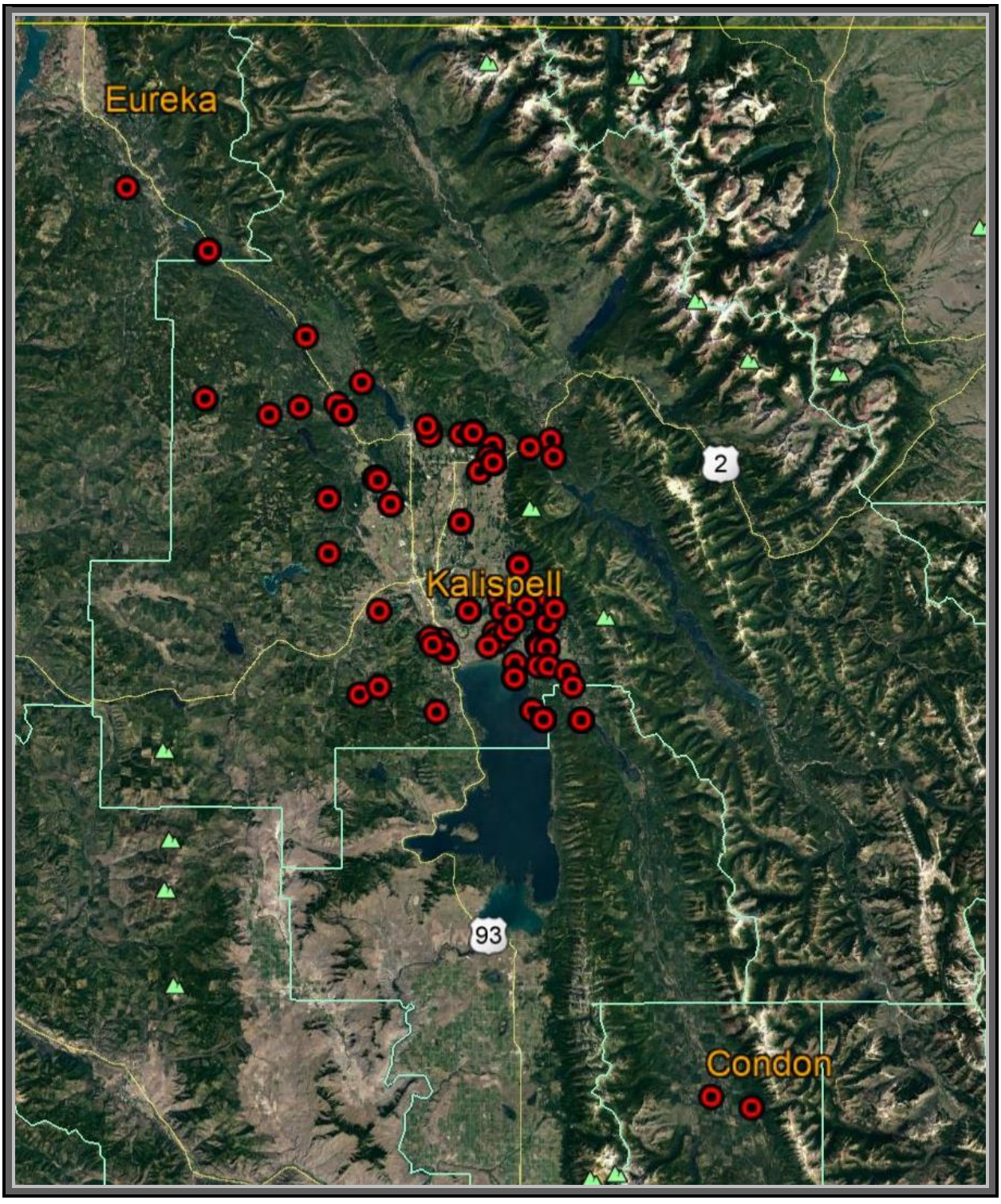


Figure 1. Locations of trap sites set in attempts to capture grizzly bears for management.

Grizzly Bear Management Captures

The decisions to capture grizzly bears for management reasons are not made without careful consideration. Human and bear safety are primary considerations. In many cases, the decision to capture and translocate a bear is made to give us time to properly remove or secure an attractant. In some cases,

the decision has been made to remove a bear from the population due to repeat conflicts, level of property damage, or concerns about human safety.



Subadult male grizzly bear (NWM279) at culvert trap, just before being captured.

Management trapping resulted in 19 captures of 19 individual grizzly bears. All 19 captures occurred on private land (Figure 2). Fifteen of the 19 captures occurred outside of the grizzly bear recovery line.

The 19 individual grizzly bears that were captured included two adult females, one with three yearlings (three female yearlings captured), and one with a male cub of the year, five subadult males, six subadult females, two yearling females and no adult or yearling males (Table 1).

All grizzly bears were captured in culvert traps. Captured grizzly bears were anesthetized with Telazol or Telazol/Medetomidine administered by syringe pole. All grizzly bears were examined for injury, age, sex, breeding condition, lactation, and overall physical condition. Temperature and respiration were monitored and recorded. A pulse oximeter was used to monitor heart rate and oxygen level. Supplemental oxygen was provided.

Basic physical measurements were taken and recorded. Weights were recorded with a digital scale. A Bioimpedance Analyzer was used to measure resistance to calculate % body fat to quantify body condition. Bears over 2 years of age were radio-collared and in a special case, a female cub of the year was radio-collared with an Iridium collar that can be triggered to drop off. All grizzly bears were microchipped for identification. We microchipped the first grizzly in 1995.

Hair samples were collected for both DNA and stable isotope analysis. We first collected hair for DNA in 1994 and the first DNA analysis was in 1998 in coordination with the USGS. Blood was spun using a centrifuge and the serum and whole blood were collected, frozen and sent to Washington State University for stable isotope analysis beginning in 2010. The isotope analysis was used to determine the primary diet (meat or vegetation) of the grizzly bear within certain time periods, within a week, month or year.

Grizzly bears that we anesthetized were held overnight in culvert traps on a bed of straw until they recovered from the effects of the drugs. They were kept in an isolated area, monitored with minimal human contact and given water once they recovered from anesthesia.

Table 1. Grizzly bears captured for management in Flathead Portion Region 1, 2020.

Record	Bear ID	Capture Date	Sex	Age Class	CapNo	Capture Drainage	Release Drainage	Current Status
461	NWM268	4/24/20	Female	Yearling	1	Flathead	NFK Flathead	Alive
462	NWM269	4/25/20	Female	Adult	1	Flathead	Euthanized	Dead
463	NWM270	4/26/20	Female	Yearling	1	Flathead	NFK Flathead	Alive
464	NWM271	4/26/20	Female	Yearling	1	Flathead	Euthanized	Dead
465	NWM272	5/7/20	Female	Subadult	1	Swan	NFK Flathead	Dead
466	NWM273	5/7/20	Female	Subadult	1	Swan	NFK Flathead	Dead
467	NWM274	5/7/20	Male	Subadult	1	Swan	NFK Flathead	Dead
468	NWM275	5/28/20	Female	Subadult	1	Swan	SFK Flathead	Alive
469	NWM276	6/7/20	Male	Subadult	1	Stillwater	Stillwater	Alive
470	NWM257	6/11/20	Male	Subadult	2	Flathead	Euthanized	Dead
471	NWM277	7/8/20	Female	Subadult	1	Flathead	SFK Flathead	Alive
472	NWM265	7/10/20	Female	Yearling	3	MFK Flathead	SFK Flathead	Alive
473	NWM230	7/12/20	Female	Subadult	5	Flathead	MFK Flathead	Alive
474	NWM278	9/11/20	Male	Subadult	1	Whitefish	SFK Flathead	Alive
475	NWM279	10/12/20	Male	Subadult	1	Flathead	NFK Flathead	Alive
476	NWM225	10/20/20	Female	Adult	2	Flathead	MFK Flathead	Alive
477	NWM280	10/20/20	Male	Cub	1	Flathead	MFK Flathead	Alive
478	NWM281	10/21/20	Female	Yearling	1	Flathead	On-site	Dead
479	NWM282	11/2/20	Female	Subadult	1	Flathead	SFK Flathead	Alive

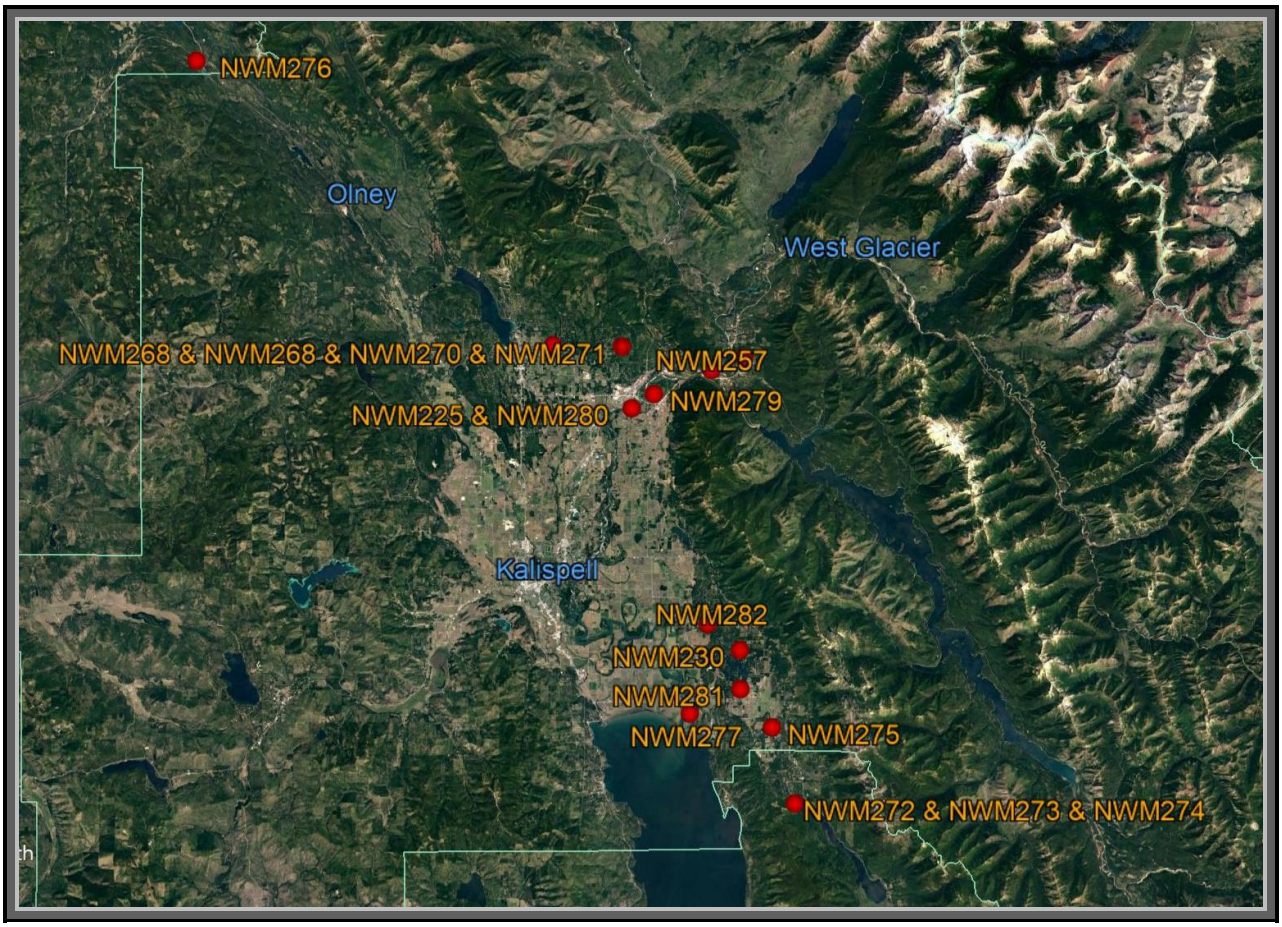


Figure 2. Management grizzly bear capture locations in 2020. Numbers relate to BearID in Table 1.



NWM268, NWM269, NWM270, & NWM271 was a family group of grizzly bears that was captured north of Columbia Falls. During the fall of 2019, the had been getting into pig feed, fruit trees, and bird feeders. In the spring of 2020, they continued that behavior and began killing chickens. The entire family group was captured, which included an adult female and three yearling females. Due to the large number of repeated conflicts the decision was made to kill the adult female. One female yearling was observed limping and after being captured, we took her to a local veterinary clinic where her front paw was X-rayed. We saw there was a broken bone in her foot, most likely due to the trap door hitting it when the adult female was captured. The decision was made to euthanize her. The other two yearlings were microchipped but not radio-collared. They were released together at Logging Creek in Glacier National Park. NWM268 was recaptured on Stryker Ridge while augmentation trapping. When she was being handled in Libby, a microchip was detected and due to her management history, she was not a

candidate for the augmentation program. She was radio-collared released back on Stryker Ridge where she was captured. It appears she is denning on Stryker Ridge.



NWM272, NWM273, & NWM274 were three-year-old grizzly bears that were in the Ferndale and Woods Bay areas. They were captured on the west side of Swan Lake after getting into unsecured garbage, dog food, and bird feeders at numerous locations during the fall of 2019 and the spring of 2020. All three grizzly bears were radio-collared. The male (**NWM274**) was released in the North Fork of the Flathead at the Canadian border. The two females were released together in the North Fork in Whale Creek. All three bears eventually traveled west to the Fortine, Trego, and Stryker areas. They continued getting into unsecured garbage and bird feeders. Kim Annis and Amber Kornak recaptured all three of them and they were all euthanized.

NWM275 is a subadult female that was captured in Ferndale after she found an unsecured garbage bag with some dog food in it. She would not leave even after the landowner had buried it. She was radio-collared and released on the east side of Hungry Horse Reservoir in Deep Creek. Eventually, she swam across Hungry Horse Reservoir and ended up in the Swan Range. We recaptured her while augmentation trapping in Goldie Creek. Her collar looked like it was wearing well, so we released her on-site. She stayed on the east side of the Swan Range until after the huckleberries dropped off. She then moved west and dropped into the Flathead Valley. She was around Many Lakes, Creston, and Lake Blaine but did not cause any conflicts. It looks like she might den in the Swan Range.



NWM276 is a 4-5 year old male that was an incidental capture near Stryker, where we had set a trap trying to recapture the two subadult females (**NWM 272 & NWM273**). Because this male was captured at Stryker and what looked to be a gunshot injury that was not critical to his overall well-being, we decided to radio collar him to monitor his activity. We released him near the capture site up Sunday Creek because we did not want to release him too close to Stryker, the railroad tracks, and highway. He has spent most of his time west of Highway 93 in the Salish Range. He did make a few trips to the east into the Whitefish Range. He spent much of September along creeks and a small stream that may have had spawning kokanee salmon. He did show up at a residence west of Trego where biodiesel was being produced. We worked with the landowner on electric fencing and the landowner got rid of some empty plastic containers that

had contained biodiesel. There were no other reported issues with this bear. It appears that he has denned in the Salish Range.



Male grizzly bear NWM 276, incidental capture near Stryker. Landowner photo.

NMW257 was a subadult male that was first reported along the Flathead River near Kalispell feeding on chokecherries in 2019. A trap was set due to where he was at among houses, but he moved on. A while later we got a report that a grizzly bear was observed getting into unsecured garbage cans at a couple of residences along the Flathead River. The garbage was secured, and a trap was set. The bear was captured immediately. He had no previous history and was collared and released in the Spotted Bear drainage. He went southwest along the South Fork drainage and then proceeded to travel north along the east side of Hungry Horse Reservoir. He ended up in Coram, Martin City, and Hungry Horse and was reported getting into garbage and fruit trees. He then moved east through Badrock Canyon and showed up in Columbia Falls. He continued getting into unsecured garbage in the middle of the night. He followed the Flathead River and ended up near where he was originally captured. Then he turned around and went back north to Columbia Falls. Traps were set near Kalispell and Columbia Falls at four different locations. He was detected on camera at two of the trap sites but wouldn't go in. Eventually, he left Columbia Falls and headed to West Glacier. He moved into the park and he denned above Avalanche Lake.

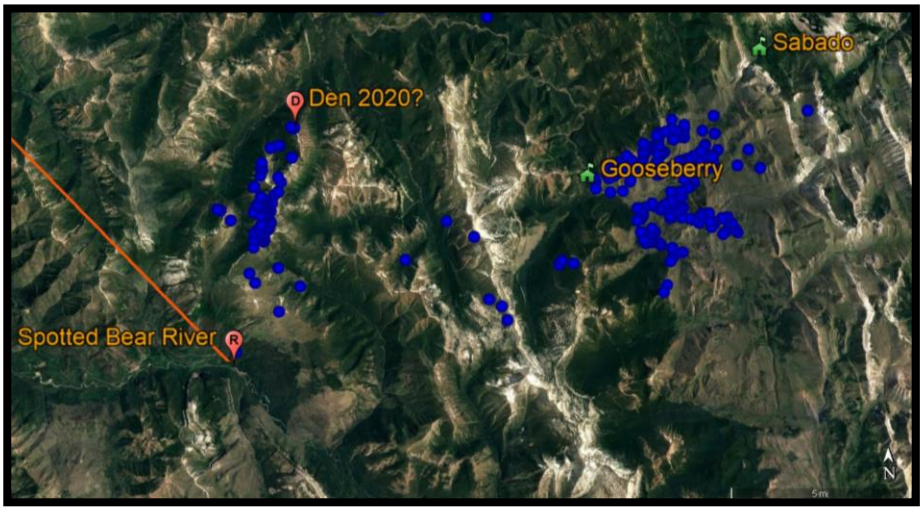


NWM257 feeding on chokecherries in a backyard on the east side of Kalispell (2019). He later got into unsecured garbage along the Flathead River and was captured and relocated. He went and denned on Bear Hat Mtn above Avalanche Lake in Glacier National Park.

In 2020, he left Glacier and ended up at the north end of Columbia Falls. He continued to get into unsecured garbage as he did in 2019. He eventually moved into the Hungry Horse community and was recaptured at the Glacier Bible Camp. He was put down due to his repeated conflicts of getting into garbage in town.

NWM277 This subadult female was captured near Eagle Bend Golf Course, just west of Bigfork. For several weeks there had been reports of a single grizzly bear on the golf course, getting into bird feeders and garbage cans around Bigfork. The bear was eventually captured along the Flathead River just south of Highway 82 and Sportsman's bridge. We estimated her age at 4-5 years. She was radio-collared and released at the end of the Spotted Bear River road. She spent quite a bit of time within the Bob Marshall Wilderness Area. In October, she was along the South Fork of the Flathead River near Spotted Bear. Her last GPS location was north of

Spotted Bear near Dry Parks. We have not gotten any additional GPS downloads since October 9th and her status is unknown.



NWM265 is a yearling female grizzly bear that we captured in the fall of 2019 as a cub with its mother. We put down the adult female for repeated conflicts and decided to radio collar and release the female cub on the east side of Hungry Horse Reservoir in Deep Creek. She ended up moving north along the reservoir and ended up denning near Desert Mountain. She emerged in the spring of 2020 and started spending time between the communities of Martin City and Coram. She spent most of her time on the Forest Service mule pasture and did not cause any conflicts. Due to her proximity to unsecured attractants, we decided to recapture her on private land, check the fit of her radio collar that can be remotely triggered to drop off. This capture was considered preventative to keep her from going into one of the communities and getting garbage. We released her at the end of the Spotted Bear River Road. She ended up moving east into the Gooseberry and Strawberry Creek areas of the Bob Marshall Wilderness. After the berry season she moved back toward the Spotted Bear drainage and ended up denning between Shafer and the Spotted Bear River. This was the second orphan female cub that we radio-collared and they both were able to den successfully on their own. We will drop this bear's collar after she emerges from the den in the spring of 2021.



NWM230 This four-year-old female grizzly bear was an incidental capture in 2020 while trying to capture a different grizzly bear that was killing chickens north of Echo Lake. NWM230 was originally captured as a yearling with her sibling near Eureka. She has been recaptured, radio-collared and relocated several times since then. This time, she was again released in the Puzzle Creek drainage near Marias Pass. She had been released there twice before. She quickly returned to the Flathead Valley and stayed around the Ferndale area. We got reports of her getting into unsecured garbage. She went up and denned in the Swan Range and she may come out with cubs in 2021. If she continues getting into garbage and other attractants there is a good chance she will be removed.

NWM278 In mid-September, a small pig was killed in an unprotected pen off of East Edgewood Drive near Whitefish. A subadult male grizzly was captured at the location. The bear had no previous capture history. We radio-collared him and he was released in Deep Creek on the east side of Hungry Horse Reservoir. He moved into the Great Bear Wilderness Area between the South Fork and Middle Fork of the Flathead River. Late in the year he ended up in the community of Essex. He was reported to have gotten bird seed and unsecured garbage. We asked residents to put away all attractants and hoped that the bear would move on. He finally went across the Middle Fork into Glacier National Park. The last GPS locations we got before his collar turned off for the winter were in Glacier along the Middle Fork.

NWM279 is a 4-5 year old male that was captured just east of Columbia Falls. We were trying to capture an adult female with a cub that was at a local ranch getting into fruit trees. This male that was captured may have been getting fruit there, but we couldn't confirm that. We radio-collared this male and released him in Deadhorse Creek up the North Fork of the Flathead. He moved northwest in the Whitefish Range and ended up dropping into the area near Eureka. He went into the Pinkham Creek area almost to Lake Koocanusa and then traveled south near Olney and eventually ended up north of Columbia Falls. He then moved back north of Whitefish Lake and appears to have denned in the Whitefish Range southeast of Upper Whitefish Lake. We didn't have any reported conflicts involving him while he was radio-collared.



NWM279 was an incidental capture near Columbia Falls. Photo by Madelon Martin.

NWM225 & NWM280 We were finally able to capture this female NWM225 with her male cub (NWM280) just south of Columbia Falls. We believe they were the grizzly bears that had gotten into unsecured garbage along the Flathead River off Bayou Road. They then moved northeast of Columbia Falls and got into fruit trees. They then went back to Columbia Falls and got into garbage at a new apartment complex and at several residences. Efforts to trap them in those places were unsuccessful. They then moved south of the Flathead River, along Columbia Falls Stage. We were contacted by a landowner that had encountered them in his woods along the river. He jumped them out of their day bed and the female charged at him. He was able to deploy his bear spray at close range. He had his seven-year-old daughter and a dog on leash with him. They got back to the house safely. We set two traps and captured both bears that night. We

discovered the bears had been in the neighboring apple orchard and had also gotten unsecured garbage at another neighbor's house. After drugging the adult female, we detected that she was microchipped. She had been originally captured as a trend bear several years earlier at Granite Park in Glacier National Park. We captured her in 2016 at Vandevanter Meats south of Columbia Falls with a female cub of the year. At that time, we relocated her and the cub to Anaconda Creek in Glacier. She ended up denning on the Garden Wall and dropped her collar in the spring of 2017. This time, the decision was made to give her another chance since she did have a cub with her. Glacier Park allowed us to release her at Logan Creek since that area was closed to the public at the time. She and the cub moved back toward Columbia Falls, but never went back into town. They also spent time over near Lake Five before moving up the Middle Fork of the Flathead drainage to Nyack Flats. They then crossed the river and went up Harrison Creek in Glacier where they denned.



NWM225 was recaptured south of Columbia Falls along the Flathead River with her male cub of the year. They were relocated into Glacier National Park.

NWM281 Was a yearling female that was part of a trend monitoring family group of which the adult female was captured in 2019 on the east side of the Flathead Valley. The family group used the Mud Lake area north of Ferndale and the Jewel Basin Hiking area. In 2019 they denned on the edge of the Jewel Basin area. During the spring of 2020, they spent time in the Flathead Valley primarily grazing on alfalfa and digging ground squirrels. They were observed in hay fields but caused no conflicts. They spent the summer in the Jewel Basin area and after the huckleberries dropped off, they came back down into the valley. We started getting reports of them feeding on apples near the Swan River. They then moved to the northwest and ended up



getting into a garden and orchard where they fed on carrots and apples. We put up temporary electric fencing around the garden and orchard. Then they showed up at a residence where they killed chickens and ate chicken feed. We put up temporary electric fence there and set three culvert traps. We ended up capturing a yearling female. We ran the traps for two more nights trying to capture the adult and other yearling. Neither one would go into the traps. With the landowner's permission, we released the yearling on-site, so it would reunite with the other bears. They did get back together but stayed in the area and killed additional chickens at three different places. They then headed to the mountains but again dropped into the valley. On November 9th, we received a report of two dead grizzly bears that were dumped along the Bear Creek road off Highway 83. It was the adult female and this yearling. That case is under investigation. I later received reports of a young grizzly killing more chickens where the family group had been before. I set traps, but the bear never went to the traps.

NWM282 This subadult female was an incidental capture in November while we were attempting to capture a female with at least one cub that was killing chickens on the east side of the Flathead Valley. We fitted her with a radio collar and released her on the east side of Hungry Horse Reservoir in Deep Creek. She stayed east of the reservoir for a while and then swam across the reservoir. In a short period of time she crossed the Swan divide and was back into the Flathead Valley. She was photographed by landowners with trail cameras but not causing any conflicts. She then headed back east over the Swan divide and denned.



Grizzly Bear Releases

Sixteen of the 19 grizzly bears that were captured for management reasons were initially released back into the wild (Figure 3). Three were recaptured in Lincoln County and were euthanized, the other three bears were euthanized without being relocated. All the grizzly bear releases are entered into the MFWP relocation database.

The grizzly bears that were released were either relocated to an approved site or released on-site with the permission of the landowners. One grizzly bear was released on private land, one on the Kootenai National Forest, ten releases occurred on the Flathead National Forest, and four in Glacier National Park.

Prior to releasing any bears, we coordinated with the MFWP, USFWS, and the land management agency or landowner. We made sure that there were not any people working, hiking, camping, or parked at or

near the release sites. If there was an unattended vehicle at the gate or near the site, we would move to an alternate location.

All the bears that were released were held overnight so that the anesthetizing drugs were metabolized. All the releases were "soft" releases where we just opened the door and the bear left.

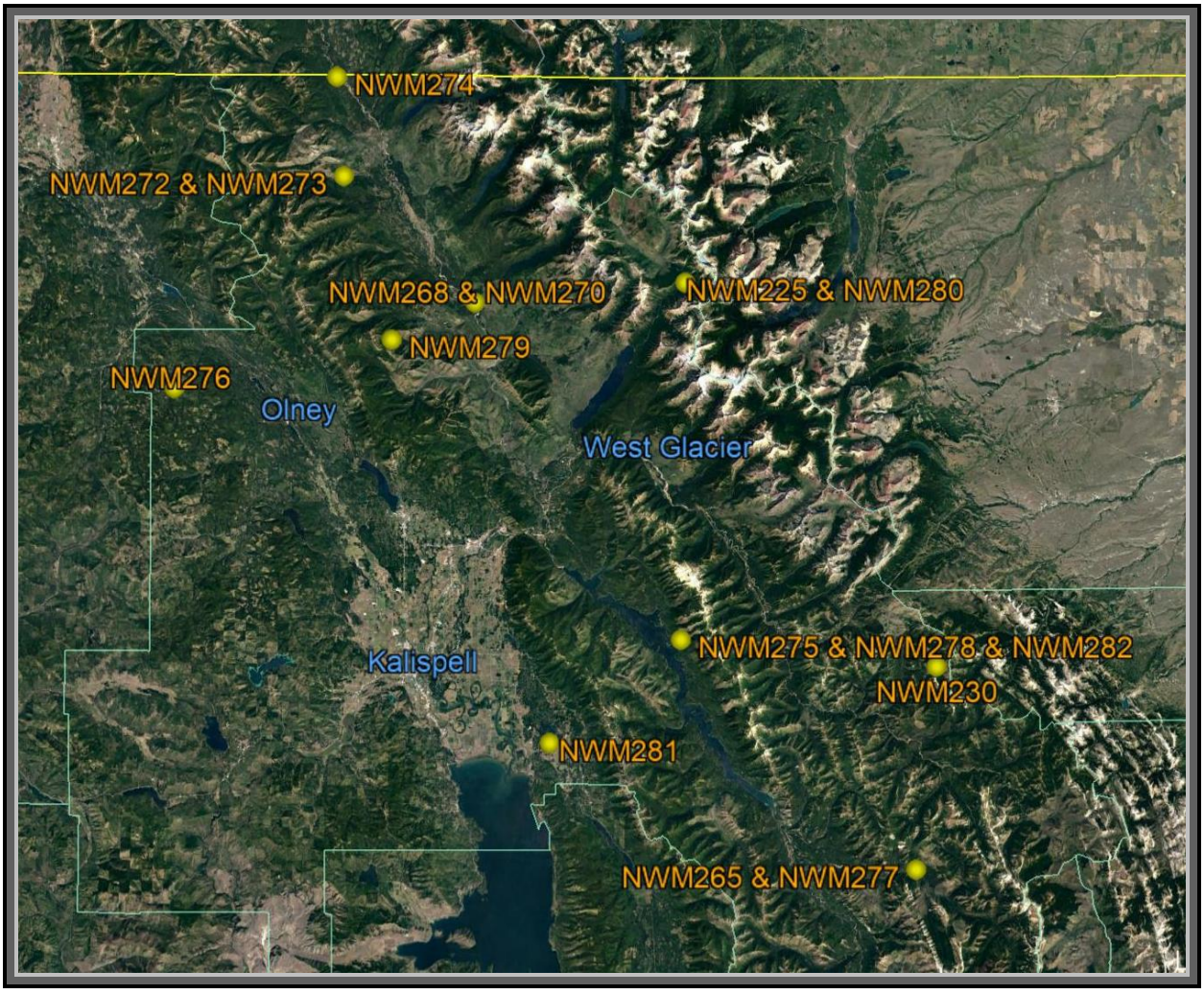


Figure 3. Management grizzly bear release locations in 2020. Numbers relate to BearID in Table 1.

Monitoring

Radio-collared grizzly bears were monitored primarily with the GPS Iridium collars. Ground and aerial telemetry were also used to monitor movements and to get visuals on females with cubs. In previous years we attempted to fly at least once a month. With the new GPS Iridium collars, we can monitor the bears without the need for monthly flights. Two monitoring flights were conducted with MFWP helicopter pilot Rob Cherot and Two Bear Air Rescue pilot Jim Pierce.

Thirteen grizzly bears were fitted with Iridium GPS collars with geofence capability and released back into the wild. Three of the 16 were microchipped but not radio-collared because they were yearlings and collars were not available. The geofence technology allows us to delineate polygons around places where we want to obtain additional GPS locations to document the bears movements. When a bear is in a remote

area and away from residences, the collar acquires a GPS location every six hours. When the bear moves into the geofence polygon, the collar acquires a GPS location every 30 minutes.

The collars store the GPS locations on the collar, but we can also download all or some of the data through a satellite connection once every other day. This allows us to limit the amount of flying and ground tracking time to obtain locations. Although the downloads do not provide real time data, we are still able to monitor the grizzly bear movements and activity much better than with the previous generation of VHF and GPS radio collars.

To save battery power, the GPS collars turn off on December 1st or 15th and turn on March 1st or 15th. We are finding some bears are not denning until after the 1st of December and some bears are emerging from their dens prior to March 15th.

The GPS collars are built with a mortality switch that produces a mortality pulse rate if the collar does not move for six hours. On the spreadsheet of the collar downloads we can see if the collar went to mortality. A collar not moving for six hours can be the result of the bear being dead or the collar falling off. Once a collar is on mortality, we attempt to retrieve the collar to determine if the bear is dead or if the collar just dropped.

Funding for some of the collars and refurbishment of dropped collars was received from BNSF through NFWF and MTOLF. An additional ten Iridium GPS collars were purchased through MTOLF with money donated by two private individuals. Madelon Martin did a fundraiser during 2020 which allowed us to refurbish two Iridium GPS collars.

Six Iridium GPS collars are needed to be refurbished for the 2021 field season. New Iridium GPS collars cost about $2,400 each. To refurbish a collar, the cost is about $1,600. While the cost of the collars is much higher than the traditional $350 VHF collars, we can get up to 48 accurate GPS locations a day, depending on if the bear is within the geofence or not, compared to maybe less than 10 somewhat accurate VHF locations a month. Also, with the GPS and download technology, flight costs drop dramatically.

Grizzly Bear Management Captures (1993-2020)

Since 1993, 279 individual grizzly bears have been captured 475 times as part of the grizzly bear management program. The number of new grizzly bears captured ranged from 1 in 1994 to 20 in 2004. The years 1998, 1999, 2004, 2011, and 2012 had many grizzly bears captured because of the poor huckleberry crop in the falls of 1998, 2004, and 2011 (Table 2).

Table 2. Grizzly bears captured in management actions within the NCDE portion of Region 1. 1993-2019.

Year	# Captures	# Ind. Bears	# New Bears
1993	2	2	2
1994	1	1	1
1995	16	12	11
1996	12	10	8
1997	15	13	9
1998	24	19	12
1999	26	13	8
2000	13	13	9
2001	15	12	7
2002	8	7	6
2003	14	13	13
2004	39	28	20
2005	7	7	5
2006	11	8	7
2007	21	15	10
2008	13	10	6
2009	13	10	7
2010	25	23	16
2011	45	31	19
2012	19	18	13
2013	12	10	6
2014	10	9	7
2015	15	13	11
2016	16	16	10
2017	21	15	10
2018	23	20	17
2019	19	16	13
2020	19	19	16
R-1 Management Total	**475 (mean = 16.9)**		**279 (mean = 9.9)**

Reasons For Capturing Grizzly Bears For Management (1993-2020)

Of the 475 management captures and handling of grizzly bears (1993-2020), the highest categories were the captures of dependent young that were caught while trapping for the adult females that were involved with some type of management action, followed by grizzly bears captured for being around homes, depredations on domestic animals, and accessing feed for domestic animals and wild birds. Next were bears getting into domestic fruit trees and incidental captures of grizzly bears while trapping for black bears or bears causing the actual conflict. Property damage, accessing garbage, and grizzly bears digging up domestic carcasses or taking

harvested game on private property comprised the rest of the categories. All categories and sub-categories for management captures and handling of grizzly bears are listed in Table 3.

Table 3. Reasons For Capturing and Handling Management Grizzly Bears. 1993-2020.

Category	Sub-category	Number of Captures
Dependent Young		**100**
Around Homes		**79**
Depredation	Poultry	44
	Goat	4
	Pig	5
	Llama	2
	Sheep	2
	Calf	1
	Dog	1
Depredation Total		**59**
Feed	Pet	25
	Wild Bird	11
	Horse	7
	Pig	5
	Poultry	3
Feed Total		**51**
Fruit		**38**
Incidental		**35**
Garbage		**29**
Property Damage	Shed	11
	Garage	4
	Cabin	3
	Freezers	3
	Vehicle	2
	Kennel	1
	Trailer	1
Property Damage Total		**25**
Carcass	Deer	4
	Horse	4
	Butcher Scraps	1
	Cow	1
	Dog	1
Carcass Total		**11**
Orphaned		**11**
Habituated		**9**
Campground		**5**
Food		**5**
Preventative		**5**
Grease		**4**
Leghold Trap		**4**
Grain		**3**
Grain Spill		**1**
Wounded		**1**

Status of Grizzly Bears Sent to Zoos or Facilities

Since 1993, we have sent 29 grizzly bears to zoos or research facilities. Most of these were cubs and yearlings, but a few occasions included subadult or adult grizzly bears that we felt would adapt to captivity. These were bears that would have been killed if they hadn't been placed elsewhere. We prefer to have bears alive and in the wild. Removing a grizzly bear from the population is a final option. No grizzly bears were sent to zoos or facilities in 2020.

The first grizzly was removed in 1993 and was sent to the San Antonio Zoo in Texas. She was a seven-year-old female from Spotted Bear. I am not sure of her status.

Two female grizzly bears were sent to the Bronx Zoo; a subadult in 1995 and a cub in 2003. Status unknown.

Two female cubs were sent to the Wildlife Way Station, a wildlife rescue facility in California, in 1995. As far as we know they are still there, but the facility was being closed in 2019. Status unknown.

The Grizzly and Wolf Discovery Center (GWDC) in West Yellowstone now houses four grizzly bears we have sent to them. All the bears are still alive and doing well. The first one was an adult female in 2002 from the Whitefish area. She had been captured and relocated five times before being removed. In 2011, the second bear was a subadult male from the Coram area after being captured and relocated twice before. The third and fourth bears are female cubs that were captured in 2019 near Condon after the adult female was killed for repeated conflicts.



In 2002, a male grizzly bear cub located near Whitefish was sent to the Denver Zoo. DNA revealed that its mother was the adult female grizzly sent to the (GWDC) later in 2002. The cub was housed with a young female grizzly bear from Alaska. The male was euthanized in 2019 after having severe arthritis and other health issues.

Six grizzly bears were sent to the Washington State University Research Facility at Pullman, Washington. The first four bears were sent in 2000. They included a subadult female, originally from Seeley Lake, and an adult female and two of her male cubs from the Polebridge area. A subadult female was sent there in 2008 from the Flathead Valley. The last bear was a subadult male sent there in 2010. Originally, he was from the Ferndale area but was recaptured at Seeley Lake. All the bears sent to WSU were utilized for research and have been euthanized.

In 2004, a female and male cub that were orphaned after their mother was hit and killed by a train near Essex, were sent to the zoo in North Dakota. Their status is unknown.

In 2005, Washington Park Zoo in Michigan City, Indiana, received two female grizzly bear cubs after we killed the adult female for repeated conflicts in the Coram area. Their status is unknown.

The Cheyenne Mountain Zoo in Colorado Springs, Colorado became the home for two unrelated subadult male grizzly bears in 2008. One bear was from the Eureka area and the second bear was from Swan Lake. Both were on their own but had caused repeated conflicts before being removed. They have both bonded and are doing well in captivity.

Four grizzly bear cubs, three females and one male, were sent to the North Dakota Zoo in 2011, after both of their mothers were killed for repeated conflicts and killing pigs. Two are still at the North Dakota Zoo in Bismarck. Two of the female cubs have been transferred to the Henry Vilas Zoo in Madison, Wisconsin.

Two yearlings, one male and one female, were sent to the St. Louis Zoo in Missouri in 2017, after their mother was killed for repeated conflicts in the Ferndale area. They are currently in a new 11.1-million dollars exhibit and have adapted to captivity.

Some of these zoos have put a lot of money into large outside enclosures and are providing information on grizzly bear conservation. A suggestion is to contact these zoos and inquire about having them assist with fundraising to help with on-the-ground efforts to minimize human/grizzly bear conflicts.

Management Grizzly Bear Mortality and Removals (1993-2020)

Of the 279 individual management grizzly bears captured in Region 1 since 1993, 161 (58%) are known to have died or have been sent to zoos (Table 4). Most of the mortalities (35%) have been through management removals. There were no management removals in 1994, 2001 or 2014.

Human-caused mortality of female grizzly bears has a large influence on the recovery of the grizzly bear. Reducing the number of management removals of all grizzly bears, especially females, is a priority with this program. In the first three years (1993-1995), a total of four female grizzly bears were removed through management actions. In the following seven years, three additional females were removed, two in 2000 and one in 2002. The year 2004 saw an all-time high removal of female grizzly bears with six females removed through management actions.

In 2020, we killed one adult female grizzly bear (NWM269) due to numerous conflicts. Two subadult females (NWM272 & NWM273) were recaptured by Kim Annis near Trego and removed. A yearling female (NWM271) was euthanized at a veterinary clinic after an x-ray revealed a broken toe on her front foot due to a trap door hitting her foot. Two subadult males (NWM257 & NWM274) were both recaptured and killed after repeated conflicts. A yearling female (NWM281) was killed illegally along with its mother, a trend monitoring female. Both bears were dumped illegally near Bigfork. The USFWS and MFWP are both investigating.

Table 4. Cause-specific and class-specific mortality and removals for 161 grizzly bears. Numbers represent known mortality and removals of marked grizzly bears captured in management actions in Region 1. 1993-2020.

Age Class	Cause of Mortality									Total (%)
	Natural	Mistaken id	Self Defense	Management deaths	Sent to Zoo or WSU	Malicious	Handling	Vehicle/ Train	Unknown	
Adult										
M	0	0	1	12	0	2	0	1	5	**21 (13)**
F	0	2	2	11	3	3	0	2	2	**25 (16)**
Subadult										
M	0	0	6	22	5	13	0	5	4	**55 (34)**
F	0		1	5	4	3	0	2	0	**15 (9)**
Cub	1	0	0	2	14	0	1	3	8	**29 (18)**
Yearling	1	1	1	5	3	3	0	1	1	**16 (10)**
Total (%)	**2 (1)**	**3 (2)**	**11 (7)**	**57 (35)**	**29 (18)**	**24 (15)**	**1 (1)**	**14 (9)**	**20 (12)**	**161**

Cabinet Mountains Grizzly Augmentation Program

Since 2005, MFWP has been involved with the capture and translocation of both female and male grizzly bears into the Cabinet Mountains, south of Libby and Troy, Montana.

A total of 18 grizzly bears have been captured within the Northern Continental Divide Ecosystem (NCDE) and translocated to release sites that were approved by the Kootenai National Forest in both the West Cabinet and main Cabinet Mountains. Until their collars fell off it was known that 12 of the 18 augmented bears had remained in the Cabinet Mountains.

During 2020, we captured a subadult female grizzly in a culvert trap near Stryker Ridge. She was transported to Libby where they drugged her. They discovered she was already microchipped and was a yearling female (NWM268) we had captured in April with the rest of the family group. She had been released at Logging Creek in Glacier National Park but wasn't radio-collared. Since she had been previously captured in a management situation, she was not a candidate for the augmentation program. She was radio-collared and released her near Stryker Ridge where she was captured. Two additional grizzly bears were captured but not candidates for the augmentation program, so they were released on-site. No grizzly bears were released as part of the augmentation program in 2020.

Kim Annis and Wayne Kasworm provide annual reports that give additional information regarding the Cabinet Mountains Grizzly Augmentation Program.

Montana Fish, Wildlife & Parks

2014 -2019 MFWP R2 Grizzly Research and Management

Grizzly Bear Research Efforts:

2019

Spring, 2019 started out with a bang. The first grizzly tracks were observed in the foothills and higher ridge lines as early as March 19th and by the end of March we were getting reports of grizzlies on ranch lands in the Blackfoot Valley and from snowmobilers throughout the Clearwater Drainage. Here is a quick summary of our radio collared grizzlies that emerged from their den's this spring:

- We were able to verify when two of our radio collared grizzlies emerged from their dens. "Walking Bear", a 535- pound adult male, recaptured last July, denned in Arrastra Creek. He poked his head out of his den on March 22nd. He continues to wear his radio collar and spends most of his time ranging the river bottoms around the Aunt Molly Wildlife Management Area, the Blackfoot Canyon and the mountains north and south of Lincoln, MT. In year's past "Walking Bear" has made two tremendous/fast paced trips from the Blackfoot Valley over the top of the Mission Mountains to visit the corn fields around Ronan, MT. It will be interesting to see if he makes a similar journey this fall. In a recent flight, he was not located, and his collar may not be functioning.

- "Stevi," a sub adult male, captured last fall after digging up worms in the Stevensville Golf Course, denned in the southern Mission Range after he was relocated to the eastern edge of the Rattlesnake Wilderness. He came out of his den on March 17th. In mid-April he stumbled onto a residence north of Seeley Lake with a large accumulation of winter-garbage. FWP assisted the family with the removal of the trash. But, after that episode he continued to seek out garbage, dog food, chicken feed and bird feeders. He was suspected to have damaged a house trailer on the Blackfoot Clearwater Game Range and entered several open sheds and buildings for garbage and grain. He was documented at multiple residences in the Seeley Lake area, Clearwater Junction area, Ovando area and Woodworth area. On July 18th he was captured and euthanized after entering a building and accessing dog food on a porch at a ranch near Woodworth, MT.

- We were not able to determine when our research female "Silver Queen" came out of her den, but she was spotted this spring and again this August with her yearling in the headwaters of the Landers Fork of the Blackfoot. She was captured last July northeast of Lincoln. She has spent most of the summer ranging the south end of the Scapegoat Wilderness. "Silver Queen" is an older 245-pound adult female.

- The sub adult male grizzly "Blackfoot", who was relocated to the Flathead Valley last fall after accessing a ranch's burn barrels and garbage near Helmville, MT, emerged from his Sun River Game Range den site on March 16th. He dropped his collar on May 13th while traveling north through the Blackfoot Indian Reservation.

- A female grizzly, known as "Sabine" and who was captured on the Flathead Indian Reservation for research purposes last summer, denned in the Missions Mountains. This spring she came over to the Seeley Lake area and ended up dropping her collar west of Placid Lake on May 2nd.

- On July 9, 2019 a new research grizzly was captured northeast of Lincoln, MT in the Landers Fork area. The 225-pound sub adult male was named "Landers". He dropped his collar the end of July. He was captured a second time in August and released without handling. During the time he was collared he ranged widely between Lincoln and the Rocky Mountain Front.

- In mid-August two adult males were captured, but not handled. Hair samples were collected and the bears were released.

- On August 26, 2019 a new research female grizzly, with cubs, was captured northeast of Lincoln, MT in the Landers Fork. The female was named "Ursa". In the last several weeks she has spent most of her time north of the Highway 200 in and around the Continental Divide.

2018

Due to heavy snows and prolonged spring runoff much of the front country was unavailable and research trapping did not occur between May and June. And, for the first time since 2003, an upsurge of grizzly-related management conflicts through July, only allowed for a brief research trapping period at the end of July. On July 26th a 535 pound adult male, "Walking Bear", was recaptured and collared west of Lincoln. On July 30th two grizzlies, an adult female and a sub adult male, were captured. The 245 pound female "Silver Queen" was collared NE of Lincoln and the young male, "Sunny," was captured south of Lincoln and not collared. One additional bear, a sub adult male from the Flathead Indian Reservation, spent a considerable amount of time in the Clearwater Drainage through the month of June. Sadly, this bear started getting into garbage and breaking into grain sheds and ended up being destroyed near Condon on July 2nd. One additional female, wearing an ear transmitter, was observed on several occasions, but the

transmitter is no longer functioning. This female was captured in July 2016 and was instrumented with an ear transmitter rather than a neck collar because of a wound on the neck.

2017

Between May and July 2017, the Northern Continental Divide Ecosystem Grizzly Bear Monitoring Study FWP R2 trapped five male grizzlies for research purposed. Only one of the four bears were administered with a GPS collar. Research trapping efforts to capture a female grizzly for the NCDE Grizzly Bear Monitoring Study will resume in the spring of 2018. In 2017 four additional male grizzlies, trapped and collared last year, dropped their collars. All four collars were retrieved, and the data downloaded. These bears were all instrumented with GPS collars in conjunction with a new grizzly/black bear project initiated in 2015 and 2016 (see below in 2015). One additional female, wearing an ear transmitter, was also tracked on a weekly basis. This female was captured in July 2016 and was instrumented with an ear transmitter rather than a neck collar because of a wound on the neck. One additional male grizzly, captured on the Flathead Indian Reservation in 2017, spent considerable time on the Region 2 side of the Mission Mountain Range. This bear was monitored on a weekly basis.

2016

On July1, 2016 the Northern Continental Divide Ecosystem (NCDE) Grizzly Bear Monitoring Study FWP R2 trapped and re-instrumented an adult female grizzly with a new ear transmitter. The bear's old radio collar had failed to drop off last July, as programmed, and a concerted effort was made to recapture the female before battery failure. This spring two additional monitoring study female grizzlies went off air. In May, a sub adult NCDE monitoring female, captured last July, was shot illegally by a resident in the Placid Lake area. The incident is still under investigation. And last fall another NCDE monitoring female's ear transmitter stopped functioning. The bear has been photographed by remote cameras at several trap sites and the transmitter has clearly stopped functioning. In addition, the ear transmitter on an adult male captured last year also malfunctioned. Research trapping efforts for one additional female continued through November with no success

Also, six male grizzlies were captured, and radio collared the spring and summer of 2016. The bears were all instrumented with GPS collars in conjunction with a new grizzly/black bear project that was launched last spring (see below in 2015). Two of the males dropped their collar shortly after capture. The collars are scheduled to drop off August 9, 2017.

2015

In 2015 the Northern Continental Divide Ecosystem Grizzly Bear Monitoring Study FWP R2 trapped an adult male grizzly (recapture) and a sub adult female grizzly (new bear) in the Blackfoot Watershed. Both these bears were incidental captures made during an unsuccessful effort to re-collar an existing collared female that dropped her collar in July. The adult male, which was captured previously in 2009, was instrumented with an ear transmitter and the new female was instrumented with a GPS collar. Research trapping efforts will continue through November.

In addition, a new grizzly/black bear project was launched this spring. An MSU student is looking at electric fence permeability and the impacts of electric fence on grizzly bear movements and behavior in the Blackfoot Watershed. The project was launched in May and will continue through the fall of 2017.

2014

In 2014 the Northern Continental Divide Ecosystem Grizzly Bear Monitoring Study FWP R2 trapped a single grizzly in the Blackfoot Watershed. On June 27th crew members recaptured and re-instrumented a collared sub-adult female grizzly that had not dropped her collar as expected. The sub adult female grizzly was collared in 2012 with a VHF collar. Fearing that the collar had become tight the bear was targeted and captured to remove the collar and treat the neck. The collar was replaced with a VHF ear transmitter. In addition to this female an adult female with two cubs of the year, an adult female with two yearlings and a second sub adult female were monitored through the course of 2014 (Note: one of these females was later killed in a vehicle collision and all offspring of females were lost to unknown causes). In addition to these Region 2 grizzly bears crew members monitored a fifth female that came over to the Seeley Lake area from the Flathead Indian Reservation on multiple occasions.

On a side note, a radio collared female grizzly that denned south of I90 in 2013/2014, near St Regis MT, was monitored closely until heading back north. The female spent most of May and June in the Bitterroot Mountains along the Montana/Idaho Border. The bear crossed I90 on two occasions and was documented traveling the foothills just north of Missoula, the Garnet Range east of Bonner, the Graves Range just west of Missoula and ventured south into the Bitterroot Range just south of Lolo. In early July, the bear returned north to the Bob Marshal, Glacier National Park and eventually dropped her collar NW of Eureka. This is the same collared female grizzly (with a collared sub adult male) from R1 spent some time in R2 just north of Missoula, MT in 2013. The female returned to R1 in the late spring that year and came back to the Missoula area in the fall before heading to Idaho to den. The female's male sub adult was found dead midsummer 2013.

Grizzly Bear Mortalities and Management:

2019

In 2019, there were 51 conflicts involving grizzly bears, much lower than 2018, but, three grizzlies were removed for management reasons and one grizzly was struck and killed by a vehicle. There were fewer conflicts this summer. During July and August, due to bountiful huckleberry, choke cherry and hawthorn production, conflict were .Historically the highest conflict period in the Blackfoot occurs in September and October, but compared to 2018 this year's fall conflicts were minimal. A good portion of the conflicts this year were related to the radio collared grizzly bear "Stevi" and the unmarked grizzly he was traveling with, but there are other bears in the Blackfoot Drainage exhibiting food-conditioned behavior.

Road-killed grizzly bear:

On June 6th a 500-pound adult male grizzly was killed by a vehicle on Highway 200 near Patterson Prairie. This is the 12th grizzly killed by vehicles in the Blackfoot Valley since 2004. Eight of these grizzlies have been killed along Highway 200 in the Lincoln Canyon between Ovando and Lincoln, MT.

Livestock depredations/one grizzly euthanized:

Between April and the end of July, the Department of Agriculture's Wildlife Services and FWP R2 responded to 4 verified livestock depredation incidents and a handful of additional calls about livestock (where cause of death or injury was natural, or not determined). Below is a synopsis of each of the incidents and management actions that occurred in the Blackfoot Valley:

- On April 19th, Wildlife Services investigated wounds on a newborn calf at a ranch east of Ovando, MT, and determined that the injury was grizzly-related. Due to the amount of time that had passed and the fact that the calf was recovering, trapping was not an option.

- On April 20th, Wildlife Services responded to a calf killed near Helmville, MT. During the investigation it was discovered that a second calf had gone missing. Culvert traps and snares were set at site. On the 23rd one of two grizzlies were captured. Even though this was the sub adult male's first offence, after close consultation with the USFWS, it was decided that due to chronic depredations occurring in the area, the 225-pound bear would be put down. The second bear was not captured. Adjacent to this ranch, in 2018, there were multiple calf depredations by grizzlies at the neighboring calving ground. Traps were set at this site last year on three occasions, but no bears were captured. For more information check out this link:

  https://www.blackfootvalleydispatch.com/story/2019/05/01/news/grizzly-euthanized-after-cattle-depredations-in-helmville-valley/1001.html

- On May 23rd two calves were killed by a grizzly at a 2nd ranch near Helmville, MT. Wildlife Services set traps at-site, but the bears had consumed the calves and did not return. Traps were closed after several days of trapping.

- On June 15th aother calf depredation was discovered near Helmville, MT. Wildlife Services determined the death to be grizzly-related. But, due to the amount of time that had passed trapping was not an option.

- Since April, Wildlife Services has investigated seven additional calf carcasses where it was determined the calves had died of natural causes and were scavenged by grizzlies. (Two of these incidents occurred in the Avon area). In addition, Wildlife Services documented one calf killed by coyotes that had been scavenged

by grizzlies. Wildlife Services also investigated a calf with a neck wound, near Avon, MT, that was determined to be related to an infection and not a bite wound.

- Since June 15th, there have been no additional grizzly bear depredation reports in the Blackfoot Valley.

Two grizzlies euthanized due to food-conditioned behavior:

Two grizzlies have had to be destroyed this summer as a result of their extreme food-conditioned behavior.

- The first of these bears has already been discussed in the radio-collared bear section. This is "Stevi," the grizzly that was trapped last fall in the Bitterroot Valley and relocated to the headwaters of Belmont Creek near Missoula, MT. For more information check out this link:

  https://missoulian.com/news/local/grizzly-that-prowled-stevi-golf-course-euthanized-after-seeley-lake/article_6d24e8a2-2d9d-5565-bc1e-72cb9db35b6b.html

- The second grizzly, euthanized on May 12th, southeast of Seeley Lake in the Woodworth area, did not have a known history, but was observed on multiple occasions traveling with the radio-collared grizzly known as "Stevi". Because of this bear's extreme food-conditioned behavior, after consultation with the USFWS, it was decided to put this bear down. This young 250-pound sub adult male grizzly ripped the door off a secured barn in order to access grain. He had been observed damaging the barn on video the night before and he was at adjacent home sites accessing unsecured grain, garbage, pet food, chickens and other attractants. It can be assumed that this bear is one of several grizzlies that learned "bad behavior" last year, as a result of some folks not having grain, garbage and other attractants secured. For more information check out this link:

  https://www.seeleylake.com/story/2019/05/30/news/fwp-euthanizes-two-bears-in-the-area-in-the-past-month/4868.html.

Residential and agricultural conflicts:

The Blackfoot Region is well known for a community-driven approach to managing and mitigating for bear conflicts, and the Blackfoot Valley has been recognized internationally for having some of the lowest numbers of grizzly conflicts in the state.

But, as mentioned earlier, multiple grizzlies in the Blackfoot Drainage developed bad habits last year. In 2018, a handful of bears learned that homesites and ranches are good places to find unsecured food.

2018:

2018 turned out to be the worst grizzly conflict season on record in the Blackfoot watershed. Most years, we average four to five livestock depredations and 15 or so residential conflicts, involving garbage, bird feeders, fruit trees, freezers, grain sheds and other attractants. But this last year we had approximately 80 grizzly-related conflicts, six of which were verified livestock depredations and one depredation attempt.

Due to the large number of residential-related conflicts last year, I grouped some of the individual conflict incidents into conflict episodes. For example, during a two-night period in June, we had two grizzlies come into Ovando, that got into uncontained garbage at multiple homes and businesses, grain in one chicken coop and a garbage wagon. These conflicts were all lumped and counted as one conflict episode.

With that in mind, I did my best to break the 2018 grizzly bear conflicts up by tributary:

Clearwater Drainage 2018

In the Clearwater Drainage we had approximately 18 conflicts: 15 involved grizzlies getting into uncontained garbage and chicken or livestock feed; one predation of a pig; and two crowd control/ traffic hazard- related conflicts. The majority, of these conflicts, were related to the radio collared grizzly bear "Baptiste", who was destroyed by FWP R1 near Condon in early July.

There was at least one additional adult male grizzly that killed the pig and was involved in a handful of garbage incidents. This unmarked adult male also spent time on the Blackfoot Valley side near Woodworth and Ovando.

Upper Blackfoot Drainage 2018

In the Blackfoot Valley we had approximately 62 conflict episodes. There were roughly 50 incidents involving grizzlies accessing garbage, livestock feed, chicken feed, Crystal Lyx, bird feeders, BBQs, dog food, fruit trees, animal carcasses in yards and one incident of a freezer full of meat on a back porch. There were two reports of a grizzly hitting hunting camps in the Scapegoat Wilderness. There were three sudden encounters, in two of which bear spray was deployed. And in the Blackfoot, Wildlife Services, verified five livestock depredations and one depredation attempt on calves. And in the Lincoln area there was one road hazard/crowd control situation involving a road-killed female grizzly and her 3 orphaned cubs. The majority, of the residential conflicts, involved two grizzly bears traveling together and additional grizzly bears, one of which had a severe limp. It was difficult to determine how many grizzlies were involved with the Blackfoot Valley depredations, but it was verified that a family group was involved with the one calf injury west of Helmville in early April, and a lone grizzly was suspected in depredations south west of Helmville. But, due to the large numbers of conflicts in 2018 it was difficult to determine exactly how many different bears were involved in conflicts. Two adult grizzlies and three orphaned cubs were trapped as a result of these conflicts. The two adults were relocated to the Flathead National Forest and the three cubs were placed in the Quebec Zoo.

(Note: there were a handful of additional incidents with livestock involving grizzly bears feeding on or scavenging other predator's kills and/or suspect kills. And south of the

Blackfoot Valley, in the Gold Creek area, there was one verified grizzly calf depredation July.)

We had higher conflicts in 2018 for multiple reasons: 1) The grizzly bear population has increased and we have reached capacity; 2) Grizzlies that have keyed into agricultural crops in proximity to houses; 3) Multiple family groups with dispersing sub adults are inhabiting the valley; 4) Unusual spring and heavy snow pack has concentrated the bear activity on green-up sites around the valley floor; 5) The 2017 fires burned hot along the south end of the Bob Marshall and Scapegoat Wildernesses and bears were displaced to adjacent areas; 6) Exceptional berry crops (service berry, choke cherry and hawthorn) lured bears into the lower elevations; and 7) Bears are being trained up by individuals with uncontained residential/agricultural foods that are good to eat (garbage, grain, fruit, etc.).

The two male grizzlies trapped and relocated were captured during the following management actions:

1. On April 22nd, 2018, a calf was attacked and injured northwest of Helmville. The calf survived. Wildlife Services verified the attack and traps were set for a female grizzly bear with 3 sub-adults that were observed at the site of the incident. The family group was not captured, however, on 4/25 a 474 pound-male grizzly named "McElwain" was incidentally captured. The bear was collared and relocated to Glacier National Park. (Due to heavy snow at the time, there were no other adequate relocation sites.) In late summer 2018 "McElwain" dropped his collar in Glacier National Park.

2. On September 19th, 2018, a young adult male was captured at a ranch near the Aunt Molly Wildlife Area after it tipped over several burn barrels and investigated the yard area. The bear was approximately 300 pounds and was named "Blackfoot". The bear was collared and relocated to the Flathead National Forest on the edge of the Great Bear Wilderness Area. His last known location was last fall south of the Blackfoot Indian Reservation on the Rocky Mountain Front.

The residential/ranch-site conflicts that occurred in 2018 were mostly due to a handful of grizzlies that developed food-conditioned behavior last year. These bears are showing us where lots of home sites and ranches are leaving out uncontained sources of grain, chicken feed, bird feeders and grain. Please remember, that the best way to keep bears from developing bad habits in the first place is to be diligent in containing any food-related items around the household or ranch. If possible manage garbage carefully and store grain, sweet licks and other desirable attractants behind electric fence or within stout buildings with closed doors. That is, anything that a bear might find desirable should be locked up tight and be made unavailable-- especially if your homesite or ranch is adjacent to areas with known bear activity. The best way to keep the area safe is to deter bears from coming in and around homesites by not encouraging them or training them to seek out food rewards around homesites in the first place.

2017
In 2017 there was only one management action involving the capture of a grizzly bear. In late June a young adult male was captured at a residence NE of Ovando, MT after several free ranging chickens were killed. The bear was instrumented with a VHF collar and relocated to the south end of the Mission Mountains. FWP R2 assisted the landowner with containing the chickens with electric fence Through the month of July the bear was involved in additional chicken-related conflicts and was shot and killed in a chicken coop by a homeowner in August. The case, which occurred in Region 1 south of Condon, MT, is under investigation. In Addition, FWP R2 fielded three complaints of a calves/heifers killed by unknown species of bear and a handful of complaints involving grizzlies accessing garbage, chickens and a poorly contained livestock feed in and around the community of Seeley Lake. The department continues to see grizzly activity in and around agricultural crops near the communities of Ovando and Helmville. In early May there were two incidents involving antler hunters confronting grizzlies at close range. The sites were posted and FWP R2 did several press releases warning hikers about staying safe in grizzly country. In May, a young adult male grizzly was killed illegally by a black bear hunter up Johnson Creek East of Bonner MT. The case is being handled by the USFWS and is still under investigation. During hunting season there were several incidents of hunters encountering grizzlies at close range, several reports of grizzlies taking over elk or deer carcasses and one incident of a grizzly entering a poorly contained shed and usurping a deer carcass.

2016
In 2016 there were two management captures involving the same bear. In August, a sub adult male grizzly was captured near Basin, MT. The bear was collared and relocated NW of Lincoln, MT. Shortly thereafter the bear broke into a horse trailer and entered several buildings and was destroyed in September. In addition, FWP R2 has fielded a handful of complaints involving grizzly activity in and around agricultural crops and apple trees near the communities of Ovando and Helmville. In May, there was one incident involving a possible grizzly breaking into a turkey coop on the outskirts of Lincoln. In April traps were set by Wildlife Services for several calf depredations near Helmville, MT. No bears were captured.

There were three grizzly bear mortalities in 2016. As mentioned above, in May a sub adult NCDE monitoring female, captured last July, was shot illegally by a resident in the Placid Lake area. The incident is under investigation. In June, the carcass of an adult female grizzly was found alongside a trail in the Scapegoat Wilderness. The case is under investigation. In October, a female cub was struck by a vehicle just south of Seeley Lake on Highway 83.

2015
In 2015 there were a handful of grizzly bear conflicts. Two adult males, involved in sheep depredations, were trapped east of Lincoln. One adult male, which had been handled previously in 2012 after killing sheep, was destroyed. The second adult male,

which had no previous history, was collared and relocated to the North Fork of the Flathead River. In addition, traps were set for a possible grizzly that killed a llama north of Avon. Later a female grizzly was captured at a sheep depredation east of Avon. (Note: this female was shot and killed the spring of 2016 in the Flathead Valley by a hobby apiarist.) The sub adult female was relocated to the South Fork of the Flathead. A landowner, who declined management assistance and built an electric fence, lost a "bottle calf" to a grizzly east of Ovando. And earlier this spring there were several incidents involving a grizzly getting into an open grain shed, an uncontained chicken coops and an uncontained apiary. The problem was remedied by containing the attractants or with electric fence. In November, an unmarked young adult male grizzly was found dead in the upper Clearwater Drainage along Highway 83. The bear was shot, and the case is under investigation.

2014

In 2014 less than 20 grizzly bear-related conflicts occurred in FWP R2 territories. Traps were set, and electric fence kits were erected on several occasions at a handful of conflict sites involving grizzlies near homes, getting into grain sheds and seeking livestock carcasses near ranch buildings and Wildlife Service's did set snares for a grizzly that killed a lamb east of Lincoln---no bears were captured. Two grizzlies were captured during a management action conducted by Wildlife Service's SE of Seeley Lake. On October 7, a heifer was killed by a grizzly on the north end of the Blackfoot Clearwater Game Range. On October 14, an adult male grizzly and one of the NCDE Monitoring Study females were captured in snares. Due to the substantial number of bears in that area at the time it was difficult to determine if the monitoring female was involved in the depredation. Wounds on the cow matched the adult male's dentition and he was relocated to the South Fork of the Flathead on October 15th. The female was released at a remote site within her home range. There was a single human-caused grizzly mortality on the south end of the ecosystem. Sadly, on September 10th one of the adult radio-collared monitoring study females, collared off and on since 2007, was struck and killed by a vehicle on Hwy 200 near Arrastra Creek. Earlier in the summer this female and a second monitoring female each lost two offspring to unknown causes.

Grizzly Bear Management Notes:

Since 2004 grizzly Bear/human conflicts have been minimal in FWP R2. However, the sudden increase in 2018 is worrisome and the department will work closely with the community to understand why conflicts have increased and will evaluate how best to approach the situation, During the last few years there was an increase in the number of residential conflicts in and around the Seeley Lake Area---most of these conflicts can be attributed to various bears mentioned between 2009 to present date. There were also a handful of residential conflicts in and around Lincoln, MT related to improper garbage storage and bird feeders. In 2011 and 2012 there were multiple bear/human conflicts around the town of Lincoln and the Ovando Dump. Most of the conflict in Lincoln can be

attributed to the one sub adult male that was captured and relocated in July 2012. The conflicts that occurred near Ovando were related to bears accessing an open dump. This dump was contained in an electric fence the fall of 2012. FWP R2 has been working with all the Blackfoot Valley communities on a new and recent issue------bear conflicts involving agricultural crops. In the last few years more and more bears have keyed into this food source and it is becoming quite an issue within the local community and can most likely be correlated to the recent upsurge of conflicts in 2018. Thus far, in 2019, conflicts in the conflict have been manageable.

Elsewhere in R2 grizzly bear conflicts between 2010 and 2019 have been minimal. Several grizzlies were involved in minor residential attractant conflict issues in the Ninemile Drainage and the Little Blackfoot and Deerlodge Valleys. It should be noted that reports of grizzly bears south of the Northern Continental Divide Ecosystem are becoming more and more common and the department is predicting and increase in grizzly bear conflicts over the next ten years south of Highway 12 and Interstate 90. In 2010 grizzly bears were sighted in and around areas such as Huson, Frenchtown, Wolf Creek, Marysville, Helena, Avon, Elliston, Georgetown Lake, Deerlodge, Drummond and Phillipsburg. And between 2011 and 2019 grizzly activity has been verified in the Boulder Valleys, the Deerlodge Valley, the John Long Mountains and the Sapphire Range. And in 2016, 2017 and 2018 multiple grizzly bear sighting were verified in the Boulder Range as far East as Butte, grizzlies have been verified in the Elkhorn Mountains, further east into the prairies and grizzly bear activity has been verified in the Big Hole Valley. And, in 2019, a radio collared grizzly from the Cabinet Mountains and an unmarked grizzly have been observed on multiple occasions in the Bitterroot Mountains of Idaho.

Education and Community Outreach:

Grizzly bear activity south of the Northern Continental Divide Ecosystem has escalated local community interest in outreach programs and solutions to bear-human conflicts. R2 has also seen an increase in requests for “Hunting Safely in Grizzly Country” information and outreach programs. Although time-consuming for FWP R2 Wildlife Management Specialists---educational events and community outreach continue to be a high-priority and since 2004 R2 has placed more emphasis toward preventative management. For example, in 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018 and 2019 R2 bear managers in cooperation with community groups have been involved in hundreds of preventative management actions ranging from the removal of domestic animal carcasses, multiple electric fencing projects, and the raising of funds and placement of bear-resistant rollout containers, dumpsters and containment structures. In addition, R2 is still actively encouraging communities, counties and rural districts to develop the concept of "Bear Smart Communities", a program that emphasizes community involvement in bear management and the reduction of bear attractants. In R2 there are multiple community groups that are actively pursuing Phase I of the "Bear Smart Community Program" that was launched by the Province of British Columbia in the late 1990's.

Since 2009 FWP R2 Bear Management has been working with the Block Management Program, the local game wardens and biologists and the Blackfoot Challenge and Granite

Headwaters watershed groups to distribute more bear pepper spray into the hands of hunters, ranchers and recreationists on the south end of the NCDE. Again, in 2017, 2018 and 2019, approximately 100 cans of bear pepper spray/year, were distributed across the Blackfoot and Clark Fork Watersheds. The program has been successful, and sportsmen and ranchers are stepping up and taking on distribution and mentoring (of proper use of bear pepper spray) to other hunters and rural community members.

MFWP R2 continues to work with a variety of conservation groups and state and governmental agencies that are contributing toward proactive efforts and the funding of various internship positions to assist the department with the "Bear Smart Community Program" in R2. For example, there is a loon/bear ranger position in Seeley Lake, a bear aware/bear management intern position in Missoula and a bear/wolf range rider position in and around the Ovando area. In addition, R2 continues to work with the Wind River Bear Institute who is aiding the Bitterroot Valley's game wardens who have been inundated with black bear conflicts for the last few years. FWP R2 is also actively involved in the MFWP Volunteer Program and volunteers are assisting with bear aware efforts in the Missoula Valley, lower Clark Fork River Basin and the Bitterroot Valley.

Livestock carcass pickup program:

The Blackfoot Challenge's Livestock Carcass Pick Up and Removal Program runs during calving season from mid-February through mid-May. Thereafter, carcasses in the Blackfoot Valley have been picked up by FWP or Blackfoot Challenge employees. In the spring of 2018, there were 5 incidents of grizzly bears venturing into ranch compounds to retrieve carcasses left out for the carcass pickup program. Dead calves were either left on the ground or placed on hay bales within high activity areas on the ranch and bears were lured in to feed on the carcasses. As a result, in 2019 FWP re-evaluated pickup protocol and now recommends that after March all carcasses set aside for pickup be stored away from ranch premises. In addition, to the Blackfoot Valley FWP also picks up carcasses in the areas of Deer Lodge, Phillipsburg and Huson, MT.

Grizzly Bear Management
2019 Annual Report
NCDE Portion of Region 1
Montana Fish, Wildlife & Parks



Landowner photo.

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Adult female grizzly bear (NWM256) at culvert trap in the Swan Valley. Landowner photo.

Acknowledgements

Many people were essential to having a successful grizzly bear management program. Funding was provided by Montana Fish, Wildlife & Parks (MFWP), Montana Outdoor Legacy Foundation (MTOLF), and National Fish & Wildlife Foundation (NFWF) through a grant from Burlington Northern Santa Fe Railroad (BNSF). MFWP wildlife technician, Justine Vallieres, was hired again in May. The funding for her position was through the MTOLF. MFWP managers Neil Anderson and Ken McDonald have supported management decisions. Coordination with bear managers Kim Annis (MFWP), Dustin Weatherwax and Cassie Powell (Blackfeet Tribe (BIR)), Stacy Courville (Confederated Salish & Kootenai Tribe (CSKT)), John Waller (Glacier National Park (GNP)), Jamie Jonkel (MFWP), Mike Madel (MFWP), Erik Wenum (MFWP), and Chad White (MFWP) was prompt and effective. MFWP biologists Jessy Coltrane and Ethan Lula provided help with the capture and handling of bears. MFWP game wardens Lee Anderson, Perry Brown, Ben Chappelow, Chris Crane, Nate Muhn, Chris Neu, John Obst, Wes Oedekoven, Nathan Reiner, Justin Slobuszewki, and Brian Sommers were extremely helpful in the reporting and investigation of bear conflicts, illegal feeding, bear mortalities, and handling bears. MFWP research biologists Cecily Costello and technicians Aaron Groves and Scott Waller provided equipment and assistance on numerous occasions. MFWP research assistant Lori Roberts helped with database management, logistical support, and bear handling. MFWP helicopter pilots Ken Justus and Rob Cherot, and Two Bear Air Rescue pilot Jim Pierce, all provided safe and excellent service when tracking bears by helicopter. Glacier National Park (GNP) personnel John Waller and Regi Altop were extremely helpful in coordinating bear management decisions. U.S. Forest Service (USFS) personnel Rob Davies, Scott Snelson, Amy Jacobs, and Mark Ruby, made timely decisions on the translocation sites for bears on the Flathead NF. Kootenai NF personnel Brian Donner and Lynn Johnson assisted with capture and release sites. USFS employees Cassie Waters, Rachel Manley, Mark Ruby, and Jessica Swanson assisted greatly with monitoring and reporting potential problems on Forest Service lands and helping with handling of bears. Dave Ring with the Montana Department of Natural Resources (DNRC) assisted with decisions regarding the trapping and releasing of grizzly bears on DNRC lands. Hilary Cooley and Wayne Kasworm with the U.S. Fish and Wildlife Service (USFWS), supported management decisions and assisted in the handling of grizzly bears. USFWS Special Agent Mona Iannelli investigated cases involving dead bears. BNSF employees were available and helpful when dealing with situations along the railroad tracks. A couple of NGOs have provided funding and on-the-ground assistance with prevention projects. Defenders of Wildlife personnel, Erin Edge and Russ Talmo, have been very supportive with electric fencing projects. Luke Lamar with Swan Valley Bear Resources has been very valuable helping residents in the Swan Valley install and maintain electric fencing. Madelon Martin raised money for equipment and to refurbish collars. Several people have provided a large amount of time as volunteers. Regi Altop, Doug Chadwick, Rachel Manley, Madelon Martin, Gary Moses, and Jim Pierce, were extremely dedicated and helpful.

Introduction

In 1993, Montana Fish, Wildlife & Parks (MFWP) hired a Grizzly Bear Management Specialist for Region 1, to work closely with private landowners and agency personnel to minimize conflicts between grizzly bears and humans. More emphasis was placed on a proactive approach of prevention. In 1995, we began pre-emptive capture and releasing bears closer to, or within, their home ranges. In 1996, working with Carrie Hunt of the Wind River Bear Institute, we began using onsite releases and aversive conditioning in an attempt to modify the behavior of the bear. At the same time, we worked closely with the landowners to identify and secure attractants.

There has been a lot of interest in the methods and philosophy of the program from the bear management community and the public. This has generated local and national media coverage which has highlighted the importance of preventing bear problems in the first place and secondly, how to handle those bears if problems do occur. The methods and techniques developed in the field continue to be refined and

improved. An interaction between grizzly bears and humans tends to be very individualistic which makes the analysis of data and presentation of results very complex.

The grizzly bear trend monitoring program began in 2004 and continues today. The program is headed up by MFWP but is an Interagency effort. We have assisted with the capture, collaring, and monitoring of those trend bears when possible.

In 2005, MFWP began an augmentation program of capturing grizzly bears with no history of conflict from the NCDE and releasing them into the Cabinet Mountains. Heather and Derek Reich were hired under contract with funding support from the Montana Fish, Wildlife & Parks Foundation and the National Fish and Wildlife Foundation. Since 2011, MFWP has continued the augmentation work with MFWP personnel.

This report is an overview of the work conducted during 2019 and a summary of management related captures since 1993. It includes prevention efforts, reported grizzly bear conflicts, management captures, releases, monitoring, mortality, and the Cabinet Mountains augmentation program.

Goal and Objectives

Goal: Minimize conflicts between people and grizzly bears.

Objectives:

-To minimize grizzly bear conflicts by working with landowners to identify, secure, or remove attractants.
-To work with agencies to promote food storage on public lands to minimize grizzly bear conflicts.
-To work with city, county, state, and federal governments to minimize grizzly bear conflicts.
-To provide information to the media on how people can prevent grizzly bear conflicts.
-To educate the public how to live and recreate safely in grizzly bear country.
-To respond to grizzly bear conflicts on private and public lands.

Grizzly Bear Technician

Montana Outdoor Legacy Foundation (MTOLF) and the National Fish and Wildlife Foundation (NFWF) again provided monies to fund a 6-month technician to work with the MFWP Grizzly Bear Management Specialist. This year, Justine Vallieres was hired for a second season and began work on May 13, 2019.

Over the last two field seasons, Justine has learned a lot and has become very confident and proficient in preventing and responding to grizzly bear conflicts. This involved working closely with landowners and agency personnel when preventing and dealing with reported conflicts. Justine has become very competent with trapping, drugging, handling, and monitoring grizzly bears. All the captures and handling events were conducted in a safe and professional manner. Justine is also experienced with installing and maintaining electric fences, deploying critter gitters, remote cameras, and assisting landowners in identifying and securing attractants.



The grizzly bear technician position is an extremely important part of the grizzly bear management program. It provides additional personnel to respond to conflicts and to work with landowners on preventing conflicts.

Funding for the technician position has always been a challenge because it is funded with "soft" dollars. That means funds must be raised every year primarily through grants and donations.

Justine's last day of work was Nov 1, 2019. We were still getting bear calls into December.

Prevention

The best way to minimize conflicts between people and grizzly bears is to prevent conflicts from occurring in the first place. Prevention can include a wide range of options including education (brochures, press releases, presentations, Bear Fairs), increasing human tolerance, installing and maintaining an effective electric fence, and using approved bear resistant garbage containers. Perhaps the most effective, but also the most time-consuming option, is one-on-one communication with people that live and recreate in grizzly bear country. The one-on-one communication needs to be done before a conflict occurs. Unfortunately, most one-on-one communication tends to occur in response to a conflict that has already occurred.

County Garbage Transfer Stations
We work with Flathead, Lake, Lincoln, and Missoula counties in regard to their garbage transfer stations or "green box sites".

Flathead County was the first to move and install electric fencing around their Coram transfer site. Since then, they have moved or consolidated, and put electric fencing around their other sites at Olney, Ashley Lake, Essex, and Bigfork. The Flathead National Forest and the Great Northern Environmental Stewardship Area (GNESA) were involved with logistics and funding for some of the sites.

Lincoln County has followed the Flathead County bear-resistant transfer station design and efforts. Within and adjacent to the NCDE, they have protected their sites at Glen Lake, Pinkham, Trego, and Fortine. They also moved the dumpsters from Stryker to the Trego site. Kim Annis and the Kootenai National Forest, and GNESA were very instrumental in working with Lincoln County in securing those sites.

Lake County operates two transfer stations in our area. One at Porcupine Creek, south of Swan Lake and the Ferndale site adjacent to Ferndale. Both sites have 40 cubic yard roll off containers with hydraulic arms and screen tops. Both sites were modified so that the lids could be opened and closed by flipping a switch. Currently, only the Porcupine site is operating correctly. The Ferndale site developed a leak in the buried hydraulic line and the county has yet to fix the problem.

Missoula County covers the Swan Valley near Condon. Presently, all garbage collection is done by a private company, Republic Services. There have been discussions about creating a bear-resistant transfer station near Condon, but nothing has occurred yet.

City of Whitefish: MFWP Conflict Specialist, Erik Wenum, has been working closely with Whitefish for many years related primarily to black bear conflicts. He was instrumental in getting the city to enact an ordinance that basically states that the residents and businesses within the city limits can not roll out their garbage until the morning of pickup unless it is in a bear resistant container. MFWP and Whitefish City officials met in October to discuss the bear situation in Whitefish. There was an agreement made to

remove fruit trees on city property and to work with the local hauler, Republic Services, to provide bear resistant garbage containers (Kodiak cans) within the city limits.

We are hoping that Whitefish will be the example of a responsible "Bear Smart Community" for all communities in the region.

Electric Fencing: Properly constructed and maintained electric fences are very effective at keeping bears from gaining access to attractants. Bear conflict specialist, Kim Annis, based in Libby, has developed an electric fencing guide that provides information on how to properly install and maintain an electric fence. We distribute that guide to landowners and provide them with a link to the Interagency Grizzly Bear Committee website for additional information. http://igbconline.org/wp-content/uploads/2016/03/MFWP Electric-Fencing-Guide_March-2017.pdf

A large part of our prevention work involved assisting landowners with protecting chickens, pigs, and fruit trees with electric fencing. We helped with the installation of 12 temporary and permanent electric fencing projects located near Columbia Falls, Whitefish, Creston, Bigfork, Ferndale, and Swan Lake. We also have an electric fence loaner program. During 2019, ten electric fence energizers and net fences have been loaned to landowners.

Electric Screens and Mats: For the past 12 years we have been utilizing pulsating electric fence energizers to electrify screens on rubber mats on the ground in front of doors, on windows and doors of chicken coops, metal grain barrels, and even metal doors on garages and shops. We use these techniques if we are unable to secure the attractants with conventional electric fencing. We have found these techniques are usually quick, easy to install, easy for landowners to use, and are effective in deterring grizzly bears. In 2019, we utilized some of these techniques to protect chicken coops and garage doors at 7 different locations. We were able to get video footage at two of those locations of grizzly bears touching the door and screen with their noses, getting shocked, and leaving. The grizzly bears did not return.

Critter Gitters: Since 1994 we have been using motion-activated noise makers called Critter Gitters to temporarily keep bears away from attractants. The Critter Gitters are made by Amtek and are powered by a 9-volt transistor battery. We currently loan them out to landowners to put up on chicken coops, garages, and any attractants that can't be quickly secured. We have 15 available and 9 are currently on loan.

Bear Resistant Containers: Since 2004, we have had a program established to loan bear resistant roll out garbage containers to residents. We started with Unbearable bins and have now acquired Kodiak cans thanks to funding provided by Montana Outdoor Legacy Foundation (MTOLF) and the National Fish and Wildlife Foundation (NFWF).

This loaner program has been very popular and currently 6 of these containers are on loan. Two of those were borrowed from Swan Valley Bear Resources. We have had to retire some of the containers due to age and damage by hauling companies when they empty them.

Fruit Gleaning Program: In the fall, Justine created a Facebook page called Flathead Fruit Gleaning. It was set up so that landowners who wanted fruit picked could connect with people who were willing to come pick fruit, give it to the landowner, keep it for themselves, and/or provide it to the food bank. The page is new, but there was certainly interest and use by both landowners and the public and over 300 people were following the page by the end of the field season. The local food banks have expressed an interest in helping with the program and receiving excess fruit.

Bear Fairs and Wake-up Social: Several years ago, a group in the Swan Valley started a Bear Fair that was open to the public. Within a few years, it grew from 50 people to over 300 people attending. Due to the success of reaching out to residents, additional bear fairs were planned and hosted at the communities of Polebridge, Essex, Coram, and Ferndale.

In 2019, Bear Fairs were held in Condon and at Polebridge. The Condon Bear Fair was at the Community Hall and was organized and hosted by Swan Valley Bear Resources. Agency personnel from Montana Fish, Wildlife & Parks, the U.S. Forest Service, and U.S. Fish and Wildlife Service set up booths and gave presentations. Private NGO's (Swan Valley Connections, Defenders of Wildlife, Living with Wildlife Foundation, Flathead Valley Land Trust, Vital Ground) and company vendors, Counter Assault and Gallagher Fencing also put up displays and gave presentations on electric fencing, bear resistant containers, and the use of bear spray. More than 100 residents and tourists attended that event.

The second Bear Fair was in Polebridge and was hosted by the Northern Lights Saloon and was organized by Flannery Coats and Debo Powers. Booths were set up by agency personnel from the U.S. Forest Service, Glacier National Park, and Montana Fish, Wildlife & Parks. Private NGO's (North Fork Preservation Association, North Fork Landowners Association, Yellowstone to Yukon) also assisted with and sponsored the event. Vendors from Gallagher Fencing and Kodiak Products were present to demonstrate electric fencing and bear resistant trash containers. Over 130 residents and tourists attended the event.

In addition to the Bear Fairs, Swan Valley Bear Resources also started a Bear Wake-up Social several years ago. This event is held during April when bears are emerging from their dens. This year, the event was held at the Swan River Community Center near Ferndale. Presentations were given by author and Wildlife Biologist Doug Chadwick and me. The presentations were well attended by more than 100 residents.

Presentations, Meetings, and Training

A large part of grizzly bear management involves interactions between the public and agency personnel. This includes formal presentations, meetings, workshops and training. The following is a list of the presentations, meetings, workshops, and training with which we were involved. The list is in chronological order, and includes the type of interaction, date, and participants.

Most presentations are given during the winter months and most workshop and training sessions occur in the spring. Presentations are not typically scheduled during the field season due to the day-to-day unpredictability of the work. Presentations on grizzly bear conflict prevention were given at the following locations and dates:

January:
Science on Tap. Presentation in Bigfork. January 2. Public.
Conservation Strategy Meeting. January 11. Agencies.
Swan Valley Bear Resources Meeting in Condon. January 19. Agencies & NGOs.
Conservation Strategy Meeting in Kalispell. January 30. Agencies.

February:
Flathead Valley Community College Presentation. February 8. Public.
North Fork Interlocal Meeting. February 20. Agencies and Public.
Montana Department of Transportation Workshop in Kalispell. February 21. Agency.

March:
Grizzly Bear Trend Monitoring Meeting in Missoula. March 4. Agencies.
USFWS Bear Handling Workshop in Missoula. Workshop & Presentation. March 5-6. Agencies.
Swan Valley Bear Resources meeting in Condon. March 8. Agency & NGO.
MFWP Wildlife Meeting at Lone Pine. March 12. Agency.

April:
Whitefish Legacy Partners Presentation in Kalispell. April 23. Public & NGO.
Spring Bear Wake-up Social in Ferndale. April 25. Public.
Grizzly Bear Science Team Conference Call. April 26. Agencies.
Northern Continental Divide Ecosystem Subcommittee Meeting in Kalispell. Agencies & Public.
Whitefish Legacy Partners Bear Aware Program in Whitefish. April 30. Presentation. Public.

May:
Burlington Northern Santa Fe Railroad Meeting in Whitefish. May 1. BNSF & Agency.
Flathead Electric Coop in Kalispell. Presentation. May 8. FEC Employees.
MFWP Citizen's Advisory Committee at Lone Pine. Presentation. Agency & Public.

June:
Bear Fair in Condon. Presentation. June 1. Public.
North Fork Landowners Association at Sonderson Hall. Presentation. June 9. Public.
USFS Bear Training in Eureka. Presentation. June 11. USFS.
Glacier National Park Bear Training in West Glacier. Presentation. June 11. GNP.
Glacier National Park Bear Training in St. Mary. Presentation. June 12. GNP
Backcountry Pilots Association in West Glacier. Presentation. June 29. Public.

July:
North Fork Interlocal at Sonderson Hall. Meeting. July 10. Agencies & Public.
Summit Restaurant Presentation. July 24. Public.
Day in the Field with Danielle Coffman. July 23. Public.

August:
Polebridge Bear Fair. Presentation. August 24. Public.

September:
Nothing scheduled.

October:
Burlington Northern Santa Fe Railroad. Meeting. October 22. BNSF.
Whitefish City Employees. Meeting. October 24. WF employees & Agency.
Beers for Bears at Sacred Waters Brewery. Presentation. October 29. Public.

November:
Conference Call GB Mortality Committee. Meeting. November. 7. Agencies.

December:
NCDE Subcommittee Meeting in Missoula. November 3. Agencies & Public.

Reported Grizzly Bear Conflicts

In 2019, we received over 250 calls related to grizzly bears. Of those calls, most were classified as actual bear conflicts. The other calls were people wanting information about grizzly bears, grizzly bear sightings, media calls, or second-hand reports that could not be confirmed.



Unprotected chicken coops that were broken into by two different adult male grizzly bears. One near Radnor (left) and the other on the east side of the Flathead Valley (right). The landowner at Radnor did not want an electric fence installed since all the chickens were killed. A temporary electric fence was put up at the other property. No additional chickens were killed even though the bear returned. Traps were set at both locations, but no bears were captured.

Reported grizzly bear conflicts involved bears getting into unsecured garbage, pet food left outside, bird feeders, livestock grain, chicken feed, killing chickens, killing pigs, damage to fruit trees, property damage to a car, and a yurt. Numerous calls were received because bears were feeding on grass in yards and being seen next to homes. Some of those bears were captured and translocated.

We had many reports of grizzly bears feeding on domestic fruit. These reports were primarily from the Flathead Valley and included apples, plums, pears, and cherries. In some situations, we were able to install temporary electric fences to prevent the bears from accessing the fruit and causing damage to the trees. In a couple of situations, there was not a good way to use electric fencing because of the location of the trees, driveways, and other obstacles. In those situations, we tried to get the fruit picked and monitor the bear activity with remote cameras or install critter gitters. Trapping was also not ideal when we dealt with a female and cub(s): if just the cub(s) would have been captured and not the female, a possibly dangerous situation might have been created.



Grizzly bear family group feeding on crabapples near Creston. Landowner photo.



Photos from some of the grizzly bear conflicts that occurred in 2019. Damage to a chicken coop, killing chickens, sheep depredation, and a garage broken into to get cat food and horse feed.



Female grizzly with 3 two-year-olds feeding on grass and clover in a yard near Ferndale. These subadults eventually moved west toward Flathead Lake. They were last observed late in the fall on the Flathead Indian Reservation north of Polson. Landowner photo.



Adult female grizzly bear and two yearlings at crabapple tree along the Flathead River, Creston.

In previous years, the number of calls reporting grizzly bear conflicts ranged from 10 in 1993 to over 250 in 1998. Since 1993, the number of calls has averaged about 100 each year. The number of calls is not

necessarily an accurate measure of the level of grizzly bear conflicts for a given year (e.g. one grizzly bear in a subdivision may elicit many phone calls as the bear moves from house to house).

Once a grizzly bear conflict report is received, an effort is made to contact the reporting party and determine if a site investigation is warranted. Once a site has been investigated, a determination is made as to what actions can be taken to prevent further conflicts. In most cases, identifying and properly securing the attractants takes care of the situation. In some cases, the decision is made to attempt to capture the grizzly bear, or bears, involved. The decision to capture the bear is not automatic and it is based on human safety, bear safety, the type of conflict, location, and behavior of the individual bear.



Bear resistant Kodiak Can that we loaned to a property owner in the North Fork of the Flathead drainage. They had chained it to a post so no one would steal it. A grizzly bear was able to get some leverage and was able to get into it. That is why we use the term "bear resistant".

Emphasis is placed on trying to find solutions that will prevent problems from occurring at the same site again. With the landowner, we walk the property identifying why the bear was attracted to the site and how that attractant can be secured so that this bear or other bears will not visit the site and repeat the problem. Many times, the solutions are simple and the landowners are willing to assist us by securing the attractants. Bird feeders, pet food, fruit, garbage, and poultry are the primary attractants we deal with and all are usually easily secured.

During the 2019 field season, in attempts to capture bears for management reasons, culvert traps were set a total of 73 times for a total of 330 trap nights. All the management traps were set on private property (Figure 1).

When multiple bears, including family groups were involved in conflict situations, multiple traps were set. The family trap we share with Glacier National Park was used on several occasions to capture cubs when the adult female was captured.

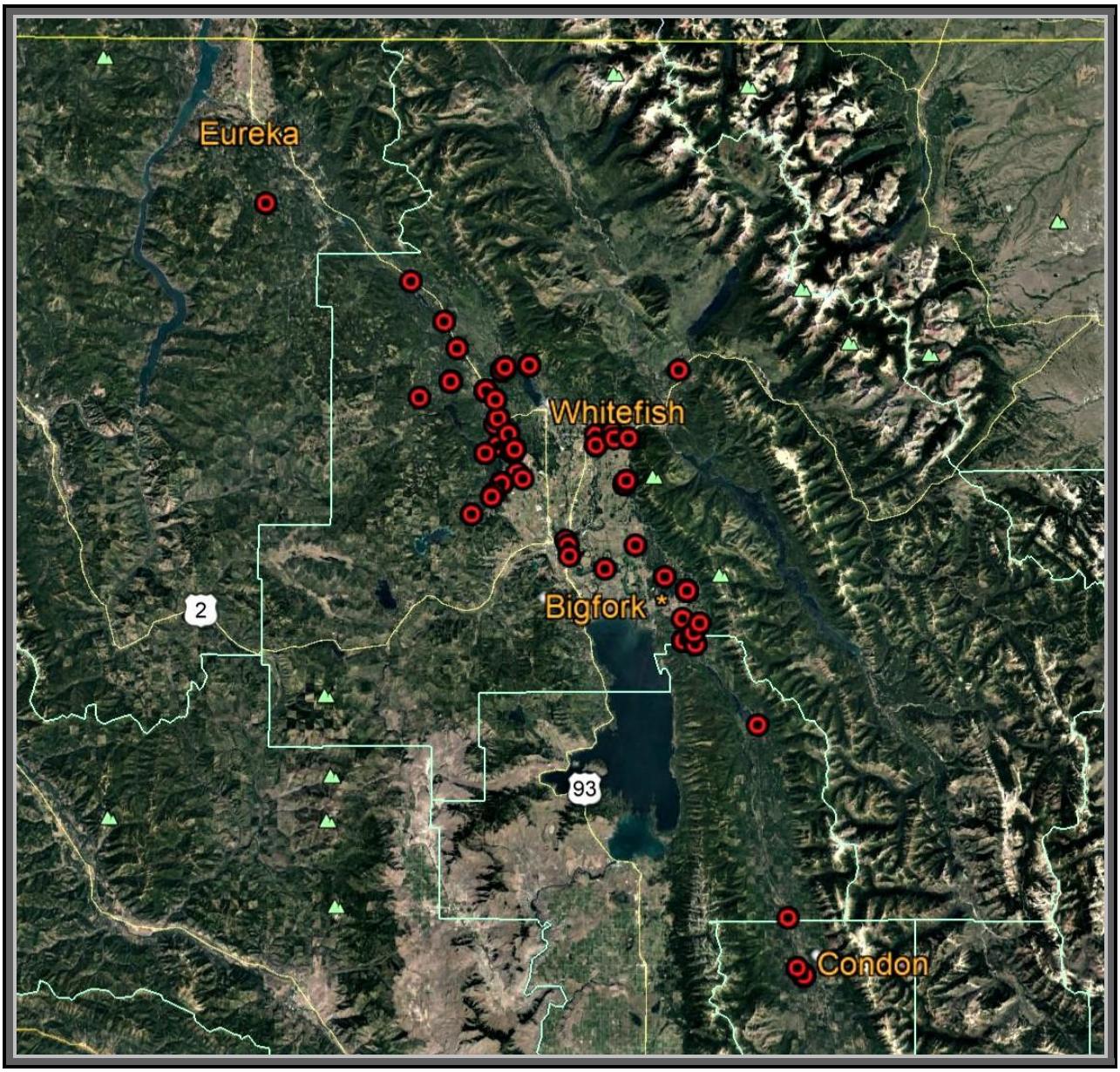


Figure 1. Locations of trap sites set in attempts to capture grizzly bears for management.

Grizzly Bear Management Captures

The decisions to capture grizzly bears for management reasons are not made without careful consideration. Human and bear safety are primary considerations. In many cases, the decision to capture and translocate a bear is made to give us time to properly remove or secure an attractant. In some cases, the decision has been made to remove a bear from the population due to repeat conflicts, level of property damage, or concerns about human safety.



Adult female grizzly bear (NWM195) outside traps where her two yearlings (NWM248 & NWM249) are being held.

Management trapping resulted in 19 captures of 16 individual grizzly bears. All 19 captures occurred on private land (Figure 2). Fifteen of the 19 captures occurred outside of the grizzly bear recovery line.

The 16 individual grizzly bears that were captured included 2 adult females, one with 3 cubs of the year (2 female cubs captured), and one with 1 female cub of the year, 7 subadult males, 2 subadult females, 2 yearling males and no adult males (Table 1).

All grizzly bears were captured in culvert traps. Captured grizzly bears were anesthetized with Telazol or Telazol/Medetomidine administered by syringe pole. All grizzly bears were examined for injury, age, sex, breeding condition, lactation, and overall physical condition. Temperature and respiration were monitored and recorded. A pulse oximeter was used to monitor heart rate and oxygen level. Supplemental oxygen was provided. This year we purchased a used Invacare portable oxygen concentrator. We tested it on a few bears with mixed results. It does not provide a steady flow of oxygen. Instead, when it detects an exhale, it provides a puff of oxygen. We found with a younger bear it worked well and kept the bears oxygen level over 90. On other bears, it wouldn't detect the exhale and would shut down. We will continue to test it and provide bottled oxygen if needed.

Basic physical measurements were taken and recorded. Weights were recorded with a digital scale. A Bioimpedance Analyzer was used to measure resistance to calculate % body fat to quantify body condition. Bears over 2 years of age were radio-collared and in a special case, a female cub of the year was radio-collared with an Iridium collar that can be triggered to drop off. All grizzly bears were microchipped for identification. We microchipped the first grizzly in 1995.

Hair samples were collected for both DNA and stable isotope analysis. We first collected hair for DNA in 1994 and the first DNA analysis was in 1998 in coordination with the USGS. Blood was spun using a

centrifuge and the serum and whole blood were collected, frozen and sent to Washington State University for stable isotope analysis beginning in 2010. The isotope analysis was used to determine the primary diet (meat or vegetation) of the grizzly bear within certain time periods, within a week, month or year.

Grizzly bears that we anesthetized were held overnight in culvert traps on a bed of straw until they recovered from the effects of the drugs. They were kept in an isolated area, monitored with minimal human contact and given water once they recovered from anesthesia.

Table 1. Grizzly bears captured for management in Flathead Portion Region 1, 2019.

Record	Bear ID	Capture Date	Sex	Age Class	CapNo	Capture Drainage	Release Drainage	Current Status
442	NWM255	5/30/19	Male	Subadult	1	Stillwater	Euthanized	Dead
443	NWM249	6/12/19	Male	Yearling	2	Whitefish	Euthanized	Dead
444	NWM248	6/12/19	Male	Yearling	2	Whitefish	Euthanized	Dead
445	NWM224	7/8/19	Female	Subadult	2	Flathead	MFK Flathead	Dead
446	NWM256	7/23/19	Female	Adult	1	Swan	Onsite	Dead
447	NWM257	8/21/19	Male	Subadult	1	Flathead	SFK Flathead	Alive
448	NWM258	8/22/19	Female	Subadult	1	Flathead	SFK Flathead	Alive
449	NWM256	9/4/19	Female	Adult	2	Swan	Euthanized	Dead
450	NWM259	9/5/19	Female	Cub	1	Swan	Sent to GWDC	GWDC
451	NWM260	9/6/19	Female	Cub	1	Swan	Sent to GWDC	GWDC
452	NWM261	9/20/19	Male	Subadult	1	Whitefish	NFK Flathead	Dead
453	NWM262	9/20/19	Male	Subadult	1	Whitefish	NFK Flathead	Dead
454	NWM263	9/23/19	Male	Subadult	1	Stillwater	Euthanized	Dead
455	NWM264	10/7/19	Female	Adult	1	Swan	SFK Flathead	Dead
456	NWM265	10/8/19	Female	Cub	1	Swan	SFK Flathead	Alive
457	NWM266	10/22/19	Male	Subadult	1	Swan	MFK Flathead	Dead
458	NWM264	10/25/19	Female	Adult	2	Swan	Euthanized	Dead
459	NWM265	10/26/19	Female	Cub	2	Swan	SFK Flathead	Alive
460	NWM267	11/14/19	Male	Subadult	1	Flathead	NFK Flathead	Alive



Figure 2. Management grizzly bear capture locations in 2019. Numbers relate to BearID in Table 1.



NWM255 was a subadult male that was captured on Lost Creek Road, west of Kalispell. The bear was repeatedly breaking into a chicken coop and killing chickens. The bear also got into unsecured garbage at the end of the driveway. Efforts were made to protect the chickens with electric fencing but the first night of installing fencing, the landowner forgot to turn on the energizer. The second night the bear grounded out the fence resulting in more damage and more dead chickens. Due to the amount of property damage and persistence of the bear, the decision was made to euthanize him.



NWM248 & NWM249 were two yearling male grizzly bears that were the offspring of adult female grizzly **NWM195**. This family group was captured in 2018 near Whitefish after killing chickens and translocated into the North Fork of the Flathead drainage. They returned to the Whitefish and Stillwater River areas and continued to break into chicken coops and kill chickens in 2018 and 2019. They also killed sheep on three different occasions. Attempts to recapture the family group in 2019 resulted in the capture of the two yearlings. The adult female would not pull on the bait and left the area after several days. After reviewing the amount of chickens killed and property damage, the decision was made to euthanize both of the male yearlings. Trapping efforts continued for the adult female but were unsuccessful. She eventually dropped her radio collar in the Haskill Basin area during the summer. She may emerge with new cubs of the year in 2020. We expect that she will continue to break into chicken coops and kill chickens.

NWM224 was a three-year-old female that was originally captured as a cub in 2016 with her mother. This year she was captured for killing pigs on the east side of the Flathead Valley. She was fitted with an Iridium GPS collar and released in Puzzle Creek up the Middle Fork of the Flathead drainage. She spent most of her time in Glacier Park and on the Blackfeet Reservation and not causing any conflicts. In the fall she was in a remote area of Glacier Park during a big snowstorm. She then moved to the east on the Blackfeet Reservation along the BNSF railroad tracks. She ended up being hit and killed by a vehicle along Highway 2 while going to the carcass of a cow that had been hit and killed by the train during the snowstorm.



NWM224 radio collared after being captured for killing pigs southeast of Columbia Falls.

NWM256, NWM259, NWM260 This was a family group consisting of an adult female and her three cubs-of-the year in the area near Condon. The adult female (NWM256) was originally captured as a subadult for the trend monitoring program. In July, we got a call about a female grizzly with cubs that had gotten into a buried food cache on private land. The remaining good food was secured, and the rotten food was taken to the landfill. A trap was set, and the adult female was captured quickly. A remote camera photographed the cubs at the trap in the middle of the night. The adult was not wearing a radio collar, but the microchip indicated it was the female that was a trend bear and she had dropped her radio collar a week earlier. The decision was made to fit the adult female with an Iridium GPS collar and release her onsite to reunite with her cubs. The landowner agreed, and she was released onsite. The family group was monitored, and we also got reports of them starting to hang around houses, getting into non-bear resistant garbage cans and dumpsters, gaining access to barns, and even trying to go into kitchens. We did set a trap at the location where she tried to go into the first kitchen. They showed up at the trap but wouldn't go in and left the area. We put up a critter gitter on the back porch in case she returned to deter her from trying to go back in. We delayed trapping for them until they got to a location where we could do it safely. In September, they got into a tack shed in a barn to get horse feed. We set up traps and ended up capturing the adult female the first night, and then two of her cubs, which were both females. We kept the bears in traps onsite trying to capture the third cub. It came to the traps for several nights and then left. After several long discussions, talking to landowners, looking at GPS collar locations, the decision was made to euthanize the adult female and send the two female cubs to the Grizzly and Wolf Discovery Center in West Yellowstone. The third cub was left in the wild. If it showed up around residences, we would try to capture it. That did not occur.





Grizzly bear cubs NWM 259 & NWM260 were transported to the GWDC.

NWM257 is a subadult male that was first reported along the Flathead River near Kalispell feeding on chokecherries. A trap was set due to where he was at among houses, but he moved on. A while later we got a report that a grizzly bear was observed getting into unsecured garbage cans at a couple of residences along the Flathead River. The garbage was secured, and a trap was set. The bear was captured immediately. He had no previous history and was collared and released in the Spotted Bear drainage. He went southwest along the South Fork drainage and then proceeded to travel north along the east side of Hungry Horse Reservoir. He ended up in Coram, Martin City, and Hungry Horse and was reported getting into garbage and fruit trees. He then moved east through Badrock Canyon and was in Columbia Falls. He continued getting into unsecured garbage in the middle of the night. He followed the Flathead River and ended up near where he was originally captured. Then he turned around and went back north to Columbia Falls. Traps were set near Kalispell and Columbia Falls at 4 different locations. He was detected on camera at two of the trap sites but wouldn't go in. Eventually, he left Columbia Falls and headed to West Glacier. He moved into the park and it appears he denned above Avalanche Lake.



NWM257 feeding on chokecherries in a backyard on the east side of Kalispell. He later got into unsecured garbage and was captured and translocated. Landowner photo.

NWM258 This subadult female was originally captured on the Flathead Indian Reservation by the CSKT bear biologist. She was captured where sheep depredation had occurred. She was collared and released in Glacier Park near Anaconda Creek. She eventually moved west and ended up along the Stillwater River west of Whitefish. We monitored her movements along the Stillwater and received reports of her feeding on natural fruit on the edges of yards. She was seen a lot and was very habituated to people and human activity. She had not caused any major conflicts except for people being concerned about how much she was around houses. We captured her and released her in the Spotted Bear drainage. She ended up moving northeast and eventually showed up around East Glacier and then further east on the Blackfeet Reservation. Again, she was being observed near homes and was also feeding on spilled grain at grain silos.

The Blackfeet bear biologists hazed and attempted to trap her with no success. She eventually moved back into the mountains and denned.

NWM261 & NWM262 We believe these two subadult male grizzly bears were first reported by a mountain biker in the Haskill Basin area near Whitefish. He reported encountering two young bears that were hesitant in getting off the trail he was riding on. About a month later we got a report from the Iron Horse Subdivision reporting two young grizzly bears had drug a deer carcass off the road and into the brush near the ridge by Haskill Basin. No further reports from there. In September, we got several calls and photos of two young grizzly bears in yards and around houses in a subdivision along the road up to Whitefish Mountain Resort. Two traps were set, and they were captured, fitted with GPS radio collars and released together on the Flathead National Forest near Frozen Lake, which is on the British Columbia border. They ended up moving east into Glacier Park near Kintla Lake and then returned to the Frozen Lake area. From there, they moved farther west and ended up in the valley at the base of the Galton Range near Grasmere. They were observed feeding on apples and started hanging around residences and reportedly got onto porches. The B.C. Conservation Officers contacted us to get additional information about their history. They decided to try and capture them, but they moved around too much. Eventually, they ended up being shot and killed by a landowner. The case is under investigation.

NWM263 We received several reports of at least one grizzly bear being seen and getting into unsecured garbage, dog food, and fruit trees in Olney. There was also a report of a grizzly getting into garbage in an open garage just south of Olney. A trap was set near the garage but no activity. Then we got more reports from Olney. We set a trap in Olney and eventually captured an unmarked subadult male. While we were drugging and preparing to collar him, we noticed a wound behind his front shoulder. Turns out it was a recent bullet wound. We also had noticed the bear was acting lethargic while in the trap. After relaying the information to the USFWS and my supervisor, the decision was made to euthanize the bear. We had the bear X-rayed at a local veterinary clinic and confirmed he had been shot with a bullet and with bird shot.



NWM263 in culvert trap and examining bullet entry wound behind left shoulder.

NWM264 & NWM265 are a female grizzly and her female cub of the year. We had numerous reports of a female grizzly bear with cubs of the year getting into chicken coops in the Ferndale area. We helped landowners with protecting their chickens with electric energizers when we were notified of a conflict. Unfortunately, we usually found out about the situation after coops

were destroyed and chickens were killed. In the fall, we got a call about a grizzly bear that had gotten chicken feed, killed chickens, and had done some damage to two vehicles trying to get to chicken feed that was in the trunk. At the same time, there were reports of a female grizzly with just one cub killing chickens just to the north. We set traps where the vehicles were damaged, and we captured an unmarked adult female and her female cub of the year. Since she was unmarked and had a cub, the decision was made to give her another chance. She was released in the Spotted Bear drainage. In about a week, she had returned to the Ferndale area. We didn't get any reports of her causing conflicts, but her GPS locations showed she was visiting the places where chickens had been killed. About two weeks later, they were captured where a trap had been set for a different grizzly bear. Because of the previous conflicts she had been involved with, the decision was made to euthanize the adult female. Since the female cub was in good shape, we decided to give her another chance. She was fitted with a GPS collar with a drop off mechanism that could be triggered remotely so it doesn't get too tight. We released her on the east side of Hungry Horse Reservoir. She moved north and was on the outskirts of Martin City and Coram. We were able to document she was feeding on gut piles and meat scraps from big game killed by hunters. People reported seeing her tracks in the snow but no reported conflicts. Her collar turned off December 1st, so we do not know where she denned.



NWM266 In late October, we received several reports of a grizzly bear killing chickens, west of Kalispell in the Rhodes Draw area. Residents had chased it off several times, but it kept returning. We also noticed several unsecured garbage cans tipped over in the area. We spoke to the residents about electric fencing to protect their chickens and they were going to do that but needed some time to get it accomplished. We set a trap and captured an unmarked subadult male grizzly bear. We contacted Glacier Park and got permission to release the grizzly bear at Packers Roost. The main road was closed due to road work, so the number of visitors in that area would be minimal. After being released, the bear moved east over Logan Pass and down the north side of St. Mary Lake. Eventually, he ended up along Lower St. Mary Lake. The Blackfeet biologist contacted me and said that a grizzly bear had been getting into an over-filled garbage dumpster east of the lake. After checking the GPS locations, we determined that NWM266 had been at that location. The biologist set up cameras and set a trap. Two grizzly bears showed up at the site. One was NWM266 and the other was not collared. NWM266 was soon captured and the decision was made to euthanize him. The property owner where the dumpster was located was fined by tribal wardens.

NWM267 In November, we had reports of a grizzly bear getting into unsecured garbage and fruit trees in Columbia Falls. A trap was set but it took a while before the bear would go into it. An unmarked subadult male was captured. The bear was fitted with a GPS collar and released in the upper Whale Creek drainage. After being released, he moved north toward Trail Creek. His collar turned off December 1st, so we do not know where he denned.

Grizzly Bear Releases

Ten of the 16 grizzly bears that were captured for management reasons were initially released back into the wild (Figure 3). Two were recaptured and euthanized, the other six bears were euthanized. Two female cubs of the year were sent to the Grizzly and Wolf Discovery Center. All the grizzly bear releases are entered into the database of the MFWP website at:
http://fwp.mt.gov/fishand wildlife/livingwithwildlife/relocation/.

The grizzly bears that were released were either relocated to an approved site or released onsite with the permission of the landowners. One grizzly bear was released on private land, nine releases occurred on the Flathead National Forest, and one in Glacier National Park.

Prior to releasing any bears, we coordinated with the MFWP, USFWS, and the land management agency or landowner. We made sure that there were not any people working, hiking, camping, or parked at or near the release sites. If there was an unattended vehicle at the gate or near the site, we would move to an alternate location.

All the bears that were released had been held overnight or for a sufficient period of time for the anesthetizing drugs to have worn off. All the releases were "soft" releases where we just opened the door and the bear left.

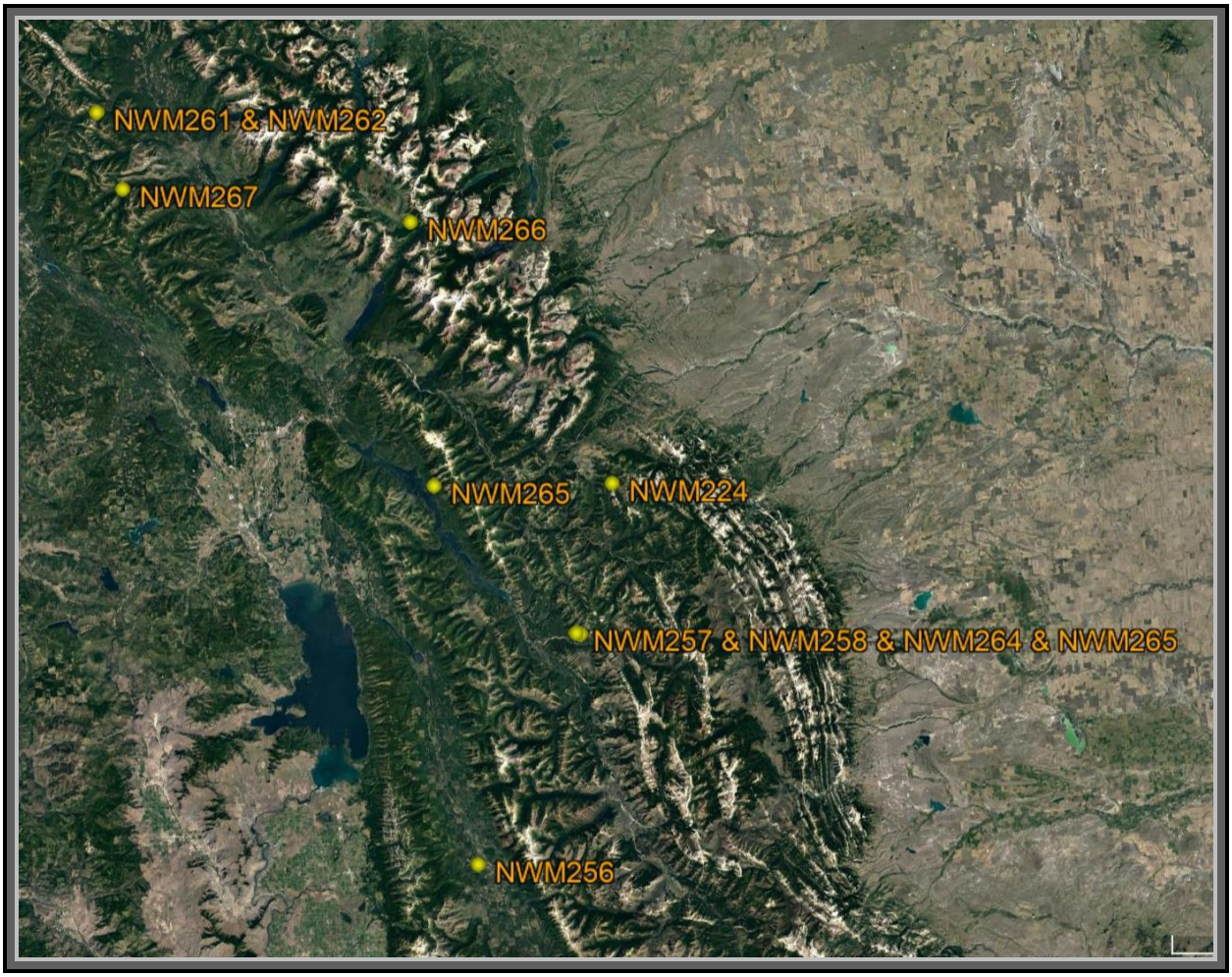


Figure 3. Management grizzly bear release locations in 2019. Numbers relate to BearID in Table 1.

Monitoring

Radio-collared grizzly bears were monitored from the ground and from the air. In previous years we attempted to fly at least once a month. With the new GPS Iridium collars, we can monitor the bears without the need for monthly flights. A total of 4 monitoring flights were conducted with MFWP helicopter pilots Ken Justus and Rob Cherot, and Two Bear Air Rescue pilot Jim Pierce.

Ten grizzly bears were fitted with Iridium GPS collars with geofence capability and released back into the wild. One of the ten was a female cub of the year which was fitted with a GPS collar with a remote release system.

The geofence technology allows us to delineate polygons around places where we want to obtain additional GPS locations to document the bears movements. When a bear is in a remote area and away from residences, the collar acquires a GPS location every 6 hours. When the bear moves into the geofence polygon, the collar acquires a GPS location every 30 minutes.

The collars store the GPS locations on the collar, but we can also download all or some of the data through a satellite connection once every other day. This allows us to limit the amount of flying and ground tracking time to obtain locations. Although the downloads do not provide real time data, we are still able to monitor the grizzly bear movements and activity much better than with the previous generation of VHF and GPS radio collars.

To save battery power, the GPS collars turn off on December 1st and turn on March 15th. In the future, new collars will be programmed to turn off December 15th and turn on March 1st. We are finding some bears aren't denning until after the 1st of December and some bears are emerging from their dens prior to March 15th.

The GPS collars are built with a mortality switch that produces a mortality pulse rate if the collar does not move for 6 hours. On the spreadsheet of the collar downloads we can see if the collar went to mortality. A collar not moving for 6 hours can be the result of the bear being dead or the collar falling off. Once a collar is on mortality, we attempt to retrieve the collar to determine if the bear is dead or if the collar just dropped.

Funding for some of the collars and refurbishment of dropped collars was received from BNSF through NFWF and MTOLF. An additional 10 Iridium GPS collars were purchased through MTOLF with money donated by two private individuals. Madelon Martin did a fundraiser during 2019 which allowed us to refurbish two GPS collars.

Three Iridium GPS collars are needing to be refurbished for the 2020 field season. New Iridium GPS collars cost about $2400 each. To refurbish a collar, the cost is about $1600. While the cost of the collars is much higher than the traditional $350 VHF collars, we can get up to 48 accurate GPS locations a day, depending on if the bear is within the geofence or not, compared to maybe less than 10 somewhat accurate VHF locations a month. Also, with the GPS and download technology, flight costs drop dramatically.

Grizzly Bear Management Captures (1993-2019)

Since 1993, 263 individual grizzly bears have been captured 456 times as part of the grizzly bear management program. The number of new grizzly bears captured ranged from 1 in 1994 to 20 in 2004. The years 1998, 1999, 2004, 2011, and 2012 had many grizzly bears captured because of the poor huckleberry crop in the falls of 1998, 2004, and 2011 (Table 2).

Table 2. Grizzly bears captured in management actions within the NCDE portion of Region 1. 1993-2019.

Year	# Captures	# Ind. Bears	# New Bears
1993	2	2	2
1994	1	1	1
1995	16	12	11
1996	12	10	8
1997	15	13	9
1998	24	19	12
1999	26	13	8
2000	13	13	9
2001	15	12	7
2002	8	7	6
2003	14	13	13
2004	39	28	20
2005	7	7	5
2006	11	8	7
2007	21	15	10
2008	13	10	6
2009	13	10	7
2010	25	23	16
2011	45	31	19
2012	19	18	13
2013	12	10	6
2014	10	9	7
2015	15	13	11
2016	16	16	10
2017	21	15	10
2018	23	20	17
2019	19	16	13
R-1 Management Total	**456 (mean = 16.8)**		**263 (mean = 9.7)**

Reasons For Capturing Grizzly Bears For Management (1993-2019)

Of the 456 management captures and handling of grizzly bears (1993-2019), the highest categories were the captures of dependent young that were caught while trapping for the adult females that were involved with some type of management action, followed by grizzly bears captured for being around homes, depredations on domestic animals, and accessing feed for domestic animals and wild birds. Next were bears getting into domestic fruit trees and incidental captures of grizzly bears while trapping for black bears or bears causing the actual conflict. Property damage, accessing garbage, and grizzly bears digging up domestic carcasses or taking

harvested game on private property comprised the rest of the categories. All categories and sub-categories for management captures and handling of grizzly bears are listed in Table 3.

Table 3. Reasons For Capturing and Handling Management Grizzly Bears. 1993-2019.

Category	Sub-category	Number of Captures
Dependent Young		**96**
Around Homes		**79**
Depredation	Poultry	42
	Goat	4
	Pig	4
	Llama	2
	Sheep	2
	Calf	1
	Dog	1
Depredation Total		**56**
Feed	Pet	25
	Wild Bird	11
	Horse	7
	Pig	5
	Poultry	3
Feed Total		**51**
Fruit		**38**
Incidental		**32**
Property Damage	Shed	11
	Garage	4
	Cabin	3
	Freezers	3
	Vehicle	2
	Kennel	1
	Trailer	1
Property Damage Total		**25**
Garbage		**22**
Carcass	Deer	4
	Horse	4
	Butcher Scraps	1
	Cow	1
	Dog	1
Carcass Total		**11**
Orphaned		**11**
Habituated		**9**
Campground		**5**
Grease		**4**
Food		**5**
Leghold Trap		**4**
Grain		**3**
Preventative		**3**
Grain Spill		**1**
Wounded		**1**

Status of Grizzly Bears Sent to Zoos or Facilities

Since 1993, we have sent 30 grizzly bears to zoos or research facilities. Most of these were cubs and yearlings, but a few occasions included subadult or adult grizzly bears that we felt would adapt to captivity. These were bears that would have been killed if they hadn't been placed elsewhere. We prefer to have bears alive and in the wild. Removing a grizzly bear from the population is a final option.

The first grizzly was removed in 1993 and was sent to the San Antonio Zoo in Texas. She was a 7 years old female from Spotted Bear. I am not sure of her status.

Two female grizzly bears were sent to the Bronx Zoo; a subadult in 1995 and a cub in 2003.

Two female cubs were sent to the Wildlife Way Station, a wildlife rescue facility in California, in 1995. As far as we know they are still there, but the facility was being closed in 2019.

The Grizzly and Wolf Discovery Center (GWDC) in West Yellowstone now houses four grizzly bears we have sent to them. All the bears are still alive and doing well. The first one was an adult female in 2002 from the Whitefish area. She had been captured and relocated 5 times before being removed. In 2011, the second bear was a subadult male from the Coram area after being captured and relocated twice before. The third and fourth bears are female cubs that were captured in 2019 near Condon after the adult female was killed for repeated conflicts.



Also, in 2002, a male grizzly bear cub located near Whitefish was sent to the Denver Zoo. DNA revealed that its mother was the adult female grizzly sent to the (GWDC) later in 2002. The cub was housed with a young female grizzly bear from Alaska. The male was euthanized in 2019 after having severe arthritis and other health issues.

Six grizzly bears were sent to the Washington State University Research Facility at Pullman, Washington. The first four bears were sent in 2000. They included a subadult female, originally from Seeley Lake, and an adult female and two of her male cubs from the Polebridge area. A subadult female was sent there in 2008 from the Flathead Valley. The last bear was a subadult male sent there in 2010. Originally, he was from the Ferndale area but was recaptured at Seeley Lake. All the bears sent to WSU were utilized for research and have been euthanized.

In 2004, a female and male cub that were orphaned after their mother was hit and killed by a train near Essex, were sent to the zoo in North Dakota. Their status is unknown.

In 2005, Washington Park Zoo in Michigan City, Indiana, received two female grizzly bear cubs after we killed the adult female for repeated conflicts in the Coram area. Their status is unknown.

The Cheyenne Mountain Zoo in Colorado Springs, Colorado became the home for two unrelated subadult male grizzly bears in 2008. One bear was from the Eureka area and the second bear was from Swan Lake. Both were on their own but had caused repeated conflicts before being removed. They have both bonded and are doing well in captivity.

Four grizzly bear cubs, 3 females and 1 male, were sent to the North Dakota Zoo in 2011, after both of their mothers were killed for repeated conflicts and killing pigs. Two are still at the North Dakota Zoo in Bismarck. Two of the female cubs have been transferred to the Henry Vilas Zoo in Madison, Wisconsin.

Two yearlings, 1 male and 1 female, were sent to the St. Louis Zoo in Missouri in 2017, after their mother was killed for repeated conflicts in the Ferndale area. They are currently in a new 11.1-million dollars exhibit and have adapted to captivity.

Some of these zoos have put a lot of money into large outside enclosures and are providing information on grizzly bear conservation. A suggestion is to contact these zoos and inquire about having them assist with fundraising to help with on-the-ground efforts to minimize human/grizzly bear conflicts.

Management Grizzly Bear Mortality and Removals (1993-2019)

Of the 263 individual management grizzly bears captured in Region 1 since 1993, 155 (59%) are known to have died or have been sent to zoos (Table 4). Most of the mortalities (52%) have been through management removals. There were no management removals in 1994, 2001 or 2014.

Human-caused mortality of female grizzly bears has a large influence on the recovery of the grizzly bear. Reducing the number of management removals of all grizzly bears, especially females, is a priority with this program. In the first three years (1993-1995), a total of 4 female grizzly bears were removed through management actions. In the following 7 years, 3 additional females were removed, 2 in 2000 and 1 in 2002. The year 2004 saw an all-time high removal of female grizzly bears with 6 females removed through management actions.

In 2019, we killed two adult female grizzly bears (NWM256 & NWM264) and sent two female cubs (NWM259 & NWM260) to the Grizzly and Wolf Discovery Center. A fifth subadult female (NWM224) that we had captured and relocated died after being struck by a vehicle on Hwy 2 near East Glacier. Three subadult males and two yearling males were removed in management actions, and two subadult males were killed by a landowner in British Columbia (under investigation).

In addition to the known mortality of management grizzly bears captured in 2018, there was a subadult male captured in 2017 that was killed in 2018 and which is currently under investigation. The remains of an adult male (NWM103) were located in the woods near Coram. The cause of death is unknown.

Table 4. Cause-specific and class-specific mortality and removals for 155 grizzly bears. Numbers represent known mortality and removals of marked grizzly bears captured in management actions in Region 1. 1993-2019.

Age Class	Cause of Mortality									Total (%)
	Natural	Mistaken id	Self Defense	Management deaths	Sent to Zoo or WSU	Malicious	Handling	Vehicle/ Train	Unknown	
Adult										
M	0	0	1	12	0	2	0	1	5	**21 (14)**
F	0	2	2	10	3	3	0	2	2	**24 (15)**
Subadult										
M	0	0	6	20	5	13	0	5	4	**53 (34)**
F	0		1	3	4	3	0	2	0	**13 (8)**
Cub	1	0	0	2	14	0	1	3	8	**29 (19)**
Yearling	1	1	1	5	3	2	0	1	1	**15 (10)**
Total (%)	**2 (1)**	**3 (2)**	**11 (7)**	**52 (33)**	**29 (19)**	**23 (15)**	**1 (1)**	**14 (9)**	**20 (13)**	**155**

Cabinet Mountains Grizzly Augmentation Program

Since 2005, MFWP has been involved with the capture and translocation of both female and male grizzly bears into the Cabinet Mountains, south of Libby and Troy, Montana.

A total of 18 grizzly bears have been captured within the Northern Continental Divide Ecosystem (NCDE) and translocated to release sites that were approved for the Kootenai National Forest in both the West Cabinet and main Cabinet Mountains. Until their collars fell off it was known that 12 of the 18 augmented bears had remained in the Cabinet Mountains.

During 2019, we captured two subadult grizzly bears in the Whitefish Range. A subadult female in the Deadhorse drainage and a subadult male in the Hallowat drainage. The bears were transported to Libby where they were anesthetized, radio-collared, allowed to recovery, and released. Neither bear had any known conflict history. Both bears had denned in the Cabinet Mountains by the end of 2019.

Kim Annis and Wayne Kasworm provide annual reports that give additional information regarding the Cabinet Mountains Grizzly Augmentation Program.

2020 Grizzly Bear Conflicts

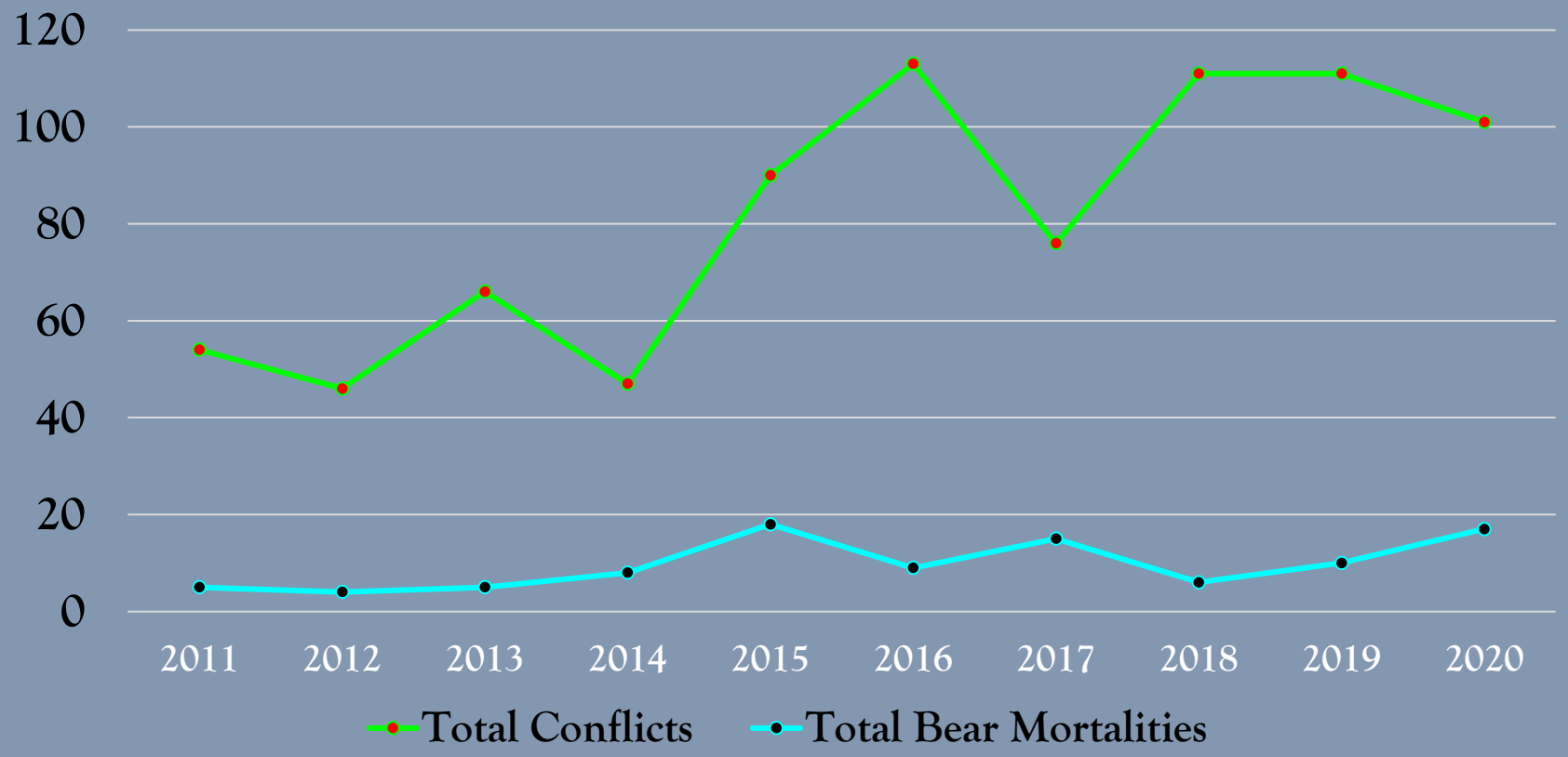


Total Conflicts : 101 **10-year average: 81**

Human-grizzly bear conflicts in Montana's portion of the Greater Yellowstone Ecosystem, 2020.	
Conflict type	Number of conflicts
Encounter situations	14 (4 humans injured, 3 DL*)
Livestock – cattle	31 (32 cattle killed or injured)
Livestock – sheep	1 (2)
Livestock – poultry	1 (6)
Property damage	3
Anthropogenic foods	9
Anthropogenic foods with property damage	3
Near developed sites- safety concerns	24
Bear mortalities	14 + 3* – 10 management, 7 other
Management relocations	1 – (2 bears)

Human-grizzly bear conflicts by land ownership in Montana's portion of the Greater Yellowstone Ecosystem, 2020.	
Conflict type	Land ownership
Total Conflicts:	**63% private, 37% public (38 out DMA, 26 in DMA, 37 RZ)**
Encounter situations	14: (3 private, 11 *3 DL public)
Livestock – cattle	31: (16 private,15 public)
Livestock – sheep	1: (0 private, 1 public)
Livestock – poultry	1: (1 private, 0 public)
Property damage	3: (3 private , 0 public)
Anthropogenic foods	9: (8 private, 1 public)
Anthropogenic foods with property damage	3: (3 private, 0 public)
Near developed sites- safety concerns	24: (21 private, 3 public)
Bear mortalities	14 + 3*: (8 private, 9 public)
Bear relocations	1 – (2 bears, private to public)

Total Conflicts & Bear Mortalities
MT-YES 2011 - 2020



Total Investigated Mortalities: 17

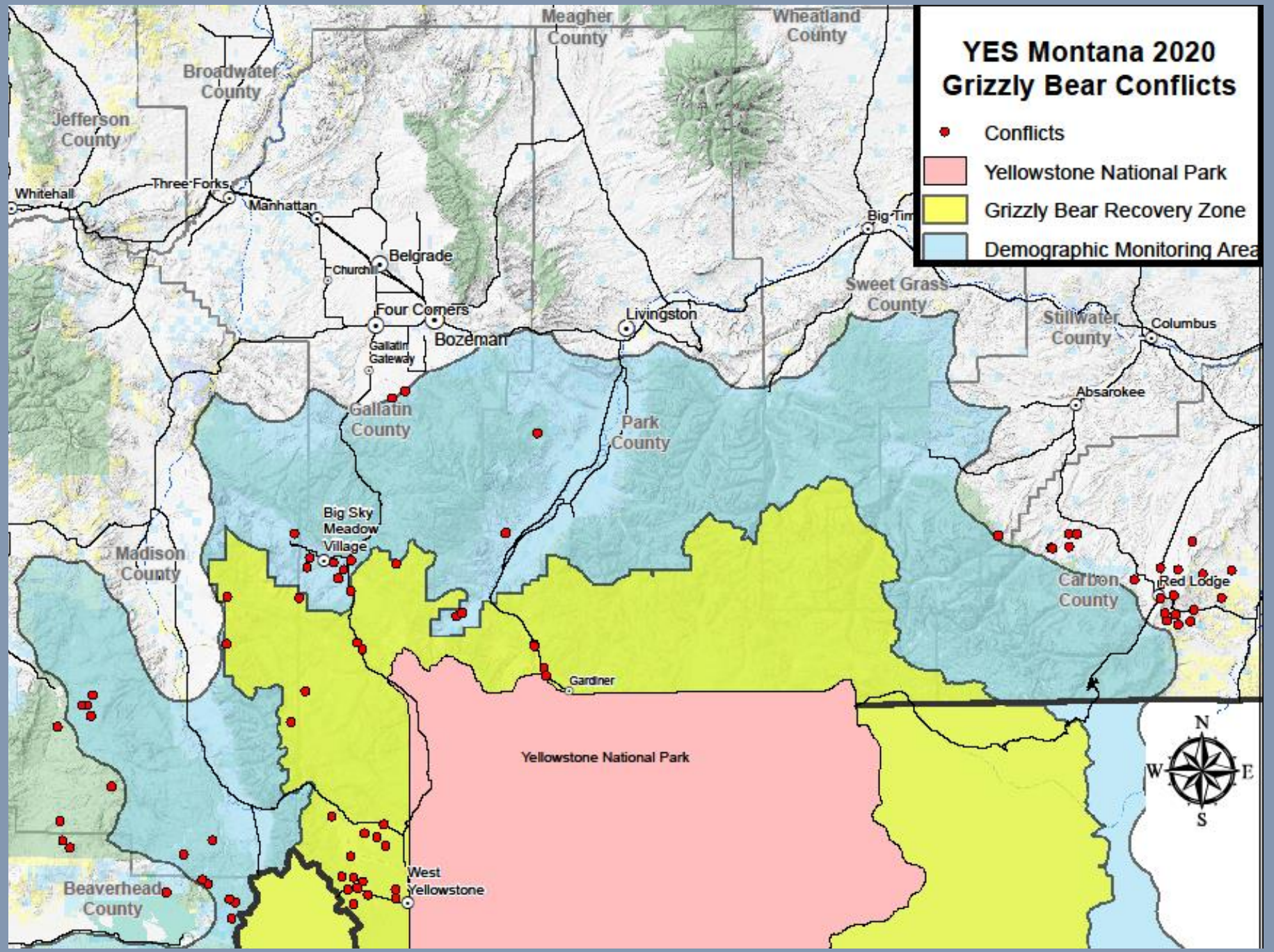
Ten-year average: 10

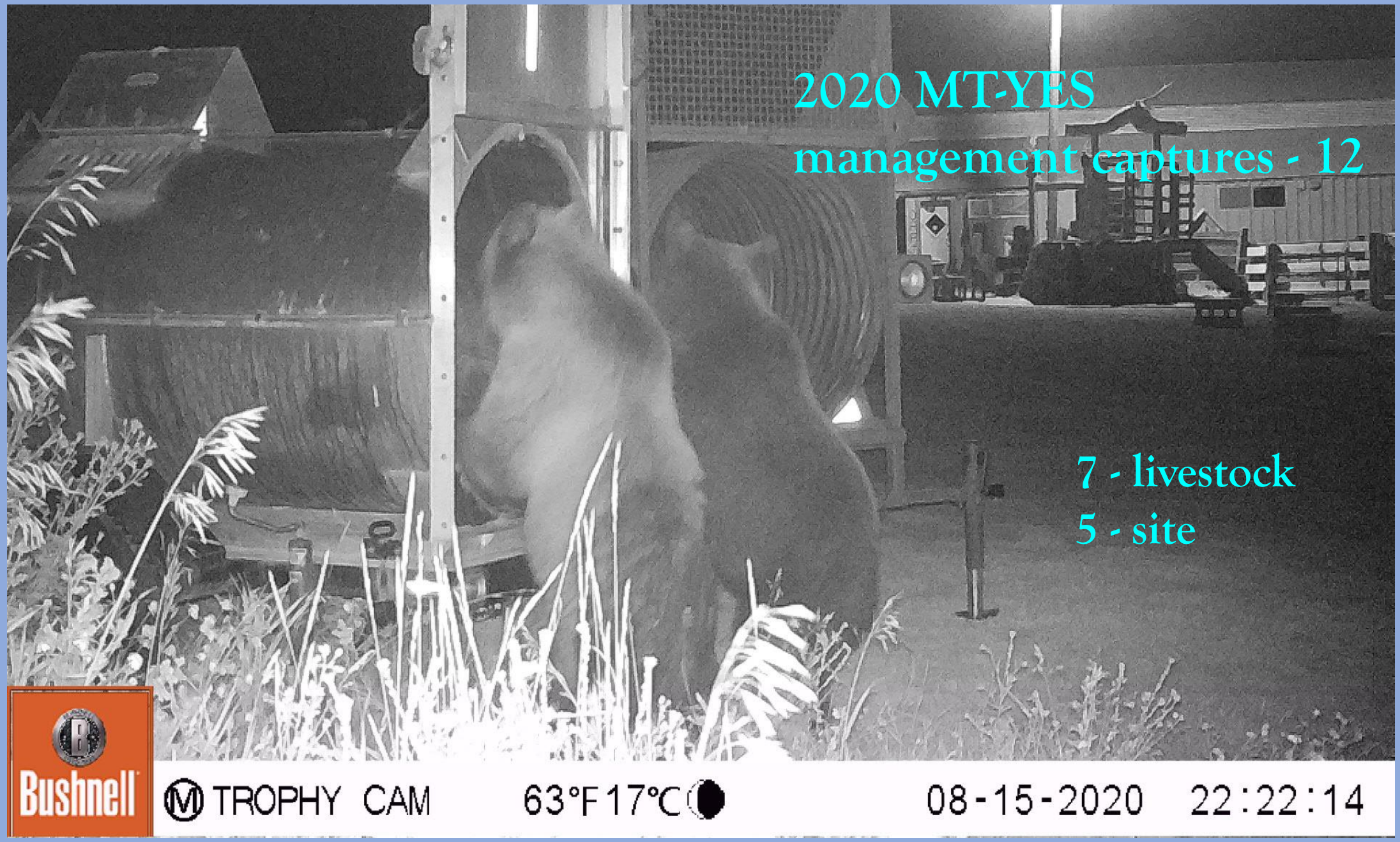
2020: females - 9
males - 7
unknown - 1 cub

Causes:

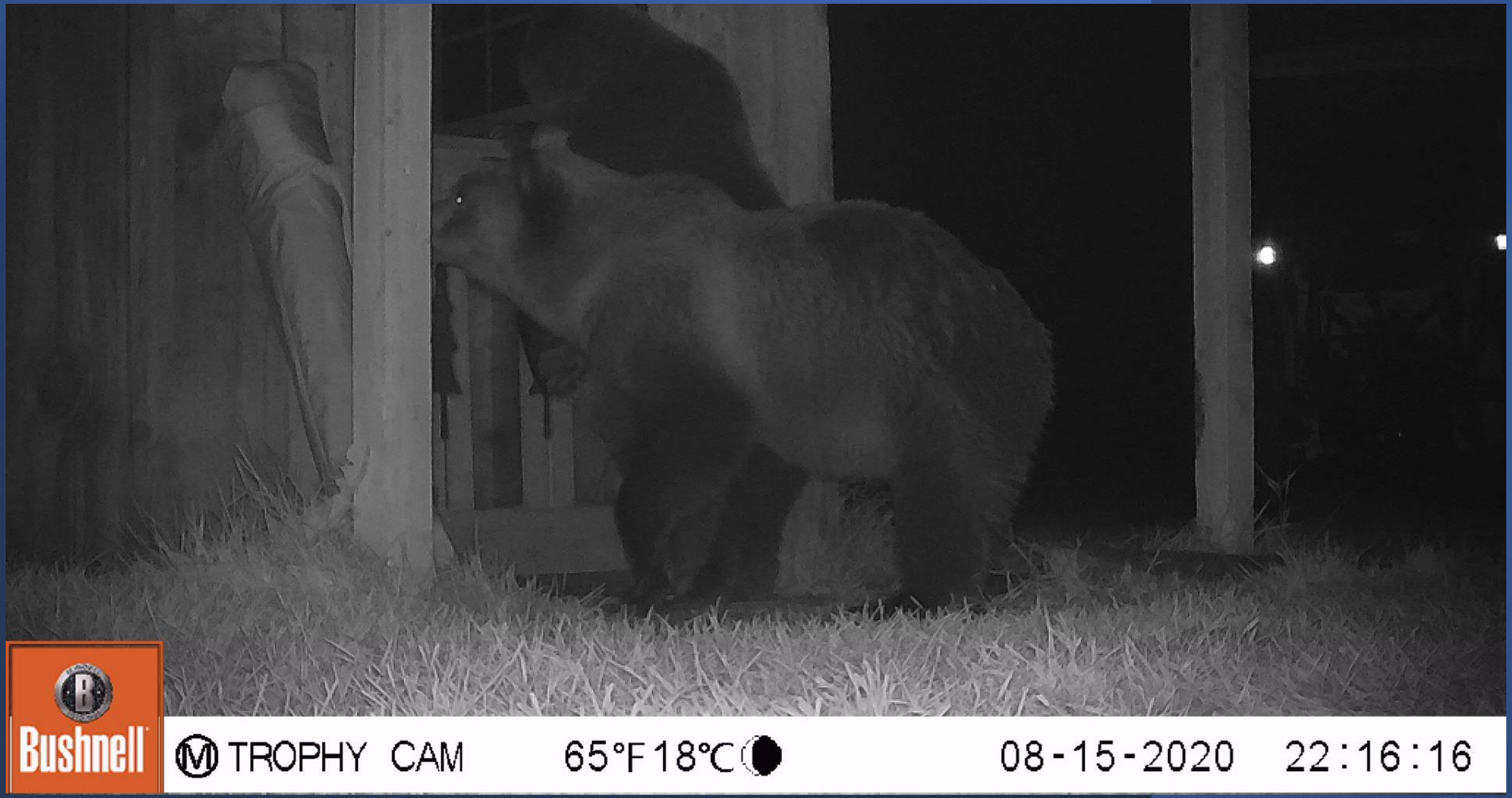
livestock depredations –	**7**
property loss/human safety –	**4 (1*)**
vehicle strikes –	**2**
defense of life –	**3***
illegal take -	**1***

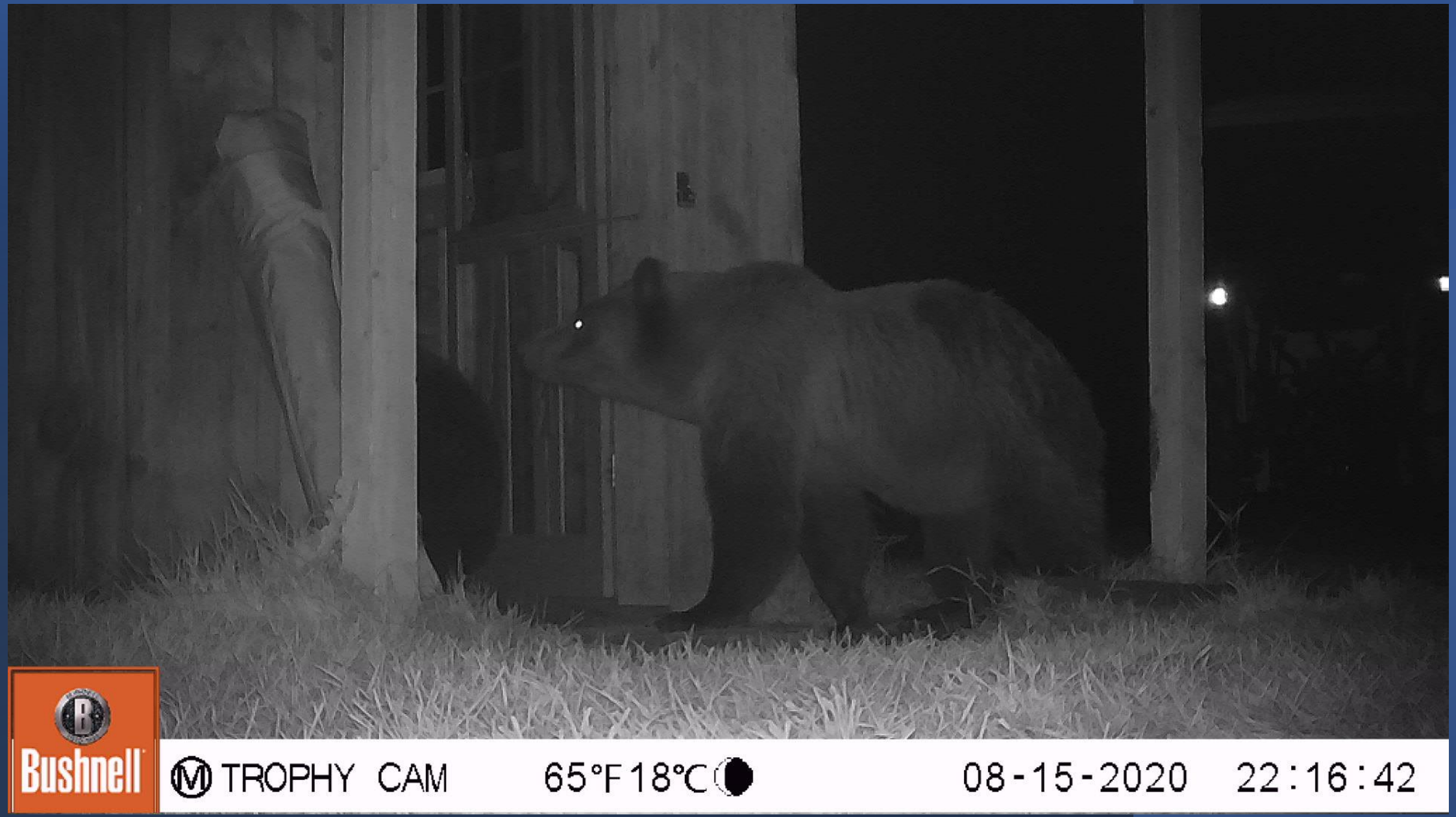
*** under investigation**

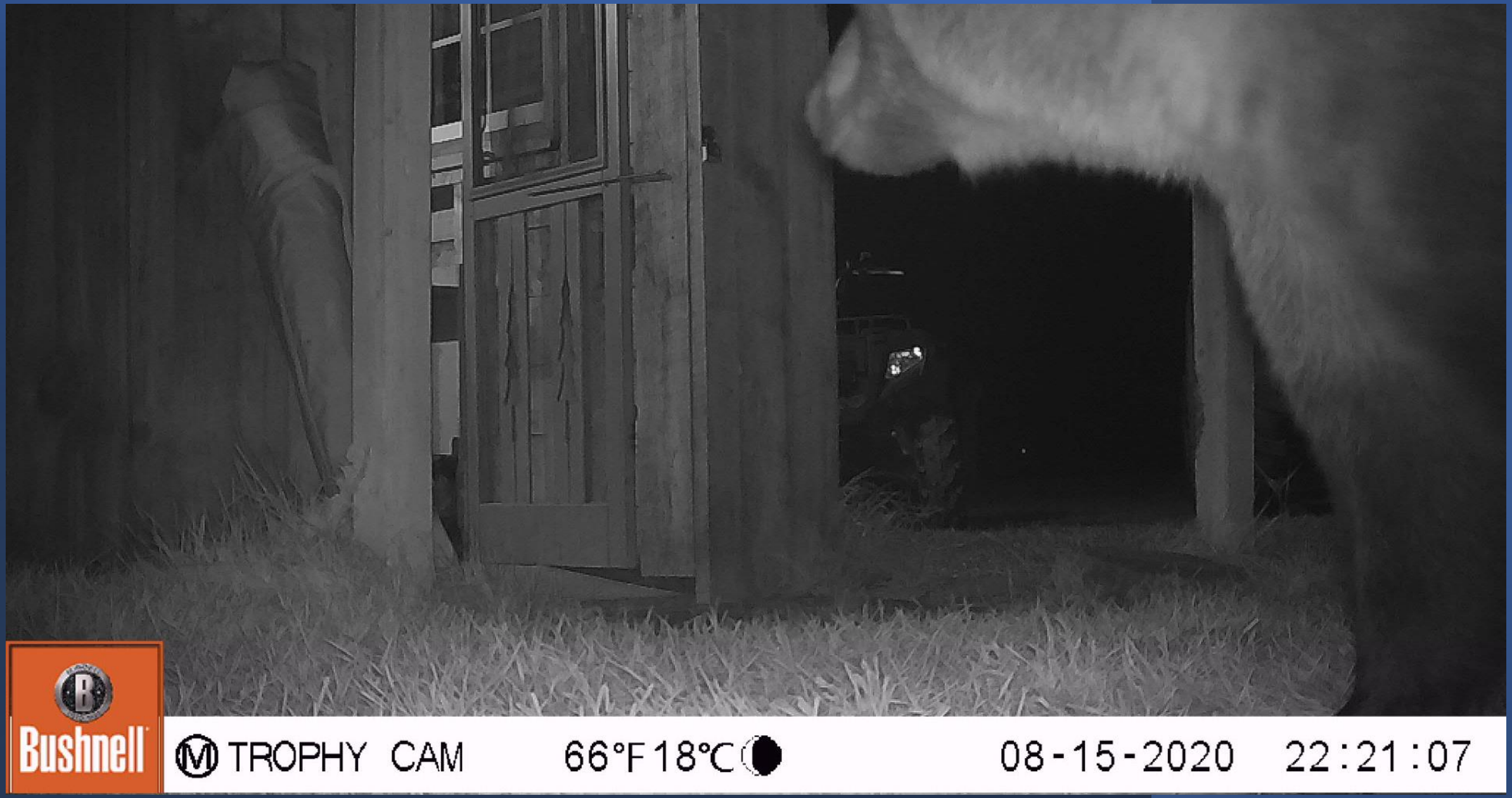

YES Montana 2020
Grizzly Bear Conflicts
Conflicts
Yellowstone National Park
Grizzly Bear Recovery Zone
Demographic Monitoring Area
Meagher County
Wheatland County
Broadwater County
Jefferson County
Whitehall
Three Forks
Manhattan
Belgrade
Churchill
Four Corners
Bozeman
Gallatin Gateway
Livingston
Sweet Grass County
Stillwater County
Columbus
Absarokee
Gallatin County
Park County
Big Sky
Meadow Village
Madison County
Carbon County
Red Lodge
Gardiner
Yellowstone National Park
West Yellowstone
Beaverhead County
N
W
E
S


2020 MT-YES
management captures - 12
7 - livestock
5 - site
Bushnell
TROPHY CAM
63°F 17°C
08-15-2020
22:22:14


Bushnell
TROPHY CAM
66°F 18°C
08-15-2020
22:01:49


Bushnell
TROPHY CAM
65°F 18°C
08-15-2020
22:16:16


Bushnell
TROPHY CAM
65°F 18°C
08-15-2020
22:16:42


Bushnell
TROPHY CAM
66°F 18°C
08-15-2020
22:21:07

From:	Frey, Kevin
To:	Cooley, Hilary
Subject:	its done.....
Date:	Wednesday, July 28, 2021 3:18:38 PM
Attachments:	image001.png Baker"s Hole.docx

Hey Hilary,
Finally ! Some changes from the draft version but I think overall it is informative and fully open. Please post with other Yellowstone fatalities at your early convenience and let me know it is posted to placate the interested parties.
Thank-you,

Kevin Frey
Grizzly Bear Specialist
Wildlife Division
Montana Fish, Wildlife & Parks, Region 3

1400 South 19th
Bozeman, MT 59718
Ph: (406) 577 7876
Montana FWP

THE **OUTSIDE** IS IN US ALL.

* Lots of activity here…..black and grizzly. I don't clog your days with more.

INVESTIGATION REPORT

The subsequent fatality of Mr. Charles (Carl) Wesley Mock from a grizzly bear attack on 15 April 2021 near Baker's Hole Campground on the Custer Gallatin National Forest

Hilary Cooley – *Grizzly Bear Recovery Coordinator, United States Fish Wildlife Service, Missoula. Montana*
Brian Debolt - *Large Carnivore Section Conflict Coordinator, Wyoming Game & Fish, Lander, Wyoming*
Kevin Frey – *Grizzly Bear Management Specialist, Montana Fish Wildlife & Parks, Bozeman, Montana*
Kerry Gunther - *Bear Management Biologist, Yellowstone National Park, Mammoth, Wyoming*
Mark Haroldson - *Supervisory Wildlife Biologist, U.S. Geological Survey, Interagency Grizzly Bear Study Team, Bozeman, Montana*
Jeremy Nicholson - *Wildlife Biologist, Idaho Fish and Game, Island Park, Idaho*
Dan Thompson - *Large Carnivore Section Supervisor, Wyoming Game & Fish, Lander, Wyoming*
Dan Tyers - *GYE Grizzly Bear Habitat Coordinator, United States Forest Service, Bozeman, Montana*

SUMMARY:

On the afternoon of 15 April 2021, a lone 40-year-old male resident of West Yellowstone, Montana had gone hiking at nearby Baker's Hole Campground on the Custer Gallatin National Forest (CGNF) to either fish, take photographs or both. At approximately 3:45 pm, the man called 911, connecting to the West Yellowstone Police Department Dispatch reporting he had been mauled by a grizzly bear. Search and rescue were immediately implemented. The victim, Mr. Charles (Carl) Wesley Mock was found severely injured by search and rescue personnel. Mr. Mock was given medical attention in the field, taken to an ambulance, and transported to Idaho Falls, Idaho Regional Medical Center. The following day, 16 April investigation team members were charged by a bear near the site where Mr. Mock had been mauled. Investigators killed the bear during the encounter. Unfortunately on Saturday, 17 April 2021, Mr. Mock died from complications from the severe wounds to his head and neck caused by a grizzly bear attack. Mr. Mock was a West Yellowstone resident and guide for Back Country Adventures.

Format of report:

A board of review is required after any human fatality caused by a grizzly bear as per the Interagency Grizzly Bear Guidelines (p 59). This report is based on the investigations, personal statements, and documentations of personnel with the Gallatin County Sheriff's Office, West Yellowstone Police

Department, United States Forest Service, Gallatin County Search and Rescue, Hebgen Basin Fire and Montana Fish Wildlife & Parks. Gallatin County Sheriff's Office (Deputy Mike Gavagan) report of Mr. Mock's rescue and Montana Fish Wildlife & Parks enforcement division (Warden Robert Pohle) overall reports are attached in Appendix A. This report is written in sections of occurrence and with an investigative conclusion at the end of the report. To avoid

unwarranted speculation as to how this attack and resulting fatality occurred, only information gathered and documented during the investigations is contained in this report.

Note: There are several minor discrepancies between this investigation report and officers Gavagan's and Pohle's reports. Those minor discrepancies are footnoted below their reports. The information in this investigation report is correct.

Baker's Hole Campground:

Baker's Hole Campground is located on the Hebgen Ranger District, Custer Gallatin National Forest. The campground is located within a lodgepole pine (LPP) forest with willows along the southeast side. The campground is east of U.S. highway 191, west of the Madison River, approximately 2.5 miles north of West Yellowstone, Montana and approximately 200 yards west of the Yellowstone National Park boundary.
The campground has 73 campsites within the 3 campsite loops. The campground is annually closed to camping from October 1 to May 1 but the area is open to recreationists year-round. People also use the campground to access the Madison River for fishing and wildlife viewing as the area is known for its use by bears, moose, elk, ospreys, eagles, waterfowl, and bison. Baker's Hole Campground is very well posted with permanent wooden or metal signs at the entrance and on kiosks among the campsite loops informing the public of grizzly bear presence in the area and of food storage order requirements (Photos 1 & 2). An image of the attack site in relation to Baker's Hole Campground, West Yellowstone and Yellowstone National Park is shown in Figure 1.



Photo 1. Grizzly Bear awareness signs at Baker's Hole Campground



Photo 2. Grizzly Bear awareness and food storage sign at Baker's Hole Campground



Figure 1. Baker's Hole Campground in relation to West Yellowstone and Yellowstone National Park

04-15-2021

SEARCH and RESCUE:

15:42 hours - West Yellowstone Police Department (WYPD) Dispatch received a call from a 40-year-old male reporting he has been mauled by a grizzly bear approximately 200 yards from CGNF Baker's Hole Campground.
West Yellowstone PD, Gallatin County Sheriff's Deputy (GCSO), US Forest Service law enforcement (USFS LEO), Gallatin County SAR (GC SAR) and Hebgen Basin Fire are immediately dispatched to respond. Hebgen Basin EMS was then dispatched to Baker's Hole Campground to wait for rescue of the victim.
Secondary information from WYPD Dispatch was issued to Search and Rescue (SAR) that the victim reported he had facial injuries, was laying on the ground, there was one bear and to go to the closed campground main entrance.

15:52 hours -approximately
*GCSO, USFS LEO, WYPD, Hebgen Basin Fire and GC SAR arrive at Baker's Hole Campground to begin the search. Initially human footprints were searched for in the snow near hiking trails towards the Madison River.

*Hebgen Basin Fire was instructed by GCSO to assume incident command.

*Dispatch was unable to triangulate or ping a location of the victim's cell phone. His phone was not active, 911emergency call capacity only. Though found by SAR relatively quickly the phone's status had delayed SAR from finding the victim sooner.

*Although seriously injured, the victim was able to communicate with WYPD dispatch before he was found by SAR.

*Hebgen Basin Fire activated sirens, which victim told dispatch he could hear the sirens. He then told dispatch he was about ¼ mile from campers (camp host) in campground, towards town (south of main entrance).

*The victim then relayed he was off the blue diamond ski trail.

*With this information SAR was then able to focus on an area.

*Incident command requested West Yellowstone based Air Idaho (helicopter) to aid in support and search. Also a SAR page was sent out for a backcountry rescue.

*GC SAR and USFS LEO proceeded on the ski trail out of campground, followed within minutes by 2 officers with GCSO and WYPD.

*These 2 officers were joined by another WYPD officer after they stopped hiking due to sighting a grizzly bear approximately 80 yards east of the ski trail. The bear was standing on hind legs and making huffing sounds. The bear dropped to all 4 feet and charged towards the officers, breaking of the charge after 30 yards.
Dispatch relayed that the victim could hear the officers yelling and that the bear was very close to him.

*The search party then turned east off the ski trail, down an old logging spur in the direction of the bear.

*Approximately 70 yards down the old logging spur the victim was found lying on the ground.

*The bear continued to aggressively move around the rescue party in a half circle, at a distance varying 20 to 70 yards.

*The bear continued to stalk the rescuers and victim, making another bluff charge while initial medical attention was being given to the victim.

*Emergency medical (EMS) and Air Idaho personnel hiked into the site of the injured man.

*Two GC SAR members arrived with snowmobiles and a rescue toboggan.

*EMS was able to bandage the victim and carry him up to the ski trail to the SAR rescue toboggan. The victim was transported to the EMS ambulance in the campground and was then transported to the Regional Medical Center in Idaho Falls, Idaho. *Poor weather conditions prohibited victim transport via helicopter.*

16:54 hours – Montana Fish Wildlife & Parks (MTFWP) Warden arrived at campground.
*Two WYPD officers, 1 GCSO deputy, 1 USFS LEO and the MTFWP warden went back to the site to get coordinates and take initial pictures of the incident scene. The victim's personal items including an empty can of bear spray were noted and photographed. The initial investigation group then left the scene. The bear was not encountered during this brief investigation.

**A digital camera with a telephoto lens was found within 4 feet of where the victim had been laying when found by rescuers. The camera was secured in the victim's vehicle at the entrance gate to the Baker's Hole Campground when the victim was transferred to the ambulance. A friend of the victim took possession of the vehicle and investigators did not have opportunity to examine the camera.*

The moose carcass **was not noticed by SAR or by the helicopter during the rescue recovery of the victim.*

1830 hours – USFS HEBGEN RANGER DISTRICT posts closure signs of area.

04-16-2021

1000 hours - Official order from the Custer Gallatin Forest Supervisor was signed and posted.

SITE INVESTIGATION and BEAR MORTALITY:

1400 hours –

***** An investigation team consisting of two USFS LEOs, three MTFWP Wardens and two MTFWP Bear Specialists with one dog meet at USFS/MTFWP residential site north of Baker's Hole. It was required and imperative to investigate the attack site due to its proximity to a public campground, cabin area and well used hiking trails.

The overall investigation, methodology of approach/hike, individual duties at the site and considering the bear's aggressive behavior during the victim's rescue, the bear may still be present and potentially charge were all discussed. Additionally, if the bear was present and would not "bump off" and did charge, it would have to be killed.

The investigation party then drove to Baker's Hole Campground proceeding to the south end of the south campground loop and ski trail.

*The investigation team began hiking south along the ski trail towards the mauling site. After approximately 45 yards of hiking, the team stopped, firing 2 cracker rounds and hollered. The dog began barking and alerted that it could smell a bear. One of the team members said he had seen something moving approximately 50 yards away in the trees east of the team and ski trail and stated it could be a bear. The dog was now growling and barking indicating a bear was close. The bear was travelling in a parallel direction to the team as they hiked south.

*The team waited a few minutes, then a proceeded another 80 yards, stopping to fire 3 additional cracker rounds. Members of the team alternated yelling during the entire hike to the site. The team again waited a few minutes and there were no other sightings or indications the bear was near or approaching. Though the dog was barking, the investigation team did not know if the bear had possibly moved out of the area or if it was still nearby.

*The team then hiked to where the old spur logging trail forked off the ski trail, downhill in a southeasterly direction. This junction is approximately 200 yards along the ski trail south of the campground loop. Upon stopping, 2 more cracker rounds were fired. Again, there was no indication the bear was nearby. Team members yelled as the dog continued to bark while they slowly walked down the spur trail towards the attack site. The trail had intermittent deadfall trees across it.

*Approximately 50 yards down the spur trail, several team members said they could see some brush and a small conifer move, indicating towards the northeast across an open boggy wet area.
All members stopped and readied in case it was the bear and it charged. Within seconds the bear silently charged out of the brush, head down, ears back and running full out. The bear crossed the open wet area and continued charging towards the team members, running into a patch of deep rotten snow in the willows. The bear floundered in the deep snow, dug its way clear and begin to charge again. At this point the decision was made to shoot the bear.

1435 hours - Multiple members shot at once killing the bear instantly.

*The bear was checked to confirm it was dead and to see if it had been previously captured or marked.

*A submerged, cached/buried moose carcass was found nearby.

*All scenes associated with the incidences were photographed.
*Distances between key locations were measured.
*Mr. Mock's personal items were collected as were items left by first responder medical staff.
*GC SAR was contacted, bringing a tracked ATV to move the bear carcass to vehicles in the campground.

1630 hours - All personnel and the bear carcass at vehicles in the campground.

INVESTIGATION FINDINGS:

The site of where the grizzly bear attacked Mr. Mock was investigated 3 times, on 15 April during an initial investigative overview after Mr. Mock had been recovered by SAR, on 16 April during the actual site investigation and on 21 April during the removal of the moose carcass.

Following the ski trail from the south end loop of Baker's Hole Campground and then the old logging spur trail, it is approximately 270 yards to the attack site.

The attack site was approximately 70 yards down an old logging spur trail running southeasterly from the ski trail. The site is at the end of the old logging spur located in mature LPP timber and at the edge of a boggy wet area.

Personal items found at the attack site area belonging to Mr. Mock included one muck-type boot, sunglasses, small plastic fishing tackle box, a winter cap, an empty can of bear spray* & holster, safety lock from bear-spray cannister, fishing pole and a half-empty juice container.
*The can of bear spray was the UDAP brand, 7.9ounce, Expiration 12/2023 S/N P1711-071135).

It was later discovered that a digital camera was found near Mr. Mock during the rescue but the camera was taken into the possession of Mr. Mock's friends. On 17 April, a MTFWP warden was able to view the memory card from the camera and did not find any pictures from the Baker's Hole area or from the day of the attack.

After the investigation team had to kill the bear on 16 April, a moose carcass was discovered cached in the water (Photo 3) near the site where Mr. Mock had been attacked. It was 47 yards from the cached moose carcass to the attack site. Searching the area around the moose carcass it was evident that a bear had been feeding on the moose for numerous days due to multiple and drying bear scats. It could not be determined what caused the death of the moose. Common causes of moose deaths are predation, ticks, winterkill (poor nutrition), meningeal artery worms and vehicle strikes. There were no broken long bones observed on the moose that are normally associated with a vehicle strike from nearby US Highway 191.



Photo 3. Moose carcass cached in water near the attack site.

The bear-spray safety lock, fishing pole and a half empty juice contains were discovered where it was determined Mr. Mock had been and first reacted defensively due to the bear. The bear-spray safety lock and juice container were 1 to 2 feet E x NE of the fishing pole. The fishing pole was approximately 6 feet away (NE) from where Mr. Mock had obviously been mauled. At the mauling site Mr. Mock's boot, tackle box, sunglasses, knit cap and empty bear-spay were found scattered in the snow. A diagram of Mr. Mock's personal items at the attack site can be viewed in Figure 2. The bear-spray can was empty and investigators assumed Mr. Mock had likely sprayed the entire can of bear-spray.

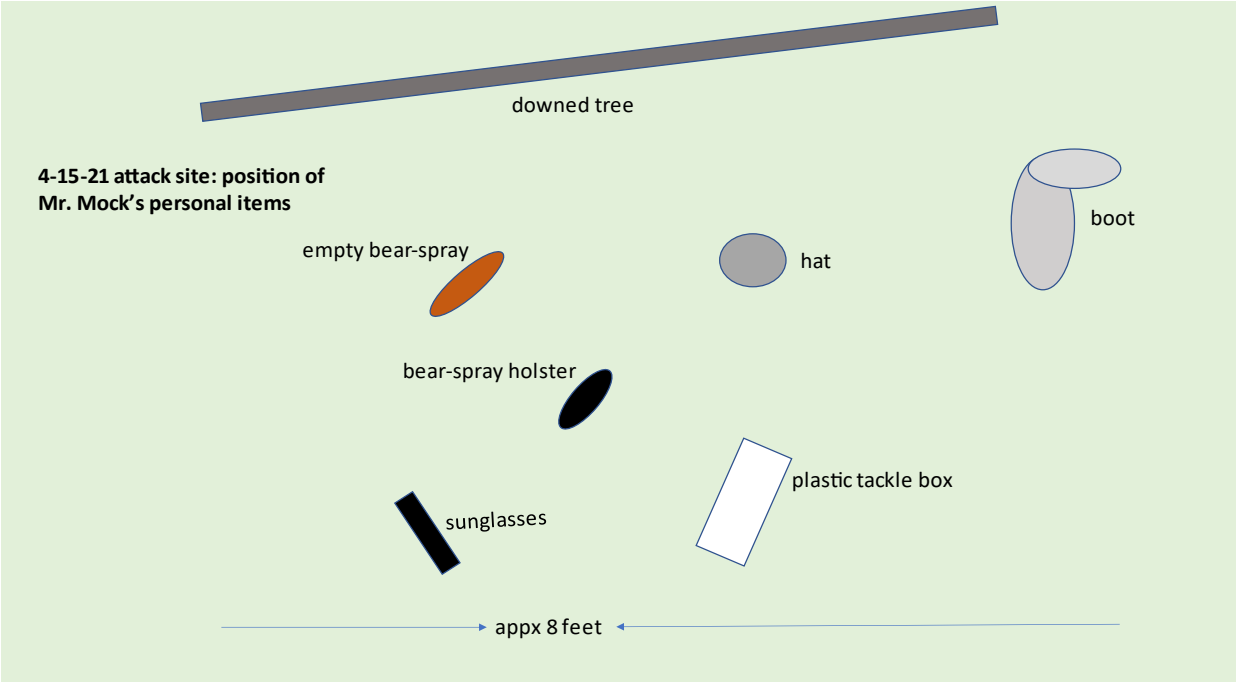


Figure 2. Position of personal items belonging to Mr. Mock found at the attack site.

Search and Rescue had found Mr. Mock 12 feet up the logging spur trail from where he had been attacked.

A diagram of the distances and location of moose carcass, attack site, bear and investigative team are shown in Figure 3. A satellite image of the locations and relationship of attack site to campground (south loop visible in upper left) and US Highway 191 are shown in Figure 4 and a closer view of the attack area is shown in Figure 5.

Anecdotal information from a friend in West Yellowstone of Mr. Mock's stated that he had talked with Carl Mock in the early afternoon (1342 hours) of 15 April. Mr. Mock said he was going home to get lunch and go back out that afternoon. This information indicates Mr. Mock had only been in the Baker's Hole area for a relatively short time before the bear attack occurred.

Mr. Mock's 911 call to WYPD was recorded. The 911 call lasted for 49 minutes and 47 seconds, 27 minutes into the call at 1609 hours, the dispatcher asked him (Mr. Mock) if he was out fishing. He responded "No, I was taking pictures (with moaning in that statement)" She asked him, "You were out taking pictures?" He then moans with an unintelligible response.

BEAR FINDINGS:

The bear was 20 yards northeast of the unknown moose carcass when it charged the investigation team, who were 57 yards from the bear across the boggy wet area.

The bear was killed 24 yards from the investigative team who were approximately 37 yards from the unknown cached moose carcass.

FIELD:
Examination of the bear revealed tattoos were visible in both upper inside lips.
No ear tags were present.
Overall body condition was a 4 on a scale of 1 to 5.
No visible recent wounds or injuries.
Teeth were worn with lower canine teeth broken and worn. Incisor teeth were worn smooth with some missing as is normal with aged bears. Field estimate of age was around 20 years old.
Tattoos were noted in both inside upper lips.
When the bear was loaded into a vehicle at the campground, it was evident the bear had been bear-sprayed by Mr. Mock during the attack as personnel began coughing from the bear-spray residue becoming airborne from handling the bear.

LABORATORY:
During the examination of the bear at MTFWP Region 3 Headquarters in Bozeman the bear-spray residue again physically affected investigators.

The bear weighed 411 pounds.

The tattoo was read as 504 in both upper inside lips. Tattoo 504 identified the bear as bear number 449 in the Inter-agency Grizzly Bear Study Team (IGBST) database for the Yellowstone Ecosystem.
Bear 449 was 6 years old when captured on 9/21/2003 at Cascade Creek, YNP by the IGBST during research capture efforts. Bear 449 had been lip tattooed in both upper lips with green ink, number 504 inside both upper lips (Photo 4.), ear tagged, fitted with a GPS/VHF radio-collared and implanted with a micro-chip at that time. Last known location of bear 449 was on 2/22/2004 at his den site near Nymph Lake, YNP. It was deemed a collar failure as the signal had been intermittent since the bear had been captured, collared, and released on site.


Photo 4. Tattoo number 504 in upper lip of bear 449.

Overtime, male bears are prone to losing ear tags and radio-collars when fighting with other male bears, plus radio-collars are designed to drop off bears.
No functioning micro-chip could be located on bear 449 during laboratory examination, which was not surprising after nearly 18 years since the chip was implanted.

Bear 449 had no previous conflict management captures or history.

A gastro-intestinal examination of bear 449 was conducted revealing moose hair, trachea cartilage, and muscle tissue along with grass/dirt debris. A piece of tissue that was suspected as skin and cartilage that was not identifiable or consistent with other tissues in the stomach was collected and submitted to the Wyoming Game and Fish Forensics Laboratory in Laramie, Wyoming for identification as to origin of tissue. Results were received 14 June 2021. The tissue was identified as originating from a grizzly bear (Ursus arctos). See Appendix B.

*The unknown grizzly bear tissue and its location in the lower stomach portion of bear 449 indicates 449 had possibly been in a very recent fight with another grizzly bear defending the moose carcass or fought taking the moose carcass from another grizzly bear. If this were the case, those interactions could have contributed to bear 449's overall aggressive defense of the moose carcass towards Mr. Mock, initial SAR and the Investigation Team.

Muscle (meat) tissue can persist for 14+ hours in the digestive tract of fully active and feeding brown (Ursus arctos) bears (Elfstro"m et al. 2013). Skin and cartilage tissue can persist longer due to slower gastro-intestinal digestion of the tissue and tissues could also persist longer if a bear was not actively consuming amounts of foods to move previously ingested food through the digestive tract. Skin and cartilage could persist in the digestive tract at an outside time of 2 to 3 days (pers. comm. Charlie Robbins Ph.D. -Washington State University, Pullman, WA.)

The skull/brain of bear 449 was submitted for rabies testing to the Montana Department of Livestock, Montana Veterinary Diagnostic Laboratory in Bozeman, Montana. The results were negative for rabies. See Appendix C.

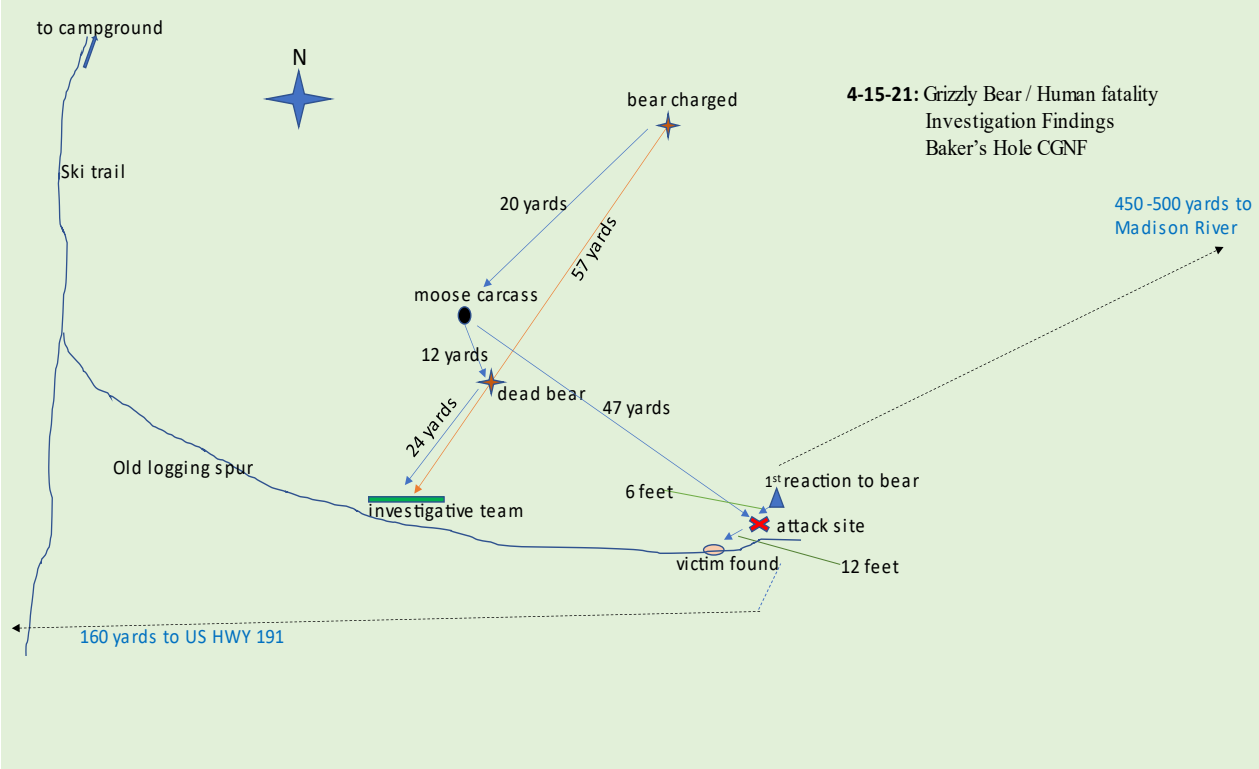


Figure 3. Distances and location of moose carcass, attack site, bear and investigative team near Baker's Hole Campground.



Figure 4. View of the relationship between the attack area, south end loop of Baker's Hole Campground and US Highway 191.

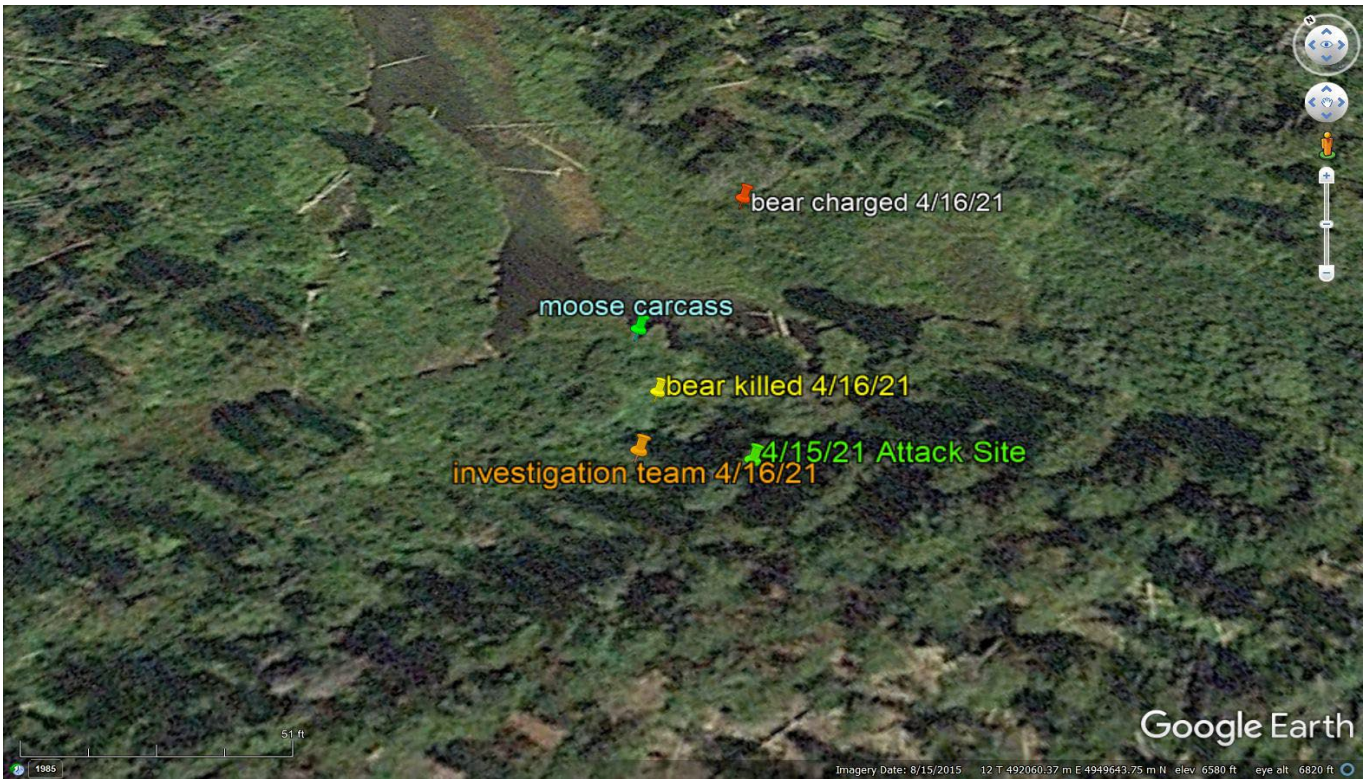


Figure 5. Closer view of the attack area and locations of significant points.

04-19-2021

CGNF Hebgen Basin District and MTFWP Bear Management discuss the known moose carcass, its potential to attract other bears, proximity to campground, hiking trails and the options for its removal. Dragging the moose carcass out of area would create a scent trail for other bears to follow to the campground and feasibility of doing so did not exist due to boggy wet area. Hebgen Basin District decided to use explosives for removal and would handle all logistics in the removal of the moose carcass.

04-21-21

REMOVAL (explosives) OF MOOSE CARCASS:

Personnel from the Hebgen Basin District CGNF, Bozeman District CGNF, Cody, Wyoming Bureau Land Management (BLM), MTFWP, GCSO and WYPD were all involved in the removal of the carcass.
The BLM flew a drone over the area for possible detection of another bear on or near the moose carcass. No bears were observed and the carcass did not appear to have been recently fed on. A USFS LEO and two MTFWP personnel provided security. CGNF field staff and certified explosive blasters were responsible for actual moose carcass positioning and blasting.

The moose carcass was successfully exploded into obscurity. The area remained closed to the public to allow for scavengers to utilize any small pieces of the moose and for the scent to dissipate.

04-30-2021 Custer Gallatin National Forest lifts closure and re-opens the area to public use.

CONCLUSION:

On 15 April 2021 prior to 1542 hours Mr. Charles (Carl) Wesley Mock was attacked by a grizzly bear near Baker's Hole Campground on the CGNF. When rescued Mr. Mock was found severely injured 12 feet west of the mauling site. Mr. Mock did not give statements or communicate with SAR as to the grizzly bear attack. Once in medical care Mr. Mock did not speak or was in condition to talk about the attack. Unfortunately, Mr. Mock died from the complications of his sustained severe head and neck injuries on 17 April 2021.

Alone, Mr. Mock had parked his vehicle at the entrance of CGNF Baker's Hole Campground to begin his hike and activities. The campground and entry are well posted with grizzly bear information.

It cannot be determined if Mr. Mock purposely or randomly went to the site of the attack. Mr. Mock was in possession of fishing gear and a telephoto lens camera. The closest point to the Madison River is approximately 400 yards northeast of the attack site.
From information provided by Mr. Mock's friend it is estimated Mr. Mock was in the Baker's Hole area for less than 1.5 hours. However, it cannot be determined exactly how much time Mr. Mock had been at the site area prior to being attacked.

Considering field investigation findings of the locations of the attack site, the cached moose carcass and the old logging spur trail, it seems apparent that Mr. Mock had walked along the ice packed ski trail and then down the logging spur trail, passing within 37 yards of the moose carcass to the location of the bear attack site. Either he had done so without being noticed by the bear or the bear came to the moose carcass after Mr. Mock had reached the area of the attack site, which was 47 yards from the moose carcass. The old logging spur/trail basically ends at the attack site.

Though Mr. Mock had told 911 dispatch that he was taking pictures, it cannot be confirmed what Mr. Mock was doing prior to the bear detecting and then attacking him, but the half empty juice container suggests Mr. Mock had likely stopped at the location before the bear detected him.

Field investigation and examination of Mr. Mock's fishing gear did not indicate he was or had been actively fishing when the attack occurred. Mr. Mock was in possession of a valid Montana fishing license, purchased March 10, 2021. Mr. Mock had not purchased a YNP fishing license on-line and vendors in West Yellowstone were not yet in possession of 2021 fishing licenses to sell. Fishing in YNP opened May 29th.

Due to the empty cannister of bear-spray and the bear-spray residue on the bear carcass (hair), Mr. Mock had obviously been aware of possible grizzly bear encounters in the area and had deployed his bear-spray at the bear. It is not known if he bear-sprayed towards the bear prior to the bear contacting him or at what points during the attack he used the spray. During field and lab investigations, it was confirmed that the bear had substantial bear-spray residue on its hair. Additionally, the overall effects of the bear-spray to the bear are not known but the bear had quit attacking Mr. Mock, indicating the bear was affected by the bear-spray. After the bear stopped attacking, Mr. Mock was able to move a short distance and call 911 emergency. However, the bear remained agitated, close to the attack site and near the moose carcass, which was unknown to rescuers during the initial SAR and again the next day (16 April) during the team investigation of the attack site area, when the male bear was killed as it charged the investigation team.

The tragic event of Mr. Mock being attacked by an adult male grizzly bear and subsequently dying from the attack, was the direct result of Mr. Mock's own purposeful or random placed proximity to a moose carcass that an adult male bear had cached and was actively feeding on. A short time before the adult male bear attacked Mr. Mock it may have defended or claimed the moose carcass from another grizzly bear. If so, this would have contributed to the bear's extended aggressive defense of the moose carcass.

Kevin Frey – Grizzly Bear Specialist, Montana Fish Wildlife & Parks

References:

Elfstro¨m, M., Støen, O-G., Zedrosser, A., Warrington, I., Swenson, J.E. 2013: Gut retention time in captive brown bears Ursus arctos - Wildlife Biology 19: 317-324

Appendix A:

OFFICE OF THE SHERIFF / CORONER
GALLATIN COUNTY, MONTANA

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Sheriff

Jeremy Kopp
Undersheriff

Randy Jones
Chaplain

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FAX (406) 582-2126

On April 15, 2021 at approximately 1543 hours, I was dispatched by the West Yellowstone Police Department dispatch center to the report of a 40 year old male who reported he had been attacked by a bear. Dispatch reported the male was approximately 200 yards from the front entrance to the Bakers Hole Campground and was off trail. The male was later identified as Charles Wesley Mock of West Yellowstone.

I instructed dispatch to page out Hebgen Basin EMS and have them stage at the front entrance to the campground. An update from dispatch informed responding units that Mock had sustained facial injuries, was laying on the ground, there was only one bear and responders should go right at the main entrance.

I arrived on scene approximately 10 minutes after the initial dispatch. Also arriving on scene were Forest Service LEO Ryan Linhart (FS72), West Yellowstone PD officer Neil Courtis (686), Hebgen Basin Fire Chief Shane Grube (36) and Gallatin County SAR member Travis Mann. We all started a hasty search of the area, looking for foot prints in the snow near popular hiking areas. WYPD officer Leonel Sosa arrived a short time later and joined us in the search.

I assigned Chief Grube to take over Incident Command and help coordinate our search efforts. With a lot of ground to try to cover, more information was requested from dispatch. Unfortunately they were unable to triangulate the 911 call, but were still on the phone with Mock. Mock was able to communicate with dispatch, although garbled and hard to understand. Grube activated his siren in hopes that Mock would be able to hear it and possibly guide us closer. Mock was able to tell dispatch that he could hear the siren and that he was about ¼ away from the campers in the campground, toward town. He then said he was off the blue diamond ski trail.

This information gave us a definitive area to focus the search in. Grube asked Air Idaho in West Yellowstone to add some aerial search support and they launched. He also sent out a Search & Rescue page for a backcountry rescue. Linhart and Mann were closest to the trailhead at the southern part of the campground and immediately headed up the trail. Courtis and I followed behind, roughly three minutes behind them. We were joined by Sosa later, after Courtis and I stopped, having spotted the bear.

Approximately 200 yards south of the campground on the blue diamond trail, I spotted a bear that was about 80 yards east of our location. The bear was standing on its hind legs

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and making huffing noises at us. The bear then dropped to all fours and charged us, breaking off his charge after about 30 yards. We were yelling and hollering at the bear as he charged. Dispatch notified us that Mock could hear us yelling at the bear and he said the bear was very close to him. I notified other search units to respond to our location, knowing we were very close to Mock.

We proceeded south on the trail about another 20 yards until we discovered human footprints in the snow, heading east toward the location of the bear. We started following the footprints east and hollering at the bear who was still aggressively pacing the area and watching us. Approximately 70 yards later, we found Mock laying on the ground. He was seriously injured, having suffered significant head and facial injuries. The bear continued to stalk us, aggressively moving around us in a half circle at a distance of approximately 40 – 70 yards.

Courtis, Sosa and Mann provided scene security for us while Linhart and I provided medical care to Mock. None of the responders on scene had any medical gear with us. Linhart and I determined that we needed to somehow stop the large amount of blood that Mock was losing. Linhart took off his uniform top and removed his t-shirt while I continued to support Mock. Linhart wrapped the t-shirt around Mock's head and applied direct compression. Mock was having difficulty talking and breathing due to the amount of blood in his mouth. We made the decision to move him into the recovery position with Linhart supporting his head & neck and me rolling his body onto his side. This seemed to allow Mock better breathing.

The bear continued to stalk the group and made another false charge. At this point, I turned patient care over to Linhart while grabbing my rifle and providing additional security against the bear. Emergency medical personnel from Hebgen Basin and Air Idaho were able to hike into our location while we provided protection from the bear. Two Gallatin County Sheriff SAR members arrived on scene with two snowmobiles and a rescue toboggan. EMS personnel were able to bandage and wrap Mock's head, they placed him on a backboard and carried him the 70 yards uphill to the SAR rescue personnel and gear.

Mock was then transported to the ambulance at the entrance to the campground. The armed first responders then escorted the EMS crew out of the area and back to the campground. Due to snow and bad weather that had moved in during this incident, Air

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Idaho was unable to fly Mock to the hospital, so he was transported to Eastern Idaho Regional Medical Center in Idaho Falls by ambulance.

Fish, Wildlife and Parks LEO Robert Pohle (FG32) arrived. Officers Courtis, Sosa, Linhart and I escorted him back in to the scene of the attack so that he could take some quick pictures and log an accurate GPS location of the attack. The incident happened at 44.70002, -111.10018

Initial investigation at the scene indicated that Mock was likely attacked 15 feet east of the location he was laying at when we found him. It appeared that Mock was able to retrieve his bear spray from its holder and was able to deploy it (can was empty). Additional items on scene were a digital camera with a large telephoto lens, spin fishing rod, small plastic box of lures, and a backpack.

The following day on April 16, personnel from the Forest Service and FWP reentered the location of the bear attack and were charged by a bear. Even with seven people yelling, shooting explosive noise making shotgun rounds, and a dog barking at the bear; the bear continued to charge the group. They were forced to shoot the bear and killed it.

An investigation of the area revealed a large moose which had been buried and cached by the bear. This moose was about 35 – 40 yards away from the location where Mock was attacked. Forest Service requested an agency assist from me, requesting equipment and help removing the bear carcass from the woods. I arrived on scene with a tracked four-wheeler with attached winch. We were able to winch the moose up a short hill and drag it out to the campground across the snow covered trail. The bear was loaded into the back of a truck and taken by FWP for further evaluation and research.

Case closed – Search & Rescue and Agency Assist

Michael P. Gavagan

Deputy Mike Gavagan – Badge #635
Gallatin County Sheriff's Office

Footnote: it was the bear carcass that was winched up a short hill, not the moose carcass.

FWP21CAD001860 Robert Pohle

On April 15, 2021 at approximately 1630 hours, I, Game Warden (GW) Robert Pohle was home off shift when I received a Gallatin County Search and Rescue page on my personal phone requesting help searching for a 40 year old male who had been attacked by a bear. The location of the attack was Bakers Hole. Upon seeing this I called the West Yellowstone Police Department (WYPD) to let them know I was responding, inquiring if the attack occurred inside Yellowstone National Park (YNP) or the county. I was told dispatch was having a difficult time locating the victim, later identified as Charles (Carl) Wesley Mock (DOB 03/24/2981). **Note:** Due to some technical issue, Carl's phone was not providing coordinates to the 911 system allowing for a back trace. After hanging up with WYPD, I called Montana Fish Wildlife & Parks (FWP) Bear Management Specialist (BMS) Kevin Frey, leaving him a voice mail notifying him of the incident. As my Sergeant was away, I called Warden Captain Adam Pankratz leaving him a voice mail as well. My final call was to Sergeant Coy Kline in Butte, Montana, so I was able to directly notify a supervisor of the incident.

After gearing up, I responded, lights and siren to the Bakers Hole area. While en route I called Montana Highway Patrol (MHP) dispatch to have a call for service started. Captain Pankratz returned my call and after relaying the limited information I had, we agreed if I saw a bear in the vicinity of Bakers Hole, it was to be dispatched.

As I arrived to the Bakers Hole area, I radioed Hebgen Basin Fire Chief Shane Grube who was Incident Commander (IC), requesting info on where other responders were. I was instructed to come to the south loop of Bakers Hole United States Forest Service (USFS) campground where IC was staged. Chief Grube let me know Carl had been located and was in the process of being extricated by law enforcement and medical staff.

I met the group of first responders as they were exfiltrating from the attack location with Carl. Carl was heavily bandaged, being towed on a Search and Rescue (SAR) sled behind a snowmobile. Gallatin County Sheriffs Office (GCSO) Deputy Mike Gavagan, WYPD Officers Leonel Sosa and Neil Courtis, and USFS Law Enforcement Officer (LEO) Ryan Linhart gave me a quick brief of the situation. The officers stated they encountered the bear several times during the search for Carl. During the first encounter the bear bluff charged the group of officers several times at approximately 100 yards. During this first encounter, they noticed what appeared to be blood on the head/mouth of the bear. As they continued to search for Carl, they stated the bear hung out in the area refusing to leave, even while medics worked on Carl and the snowmobiles moved in to extract Carl. This information was concerning to me, as with that much human activity, it is not normal behavior for a bear to continue to hang out. **Note:** I learned several days later that while searching for Carl, a SAR helicopter was flying low over the area assisting in the search. Upon hearing the bear was still in the area, I went back to the attack scene with Officers Sosa, Courtis and Deputy Gavagan, with the intent to dispatch the bear.

When we arrived at the attack scene, I observed no indication that a bear was in the immediate area. Not identifying an immediate threat, I took several photos to

document the scene and used my OnX hunt maps to get Global Positioning System (GPS) coordinates of that location. The location of the scene is 44.70002, -111.10018.
The scene consisted of a patch of snow soaked in what appeared to be blood. A rubber boot, fishing tackle box, sun glasses and a blood soaked beanie cap were strewn about the patch of snow. A blood splattered can of bear spray and holster, later determined to be empty, laid on the edge of the snow. The orange safety cap from the bear spray was several feet away in the grass. A fishing pole and juice bottle lay off to the south east. North west of the snow was the area where medical staff performed first aid. There was various medical packaging littering the ground, clothing that had been cut off Carl and used bandages. After quick photographic documentation of the site, all units returned to the IC.
Note: The can of bear spray was the UDAP brand, 7.9ounce, Expiration 12/2023 S/N P1711-071135).
After returning to the IC, I met with USFS District Ranger (DR) Jason Brey, Chief Grube and USFS LEO Linhart to discuss what the preliminary plan was for public safety due to the popularity the location held for recreationists. DR Brey stated the USFS was closing the area and evacuating the few campground hosts who were prepping the facility for opening. Chief Grube informed me that Carl had been transported via ground ambulance to Idaho Falls, due to weather the helicopter was grounded. The helicopters medical crew however was in the ambulance providing patient care to Carl. I cleared the scene while calling in updates to the BMS while the USFS put up barricades and signs stating bear in area and closure information.
Since Carl was going to a hospital in Idaho, I contacted an Idaho Fish and Game (IDFG) Warden requesting assistance. I requested a Warden meet Carl at the hospital to collect clothing and if possible, take photos of the injuries and conduct a quick interview as is standard procedure in a Wildlife Human Attack (WHART) incident. I was later notified by IDFG they had been unable to interview Carl or take photos as he was on a ventilator and rushed straight into the doctors. IDFG were able to collect Carl's pants which medical crews had cut off of him. **Note:** I met IDFG Investigator Lauren Lane on April 17th, 2021 in Ashton ID to collect that item.
With night approaching, I talked with BMS Frey and discussed the next steps for the following morning. As I headed home, I came across a vehicle parked inside the USFS emergency closure. I notified WYPD dispatch I would be out looking for the occupants as we did not know the circumstances behind the bear attack and could not leave them in the area without notification of the incident and closure. After finding the individual had been fishing outside of closure on the Madison River, it was determined his car had been parked there before the closure went into effect. He left the scene without incident. Clearing that contact LEO Linhart and I observed another vehicle attempt to enter the closure by the means of the FWP driveway before backing out heading south on US HWY191 where they turned into the Bakers Hole Campground drive. USFS LEO Linhart and I contacted that individual to advise them of the closure and they commented they had heard of a bear attack and were out looking to take pictures of the bear.

Footnote: A fishing pole and juice bottle lay off to the northwest. West of the snow was the area…..

Note: Between the attack and when investigators returned to the scene the following day, law enforcement made multiple contacts of people trying to access the closure area. A white Ford F150 with ID license plates stopped by my residence before the attack, while I was off shift. The 2 male occupants of that Ford inquired about a sow grizzly and 2 cubs they had heard were active in the Basin which I was unaware of. They were wearing camo clothing and had a camera with large lenses on the center console. This indicated to me they were wildlife photographers looking for bears. I observed that vehicle along US HWY191 when I initially responded to the scene and then again turning into the Bakers Hole Campground drive as units were clearing. When I last saw that vehicle, USFS personnel were talking to the occupants.

The following morning, April 16, 2021, I was contacted by Captain Pankratz. He informed me to hold off going to the Bozeman Regional Office (BRO) as he was headed down to West Yellowstone, that he would contact Bear Management and we would then plan to meet and return to the attack scene. My decision to return to the scene was made due to the following considerations;

- Without being able to interview Carl, it was unknown what precipitated the attack. We did not know if it was a predatory attack, defensive attack or surprise encounter.
- We had no time line of when an interview with Carl may take place.
- No evidence was collected the day of the attack except for photos and the pants which IDFG retrieved from the hospital.
- It was forecast to start snow/rain in a couple days which would diminish any evidence on scene.
- The area the attack took place is a "high use" recreation area. It is common for anglers, hikers, campers and skiers to frequent the Bakers hole area.
- As noted earlier, multiple law enforcement contacts had been made concerning individuals trying to take pictures of bears. News of bear activity was drawing them in.
- This close to a weekend, we could expect a significant number of recreationists wanting to use the area. This would be compounded by the opening of Yellowstone National Park (YNP) for the summer season and news of a bear active in the area.
- It was imperative that we find out what precipitated the attack. While it was likely guarding a carcass, it was equally likely it was a surprise encounter, it was a bear with cubs or it was a predatory attack. Especially given the volume of human activity in the area while rescuing Carl did not scare the animal away.

After careful consideration, it was decided the significant risk to public safety resulting from the unknown causation of the attack outweighed the risk of a potential bear encounter from a re-entry to the scene. Phone calls were made and a team of seven (7) plus one (1) bear dog was assembled. We met at approximately 1400 hours and after a quick briefing on the situation entered Bakers Hole Campground.

Note: The team consisted of Captain Pankratz, GW Daven Thorne, GW Robert Pohle, USFS LEO Noah Pieprzyca, USFS LEO Linhart, BMS Frey (K9 Loki) and BMS

Jeremiah Smith. All team members were armed with lethal firepower and we had bear spray available.
We began our entry to the attack site, following the Boundary Ski trail that exits out of the south loop of Bakers Hole Campground. All members yelled out randomly making noise to alert a bear, humans were present. K9 Loki added to the noise barking loudly. At approximately the same location responders observed the bear the day prior, USFS LEO Pieprzyca alerted the team he saw something brown moving south towards the attack site. The movement came to the east of our location in a marshy area. It was unknown at that point if it was a bear as there were fresh bison tracks in the snow and mud. The team held that position as multiple cracker shells were fired and more yelling was made in attempts to haze the animal away. After several minutes holding that position and not seeing further movement, we continued down the trail. Along the way the team continued yelling and more cracker shells were fired. Specialist Frey alerted the team that the behavior and loud incessant barking from K9 Loki indicated a bear was nearby. **Note:** We were walking into a northerly breeze which would bring any bear scent directly to K9 Loki.
The attack site is approximately 50 yards to the south east of the main Boundary Ski trail down an old, over grown USFS road. That road had multiple downed trees laying across it and others growing through the former road bed. As we turned that way, we got approximately 30 yards from the attack site when BMS Smith alerted us to a bear. The bear was east of our location, at the edge of a small marshy clearing. It was moving south east before it stopped. At that point the bear looked at us for a split second before immediately changing directions and charging directly towards the team. The bear had to clear the marshy area before encountering willows partially buried in snow. As the bear cleared the marshy area, it hit the snow in the willows and was slowed due to the depth and softness. We held fast yelling as the bear kept pushing through the deep snow in a fashion similar to the way a dog runs through deep snow in a field. As the bear continued, it quickly became apparent this was not a bluff charge. The snow while deepest where the bear was currently located, began to thin before disappearing the closer you got towards the team's location. In the event the bear cleared the deep snow and regained traction, there would be no time for the team to react before contact was made with a human, resulting in serious injury or death.
In the split second it took to process what was taking place, I made the decision I was going to engage the bear and shoot it before it was able to gain traction again. I called out loud that I was taking a shot, before firing my shotgun. Afterwards I learned both Specialist Frey and Smith called out to shoot as well. Multiple shots were fired and I could see the impact of several rounds on the bear's body as they hit. The bear slumped down in the snow before moving again. USFS LEO Pieprzyca was armed with an issued 45/70 government rifle and heavy 540 grain bullets designed for penetration. At the instruction of Specialist Frey, USFS LEO Pieprzyca fired a couple rounds into the bear. **Note:** Once shot, it is absolutely imperative to prevent unnecessary pain and suffering of the bear and for public safety, we ensure the bear is deceased. After the bear stopped moving, the other team members covered Specialist Smith and I as we

Footnote: We were walking into a southerly breeze. The bear was northeast of our location…
It was moving southwest before it stopped.

approached the bear to check it's status. As we still did not know the sex of the bear, we approached ready to engage another animal should it have been a female with cubs. Once confirmed dead, I assisted Specialist Smith in rolling the bear over where we discovered it was an adult male. While others maintained a security perimeter and Bear Management began their checks on the bear, I took pictures of the scene, only to discover that during the charge the bear had run over a cached moose carcass, buried in the marshy area. It was difficult to see the moose as it was mostly buried and I could not smell anything that would indicate there was a carcass there.

I used my OnX Hunt maps to get GPS coordinates of the following locations;

- 44.70168, -111.10067 -- Location of the south loop of Bakers Hole Campground.
- 44.69999, -111.10053 -- Location I was standing at when I shot the charging bear.
- 44.70010, -111.10025 -- Location of deceased bear once rolled over.
- 44.70017, -111.10021 -- Location of cached moose carcass.
- 44.70002, -111.10018 -- Location of the attack site from 04/15/2021.

A brief conversation occurred with BMS Frey and it was evident that the primary causation of the bear attack on Carl was the defense of a food source. It is unknown if Carl knew the carcass was there or why he was in that location. The articles of clothing and Carl's possessions left on scene were collected. The only items retained for evidence were the discharged can of bear spray, a bloody beanie soft cap and the pants collected by IDFG. Reports indicated the attack focused on Carl's head, resulting in major head trauma with very little injury to other parts of his body. As such it is unlikely that the bear would have left any saliva or blood on other articles clothing in significant volume to provide any useable evidence to identify an individual animal. The fact the WHART team experienced a strikingly similar encounter less than 24 hours after the initial attack, resulting in a dead male bear leads one to believe the deceased bear was responsible for the attack. It would be unlikely to have multiple dominate male bears so close to such a valuable food source coexisting as the more dominate would chase the lesser male away.

USFS LEO Linhart arranged for Deputy Gavagan to bring a tracked All Terrain Vehicle (ATV) to retrieve the dead bear, as well as USFS Sawyer to clear the path. The ATV's winch was used to retrieve the bear where it was loaded into Captain Pankratz truck and taken to the BRO. While loading the bear, I noticed a burning, tingling sensation in my nose and lungs, coughing several times. That sensation was consistent with past exposure I have had to bear spray, albeit at a much lower dose. Later, while going through Carl's belongings collected from the attack site, I experienced the same sensation of burning and coughing. This indicates bear spray was discharged some time during the attack, consistent with the empty canister of bear spray found. Whether the spray was successfully deployed on the bear, or if the residue on the bear and Carl's belongings was the result of cross contamination, will forever be unknown.

Note: I was notified there had been a digital camera with Carl after the fact. That camera was passed off to his friends before my arrival during the initial rescue. On April 17, 2021, I met Keith Johnson (DOB 06/15/1985) at Back Country Adventures in West Yellowstone and was able to view the pictures on the memory card for the month of April 2021. I did not observe any pictures on that card similar to the attack site. Whether any pictures were removed before my observation is unknown, as control was lost over the camera.

I was notified the morning of April 17, 2021 by Captain Pankratz that Carl had succumbed to his injuries while in the hospital. As a result, investigators will never know for certain the events that led up to this bear attack.

No Further Action Taken. Robert Pohle FG32

Appendix B:

WYOMING GAME AND FISH DEPARTMENT 5400 Bishop Blvd. Cheyenne, WY 82006 Phone: (307) 777-4600 Fax: (307) 777-4699 wgfd.wyo.gov **GOVERNOR** MARK GORDON **DIRECTOR** BRIAN R. NESVIK **COMMISSIONERS** PETER J. DUBE – President GAY LYNN BYRD – Vice President RALPH BROKAW MARK JOLOVICH RICHARD LADWIG ASHLEE LUNDVALL KENNETH D. ROBERTS

Wyoming Game and Fish Wildlife Forensic and Fish Health Laboratory
1212 South Adams Street
Laramie, WY 82070
Phone: (307) 721-1921

FORENSIC LABORATORY EXAMINATION REPORT LAB NO.
21-27-W-CAF

DATE:
June 14, 2021

SUBMITTERS: Kevin Frey
Grizzly Bear Specialist
AGENCY:
Montana Fish, Wildlife and Parks
1400 South 19th
Bozeman, MT 59718

EXAMINER: Tasha Bauman
Lauren Schumacher
CASE NO.: 2021-04
PURPOSE: Species identification of the submitted item.

EVIDENCE RECEIVED:
Tasha Bauman, Forensic Specialist, received the following item via Federal Express on May 7, 2021:
Item #1: "Possible skin/cartilage tissue from stomach of grizzly bear"

EXAMINATIONS CONDUCTED:
Tests for species and family level identification were performed using serological and enzymatic electrophoretic techniques. Species identification was also performed using an amplified portion of the mitochondrial DNA cytochrome b gene and subsequent sequencing of the amplicon (mcb398 and mcb869). The sequence obtained was matched against sequences in the National Center for Biotechnology Information DNA database (www.ncbi.nlm.hih.gov).

RESULTS:
1) Species identification, by serological and enzymatic electrophoretic techniques, of item #1 was non-reactive.
2) The sequence of item #1 is 99% (max identity) to grizzly bear (*Ursus arctos*) sequences in the GenBank database over (395/401) base pairs indicating the sample originated from grizzly bear.

CONCLUSIONS:
1) Item #1 originated from grizzly bear.

DISPOSITION OF SAMPLES:
The item was retained in the custody of the examiners.

SEROLOGY AND DNA EXAMINER:_____
Tasha Bauman, M.S.
Forensic Specialist

SEROLOGY AND DNA EXAMINER:_____
Lauren Schumacher, M.S.
Forensic Analyst

Appendix C:

MONTANA VETERINARY DIAGNOSTIC LABORATORY

PHONE: (406) 994-4885
FAX: (406) 994-6344
WEBSITE: www.liv.mt.gov/lab
WEB RESULTS: https://mvdl.mt.gov
E-MAIL: mvdl@mt.gov

1911 WEST LINCOLN STREET
BOZEMAN, MT 59718

JENNIFER RAMSEY DVM FW & P
1400 S. 19TH AVE
BOZEMAN MT 59718

CASE:21-18156
Name/ID: FWP Grizzly
Species: Brown Bear (Grizzly)

Sex: Unknown **Age:** 20 Years

Owner: Montana FWP

COMPLETE REPORT 04/19/21

Sample Collection: 04/16/21
Accession: 04/19/21
Case Coordinator Authorization: SH

Previous Reports
04/19/21
04/19/21
04/19/21

RABIES

Rabies	Brain	Verified on: 04/19/21 by: SH
Animal ID	Test	Result
FWP Grizzly	Condition	Fair
	Human Exposure	Yes
	Rabies Final Result	**Negative**

From:	van Manen, Frank T
To:	Cooley, Hilary
Subject:	Looked up some info for the question that was posed in the chat
Date:	Wednesday, December 8, 2021 12:17:11 PM
Attachments:	Bombieri et al. 2019 - Brown bear attacks on humans a worldwide perspective.pdf Bear-caused Human Fatalities in GYE - Table.pdf

Based on fatal attacks in the GYE (see attached table), there are maybe about a quarter that involved a bear on or near a carcass.

From Bombieri et al. 2019 (global data, but probably one of the most comprehensive datasets to date). No specific data on proportion involving carcasses but some would likely be under sudden encounters and some under females with cubs:

"The most prevalent scenario of a brown bear attack was an encounter with a female bear with cubs (47%,
n = 137; Fig. 4), followed by sudden encounters (20%, n = 59), dog presence (17%, n = 48), bear attacking after
being shot or trapped (10%, n = 30), and predatory attacks (5%; n = 9 in Russia and n = 6 in North America)
(Fig. 3b). However, sometimes the scenario was more complex, because an attack could have been triggered by
more than one factor. For example, in seven cases, the attack was caused by the interaction of a female with cubs
and a dog."

Frank T. van Manen
Supervisory Research Wildlife Biologist
U.S. Geological Survey | Interagency Grizzly Bear Study Team
406-994-5043 | on the web: IGBST

SCIENTIFIC REPORTS

OPEN

Brown bear attacks on humans: a worldwide perspective

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Received: 31 October 2018
Accepted: 25 April 2019
Published online: 12 June 2019

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The increasing trend of large carnivore attacks on humans not only raises human safety concerns but may also undermine large carnivore conservation efforts. Although rare, attacks by brown bears *Ursus arctos* are also on the rise and, although several studies have addressed this issue at local scales, information is lacking on a worldwide scale. Here, we investigated brown bear attacks (n = 664) on humans between 2000 and 2015 across most of the range inhabited by the species: North America (n = 183), Europe (n = 291), and East (n = 190). When the attacks occurred, half of the people were engaged in leisure activities and the main scenario was an encounter with a female with cubs. Attacks have increased significantly over time and were more frequent at high bear and low human population densities. There was no significant difference in the number of attacks between continents or between countries with different hunting practices. Understanding global patterns of bear attacks can help reduce dangerous encounters and, consequently, is crucial for informing wildlife managers and the public about appropriate measures to reduce this kind of conflicts in bear country.

Large carnivore attacks on humans are the most dramatic form of human-wildlife conflicts[1,2]. Although rare compared to attacks by other wildlife and domestic species[3,4], such incidents are on the rise in many areas around the world[2,5–7]. Such a trend not only raises human safety concerns, but also undermines large carnivore conservation efforts, as well as the recovery of several of these species around the world[8,9]. Indeed, when they do occur, attacks on humans elicit considerable media attention, which can lead people to overestimate the risk of an attack and, eventually, cause negative public reactions and opposition towards conservation actions[10–12]. Additionally, when using negative framing and graphic contents to describe an attack, the media does not help to correctly inform people on how to avoid encountering large carnivores and how to behave in case of an encounter, but it rather unnecessary alarms the public about a phenomenon that is actually very rare[2,12]. As mentioned in previous studies[2,13,14], by providing citizens with an objective description of the events and correct information on how to avoid conflicts, the media has the power to promote both human safety and carnivore conservation[12]. Because one of the most important ways to minimize this type of conflict is to gain a deeper understanding of the circumstances triggering large carnivore attacks, as well as of potential factors associated with such incidents[2,14], it is extremely important to provide managers and the public with accurate and objective knowledge to reduce their occurrence.

The end of legal and widespread persecution, strict protection measures, and reintroductions have allowed brown bear *Ursus arctos* populations to recover and expand in many areas of North America and Europe[9,15–18]. Currently, brown bears are estimated to exceed 200,000 individuals worldwide, most of which live in Russia (~100,000), whereas North America and Europe are home to around 58,000 and 15,400 brown bears, respectively[16]. Although the number of bears is growing globally, several small subpopulations are still endangered and, in several cases, their location in close proximity to highly humanized areas leads to increased negative interactions with humans[16].

Although brown bears are known to adjust their behaviour in order to avoid humans[19], complete avoidance is not always possible. Brown bears, indeed, are known to be involved in various types of conflicts with humans, which typically include property damage[15] and, more rarely, direct attacks on people[2]. These conflicts might be even more severe in areas of recent expansion and reintroduction, where bears had previously been extirpated. Here, traditional prevention practices have been lost and people are no longer used to sharing the landscape with this large carnivore[15,20]. At the same time, human population is growing all around the world, leading to an expansion of urban areas towards natural habitats[21]. In addition, in developed countries, people living in cities are increasingly engaged in recreational outdoor activities in natural parks[2], and owning a second house in natural areas outside the city has become a common trend[22]. Such intensified use of wilderness area by humans, especially people that are not used to cohabit with wildlife, increases the probabilities of potentially dangerous encounters with these species, urging wildlife managers and conservationists to take action.

Among all large terrestrial and aquatic predators, attacks by brown bears are the most highly covered by the international media[12]. This suggests that, even if attacks by brown bears are less frequent than those by other predators, at least among North American large carnivores[2], this species has the power to attract amplified attention of mass media, which has the potential to negatively impact public attitude.

Several studies have investigated attacks on humans by brown bears at local scales, suggesting a general increase in the number of incidents over the years in different regions of the world (e.g.)[1,14,21–24]. However, most of the published literature on the topic is concentrated in North America and Scandinavia, and large-scale studies are lacking.

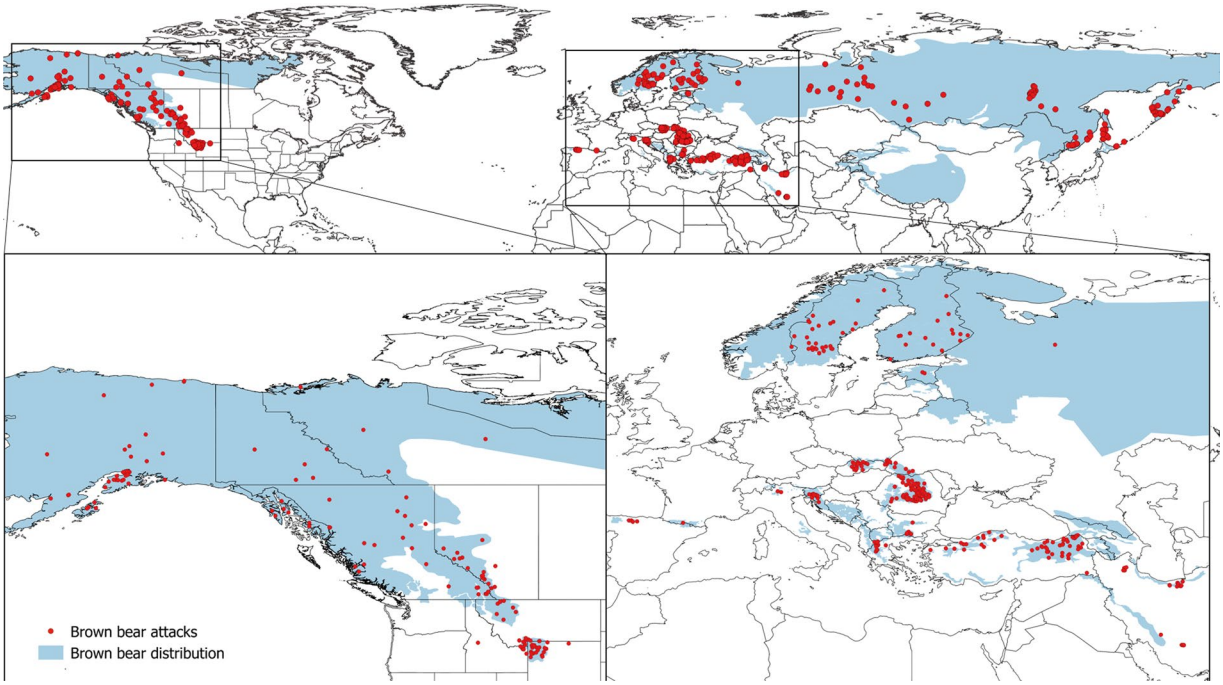


Figure 1. Spatial distribution of brown bear attacks on humans recorded between 2000 and 2015. Only attacks for which at least approximate coordinates were available are shown in the map (95% of all the attacks recorded, n = 634). In some cases, one point corresponds to more than one attack. The map was created in QGIS software[51], using the world borders layer[59] and the IUCN layer of brown bear distribution, including both permanent and occasional presence[53].

Here, we investigated patterns of brown bear attacks on humans occurring between 2000 and 2015 on a worldwide scale, with the main aim of improving our knowledge on this type of conflict and, consequently, providing useful information that could help reduce the occurrence of negative human-bear encounters. In particular, we: (*i*) provide a first global-scale perspective of the phenomenon; (*ii*) describe temporal and spatial patterns of these incidents; (*iii*) describe main attack circumstances, highlighting common features and local peculiarities in attack scenarios between geographical areas with different histories of human coexistence with this species (e.g. North America *vs*. Europe); and (*iv*) explore the effect of various factors, such as bear and human densities, as well as differences in geographic location and management practices, on the number of attacks. In this regard, we hypothesised that:

(*a*) higher numbers of attacks occurred in those countries/jurisdictions where both bear and human densities are higher, due to the consequent higher encounter probability; and (*b*) fewer attacks occurred in those countries where bears are legally hunted, due to potential removal of bold individuals.

Results

Spatio-temporal patterns of the attacks. Our search resulted in a total of 664 attacks between 2000 and 2015 from the three main geographical blocks of the brown bear distribution: West (i.e. and hereafter North America, n = 183), Centre (i.e. and hereafter Europe, n = 291), and East (i.e. Russia, Iran and Turkey, hereafter East, n = 190), for which at least information regarding the year was available (Fig. 1 and Table 1). We also recorded an additional 61 cases of attacks from the published literature (4 cases in Albania, 11 in Bosnia and Herzegovina, 9 in Macedonia, 2 in Nepal and 35 in Japan), which we did not include in the analyses due to the lack of sufficient information. We recorded an attack rate of 39.6 attacks/year globally: 11.4 attacks/year in North America and 18.2 attacks/year in Europe (10 attacks/year, if we exclude Romania). The recorded value of 19 attacks/year in the East probably represents an underestimation, due to the lack of information for several regions of the continent. Most attacks, 85.7% (n = 568), resulted in human injury and 14.3% (n = 95) ended with the death of the person involved. Specifically, 19 deaths occurred in Europe (6.6% of the attacks recorded in Europe), 24 in North America (13.1% of the total attacks in North America) and 52 in the East (32.0% of the total attacks in the East).

Within Europe, most attacks occurred in Romania (n = 131), followed by Slovakia (n = 54), Sweden (n = 28), and Finland (n = 17). In North America, most of the attacks occurred in Alaska (n = 51), British Columbia (n = 42), Wyoming (n = 29), Montana (n = 25), and Alberta (n = 18). In the East, we recorded 111 attacks in Russia, 25 in Iran and 54 in Turkey (Fig. 1 and Table 1).

The number of attacks increased worldwide over the years (Fig. 2; Supplementary Tables S1 and S2; Supplementary Fig. S1), with most of the attacks occurring in summer (48%; Supplementary Fig. S2a) and during daytime (73%; Supplementary Fig. S2b).

Country/State	Number of Attacks (2000–2015)	Number of Fatalities (2000–2015)	Number of Brown Bears	Brown Bear Range (km^2)	Human Density (inhabitants/km^2)	Brown Bear Density (bears/1000 km^2)
Romania	131	11	6000	89900	62.3	66.741
Slovakia	54	0	1000	12855	89.0	77.790
Turkey	54	11	4000	190552	29.7	20.992
Alaska	51	7	32000	1455855	0.3	21.980
British Columbia	42	2	15000	768801	0.4	19.511
Wyoming	29	5	511	27896	1.2	18.318
Sweden	28	2	2900	316300	5.0	9.169
Iran	25	0	unknown	241327	12.7	unknown
Montana	25	2	1105	64713	2.9	17.075
Alberta	18	4	691	148114	0.8	4.665
Finland	17	0	1700	357900	13.7	4.750
Greece	12	1	350	19500	26.8	17.949
Slovenia	12	0	455	13700	73.3	33.212
Poland	8	1	115	10400	75.7	11.058
Ukraine	8	2	350	28000	101.0	12.500
Idaho	8	0	34	6663	3.5	5.103
Bulgaria	7	1	560	32800	35.2	17.073
NW Territories	6	1	4000	772227	0.01	5.180
Spain	5	0	247	12800	7.2	19.297
Yukon	4	3	6000	480406	0.03	12.489
Croatia	3	0	1000	12372	21.5	80.828
Norway	2	0	105	149550	6.9	0.702
Italy (Alps)	2	0	51	2000	92.4	25.500
Estonia	2	0	700	34000	19.2	20.600

Table 1. Number of brown bear attacks on humans recorded during the period 2000–2015 and characteristics of the country/jurisdiction where the attacks occurred. Values are calculated within the brown bear population of each country where the attacks took place. When attacks occurred in more than one bear population within one country, values were calculated for the total area occupied by the populations involved.

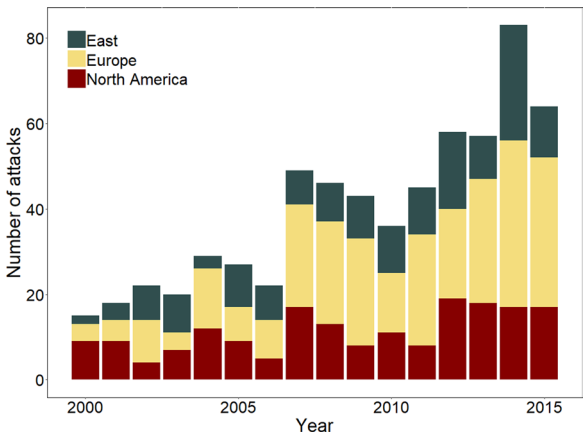


Figure 2. Temporal trends of reported brown bear attacks on humans throughout the species' range during 2000–2015, n = 664.

Main circumstances of the attacks. Attacked people were almost exclusively adults (99%; Supplementary Fig. S3a) and males (88%; Supplementary Fig. S3b). In 63% of the cases, the person was alone at the moment of the attack (Supplementary Fig. S3c). When the attack occurred, 50% (n = 279) of the people were engaged in leisure activities, such as hiking (n = 88), picking berries, mushrooms, or antlers (n = 64), camping (n = 31), fishing (n = 18), or jogging (n = 17). As for the other activities, 28% (n = 158) of the attacked people were working outside, i.e. farming, guarding livestock, or logging (n = 104), or doing wildlife-related fieldwork (n = 12), and 22% (n = 123) were hunting (Fig. 3a). Attacks that occurred during bear hunts (n = 27) were concentrated in a few countries/states (Sweden, Finland, Alaska and Russia). In Europe, this kind of attack was only present in Fennoscandia (n = 16), where bears are often hunted with chasing dogs. No attacks occurred in European

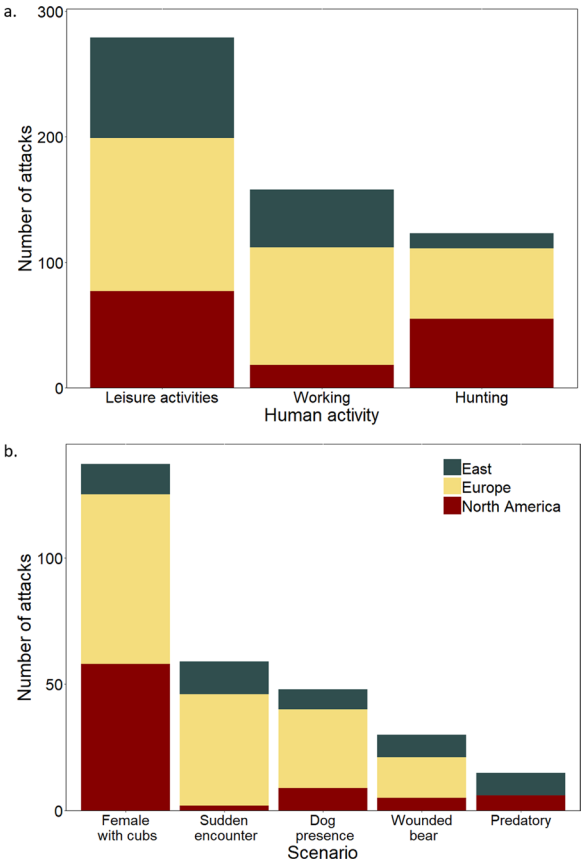


Figure 3. (**a**) Main activities carried out by people at the moment of an attack (n = 560). (**b**) Main scenarios of the attacks (n = 289).



Figure 4. Nearly half (47%) of the attacks recorded worldwide were the result of a defensive reaction of a female with cubs. Photo by Ivan Seryodkin.

countries where bears are hunted using bait from a stand. The attacks that occurred while working outside were more frequent in Europe (n = 94, of which 64 occurred in Romania) than in the rest of the brown bear range included in our study.

The most prevalent scenario of a brown bear attack was an encounter with a female bear with cubs (47%, n = 137; Fig. 4), followed by sudden encounters (20%, n = 59), dog presence (17%, n = 48), bear attacking after being shot or trapped (10%, n = 30), and predatory attacks (5%; n = 9 in Russia and n = 6 in North America) (Fig. 3b). However, sometimes the scenario was more complex, because an attack could have been triggered by more than one factor. For example, in seven cases, the attack was caused by the interaction of a female with cubs and a dog.

Correlates of the attacks. We explored general spatio-temporal patterns of bear attacks and found that the following four factors were the most important in explaining the number of attacks: (a) year of the attack, (b) bear density, and (c) human population density (Supplementary Tables S1 and S2). In such analysis, the Eastern part of bear distribution was excluded, given the spatial heterogeneity of the data, as we were able to only collect attack data from Iran, Turkey and some Russian areas. The importance of these three variables was also confirmed by their P-values (P always $\leq$0.01) and confidence intervals (Supplementary Table S2). Specifically, we observed: (1) a significant increase in the number of attacks over the years; (2) higher bear density was associated with higher number of recorded attacks; whereas (3) attacks were negatively correlated with human population density. Bear density explained the largest proportion of variance (Supplementary Table S2). We found no significant difference in the number of attacks between continents or between countries with different management practices.

Discussion

This first large-scale overview of brown bear attacks on humans has highlighted several elements that may serve as a general framework to this worldwide issue. Our results show a global increase in the number of attacks over the last decades, which is likely the result of several factors, such as the growth of both bear and human populations worldwide, that has led to increased habitat overlap. Additionally, a growing number of people is engaged in recreational activities in bear areas, which likely enhances the probability of encounters[2]. Seasonal and circadian patterns were similar between continents. Europe had a slightly higher number of attacks during winter than North America and the East, which might be because hibernation is usually shorter in Europe[25] and, thus, brown bears are more active in Europe during this season than on the other continents. The peak of attacks during the summer and during daylight is likely due to the fact that humans mainly engage in recreational activities or outdoor work in bear habitats during this season and are generally most active during the day. These patterns are in line with previous studies on attacks by brown bears both in North America[2,14] and Scandinavia[1]. Most people were engaged in leisure activities at the moment of the attack. This suggests that attacks mainly occur when people visit bear areas for recreational purposes, which is especially true in North America, where only a few attacks occurred to people working outside.

The fact that attacked people were almost exclusively adults is in line with the main human activities and attack scenarios. Indeed, when attacked by large carnivores, children are usually involved in predatory attacks, which are generally very rare for brown bears[26]. The fact that the most prevalent scenario, both in North America and Europe, was an encounter with a female with cubs agrees with that found in previous studies at smaller scales[1,14] and suggests that this class of bear is more likely to respond aggressively to encounters with humans and, therefore, requires additional attention and public information campaigns. Additionally, females with cubs, together with subadults, are most likely to use areas close to human activities in order to avoid male bears and predators or search for anthropogenic food[27–30], and this might make them more susceptible to accidental encounters with people. In this sense, where possible, temporal restrictions on public access to areas where females with cubs are commonly present might be crucial for avoiding human disturbance to brown bear females and resulting dangerous encounters. Other frequent scenarios (sudden encounters, presence of dogs, wounded bear) are mainly the result of inappropriate and risk-enhancing human behaviours (e.g. moving alone and being silent in bear country, walking an unleashed dog, or chasing a wounded bear while hunting), and could be reduced by improving public education and awareness of the issue[2]. For example, when in bear country, announcing one's presence can help to avoid sudden encounters and unleashed dogs should be strongly avoided. In Alaska, dogs have been found to help terminate attacks in nearly half of the cases[14]; however, in other cases both during leisure activities and hunting, dogs are known to have initiated the attack[1,2,14]. Therefore, keeping them leashed when engaging in recreational activities might reduce the occurrence of such incidents, while it might still help to deter the attack, when it happens. Additional preventive measures such as proper garbage management, securing trash and food containers both in developed and natural areas frequented by tourists can help prevent bears from approaching people and cause conflicts[31,32].

The main profile of the involved humans and the main scenarios agree with what has been highlighted in previous studies. In Alaska, for instance, Smith and Herrero[14] found that the majority of people involved in attacks by bears were adult males (83%), who were primarily engaged in hiking and hunting. The authors also found that interactions were usually initiated by humans (59%), such as people surprising bears, wounding them in hunts, or disturbing them while defending a carcass[14]. In the same study, unaccompanied individuals were also observed to be more vulnerable to attacks than people in groups, which is in line with our findings, as well as findings for other bear species in North America[33,34]. The reason for this is likely related to the fact that larger groups are more easily detectable and, consequently, avoided by bears, because groups tend to make more noise than a lone person. Additionally, when an encounter actually occurs, bears are more likely to flee than attack when confronted with a group of people[14]. The above-mentioned, as well as other, basic precautions are key to reducing the occurrence of dangerous encounters and should be constantly made available to people entering bear areas. For instance, in some regions of North America, warning panels are placed at trails' entrance, on which basic safety measures are provided. Additionally, visitors of National Parks receive a mandatory presentation and safety instructions on how to behave in bear country. In Russia, which hosts the largest number of brown bears and has the highest recorded number of attacks on humans, specialized manuals were developed, published, and distributed in large quantities to minimize conflicts with bears (e.g.[35,36]). Bear spray is also commonly used in North America as a personal safety measure by people who engage in recreation and work in bear areas, and its effectiveness in deterring attacking bears has been demonstrated[14,37]. This non-lethal deterrent has also been successfully used in Slovakia (R. Rigg, unpublished data), however, it is currently illegal in many other European countries. Such evidence highlights the need for further investigation on its effectiveness and potential implementation in other countries with growing number of bears.

Although we did not find any difference in the number of attacks between continents, there was a remarkable difference in the number of attacks among European countries. Indeed, Romania accounted for nearly half (45%) of all attacks registered in Europe. Romania is home to the largest number of bears in Europe and traditional semi-subsistence agriculture and livestock husbandry are still common in the Carpathian Mountains[38]. In particular, sheep and goats, which are the most vulnerable livestock to bear depredation[38], are the most common and are increasing year to year[39]. This might explain the fact that 50% of bear attacks in Romania for which detailed information was available (n = 109) involved shepherds, farmers, or cattle herders. Interestingly, in at least 8 cases, the person was attacked while chasing or directly harassing the bear after it had attacked livestock or crops. We therefore suggest that education campaigns on how to avoid or react to close encounters with brown bears and improved livestock protection measures should particularly target Romanian shepherds, farmers, and cattle herders. This scenario differs vastly from the general patterns observed in other brown bear countries, where attacks mainly occurred during leisure activities. These differences in attack patterns suggest that the occurrence of attacks might also greatly depend on local socio-cultural contexts and human behaviours[2].

Previous studies analysing brown bear attacks at a local scale have shown a correlation between the number of attacks and the growth of the human population at a national or continental scale[14,34]. These studies suggest that the more people live and work in bear areas, the greater the probability of an encounter with this species[14]. Another study found a relationship between the number of attacks on hunters and the brown bear harvest in Scandinavia[1], but there was no clear relationship with the number of attacks on people involved in non-hunting outdoor activities and the brown bear population size. However, at a global scale, attacks were more frequent in those countries/jurisdictions where human density is lower and bear density higher. Because human density is a measure of the degree of human encroachment into bear range, our results suggest that attacks are less frequent where human developments and activities extend more into bear areas, and more frequent in countries where recreational activities in bear areas are more common. This result might also suggest that bears and people have learnt to coexist better in highly humanized regions, whereas those people who are more at risk of attack are visitors of high bear-density areas, where bears are less accustomed to encountering people, because of lower human density and, consequently, bears and people might be less used to avoiding each other. Additionally, there was no significant difference in the number of attacks between 'hunting' and 'non-hunting' countries, which does not support our initial hypothesis that fewer attacks occurred in countries where bears are legally hunted.

To conclude, negative encounters with brown bears are extremely rare and mainly non-fatal. However, to increase both human and bear safety, and promote coexistence, it is crucial to gain a deeper understanding, and promote public knowledge of the riskiest circumstances that may trigger an aggressive response by brown bears. To this aim, strong connection and collaboration between researchers, managers and education tools such as mass media and schools should be established to promote correct and scientific-based information about bears among the large public. This first worldwide approach showed that, although similar patterns in attacks exist across the distribution range of brown bears, specific local contexts might prove to be crucial in explaining particularly high or low attack numbers. We therefore believe that, although it is important to have a global picture, additional studies at a local scale, especially in those countries where information is still scarce, will help identify additional factors related to local situations which will provide wildlife managers with specific information on how to effectively deal with this issue.

Methods

Collection of information on brown bear attacks. *Brown bear attack data.* We collected reports of brown bear attacks on humans that resulted in physical injury (i.e., the person required medical attention) or death from 2000 to 2015 all around the world. We limited our search to attack cases occurred starting from 2000 as, before that year, information on attacks was scarce. Attack records were collected from personal datasets of the co-authors, published literature[40], unpublished reports, PhD/MS theses, webpages, and news reports. We searched for the above-mentioned sources using the search engines Google[41] and Google Scholar[42]. In particular, to collect cases in North America, in addition to these sources, we also carried out a systematic search of news articles on Google for each jurisdiction on an annual basis, using the combination of the following terms: 'brown bear' or 'grizzly' + 'attack' or 'attack' + 'human'. Because some attacks recurred repeatedly during the search, due to the use of multiple sources, we cross-checked attack location, date, and sex/age of the people involved to avoid duplicate records in the dataset (additional information on the data collection method is available in[2]).

For each attack, we recorded the following information: (1) year; (2) month; (3) location of the attack; (4) time of day, classified into three categories, i.e. twilight, day and night; (5) sex and age (subadult, <4 years old; adult, >4 years old) of the bear; (6) sex and age of the victim[21], where age was classified into two categories (child, <13 years old; adult, >13 years old); (7) human party composition, simplified into four categories[33]: (a) adult alone, (b) child alone, (c) adult in a group, and (d) child in a group; (8) result of the attack, i.e., injury or death; (9) human activity at the time of the attack, three categories: (a) leisure activities, e.g., hiking, camping, fishing, berry/mushroom/antler picking, (b) hunting and (c) outdoor work, e.g., guarding livestock, farming, logging, wildlife-related fieldworks; and (10) attack scenario, i.e., the main reason that could have triggered the attack. We defined five different scenarios: (a) attack by a female with cubs; (b) sudden encounter with a solitary bear, i.e., when a bear (except females with cubs) was surprised at a close distance; (c) predatory, i.e., when the bear deliberately attacked and/or killed a human with the presumed purpose of consuming it[26]; (d) dog-related scenario, i.e., one or more dogs were present at the moment of the attack; (e) wounded bear (i.e. a bear that was shot or trapped during hunting).

Information related to the countries of the attacks. For each country/jurisdiction where an attack occurred (excluding Russia, for which we lacked information), we recorded: (a) bear density, i.e., bears per 1000 km^2; (b) human population density, i.e., inhabitants per km^2, within the range occupied by brown bears; and (c) brown

bear management practices. Specifically, we were interested in exploring possible differences in attack patterns between countries where the brown bear is legally hunted or harvested and countries where bear hunting is forbidden. We therefore classified each country/jurisdiction as either a 'hunting country' (i.e., where the brown bear is legally hunted or where the species is protected, but legally and regularly harvested) or a 'non-hunting country' (i.e., where brown bear is protected and killing them is generally forbidden).

Estimates of bear and human population densities and bear ranges for Europe and Turkey were obtained from[15,43] and[44]. The numbers of bears for North American jurisdictions were obtained from published literature and reports[45–50]. Bear ranges and human population densities for these jurisdictions were calculated in QGIS[51]. Specifically, we derived bear ranges and human population densities using the North American border layer[52], the IUCN layer of bear distribution[53] and the gridded world population data set[54]. Bear ranges included areas of both permanent and occasional brown bear presence. All the above-mentioned values for each country/jurisdiction are reported in Table 1.

Data analysis. *Spatio-temporal patterns of the attacks.* To explore general spatio-temporal patterns of bear attacks, we built a set of a priori competing models that included the number of attacks as the response variable. As explanatory variables, we included: (1) year of the attack; (2) 'hunting' or 'non-hunting' country; and (3) continent, i.e., North America and Europe. We did not include the Eastern part of bear distribution in these analyses, given the spatial heterogeneity of the data, as we were able to only collect attack data from Iran, Turkey and some Russian areas. Fixed factors also included (4) bear density and (5) human population density. To test for potential interactions between variables, we additionally included: (6) the interaction between bear density and human density; (7) the interaction between continent and bear density; and (8) the interaction between continent and human density. Correlation between explanatory variables was calculated before building the models and was always lower than 0.6. Moreover, because we had repeated measures throughout the dataset, we included country as a random factor. Following preliminary data exploration and model diagnostics, we excluded two years of data for Romania (i.e., 21 attacks in 2014 and 17 attacks in 2015) and all observations from Croatia (i.e., 3 attacks in total), which were found to be highly influential observations. Consequently, our model was run on a sample size of 431 attacks. All models were fitted using GLMMs with a Poisson distribution.

We selected the best model(s) based on AICc values and we considered models with $\Delta AICc < 2$ as equally competitive. Once we obtained the best set of models, we selected the most parsimonious (i.e., the model that included the lowest number of explanatory variables) and, for this model, we estimated fitted parameters, confidence intervals (CI), as well as the variance explained by each explanatory variable. All statistical analyses were performed in R v. 3.5.1 statistical software[55]. Models were fitted using the "glmer" function from the "lme4" package[56]. Model generation and AICc calculation were done using the "dredge" function from the "MuMIn" package[57]. Calculation of R-squared for the model and each explanatory variable was done using the "r2glmm" package[58].

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Acknowledgements

We would like to thank Aleksandër Trajçe, Raido Kont, Gerard Baars, Ivan Kos and Dusan Toholj for providing helpful information on brown bears. G.B. was financially supported by a collaboration contract with the MUSE – Museo delle Scienze (Trento, Italy). V.P. was financially supported by (1) the Excellence Project CGL2017-82782-P financed by the Spanish Ministry of Science, Innovation and Universities, the Agencia Estatal de Investigación (AEI) and the Fondo Europeo de Desarrollo Regional (FEDER, EU), and (2) Modalidad Grupos de Investigación Consolidados, Principado de Asturias (IDI/2018/000151). M.M.D. was financially supported by the Spanish Ramon y Cajal grant RYC-2014-16263. N.S., C.B. and A.G. were partly supported by the National Centre for Research and Development (GLOBE POL-NOR/198352/85/2013) and the National Science Centre in Poland (DEC-2013/08/M/NZ9/00469; 2016/22/Z/NZ8/00121; 2017/25/N/NZ8/02861). E.R., J.N., A.F., N.S., and C.B. were supported by the Agencia Estatal de Investigación from the Ministry of Economy, Industry and Competitiveness, Spain (project CGL2017-83045-R AEI/FEDER EU, co-financed with FEDER). Data from Russia were collected as part of the monitoring program of Russian nature reserves, Chronicles of Nature, and financially supported by the Academy of Finland grant 250444 and the Russian Science Foundation grant 18-14-00093.

Author Contributions

G.B., J.N., V.P. and M.M.D. initiated and conceived the study; J.N., V.P., N.S., H.A., C.B., T.B., V.B., V.B., S.B., J.J.C., S.C., P.C., A.D., I.D., J.M.F., A.G., P.J.G., S.G., C.G., B.G., M.H., S.H., D.H., M.K., Y.K., A.A.K., V.K., V.K., L.K., P.K., I.K., Y.K., A.K., N.K., V.K., M.K., J.K., I.K., E.L., A.L., V.M., P.M., D.M., Y.M., A.M., A.M., H.N., S.P., L.M.P., K.P., P.Y.Q., R.R., Y.R., L.F.R., A.R., L.S., V.S., A.P.S., I.V.S., A.S., A.S., M.S., V.S., V.S., O.S., J.S., J.S., D.T., A.V., P.W., L.Y. and T.Z. collected data on brown bear attacks; G.B. prepared the final dataset; G.B., V.P. and M.M.D. analyzed

the data with the collaboration of J.N., N.S., A.F., J.V.L. and G.B. led the manuscript writing with the help of V.P. and M.M.D. All authors (G.B., J.N., V.P., N.S., A.F., J.V.L., H.A., C.B., T.B., V.B., V.B., S.B., J.J.C., S.C., P.C., A.D., I.D., J.M.F., A.G., P.J.G., S.G., C.G., B.G., M.H., S.H., D.H., M.K., Y.K., A.A.K., V.K., V.K., L.K., P.K., I.K., Y.K., A.K., N.K., V.K., M.K., J.K., I.K., E.L., A.L., V.M., P.M., D.M., Y.M., A.M., A.M., H.N., S.P., L.M.P., K.P., P.P., P.Y.Q., E.R., R.R., Y.R., L.F.R., A.R., L.S., V.S., A.P.S., I.V.S., A.S., A.S., M.S., V.S., V.S., O.S., J.S., J.S., D.T., A.V., P.W., L.Y., T.Z. and M.M.D.) commented on the manuscript draft.

Additional Information

Supplementary information accompanies this paper at https://doi.org/10.1038/s41598-019-44341-w.

Competing Interests: The authors declare no competing interests.

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BEAR-CAUSED HUMAN FATALITIES IN THE GREATER YELLOWSTONE ECOSYSTEM, 1892-PRESENT
INTERAGENCY GRIZZLY BEAR STUDY TEAM

Record number	Gender/age	Date	Location	Incident description	Source
1	Male, 37	September 2, 1892	Greybull River, Wyoming	Victim was killed when grizzly bear entered his cabin.	Edgar (undated)
2	Male, 25	July 10, 1894	Boulder River drainage in what later became the Gallatin National Forest	Incident occurred when victim encountered grizzly bear while following blood trail of injured bear while hunting alone.	Whittlesey (2014)
3	Male, 63	May 4, 1912	Gallatin National Forest, Montana	Victim was killed by grizzly bear while checking a bear trap.	Whittlesey (2014)
4	Male, 61	September 8, 1916	Yellowstone National Park	Incident occurred when grizzly bear entered roadside camp.	Schullery (1992) Whittlesey (2014)
5	Male, 60	June 12, 1922	Gallatin National Forest, Montana	Victim was killed by grizzly bear while checking a bear trap.	Whittlesey (2014)
6	Female, 45	August 23, 1942	Yellowstone National Park	Unknown species of bear killed victim while walking to restroom alone at night in cabin area.	Schullery (1992) Whittlesey (2014)
7	Male, 25	June 24, 1972	Yellowstone National Park	Victim was killed when he returned to his illegal campsite at night and surprised a grizzly bear eating his camp food that was left out.	Schullery (1992) Whittlesey (2014)
8	Male, 23	June 25, 1983	Gallatin National Forest, Montana	Grizzly bear dragged victim from his tent during the night at Rainbow Point Campground.	Schullery (1992) Whittlesey (2014)
9	Female, 25	July 30, 1984	Yellowstone National Park	Victim was killed by grizzly bear while camping alone at a backcountry campsite	Schullery (1992) Whittlesey (2014)
10	Male, 38	October 4, 1986	Yellowstone National Park	Victim was killed by a grizzly bear while hiking alone off trail and pursuing wildlife photographs.	Whittlesey (2014)
11	Male, 70	June 17, 2010	Shoshone National Forest, Wyoming	Incident occurred when victim encountered grizzly bear near research trap site	USFWS Board of Review Report (2010)
12	Male, 48	July 28, 2010	Gallatin National Forest, Montana	Victim was dragged from tent during the night and killed by a female grizzly bear with yearlings.	USFWS Board of Review Report
13	Male, 57	July 6, 2011	Yellowstone National Park	Incident occurred on the Wapiti Lake Trail and involved a couple that surprised a female grizzly bear with cubs	USFWS Board of Review Report (2011)
14	Male, 59	August 25, 2011	Yellowstone National Park	Victim was killed by a grizzly bear while hiking alone on the Mary Mountain Trail, Hayden Valley.	USFWS Board of Review Report (2012)
15	Male, 31	September 4, 2014	Bridger Teton National Forest, Wyoming	Victim was killed by unknown species of bear while hiking alone to a vegetation plot.	USFWS Board of Review Report (2014)
16	Male, 63	August 6, 2015	Yellowstone National Park	Victim was killed by a female grizzly bear with cubs while hiking alone on Elephant Back Mountain.	USFWS Board of Review Report (2015

17	Male, 37	September 14, 2018	Teton Wilderness, Bridger-Teton National Forest, Wyoming	Hunting guide was killed by a female grizzly bear and yearling while retrieving an undisturbed elk carcass with a client; the client was also attacked by the bear and injured.	Wyoming Game and Fish Department (2019)
18	Male, 40	April 15, 2021	Near Baker's Hole campground, Custer Gallatin National Forest, Montana	Victim was hiking to go fishing, take photographs, or both, when a surprise encounter near a moose carcass resulted in an attack by male grizzly bear. Victim was severely injured and called 911; he was found by search and rescue and transported to Idaho Falls hospital, where he died from his injuries 2 days later.	USFWS Board of Review Report (2021)

Sources:

Edgar, B. (undated account; see https://en.wikipedia.org/wiki/List_of_fatal_bear_attacks_in_North_America#1890s)

Schullery, P. 1992. The bears of Yellowstone. High Plains Publishing Company, Inc., Worland, Wyoming.

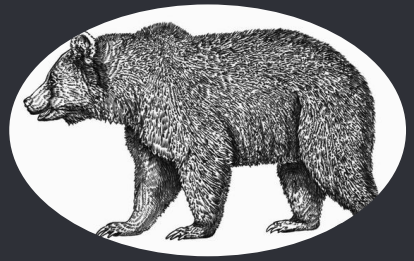
Whittlesey, L.H. 2014. Death in Yellowstone, Accidents and Foolhardiness in the First National Park (second edition). Roberts Rinehart Book, Lanham, Maryland.

U.S. Fish and Wildlife Service Board of Review Reports (2010-2021): https://www.fws.gov/mountain-prairie/es/grizzlyBear.php (under *Yellowstone Ecosystem Archives*).

Wyoming Game and Fish Department. 2019. Investigation report by the Wyoming Game and Fish Department in the death of Mr. Mark Uptain due to a grizzly bear attack on September 14, 2018 in the Bridger-Teton National Forest, Teton County, Wyoming. 34pp.

This information is preliminary and is subject to revision. It is being provided to meet the need for timely best science. The information is provided on the condition that neither the U.S. Geological Survey nor the U.S. Government shall be held liable for any damages resulting from the authorized or unauthorized use of the information.

From: Cooley, Hilary
To: Diamond, David - FS, BOZEMAN, MT
Date: Wednesday, December 8, 2021 10:21:04 AM
Attachments: IGBC Board of Review_12 2021.zip



Board of Review Recommendations Resulting from Human Fatalities

2021 Human Fatalities

- **April 15, 2021, West Yellowstone MT**

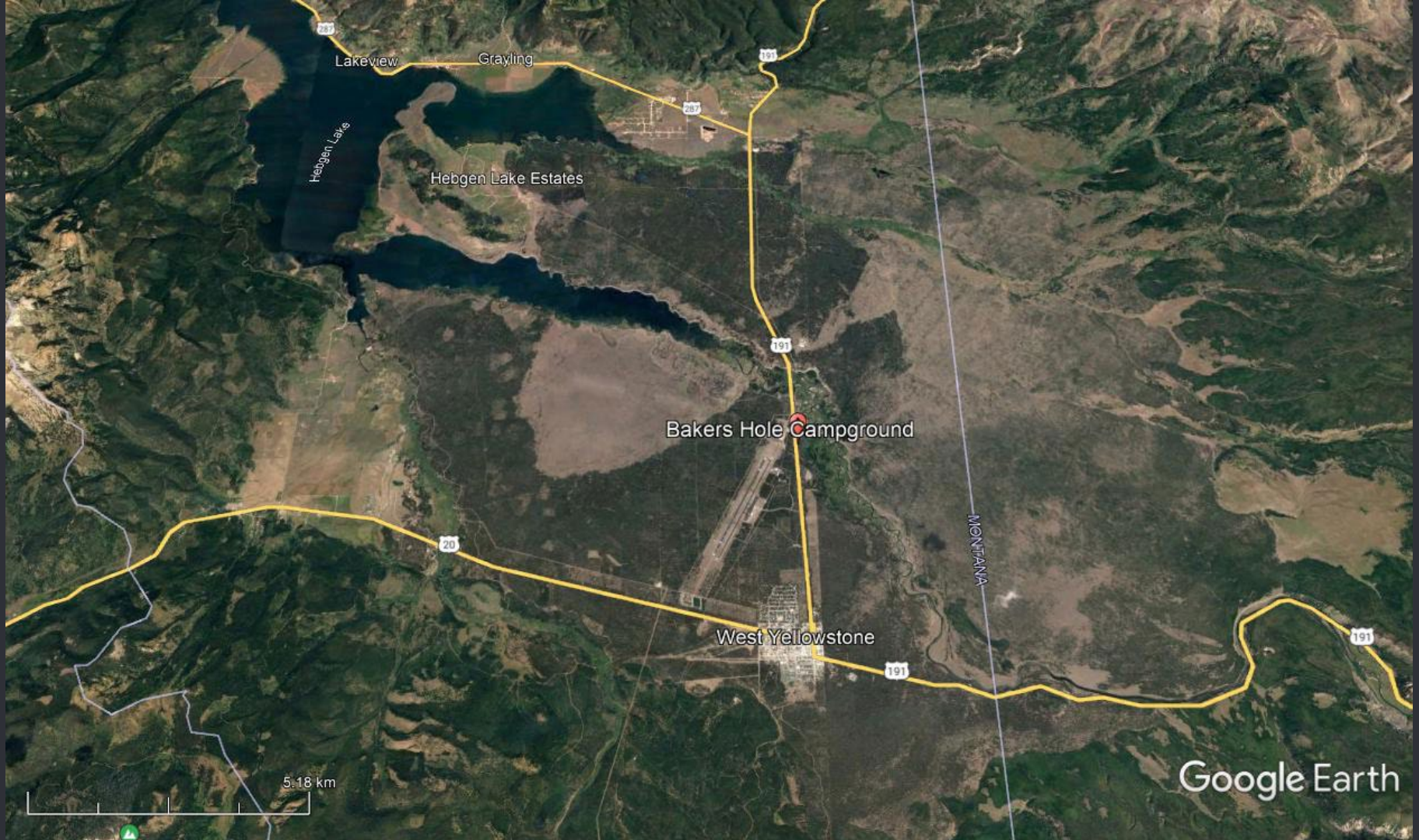
  Carl Mock: West Yellowstone resident; guide for Back Country Adventures

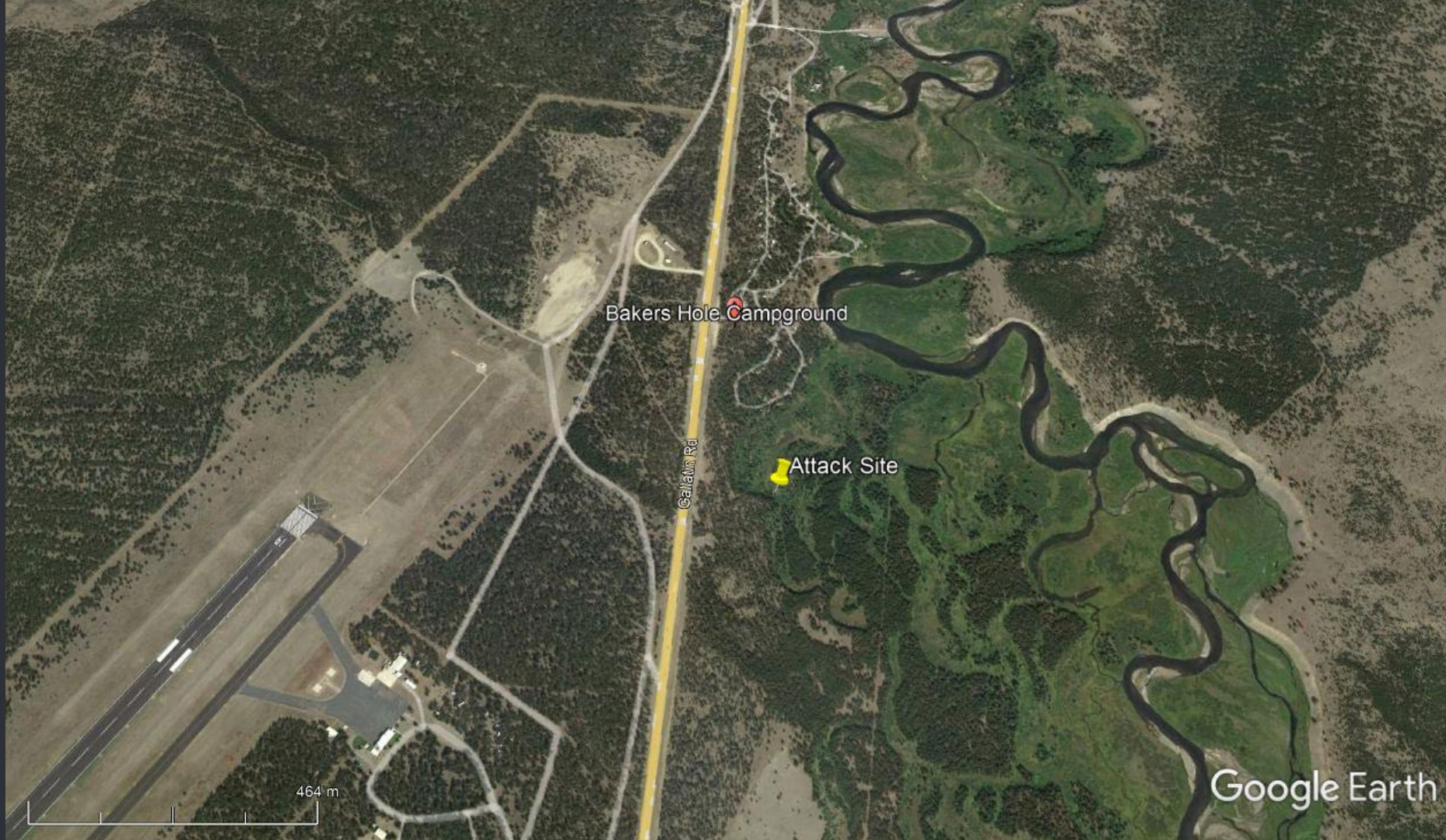
- **July 5, 2021, Ovando MT**

  Leah Davis Lokan: Chico California resident; retired nurse; avid cyclist

Board of Review: Carl Mock, West Yellowstone

- **Interagency Team:** Kevin Frey, Brian Debolt, Kerry Gunther, Mark Haroldson, Jeremy Nicholson, Dan Thompson, Dan Tyers, Hilary Cooley
- **Response & Investigation:** Gallatin County Sherriff's office, West Yellowstone Police Dept, USFS, Gallatin County Search and Rescue, Hebgen Basin Fire, MTFWP
- **Location :** Custer Gallatin NF, near Baker's Hole Campground
- 18th Human Fatality in GYE since 1892.


Lakeview
Grayling
Hebgen Lake
Hebgen Lake Estates
Bakers Hole Campground
West Yellowstone
MONTANA
287
191
20
5.18 km
Google Earth


Bakers Hole Campground
Attack Site
Gallatin Rd
464 m
Google Earth

Summary & Conclusion


191
Campground
Gallatin Rd
bear charged
moose carcass
4-16-21 bear mortality
Investigative team
4-15-21 bear attack
450-500 yards to Madison River
160 yards to US Highway 191
© 2021 Google
Google Earth
163 ft
1985
Imagery Date: 8/15/2015 12 T 492045.18 m E 4949706.45 m N elev 6582 ft eye alt 7347 ft


BEAR
COUNTRY

Recommendations

- Due to an increase in human use, bear population numbers and geographic grizzly bear distribution, more people are encountering grizzly bears. Individuals need to know and follow bear safety recommendations.
- Agencies should continue to provide public information to help reduce dangerous encounters and increase human safety in grizzly bear country.

  - Be constantly alert
  - Hike or hunt with a partner(s)
  - Make noise, if possible, to help avoid surprising a bear
  - Secure food attractants at camps, homes, and work sites
  - Do not run if you encounter a bear
  - Avoid animal carcasses -watch for concentrations of scavengers (i.e. ravens)
  - Carry and know how to use self-defense….bear-spray and or firearms. It is always recommended to carry bear-spray even if individuals carry firearms.

From: Tyers, Daniel - FS
To: Fortin-Noreus, Jennifer K; Cooley, Hilary; Frey, Kevin
Subject: RE: [EXTERNAL] Baker"s Hole BOR
Date: Tuesday, August 10, 2021 9:30:30 AM
Attachments: image001.png
image002.png
image003.png
image004.png

Thanks! I will make sure GYE FS managers know it is available. They have been asking me about it.

Dan Tyers
GYE Grizzly Bear Habitat Coordinator
Forest Service
406-600-8949
daniel.tyers@usda.gov
www.fs.fed.us
Caring for the land and serving people

From: Fortin-Noreus, Jennifer K <jennifer_fortin-noreus@fws.gov>
Sent: Tuesday, August 10, 2021 7:27 AM
To: Tyers, Daniel - FS <daniel.tyers@usda.gov>; Cooley, Hilary <hilary_cooley@fws.gov>; Frey, Kevin <kfrey@mt.gov>
Subject: RE: [EXTERNAL] Baker's Hole BOR

Hi Dan,
It was complete and posted on our webpage at: https://www.fws.gov/mountain-prairie/es/species/mammals/grizzly/Baker's%20Hole%20Fatality%20-%20final.pdf.
Jennifer

From: Tyers, Daniel - FS <daniel.tyers@usda.gov>
Sent: Tuesday, August 10, 2021 7:04 AM
To: Cooley, Hilary <hilary_cooley@fws.gov>; Frey, Kevin <kfrey@mt.gov>; Fortin-Noreus, Jennifer K <jennifer_fortin-noreus@fws.gov>
Subject: [EXTERNAL] Baker's Hole BOR

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Hello! I was wondering about the status of the Baker's Hole BOR-. I saw a news feed that seemed like it had information from that report and FS managers are asking about it. Thanks!

Dan Tyers
GYE Grizzly Bear Habitat Coordinator
Forest Service
406-600-8949
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From: Fortin-Noreus, Jennifer K
To: daniel.tyers@usda.gov; Cooley, Hilary; Frey, Kevin
Subject: RE: [EXTERNAL] Baker"s Hole BOR
Date: Tuesday, August 10, 2021 9:27:01 AM
Attachments: image001.png
image002.png
image003.png
image004.png

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Jennifer

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From: Cooley, Hilary
To: Arnold, Randy
Subject: Re: [EXTERNAL] Bitterroot Ecosystem Subcommittee Meeting
Date: Friday, November 2, 2018 3:58:57 PM
Attachments: image004.png
image001.png
image003.png
image002.png

Great.
Let's check in on carpooling Monday. I may need to help jennifer drop a car off on the way down. should know more Monday.

Hilary Cooley
Grizzly Bear Recovery Program
U.S. Fish & Wildlife Service
406-243-4903

On Fri, Nov 2, 2018 at 1:32 PM, Arnold, Randy <rarnold@mt.gov> wrote:

> Hilary,
>
> I do plan to attend. Jamie might attend as well, but might just call in. Were you interested in seeing if carpooling made sense?
>
> Chuck Mark and I visited this morning so he has an update on the Stevi bear and the growing interest around that topic.
>
> Thanks!
>
> Randy
>
> **From:** Cooley, Hilary <hilary_cooley@fws.gov>
> **Sent:** Friday, November 02, 2018 9:09 AM
> **To:** Arnold, Randy <rarnold@mt.gov>; Rob Chaney <Rob.Chaney@missoulian.com>; Roberts, Lori <LRoberts@mt.gov>; Costello, Cecily <cecostello@mt.gov>
> **Subject:** Fwd: [EXTERNAL] Bitterroot Ecosystem Subcommittee Meeting

Bitterroot agenda...

Hilary Cooley

Grizzly Bear Recovery Program

U.S. Fish & Wildlife Service

406-243-4903

---------- Forwarded message ----------
From: **Mark, Chuck -FS** <cmark@fs.fed.us>
Date: Mon, Oct 22, 2018 at 9:06 PM
Subject: [EXTERNAL] Bitterroot Ecosystem Subcommittee Meeting
To: Be Bear Award <bearinfo@cfwi.org>, "ben_conard@fws.gov" <ben_conard@fws.gov>, "Carbonari, Seth -FS" <scarbonari@fs.fed.us>, "Cathey, Karen" <karen_cathey@fws.gov>, "cmack@nezperce.org" <cmack@nezperce.org>, Colleen Matt <colleenamatt@gmail.com>, "Davis, Ellen -FS" <ellendavis@fs.fed.us>, "DeMaagd, Jim -FS" <jdemaagd@fs.fed.us>, Erin Edge <EEDGE@defenders.org>, "Gale, Debra D -FS" <ddgale@fs.fed.us>, "Higgins, Jeanne M -FS" <jmhiggins@fs.fed.us>, Hilary Cooley <hilary_cooley@fws.gov>, "bryon_holt@fws.gov" <bryon_holt@fws.gov>, Jamie Jonkel <jajonkel@mt.gov>, Jeff Burrows <jburrows@rc.mt.gov>, Jennifer Fortin-Noreus <jennifer.fortin-noreus@mso.umt.edu>, Jerome Hansen <jerome.hansen@idfg.idaho.gov>, "Jodi_Bush@fws.gov" <Jodi_Bush@fws.gov>, Jonathon Proctor <jproctor@defenders.org>, "kereybm@nezperce.org" <kereybm@nezperce.org>, "Krieger, Karryl -FS" <kkrieger@fs.fed.us>, "Lannom, Keith -FS" <klannom@fs.fed.us>, "Allen, Lydia R -FS" <lrallen@fs.fed.us>, "marciec@nezperce.org" <marciec@nezperce.org>, "Mark, Chuck -FS" <cmark@fs.fed.us>, "McKay, Tod G -FS" <tgmckay@fs.fed.us>, "steve.nadeau@idfg.idaho.gov" <steve.nadeau@idfg.idaho.gov>, "Pierson, Kim -FS" <kpierson@fs.fed.us>, "Probert, Cheryl -FS" <cprobert@fs.fed.us>, "Russell, Scott A -FS" <sarussell@fs.fed.us>, "Steele, Kurt -FS" <ksteele@fs.fed.us>, "Swanson,Lucas" <lucas.swanson@idfg.idaho.gov>, "vcrowser@mt.gov" <vcrowser@mt.gov>, "Windsor, Michele A -FS" <micheleawindsor@fs.fed.us>
Cc: "Johnston, Crystal M -FS" <crystalmjohnston@fs.fed.us>

Good evening. Looks like we have our subcommittee meeting rescheduled for Tuesday morning on November 6th at the Bitterroot National Forest Supervisor's Office. Lets plan on starting at 10 AM MST/9 AM PST. A conference call number and VTC connection will follow for folks who cannot attend in person. Attached is a draft agenda that Hillary Cooley and Jennifer Fortin-Noreus so graciously developed details for us. If you have other agenda items, please get them to me and also send your accomplishments for 2018 my way also. Thanks, Chuck.

AGENDA

1. FY 2018 Accomplishments

2. FY 2019 Program of Work

    a. Document presence/absence of grizzly bears in the ecosystem

        i. Discuss SSP proposal

        ii. Opportunistic Monitoring – ID and check tree rubs; need permission/buy-in from USFS; training; volunteers; implement in spring 2019. This was a 2018 planned activity, but did not come together.

    b. Review status of access management including gaps or inconsistencies by 2019

        i. Define/Map BMUs

        ii. Calculate Motorized Access on BMU access to inform Forest Plan revision

        iii. Identify GIS staff to do analysis and maintain database

    b. Promote natural recovery of the population through immigration

        i. Discussion on linkage zones, ongoing and future work

3. Forest Plan Components (not sure if this all fits into one of the above?)

4. BES Charter development, including discussion on membership, chair/co-chair processes, etc. (We are in the process of developing one for YES and could use that as a base to start from).

5. Relisting of Yellowstone Ecosystem Bears and future implications

Charles A. Mark, CF
Forest Supervisor
Forest Service

Salmon-Challis National Forest

p: 208-756-5111
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From: Arnold, Randy
To: Cooley, Hilary
Subject: RE: [EXTERNAL] Bitterroot Ecosystem Subcommittee Meeting
Date: Friday, November 2, 2018 3:33:08 PM
Attachments: image001.png
image002.png
image003.png
image004.png

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Chuck Mark and I visited this morning so he has an update on the Stevi bear and the growing interest around that topic.

Thanks!

Randy

From: Cooley, Hilary <hilary_cooley@fws.gov>
Sent: Friday, November 02, 2018 9:09 AM
To: Arnold, Randy <rarnold@mt.gov>; Rob Chaney <Rob.Chaney@missoulian.com>; Roberts, Lori <LRoberts@mt.gov>; Costello, Cecily <cecostello@mt.gov>
Subject: Fwd: [EXTERNAL] Bitterroot Ecosystem Subcommittee Meeting

Bitterroot agenda...

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Jennifer Fortin-Noreus <jennifer.fortin-noreus@mso.umt.edu>, Jerome Hansen <jerome.hansen@idfg.idaho.gov>, "Jodi_Bush@fws.gov" <Jodi_Bush@fws.gov>, Jonathon Proctor <jproctor@defenders.org>, "kereybm@nezperce.org" <kereybm@nezperce.org>, "Krieger, Karryl -FS" <kkrieger@fs.fed.us>, "Lannom, Keith -FS" <klannom@fs.fed.us>, "Allen, Lydia R -FS" <lrallen@fs.fed.us>, "marciec@nezperce.org" <marciec@nezperce.org>, "Mark, Chuck -FS" <cmark@fs.fed.us>, "McKay, Tod G -FS" <tgmckay@fs.fed.us>, "steve.nadeau@idfg.idaho.gov" <steve.nadeau@idfg.idaho.gov>, "Pierson, Kim -FS" <kpierson@fs.fed.us>, "Probert, Cheryl -FS" <cprobert@fs.fed.us>, "Russell, Scott A -FS" <sarussell@fs.fed.us>, "Steele, Kurt -FS" <ksteele@fs.fed.us>, "Swanson,Lucas" <lucas.swanson@idfg.idaho.gov>, "vcrowser@mt.gov" <vcrowser@mt.gov>, "Windsor, Michele A -FS" <micheleawindsor@fs.fed.us>
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From: Servheen, Chris
To: Cooley, Hilary
Subject: Re: [EXTERNAL] Boards of Review
Date: Tuesday, July 6, 2021 7:40:08 PM

We always selected people based on their knowledge of grizzly attacks on humans and experience with bears and especially past experience with human fatality investigations, not on who they worked for. That's why we had Steve Herrero and Gordon Stenhouse on past BORs. Of course, I was not an agency person when I chaired the Brad Treat BOR. Things have changed I guess...

From: Cooley, Hilary <hilary_cooley@fws.gov>
Sent: Tuesday, July 6, 2021 2:49 PM
To: Servheen, Chris <chris.servheen@mso.umt.edu>
Subject: Re: [EXTERNAL] Boards of Review

Hi Chris,
Thanks for the note. I agree that BORs are important and we plan on doing BORs for both attacks.
The Carl Mock took a while to compile initial investigations but is scheduled for next week.
There is a desire by several to keep the review internal to state and federal agencies and I should have notified you of this earlier. Apologize for my delay in that.
I hope you are doing well,
Hilary

From: Servheen, Chris <chris.servheen@mso.umt.edu>
Sent: Tuesday, July 6, 2021 1:55 PM
To: Cooley, Hilary <hilary_cooley@fws.gov>; Hilary Cooley <hilarycooley@gmail.com>
Subject: [EXTERNAL] Boards of Review

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Hi Hilary,
As you know, I have tried to stay out of your business since you took over. However,

with your forgiveness I would like to make an unsolicited "editorial" to you about something. Since 2016 there have been no Boards of Review established to review bear-caused human fatalities in the lower 48 states. I believe this is a serious problem that will only get worse over time unless this is addressed. I am not sure why there were no BORs for the fatalities of Mark Uptain in 2018 and Cark Mock in April of this year. And now we have another unfortunate case where a person was killed near Ovando early this morning. Perhaps it is state fish and game department pushback? Or territoriality between state and federal agencies?

The reason I believe that a BOR is necessary is to have one source of complete and authoritative information on each fatality that re-creates the incident and details what happened and why. BOR reports provide the authoritative summary of everything we know about each incident in one report, and the development of the BOR report helps us learn from each incident and try to reduce future incidents with the knowledge from each unfortunate fatality. Without a BOR for each fatality, the agencies are abdicating their responsibility to the public to detail and understand why these fatalities happen and if necessary, make recommendations on how to prevent similar incidents in the future. Unless the agencies complete a BOR, there is no source of information and a place to go to understand each fatality. Without a publicly released BOR, the only sources of information on these fatalities are newspaper reports and Wikipedia. These are poor, incomplete, and usually factually incorrect sources of information. The Interagency Grizzly Bear Guidelines require a factual and detailed incident report after each human fatality (p. 59). Since the Guidelines were written, we have expanded the approach for these reports and developed the BOR format. All BORs produced through 2016 are publicly available on the IGBC website and serve as the official interagency source of information on what happened, the agency response, and how to avoid similar fatalities in the future.

I have led the BORs starting with Timothy Hilston's death in 2001 through Brad Treat in 2016. I volunteer to help with future BORs to maintain their continuity and format and because this is a matter of interest for me. As I noted above, I am unsure what the problem is in empaneling BORs for the last two, and now 3 fatalities. If there is state agency resistance to having me involved for some reason, do it anyway without me. In each case through 2016, as Recovery Coordinator I pushed the need for a BOR and asked each agency to appoint 1-2 members. They did not do it without my leading them along as the Recovery Coordinator.

Remember that the BOR is not the members of the WART team because the WART warden-law enforcement team that does the immediate response and is not made up of biologists and those who can/will write a detailed BOR report. As to the timing of the BOR, sometimes it takes several months to get the BOR selected and for them to have their first meeting (which might be by zoom these days). Usually, the BOR waits for all the relevant information like the reports developed by the wardens, the police, and the autopsy report. The BOR can do a site visit, but this does not always happen, and they use photos and descriptions from the first responders instead of a site visit. The report is usually written by the chair who drafts a report and circulates it to all members for review and edits. This review and finalization process

can take a month or more depending on many factors.

In closing, I really believe the agencies are dropping the ball by failing to empanel a BOR for each human fatality. My suggestion is for the recovery office to lead the establishment of a BOR by asking each agency (and the IGBST for the Yellowstone ecosystem) for 1-2 BOR members and appoint a chair to lead the process. If an agency refuses to participate, then complete the BOR without them. A chair is necessary for each BOR to assure that someone is responsible for completing the BOR report in a timely manner.

Please consider the importance of these BORs to grizzly management, agency credibility, public perception, public safety, and the continuity and availability of credible information on how and why humans are killed by grizzly bears. It is obvious now that without FWS leadership in establishing a BOR for each fatality, a BOR will not happen.

I apologize for getting into your business, but I think this is way too important to just let it go.

My best,
Chris

From: Cooley, Hilary
To: Servheen, Chris
Subject: Re: [EXTERNAL] Boards of Review
Date: Tuesday, July 6, 2021 4:49:20 PM

Hi Chris,
Thanks for the note. I agree that BORs are important and we plan on doing BORs for both attacks.
The Carl Mock took a while to compile initial investigations but is scheduled for next week.
There is a desire by several to keep the review internal to state and federal agencies and I should have notified you of this earlier. Apologize for my delay in that.
I hope you are doing well,
Hilary

From: Servheen, Chris <chris.servheen@mso.umt.edu>
Sent: Tuesday, July 6, 2021 1:55 PM
To: Cooley, Hilary <hilary_cooley@fws.gov>; Hilary Cooley <hilarycooley@gmail.com>
Subject: [EXTERNAL] Boards of Review

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Hi Hilary,
As you know, I have tried to stay out of your business since you took over. However, with your forgiveness I would like to make an unsolicited "editorial" to you about something. Since 2016 there have been no Boards of Review established to review bear-caused human fatalities in the lower 48 states. I believe this is a serious problem that will only get worse over time unless this is addressed. I am not sure why there were no BORs for the fatalities of Mark Uptain in 2018 and Cark Mock in April of this year. And now we have another unfortunate case where a person was killed near Ovando early this morning. Perhaps it is state fish and game department pushback? Or territoriality between state and federal agencies?

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I apologize for getting into your business, but I think this is way too important to just

let it go.

My best,
Chris

From: Cooley, Hilary
To: Frey, Kevin
Subject: Re: [EXTERNAL] BOR group
Date: Thursday, June 24, 2021 10:17:20 AM
Attachments: image001.png

Thanks for putting together,
I think Dan Tyers should be on there. Don't know jason, but couldn't hurt to ask.
I'm fine if they both want to be included.

From: Frey, Kevin <KFrey@mt.gov>
Sent: Wednesday, June 23, 2021 4:09 PM
To: Cooley, Hilary <hilary_cooley@fws.gov>
Subject: [EXTERNAL] BOR group

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I was thinking of the following:

Kerry Gunther
Jeremy Nicholson
Brian Debolt and or Dan Thompson
Dan Tyers or Hebgen District Ranger….Jason Brey
Mark Haroldson
Hilary Cooley
Kevin Frey

Give me you thoughts on the and/or for WY and USFS.
I can send out a scout message on availability of folks.
Thanks,

Kevin Frey
Grizzly Bear Specialist
Wildlife Division
Montana Fish, Wildlife & Parks, Region 3

1400 South 19th
Bozeman, MT 59718
Ph: (406) 577 7876
Montana FWP



THE **OUTSIDE** IS IN US ALL.

From: Diamond, David -FS
To: Cooley, Hilary
Subject: Re: [EXTERNAL] Date for BoR report?
Date: Wednesday, December 8, 2021 5:40:14 PM

Thanks!
d.

David Diamond
Executive Coordinator
Interagency Grizzly Bear Committee
10 E Babcock St, Room 234, Bozeman, MT 59771
406-438-1283 (cell)
david.diamond@usda.gov
http://igbconline.org

From: Cooley, Hilary <hilary_cooley@fws.gov>
Sent: Wednesday, December 8, 2021 3:38 PM
To: Diamond, David -FS <David.Diamond@usda.gov>
Subject: Re: [EXTERNAL] Date for BoR report?

Just realized there is no date on the doc. You can use August 4, 2021 as publish date.

From: Diamond, David -FS <David.Diamond@usda.gov>
Sent: Wednesday, December 8, 2021 2:27 PM
To: Cooley, Hilary <hilary_cooley@fws.gov>
Subject: [EXTERNAL] Date for BoR report?

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I'm going to upload this to the collection on the IGBC site, but I need a date for the report itself. When was it published?
Baker's Hole Fatality - final.pdf (fws.gov)
d.

David Diamond
Executive Coordinator
Interagency Grizzly Bear Committee
10 E Babcock St, Room 234, Bozeman, MT 59771
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From: Cooley, Hilary
To: Diamond, David - FS, BOZEMAN, MT
Subject: Re: [EXTERNAL] Date for BoR report?
Date: Wednesday, December 8, 2021 5:38:13 PM

Just realized there is no date on the doc. You can use August 4, 2021 as publish date.

From: Diamond, David -FS <David.Diamond@usda.gov>
Sent: Wednesday, December 8, 2021 2:27 PM
To: Cooley, Hilary <hilary_cooley@fws.gov>
Subject: [EXTERNAL] Date for BoR report?

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I'm going to upload this to the collection on the IGBC site, but I need a date for the report itself. When was it published?
Baker's Hole Fatality - final.pdf (fws.gov)
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David Diamond
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From:	Costello, Cecily
To:	Cooley, Hilary
Subject:	RE: [EXTERNAL] draft Stevi grizzly bear news release
Date:	Wednesday, October 31, 2018 1:30:06 PM
Attachments:	image001.png image002.png image003.png image004.png image005.png image006.png

---

Thanks!

From: Cooley, Hilary [mailto:hilary_cooley@fws.gov]
Sent: Wednesday, October 31, 2018 10:49 AM
To: Costello, Cecily <cecostello@mt.gov>
Subject: Fwd: [EXTERNAL] draft Stevi grizzly bear news release

FYI

Hilary Cooley
Grizzly Bear Recovery Program
U.S. Fish & Wildlife Service
406-243-4903

---------- Forwarded message ----------
From: **Thompson, Michael** <mthompson@mt.gov>
Date: Mon, Oct 29, 2018 at 12:42 PM
Subject: RE: [EXTERNAL] draft Stevi grizzly bear news release
To: "Crowser, Vivaca" <Vcrowser@mt.gov>, Hilary Cooley <hilary_cooley@fws.gov>
Cc: "Jonkel, James" <JaJonkel@mt.gov>, "Arnold, Randy" <rarnold@mt.gov>, "Lemon, Greg" <GLemon@mt.gov>, "McDonald, Ken" <kmcdonald@mt.gov>

Vivaca, I advocate that the issue of alternatives for placing the bear takes us into a level of detail that we're not going to resolve in a brief news release. And we don't want to plant any seeds in people's minds and in the minds of Ravalli County Commissioners that would lead them to think that we might drop a bear somewhere unexpected (to them) without first having more directed dialogue. So, I ask, not now. That topic can come up in response to questions —and there are many to be asked—but I would not opt to prompt that discussion with this concise news that a bear was captured.

Mike Thompson
Region 2 Wildlife Program Manager
Montana Fish, Wildlife & Parks, Region 2

3201 Spurgin Rd
Missoula, MT 59804
O: (406) 542-5516
Montana FWP | Montana Outdoors Magazine



THE **OUTSIDE** IS IN US ALL.



From: Crowser, Vivaca
Sent: Monday, October 29, 2018 11:50 AM
To: Hilary Cooley <hilary_cooley@fws.gov>
Cc: Jonkel, James <JaJonkel@mt.gov>; Arnold, Randy <rarnold@mt.gov>; Lemon, Greg <GLemon@mt.gov>; McDonald, Ken <kmcdonald@mt.gov>; Thompson, Michael <mthompson@mt.gov>
Subject: RE: [EXTERNAL] draft Stevi grizzly bear news release

Thanks, Hilary. Good point. I spent quite a bit of time talking through your below point with folks this morning, getting ready for the follow-up questions that will likely come on that front. I ended up leaving it out of the release to keep it more to the point, but I don't feel strongly—I can certainly add something similar to the below if others would like.

Thanks,
Vivaca

From: Hilary Cooley <hilary_cooley@fws.gov>
Sent: Monday, October 29, 2018 11:48 AM
To: Crowser, Vivaca <Vcrowser@mt.gov>
Cc: Jonkel, James <JaJonkel@mt.gov>; Arnold, Randy <rarnold@mt.gov>; Lemon, Greg <GLemon@mt.gov>; McDonald, Ken <kmcdonald@mt.gov>; Thompson, Michael <mthompson@mt.gov>
Subject: Re: [EXTERNAL] draft Stevi grizzly bear news release

Thanks vivica. Seems like we're avoiding the obvious question of why bring the bear back to the ncde when we have a recovery zone right there? It would be good to acknowledge that the bitterroot is a recovery zone and that we want recovery there. It's just at this moment we don't have relocation sites identified and approved. But we will be working on for the future - particularly as gbear distribution in GYE and ncde is expanding.

Sent from my iPhone

On Oct 29, 2018, at 11:19 AM, Crowser, Vivaca <Vcrowser@mt.gov> wrote:

> Hi, all-
> I've attached a draft release for your review and input. As soon as I hear from you, I'll make any edits needed and then get this out the door and start returning phone calls, social media and email inquiries.

Thanks,
Vivaca

From: Jonkel, James
Sent: Sunday, October 28, 2018 1:52 PM
To: Arnold, Randy <rarnold@mt.gov>; Crowser, Vivaca <Vcrowser@mt.gov>
Cc: Hilary Cooley <hilary_cooley@fws.gov>
Subject: RE: G. Bear news release

Sub adult male. He weighed 249 pounds. Yellow ear tag number 2 green lip tattoo number 2 and iridium collar 164.460

Sent from my Verizon Wireless 4G LTE smartphone

-------- Original message --------
From: "Arnold, Randy" <rarnold@mt.gov>
Date: 10/28/2018 11:42 AM (GMT-07:00)
To: "Crowser, Vivaca" <Vcrowser@mt.gov>
Cc: "Jonkel, James" <JaJonkel@mt.gov>, Hilary Cooley <hilary_cooley@fws.gov>
Subject: G. Bear news release

Vivaca,

While visiting with Hilary Cooley today we were discussing news release. I advised you would be working with Jamie to get something out tomorrow. Hilary would like to have a chance to review the draft before we send it out.

Thanks!

Randy

Sent from my Verizon, Samsung Galaxy smartphone

<Grizzly Bear Captured Near Stevensville.doc>

From: Cooley, Hilary
To: Fortin-Noreus, Jennifer K
Subject: Re: [EXTERNAL] Final BOR 4-15-21
Date: Wednesday, August 4, 2021 6:24:10 PM
Attachments: Baker"s Hole Fatality_BOR_April 15 2021.pdf

From: Cooley, Hilary <hilary_cooley@fws.gov>
Sent: Wednesday, August 4, 2021 4:22 PM
To: Fortin-Noreus, Jennifer K <jennifer_fortin-noreus@fws.gov>
Subject: Re: [EXTERNAL] Final BOR 4-15-21

Acutally - let me rename...

From: Fortin-Noreus, Jennifer K <jennifer_fortin-noreus@fws.gov>
Sent: Wednesday, August 4, 2021 4:21 PM
To: Cooley, Hilary <hilary_cooley@fws.gov>
Cc: Kasworm, Wayne <wayne_kasworm@fws.gov>; Radandt, Thomas <thomas_radandt@fws.gov>; Teisberg, Justin E <justin_teisberg@fws.gov>
Subject: RE: [EXTERNAL] Final BOR 4-15-21

Hilary – I'll send the request now. Jennifer

From: Cooley, Hilary <hilary_cooley@fws.gov>
Sent: Wednesday, August 4, 2021 4:21 PM
To: Fortin-Noreus, Jennifer K <jennifer_fortin-noreus@fws.gov>
Cc: Kasworm, Wayne <wayne_kasworm@fws.gov>; Radandt, Thomas <thomas_radandt@fws.gov>; Teisberg, Justin E <justin_teisberg@fws.gov>
Subject: Fw: [EXTERNAL] Final BOR 4-15-21

Jennifer -
WOuld you please post the West Yellowstone BOR on our website?

Thanks

From: Frey, Kevin <KFrey@mt.gov>
Sent: Wednesday, August 4, 2021 3:00 PM
To: Cooley, Hilary <hilary_cooley@fws.gov>
Subject: [EXTERNAL] Final BOR 4-15-21

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Yee-haw…..we are done other than you/Jen posting it.
Thanks HC!

Let me know if this does not come thru clear enough or diff to post…..I had to save as a pdf…….word doc got too big….14.4MB and system will not send it today.

From: Cooley, Hilary <hilary_cooley@fws.gov>
Sent: Wednesday, August 4, 2021 2:50 PM
To: Frey, Kevin <KFrey@mt.gov>
Subject: Re: [EXTERNAL] BOR recommendations……

INVESTIGATION REPORT

The subsequent fatality of Mr. Charles (Carl) Wesley Mock from a grizzly bear attack on 15 April 2021 near Baker's Hole Campground on the Custer Gallatin National Forest

Hilary Cooley – *Grizzly Bear Recovery Coordinator, United States Fish Wildlife Service, Missoula. Montana*
Brian Debolt - *Large Carnivore Section Conflict Coordinator, Wyoming Game & Fish, Lander, Wyoming*
Kevin Frey – *Grizzly Bear Management Specialist, Montana Fish Wildlife & Parks, Bozeman, Montana*
Kerry Gunther - *Bear Management Biologist, Yellowstone National Park, Mammoth, Wyoming*
Mark Haroldson - *Supervisory Wildlife Biologist, U.S. Geological Survey, Interagency Grizzly Bear Study Team, Bozeman, Montana*
Jeremy Nicholson - *Wildlife Biologist, Idaho Fish and Game, Island Park, Idaho*
Dan Thompson - *Large Carnivore Section Supervisor, Wyoming Game & Fish, Lander, Wyoming*
Dan Tyers - *GYE Grizzly Bear Habitat Coordinator, United States Forest Service, Bozeman, Montana*

SUMMARY:

On the afternoon of 15 April 2021, a lone 40-year-old male resident of West Yellowstone, Montana had gone hiking at nearby Baker's Hole Campground on the Custer Gallatin National Forest (CGNF) to either fish, take photographs or both. At approximately 3:45 pm, the man called 911, connecting to the West Yellowstone Police Department Dispatch reporting he had been mauled by a grizzly bear. Search and rescue were immediately implemented. The victim, Mr. Charles (Carl) Wesley Mock was found severely injured by search and rescue personnel. Mr. Mock was given medical attention in the field, taken to an ambulance, and transported to Idaho Falls, Idaho Regional Medical Center. The following day, 16 April investigation team members were charged by a bear near the site where Mr. Mock had been mauled. Investigators killed the bear during the encounter. Unfortunately on Saturday, 17 April 2021, Mr. Mock died from complications from the severe wounds to his head and neck caused by a grizzly bear attack. Mr. Mock was a West Yellowstone resident and guide for Back Country Adventures.

Format of report:

A board of review (BOR) is required after any human fatality caused by a grizzly bear as per the Interagency Grizzly Bear Guidelines (p 59). This report is based on the investigations, personal statements, and documentations of personnel with the Gallatin County Sheriff's Office, West Yellowstone Police

Department, United States Forest Service, Gallatin County Search and Rescue, Hebgen Basin Fire and Montana Fish Wildlife & Parks. Gallatin County Sheriff's Office (Deputy Mike Gavagan) report of Mr. Mock's rescue and Montana Fish Wildlife & Parks enforcement division (Warden Robert Pohle) overall reports are attached in Appendix A. This report is written in sections of occurrence and with an investigative conclusion at the end of the report. To avoid

unwarranted speculation as to how this attack and resulting fatality occurred, only information gathered and documented during the investigations is contained in this report.

Note: There are several minor discrepancies between this investigation report and officers Gavagan's and Pohle's reports. Those minor discrepancies are footnoted below their reports. The information in this investigation report is correct.

Baker's Hole Campground:

Baker's Hole Campground is located on the Hebgen Ranger District, Custer Gallatin National Forest. The campground is located within a lodgepole pine (LPP) forest with willows along the southeast side. The campground is east of U.S. highway 191, west of the Madison River, approximately 2.5 miles north of West Yellowstone, Montana and approximately 200 yards west of the Yellowstone National Park boundary.
The campground has 73 campsites within the 3 campsite loops. The campground is annually closed to camping from October 1 to May 1 but the area is open to recreationists year-round. People also use the campground to access the Madison River for fishing and wildlife viewing as the area is known for its use by bears, moose, elk, ospreys, eagles, waterfowl, and bison. Baker's Hole Campground is very well posted with permanent wooden or metal signs at the entrance and on kiosks among the campsite loops informing the public of grizzly bear presence in the area and of food storage order requirements (Photos 1 & 2). An image of the attack site in relation to Baker's Hole Campground, West Yellowstone and Yellowstone National Park is shown in Figure 1.



Photo 1. Grizzly Bear awareness signs at Baker's Hole Campground



Photo 2. Grizzly Bear awareness and food storage sign at Baker's Hole Campground



Figure 1. Baker's Hole Campground in relation to West Yellowstone and Yellowstone National Park

04-15-2021

SEARCH and RESCUE:

15:42 hours - West Yellowstone Police Department (WYPD) Dispatch received a call from a 40-year-old male reporting he has been mauled by a grizzly bear approximately 200 yards from CGNF Baker's Hole Campground.
West Yellowstone PD, Gallatin County Sheriff's Deputy (GCSO), US Forest Service law enforcement (USFS LEO), Gallatin County SAR (GC SAR) and Hebgen Basin Fire are immediately dispatched to respond. Hebgen Basin EMS was then dispatched to Baker's Hole Campground to wait for rescue of the victim.
Secondary information from WYPD Dispatch was issued to Search and Rescue (SAR) that the victim reported he had facial injuries, was laying on the ground, there was one bear and to go to the closed campground main entrance.

15:52 hours -approximately
*GCSO, USFS LEO, WYPD, Hebgen Basin Fire and GC SAR arrive at Baker's Hole Campground to begin the search. Initially human footprints were searched for in the snow near hiking trails towards the Madison River.

*Hebgen Basin Fire was instructed by GCSO to assume incident command.

*Dispatch was unable to triangulate or ping a location of the victim's cell phone. His phone was not active, 911emergency call capacity only. Though found by SAR relatively quickly the phone's status had delayed SAR from finding the victim sooner.

*Although seriously injured, the victim was able to communicate with WYPD dispatch before he was found by SAR.

*Hebgen Basin Fire activated sirens, which victim told dispatch he could hear the sirens. He then told dispatch he was about ¼ mile from campers (camp host) in campground, towards town (south of main entrance).

*The victim then relayed he was off the blue diamond ski trail.

*With this information SAR was then able to focus on an area.

*Incident command requested West Yellowstone based Air Idaho (helicopter) to aid in support and search. Also a SAR page was sent out for a backcountry rescue.

*GC SAR and USFS LEO proceeded on the ski trail out of campground, followed within minutes by 2 officers with GCSO and WYPD.

*These 2 officers were joined by another WYPD officer after they stopped hiking due to sighting a grizzly bear approximately 80 yards east of the ski trail. The bear was standing on hind legs and making huffing sounds. The bear dropped to all 4 feet and charged towards the officers, breaking of the charge after 30 yards.
Dispatch relayed that the victim could hear the officers yelling and that the bear was very close to him.

*The search party then turned east off the ski trail, down an old logging spur in the direction of the bear.

*Approximately 70 yards down the old logging spur the victim was found lying on the ground.

*The bear continued to aggressively move around the rescue party in a half circle, at a distance varying 20 to 70 yards.

*The bear continued to stalk the rescuers and victim, making another bluff charge while initial medical attention was being given to the victim.

*Emergency medical (EMS) and Air Idaho personnel hiked into the site of the injured man.

*Two GC SAR members arrived with snowmobiles and a rescue toboggan.

*EMS was able to bandage the victim and carry him up to the ski trail to the SAR rescue toboggan. The victim was transported to the EMS ambulance in the campground and was then transported to the Regional Medical Center in Idaho Falls, Idaho. *Poor weather conditions prohibited victim transport via helicopter.*

16:54 hours – Montana Fish Wildlife & Parks (MTFWP) Warden arrived at campground.
*Two WYPD officers, 1 GCSO deputy, 1 USFS LEO and the MTFWP warden went back to the site to get coordinates and take initial pictures of the incident scene. The victim's personal items including an empty can of bear spray were noted and photographed. The initial investigation group then left the scene. The bear was not encountered during this brief investigation.

**A digital camera with a telephoto lens was found within 4 feet of where the victim had been laying when found by rescuers. The camera was secured in the victim's vehicle at the entrance gate to the Baker's Hole Campground when the victim was transferred to the ambulance. A friend of the victim took possession of the vehicle and investigators did not have opportunity to examine the camera.*

The moose carcass **was not noticed by SAR or by the helicopter during the rescue recovery of the victim.*

1830 hours – USFS HEBGEN RANGER DISTRICT posts closure signs of area.

04-16-2021

1000 hours - Official order from the Custer Gallatin Forest Supervisor was signed and posted.

SITE INVESTIGATION and BEAR MORTALITY:

1400 hours –

***** An investigation team consisting of two USFS LEOs, three MTFWP Wardens and two MTFWP Bear Specialists with one dog meet at USFS/MTFWP residential site north of Baker's Hole. It was required and imperative to investigate the attack site due to its proximity to a public campground, cabin area and well used hiking trails.

The overall investigation, methodology of approach/hike, individual duties at the site and considering the bear's aggressive behavior during the victim's rescue, the bear may still be present and potentially charge were all discussed. Additionally, if the bear was present and would not "bump off" and did charge, it would have to be killed.

The investigation party then drove to Baker's Hole Campground proceeding to the south end of the south campground loop and ski trail.

*The investigation team began hiking south along the ski trail towards the mauling site. After approximately 45 yards of hiking, the team stopped, firing 2 cracker rounds and hollered. The dog began barking and alerted that it could smell a bear. One of the team members said he had seen something moving approximately 50 yards away in the trees east of the team and ski trail and stated it could be a bear. The dog was now growling and barking indicating a bear was close. The bear was travelling in a parallel direction to the team as they hiked south.

*The team waited a few minutes, then a proceeded another 80 yards, stopping to fire 3 additional cracker rounds. Members of the team alternated yelling during the entire hike to the site. The team again waited a few minutes and there were no other sightings or indications the bear was near or approaching. Though the dog was barking, the investigation team did not know if the bear had possibly moved out of the area or if it was still nearby.

*The team then hiked to where the old spur logging trail forked off the ski trail, downhill in a southeasterly direction. This junction is approximately 200 yards along the ski trail south of the campground loop. Upon stopping, 2 more cracker rounds were fired. Again, there was no indication the bear was nearby. Team members yelled as the dog continued to bark while they slowly walked down the spur trail towards the attack site. The trail had intermittent deadfall trees across it.

*Approximately 50 yards down the spur trail, several team members said they could see some brush and a small conifer move, indicating towards the northeast across an open boggy wet area.
All members stopped and readied in case it was the bear and it charged. Within seconds the bear silently charged out of the brush, head down, ears back and running full out. The bear crossed the open wet area and continued charging towards the team members, running into a patch of deep rotten snow in the willows. The bear floundered in the deep snow, dug its way clear and begin to charge again. At this point the decision was made to shoot the bear.

1435 hours - Multiple members shot at once killing the bear instantly.

*The bear was checked to confirm it was dead and to see if it had been previously captured or marked.

*A submerged, cached/buried moose carcass was found nearby.

*All scenes associated with the incidences were photographed.
*Distances between key locations were measured.
*Mr. Mock's personal items were collected as were items left by first responder medical staff.
*GC SAR was contacted, bringing a tracked ATV to move the bear carcass to vehicles in the campground.

1630 hours - All personnel and the bear carcass at vehicles in the campground.

INVESTIGATION FINDINGS:

The site of where the grizzly bear attacked Mr. Mock was investigated 3 times, on 15 April during an initial investigative overview after Mr. Mock had been recovered by SAR, on 16 April during the actual site investigation and on 21 April during the removal of the moose carcass.

Following the ski trail from the south end loop of Baker's Hole Campground and then the old logging spur trail, it is approximately 270 yards to the attack site.

The attack site was approximately 70 yards down an old logging spur trail running southeasterly from the ski trail. The site is at the end of the old logging spur located in mature LPP timber and at the edge of a boggy wet area.

Personal items found at the attack site area belonging to Mr. Mock included one muck-type boot, sunglasses, small plastic fishing tackle box, a winter cap, an empty can of bear spray* & holster, safety lock from bear-spray cannister, fishing pole and a half-empty juice container.
*The can of bear spray was the UDAP brand, 7.9ounce, Expiration 12/2023 S/N P1711-071135).

It was later discovered that a digital camera was found near Mr. Mock during the rescue but the camera was taken into the possession of Mr. Mock's friends. On 17 April, a MTFWP warden was able to view the memory card from the camera and did not find any pictures from the Baker's Hole area or from the day of the attack.

After the investigation team had to kill the bear on 16 April, a moose carcass was discovered cached in the water (Photo 3) near the site where Mr. Mock had been attacked. It was 47 yards from the cached moose carcass to the attack site. Searching the area around the moose carcass it was evident that a bear had been feeding on the moose for numerous days due to multiple and drying bear scats. It could not be determined what caused the death of the moose. Common causes of moose deaths are predation, ticks, winterkill (poor nutrition), meningeal artery worms and vehicle strikes. There were no broken long bones observed on the moose that are normally associated with a vehicle strike from nearby US Highway 191.



Photo 3. Moose carcass cached in water near the attack site.

The bear-spray safety lock, fishing pole and a half empty juice contains were discovered where it was determined Mr. Mock had been and first reacted defensively due to the bear. The bear-spray safety lock and juice container were 1 to 2 feet E x NE of the fishing pole. The fishing pole was approximately 6 feet away (NE) from where Mr. Mock had obviously been mauled. At the mauling site Mr. Mock's boot, tackle box, sunglasses, knit cap and empty bear-spay were found scattered in the snow. A diagram of Mr. Mock's personal items at the attack site can be viewed in Figure 2. The bear-spray can was empty and investigators assumed Mr. Mock had likely sprayed the entire can of bear-spray.

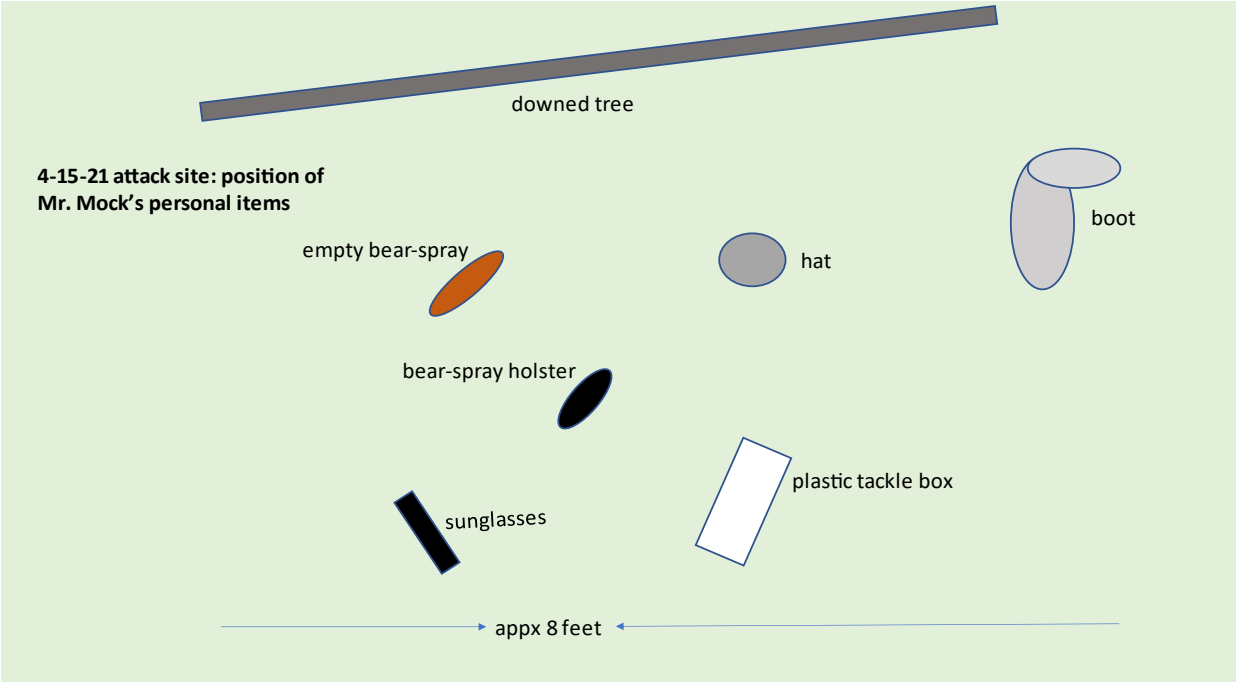


Figure 2. Position of personal items belonging to Mr. Mock found at the attack site.

Search and Rescue had found Mr. Mock 12 feet up the logging spur trail from where he had been attacked.

A diagram of the distances and location of moose carcass, attack site, bear and investigative team are shown in Figure 3. A satellite image of the locations and relationship of attack site to campground (south loop visible in upper left) and US Highway 191 are shown in Figure 4 and a closer view of the attack area is shown in Figure 5.

Anecdotal information from a friend in West Yellowstone of Mr. Mock's stated that he had talked with Carl Mock in the early afternoon (1342 hours) of 15 April. Mr. Mock said he was going home to get lunch and go back out that afternoon. This information indicates Mr. Mock had only been in the Baker's Hole area for a relatively short time before the bear attack occurred.

Mr. Mock's 911 call to WYPD was recorded. The 911 call lasted for 49 minutes and 47 seconds, 27 minutes into the call at 1609 hours, the dispatcher asked him (Mr. Mock) if he was out fishing. He responded "No, I was taking pictures (with moaning in that statement)" She asked him, "You were out taking pictures?" He then moans with an unintelligible response.

BEAR FINDINGS:

The bear was 20 yards northeast of the unknown moose carcass when it charged the investigation team, who were 57 yards from the bear across the boggy wet area.

The bear was killed 24 yards from the investigative team who were approximately 37 yards from the unknown cached moose carcass.

FIELD:
Examination of the bear revealed tattoos were visible in both upper inside lips.
No ear tags were present.
Overall body condition was a 4 on a scale of 1 to 5.
No visible recent wounds or injuries.
Teeth were worn with lower canine teeth broken and worn. Incisor teeth were worn smooth with some missing as is normal with aged bears. Field estimate of age was around 20 years old.
Tattoos were noted in both inside upper lips.
When the bear was loaded into a vehicle at the campground, it was evident the bear had been bear-sprayed by Mr. Mock during the attack as personnel began coughing from the bear-spray residue becoming airborne from handling the bear.

LABORATORY:
During the examination of the bear at MTFWP Region 3 Headquarters in Bozeman the bear-spray residue again physically affected investigators.

The bear weighed 411 pounds.

The tattoo was read as 504 in both upper inside lips. Tattoo 504 identified the bear as bear number 449 in the Inter-agency Grizzly Bear Study Team (IGBST) database for the Yellowstone Ecosystem.
Bear 449 was 6 years old when captured on 9/21/2003 at Cascade Creek, YNP by the IGBST during research capture efforts. Bear 449 had been lip tattooed in both upper lips with green ink, number 504 inside both upper lips (Photo 4.), ear tagged, fitted with a GPS/VHF radio-collared and implanted with a micro-chip at that time. Last known location of bear 449 was on 2/22/2004 at his den site near Nymph Lake, YNP. It was deemed a collar failure as the signal had been intermittent since the bear had been captured, collared, and released on site.



Photo 4. Tattoo number 504 in upper lip of bear 449.

Overtime, male bears are prone to losing ear tags and radio-collars when fighting with other male bears, plus radio-collars are designed to drop off bears.
No functioning micro-chip could be located on bear 449 during laboratory examination, which was not surprising after nearly 18 years since the chip was implanted.

Bear 449 had no previous conflict management captures or history.

A gastro-intestinal examination of bear 449 was conducted revealing moose hair, trachea cartilage, and muscle tissue along with grass/dirt debris. A piece of tissue that was suspected as skin and cartilage that was not identifiable or consistent with other tissues in the stomach was collected and submitted to the Wyoming Game and Fish Forensics Laboratory in Laramie, Wyoming for identification as to origin of tissue. Results were received 14 June 2021. The tissue was identified as originating from a grizzly bear (Ursus arctos). See Appendix B.

*The unknown grizzly bear tissue and its location in the lower stomach portion of bear 449 indicates 449 had possibly been in a very recent fight with another grizzly bear defending the moose carcass or fought taking the moose carcass from another grizzly bear. If this were the case, those interactions could have contributed to bear 449's overall aggressive defense of the moose carcass towards Mr. Mock, initial SAR and the Investigation Team.

Muscle (meat) tissue can persist for 14+ hours in the digestive tract of fully active and feeding brown (Ursus arctos) bears (Elfstro"m et al. 2013). Skin and cartilage tissue can persist longer due to slower gastro-intestinal digestion of the tissue and tissues could also persist longer if a bear was not actively consuming amounts of foods to move previously ingested food through the digestive tract. Skin and cartilage could persist in the digestive tract at an outside time of 2 to 3 days (pers. comm. Charlie Robbins Ph.D. -Washington State University, Pullman, WA.)

The skull/brain of bear 449 was submitted for rabies testing to the Montana Department of Livestock, Montana Veterinary Diagnostic Laboratory in Bozeman, Montana. The results were negative for rabies. See Appendix C.

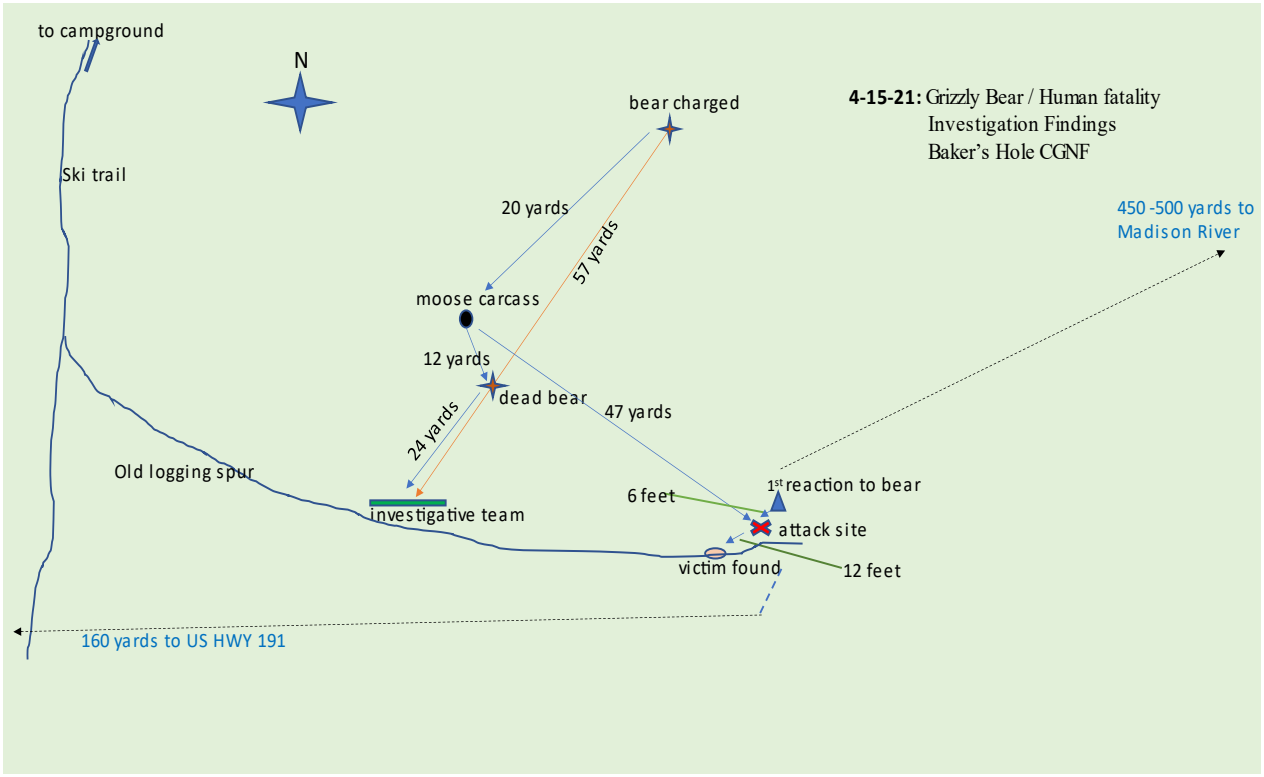


Figure 3. Distances and location of moose carcass, attack site, bear and investigative team near Baker's Hole Campground.



Figure 4. View of the relationship between the attack area, south end loop of Baker's Hole Campground and US Highway 191.

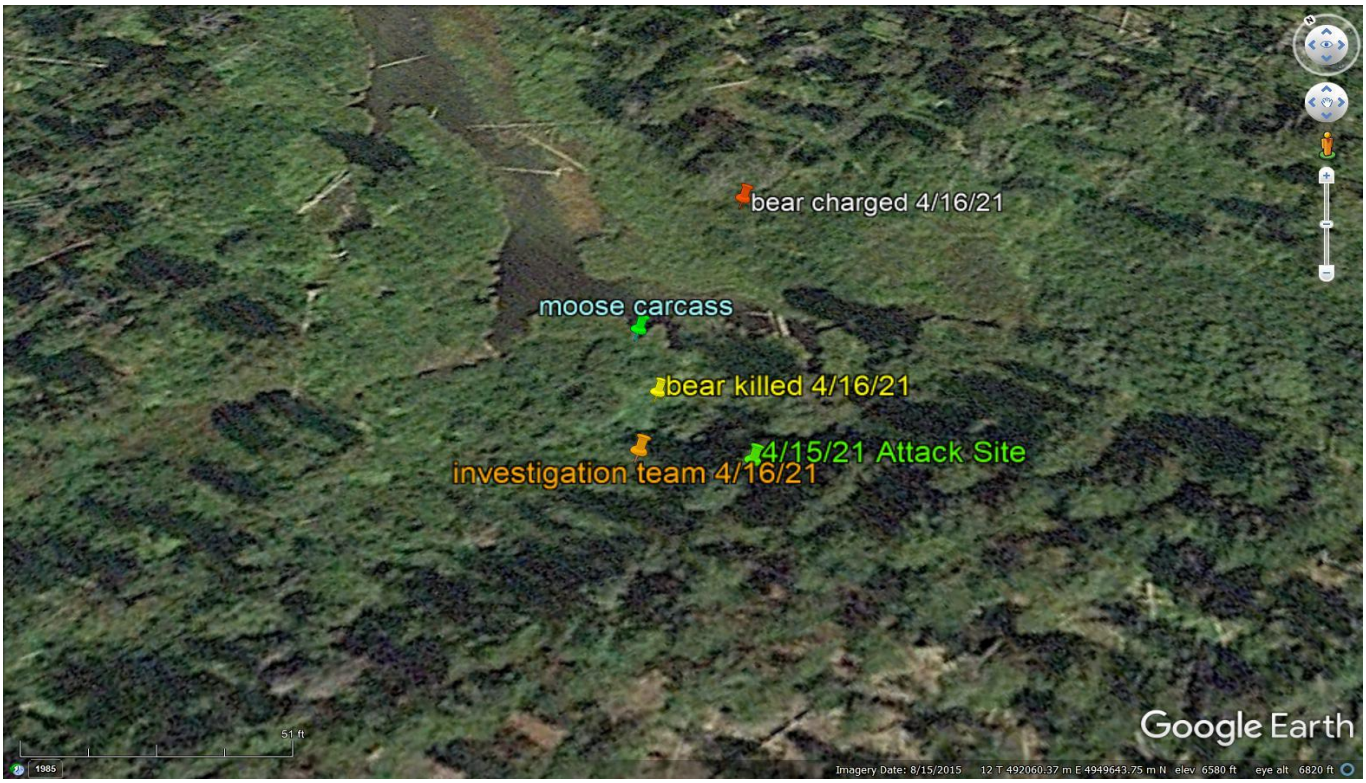


Figure 5. Closer view of the attack area and locations of significant points.

04-19-2021

CGNF Hebgen Basin District and MTFWP Bear Management discuss the known moose carcass, its potential to attract other bears, proximity to campground, hiking trails and the options for its removal. Dragging the moose carcass out of area would create a scent trail for other bears to follow to the campground and feasibility of doing so did not exist due to boggy wet area. Hebgen Basin District decided to use explosives for removal and would handle all logistics in the removal of the moose carcass.

04-21-21

REMOVAL (explosives) OF MOOSE CARCASS:

Personnel from the Hebgen Basin District CGNF, Bozeman District CGNF, Cody, Wyoming Bureau Land Management (BLM), MTFWP, GCSO and WYPD were all involved in the removal of the carcass.
The BLM flew a drone over the area for possible detection of another bear on or near the moose carcass. No bears were observed and the carcass did not appear to have been recently fed on. A USFS LEO and two MTFWP personnel provided security. CGNF field staff and certified explosive blasters were responsible for actual moose carcass positioning and blasting.

The moose carcass was successfully exploded into obscurity. The area remained closed to the public to allow for scavengers to utilize any small pieces of the moose and for the scent to dissipate.

04-30-2021 Custer Gallatin National Forest lifts closure and re-opens the area to public use.

CONCLUSION:

On 15 April 2021 prior to 1542 hours Mr. Charles (Carl) Wesley Mock was attacked by a grizzly bear near Baker's Hole Campground on the CGNF. When rescued Mr. Mock was found severely injured 12 feet west of the mauling site. Mr. Mock did not give statements or communicate with SAR as to the grizzly bear attack. Once in medical care Mr. Mock did not speak or was in condition to talk about the attack. Unfortunately, Mr. Mock died from the complications of his sustained severe head and neck injuries on 17 April 2021.

Alone, Mr. Mock had parked his vehicle at the entrance of CGNF Baker's Hole Campground to begin his hike and activities. The campground and entry are well posted with grizzly bear information.

It cannot be determined if Mr. Mock purposely or randomly went to the site of the attack. Mr. Mock was in possession of fishing gear and a telephoto lens camera. The closest point to the Madison River is approximately 400 yards northeast of the attack site.
From information provided by Mr. Mock's friend it is estimated Mr. Mock was in the Baker's Hole area for less than 1.5 hours. However, it cannot be determined exactly how much time Mr. Mock had been at the site area prior to being attacked.

Considering field investigation findings of the locations of the attack site, the cached moose carcass and the old logging spur trail, it seems apparent that Mr. Mock had walked along the ice packed ski trail and then down the logging spur trail, passing within 37 yards of the moose carcass to the location of the bear attack site. Either he had done so without being noticed by the bear or the bear came to the moose carcass after Mr. Mock had reached the area of the attack site, which was 47 yards from the moose carcass. The old logging spur/trail basically ends at the attack site.

Though Mr. Mock had told 911 dispatch that he was taking pictures, it cannot be confirmed what Mr. Mock was doing prior to the bear detecting and then attacking him, but the half empty juice container suggests Mr. Mock had likely stopped at the location before the bear detected him.

Field investigation and examination of Mr. Mock's fishing gear did not indicate he was or had been actively fishing when the attack occurred. Mr. Mock was in possession of a valid Montana fishing license, purchased March 10, 2021. Mr. Mock had not purchased a YNP fishing license on-line and vendors in West Yellowstone were not yet in possession of 2021 fishing licenses to sell. Fishing in YNP opened May 29th.

Due to the empty cannister of bear-spray and the bear-spray residue on the bear carcass (hair), Mr. Mock had obviously been aware of possible grizzly bear encounters in the area and had deployed his bear-spray at the bear. It is not known if he bear-sprayed towards the bear prior to the bear contacting him or at what points during the attack he used the spray. During field and lab investigations, it was confirmed that the bear had substantial bear-spray residue on its hair. Additionally, the overall effects of the bear-spray to the bear are not known but the bear had quit attacking Mr. Mock, indicating the bear was affected by the bear-spray. After the bear stopped attacking, Mr. Mock was able to move a short distance and call 911 emergency. However, the bear remained agitated, close to the attack site and near the moose carcass, which was unknown to rescuers during the initial SAR and again the next day (16 April) during the team investigation of the attack site area, when the male bear was killed as it charged the investigation team.

The tragic event of Mr. Mock being attacked by an adult male grizzly bear and subsequently dying from the attack, was the direct result of Mr. Mock's own purposeful or random placed proximity to a moose carcass that an adult male bear had cached and was actively feeding on. A short time before the adult male bear attacked Mr. Mock it may have defended or claimed the moose carcass from another grizzly bear. If so, this would have contributed to the bear's extended aggressive defense of the moose carcass.

BOR Recommendations:

The unfortunate subsequent death of Mr. Charles (Carl) Mock caused by a grizzly bear attack on 15 April 2021, reinforces the inherent possibility of people being involved in a serious grizzly bear encounter and the need for individuals to know and try to follow known safety recommendations.

Due to an increase in human use, bear population numbers and geographic grizzly bear distribution, more people are encountering grizzly bears. These encounters can and have resulted in human injuries or death. Multi-agency bear managers and researchers have conducted a continuous examination of these events. The goal is to provide public information to help reduce dangerous encounters and increase human safety in grizzly bear country.

There are standard grizzly bear safety messages for different public users and private landowners that can help minimize surprise encounters with grizzly bears, thereby reducing human injuries and possible death.

Some of the base safety messages are:

* Be constantly alert

* Hike or hunt with a partner(s)

* Make noise, if possible, to help avoid surprising a bear

* Secure food attractants at camps, homes, and work sites

* Do not run if you encounter a bear

* Avoid animal carcasses -watch for concentrations of scavengers (i.e. ravens)

* Carry and know how to use self-defense….bear-spray and or firearms

It is always recommended to carry bear-spray even if individuals carry firearms.

Kevin Frey – Grizzly Bear Specialist, Montana Fish Wildlife & Parks

References:

Elfstro¨m, M., Støen, O-G., Zedrosser, A., Warrington, I., Swenson, J.E. 2013: Gut retention time in captive brown bears Ursus arctos - Wildlife Biology 19: 317-324

Appendix A:

OFFICE OF THE SHERIFF / CORONER
GALLATIN COUNTY, MONTANA

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Jeremy Kopp
Undersheriff

Randy Jones
Chaplain

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On April 15, 2021 at approximately 1543 hours, I was dispatched by the West Yellowstone Police Department dispatch center to the report of a 40 year old male who reported he had been attacked by a bear. Dispatch reported the male was approximately 200 yards from the front entrance to the Bakers Hole Campground and was off trail. The male was later identified as Charles Wesley Mock of West Yellowstone.

I instructed dispatch to page out Hebgen Basin EMS and have them stage at the front entrance to the campground. An update from dispatch informed responding units that Mock had sustained facial injuries, was laying on the ground, there was only one bear and responders should go right at the main entrance.

I arrived on scene approximately 10 minutes after the initial dispatch. Also arriving on scene were Forest Service LEO Ryan Linhart (FS72), West Yellowstone PD officer Neil Courtis (686), Hebgen Basin Fire Chief Shane Grube (36) and Gallatin County SAR member Travis Mann. We all started a hasty search of the area, looking for foot prints in the snow near popular hiking areas. WYPD officer Leonel Sosa arrived a short time later and joined us in the search.

I assigned Chief Grube to take over Incident Command and help coordinate our search efforts. With a lot of ground to try to cover, more information was requested from dispatch. Unfortunately they were unable to triangulate the 911 call, but were still on the phone with Mock. Mock was able to communicate with dispatch, although garbled and hard to understand. Grube activated his siren in hopes that Mock would be able to hear it and possibly guide us closer. Mock was able to tell dispatch that he could hear the siren and that he was about ¼ away from the campers in the campground, toward town. He then said he was off the blue diamond ski trail.

This information gave us a definitive area to focus the search in. Grube asked Air Idaho in West Yellowstone to add some aerial search support and they launched. He also sent out a Search & Rescue page for a backcountry rescue. Linhart and Mann were closest to the trailhead at the southern part of the campground and immediately headed up the trail. Courtis and I followed behind, roughly three minutes behind them. We were joined by Sosa later, after Courtis and I stopped, having spotted the bear.

Approximately 200 yards south of the campground on the blue diamond trail, I spotted a bear that was about 80 yards east of our location. The bear was standing on its hind legs

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and making huffing noises at us. The bear then dropped to all fours and charged us, breaking off his charge after about 30 yards. We were yelling and hollering at the bear as he charged. Dispatch notified us that Mock could hear us yelling at the bear and he said the bear was very close to him. I notified other search units to respond to our location, knowing we were very close to Mock.

We proceeded south on the trail about another 20 yards until we discovered human footprints in the snow, heading east toward the location of the bear. We started following the footprints east and hollering at the bear who was still aggressively pacing the area and watching us. Approximately 70 yards later, we found Mock laying on the ground. He was seriously injured, having suffered significant head and facial injuries. The bear continued to stalk us, aggressively moving around us in a half circle at a distance of approximately 40 – 70 yards.

Courtis, Sosa and Mann provided scene security for us while Linhart and I provided medical care to Mock. None of the responders on scene had any medical gear with us. Linhart and I determined that we needed to somehow stop the large amount of blood that Mock was losing. Linhart took off his uniform top and removed his t-shirt while I continued to support Mock. Linhart wrapped the t-shirt around Mock's head and applied direct compression. Mock was having difficulty talking and breathing due to the amount of blood in his mouth. We made the decision to move him into the recovery position with Linhart supporting his head & neck and me rolling his body onto his side. This seemed to allow Mock better breathing.

The bear continued to stalk the group and made another false charge. At this point, I turned patient care over to Linhart while grabbing my rifle and providing additional security against the bear. Emergency medical personnel from Hebgen Basin and Air Idaho were able to hike into our location while we provided protection from the bear. Two Gallatin County Sheriff SAR members arrived on scene with two snowmobiles and a rescue toboggan. EMS personnel were able to bandage and wrap Mock's head, they placed him on a backboard and carried him the 70 yards uphill to the SAR rescue personnel and gear.

Mock was then transported to the ambulance at the entrance to the campground. The armed first responders then escorted the EMS crew out of the area and back to the campground. Due to snow and bad weather that had moved in during this incident, Air

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Idaho was unable to fly Mock to the hospital, so he was transported to Eastern Idaho Regional Medical Center in Idaho Falls by ambulance.

Fish, Wildlife and Parks LEO Robert Pohle (FG32) arrived. Officers Courtis, Sosa, Linhart and I escorted him back in to the scene of the attack so that he could take some quick pictures and log an accurate GPS location of the attack. The incident happened at 44.70002, -111.10018

Initial investigation at the scene indicated that Mock was likely attacked 15 feet east of the location he was laying at when we found him. It appeared that Mock was able to retrieve his bear spray from its holder and was able to deploy it (can was empty). Additional items on scene were a digital camera with a large telephoto lens, spin fishing rod, small plastic box of lures, and a backpack.

The following day on April 16, personnel from the Forest Service and FWP reentered the location of the bear attack and were charged by a bear. Even with seven people yelling, shooting explosive noise making shotgun rounds, and a dog barking at the bear; the bear continued to charge the group. They were forced to shoot the bear and killed it.

An investigation of the area revealed a large moose which had been buried and cached by the bear. This moose was about 35 – 40 yards away from the location where Mock was attacked. Forest Service requested an agency assist from me, requesting equipment and help removing the bear carcass from the woods. I arrived on scene with a tracked four-wheeler with attached winch. We were able to winch the moose up a short hill and drag it out to the campground across the snow covered trail. The bear was loaded into the back of a truck and taken by FWP for further evaluation and research.

Case closed – Search & Rescue and Agency Assist

Michael P. Gavagan

Deputy Mike Gavagan – Badge #635
Gallatin County Sheriff's Office

Footnote: it was the bear carcass that was winched up a short hill, not the moose carcass.

FWP21CAD001860 Robert Pohle

On April 15, 2021 at approximately 1630 hours, I, Game Warden (GW) Robert Pohle was home off shift when I received a Gallatin County Search and Rescue page on my personal phone requesting help searching for a 40 year old male who had been attacked by a bear. The location of the attack was Bakers Hole. Upon seeing this I called the West Yellowstone Police Department (WYPD) to let them know I was responding, inquiring if the attack occurred inside Yellowstone National Park (YNP) or the county. I was told dispatch was having a difficult time locating the victim, later identified as Charles (Carl) Wesley Mock (DOB 03/24/2981). **Note:** Due to some technical issue, Carl's phone was not providing coordinates to the 911 system allowing for a back trace. After hanging up with WYPD, I called Montana Fish Wildlife & Parks (FWP) Bear Management Specialist (BMS) Kevin Frey, leaving him a voice mail notifying him of the incident. As my Sergeant was away, I called Warden Captain Adam Pankratz leaving him a voice mail as well. My final call was to Sergeant Coy Kline in Butte, Montana, so I was able to directly notify a supervisor of the incident.

After gearing up, I responded, lights and siren to the Bakers Hole area. While en route I called Montana Highway Patrol (MHP) dispatch to have a call for service started. Captain Pankratz returned my call and after relaying the limited information I had, we agreed if I saw a bear in the vicinity of Bakers Hole, it was to be dispatched.

As I arrived to the Bakers Hole area, I radioed Hebgen Basin Fire Chief Shane Grube who was Incident Commander (IC), requesting info on where other responders were. I was instructed to come to the south loop of Bakers Hole United States Forest Service (USFS) campground where IC was staged. Chief Grube let me know Carl had been located and was in the process of being extricated by law enforcement and medical staff.

I met the group of first responders as they were exfiltrating from the attack location with Carl. Carl was heavily bandaged, being towed on a Search and Rescue (SAR) sled behind a snowmobile. Gallatin County Sheriffs Office (GCSO) Deputy Mike Gavagan, WYPD Officers Leonel Sosa and Neil Courtis, and USFS Law Enforcement Officer (LEO) Ryan Linhart gave me a quick brief of the situation. The officers stated they encountered the bear several times during the search for Carl. During the first encounter the bear bluff charged the group of officers several times at approximately 100 yards. During this first encounter, they noticed what appeared to be blood on the head/mouth of the bear. As they continued to search for Carl, they stated the bear hung out in the area refusing to leave, even while medics worked on Carl and the snowmobiles moved in to extract Carl. This information was concerning to me, as with that much human activity, it is not normal behavior for a bear to continue to hang out. **Note:** I learned several days later that while searching for Carl, a SAR helicopter was flying low over the area assisting in the search. Upon hearing the bear was still in the area, I went back to the attack scene with Officers Sosa, Courtis and Deputy Gavagan, with the intent to dispatch the bear.

When we arrived at the attack scene, I observed no indication that a bear was in the immediate area. Not identifying an immediate threat, I took several photos to

document the scene and used my OnX hunt maps to get Global Positioning System (GPS) coordinates of that location. The location of the scene is 44.70002, -111.10018.
The scene consisted of a patch of snow soaked in what appeared to be blood. A rubber boot, fishing tackle box, sun glasses and a blood soaked beanie cap were strewn about the patch of snow. A blood splattered can of bear spray and holster, later determined to be empty, laid on the edge of the snow. The orange safety cap from the bear spray was several feet away in the grass. A fishing pole and juice bottle lay off to the south east. North west of the snow was the area where medical staff performed first aid. There was various medical packaging littering the ground, clothing that had been cut off Carl and used bandages. After quick photographic documentation of the site, all units returned to the IC.
Note: The can of bear spray was the UDAP brand, 7.9ounce, Expiration 12/2023 S/N P1711-071135).
After returning to the IC, I met with USFS District Ranger (DR) Jason Brey, Chief Grube and USFS LEO Linhart to discuss what the preliminary plan was for public safety due to the popularity the location held for recreationists. DR Brey stated the USFS was closing the area and evacuating the few campground hosts who were prepping the facility for opening. Chief Grube informed me that Carl had been transported via ground ambulance to Idaho Falls, due to weather the helicopter was grounded. The helicopters medical crew however was in the ambulance providing patient care to Carl. I cleared the scene while calling in updates to the BMS while the USFS put up barricades and signs stating bear in area and closure information.
Since Carl was going to a hospital in Idaho, I contacted an Idaho Fish and Game (IDFG) Warden requesting assistance. I requested a Warden meet Carl at the hospital to collect clothing and if possible, take photos of the injuries and conduct a quick interview as is standard procedure in a Wildlife Human Attack (WHART) incident. I was later notified by IDFG they had been unable to interview Carl or take photos as he was on a ventilator and rushed straight into the doctors. IDFG were able to collect Carl's pants which medical crews had cut off of him. **Note:** I met IDFG Investigator Lauren Lane on April 17th, 2021 in Ashton ID to collect that item.
With night approaching, I talked with BMS Frey and discussed the next steps for the following morning. As I headed home, I came across a vehicle parked inside the USFS emergency closure. I notified WYPD dispatch I would be out looking for the occupants as we did not know the circumstances behind the bear attack and could not leave them in the area without notification of the incident and closure. After finding the individual had been fishing outside of closure on the Madison River, it was determined his car had been parked there before the closure went into effect. He left the scene without incident. Clearing that contact LEO Linhart and I observed another vehicle attempt to enter the closure by the means of the FWP driveway before backing out heading south on US HWY191 where they turned into the Bakers Hole Campground drive. USFS LEO Linhart and I contacted that individual to advise them of the closure and they commented they had heard of a bear attack and were out looking to take pictures of the bear.

Footnote: A fishing pole and juice bottle lay off to the northwest. West of the snow was the area…..

Note: Between the attack and when investigators returned to the scene the following day, law enforcement made multiple contacts of people trying to access the closure area. A white Ford F150 with ID license plates stopped by my residence before the attack, while I was off shift. The 2 male occupants of that Ford inquired about a sow grizzly and 2 cubs they had heard were active in the Basin which I was unaware of. They were wearing camo clothing and had a camera with large lenses on the center console. This indicated to me they were wildlife photographers looking for bears. I observed that vehicle along US HWY191 when I initially responded to the scene and then again turning into the Bakers Hole Campground drive as units were clearing. When I last saw that vehicle, USFS personnel were talking to the occupants.

The following morning, April 16, 2021, I was contacted by Captain Pankratz. He informed me to hold off going to the Bozeman Regional Office (BRO) as he was headed down to West Yellowstone, that he would contact Bear Management and we would then plan to meet and return to the attack scene. My decision to return to the scene was made due to the following considerations;

- Without being able to interview Carl, it was unknown what precipitated the attack. We did not know if it was a predatory attack, defensive attack or surprise encounter.
- We had no time line of when an interview with Carl may take place.
- No evidence was collected the day of the attack except for photos and the pants which IDFG retrieved from the hospital.
- It was forecast to start snow/rain in a couple days which would diminish any evidence on scene.
- The area the attack took place is a "high use" recreation area. It is common for anglers, hikers, campers and skiers to frequent the Bakers hole area.
- As noted earlier, multiple law enforcement contacts had been made concerning individuals trying to take pictures of bears. News of bear activity was drawing them in.
- This close to a weekend, we could expect a significant number of recreationists wanting to use the area. This would be compounded by the opening of Yellowstone National Park (YNP) for the summer season and news of a bear active in the area.
- It was imperative that we find out what precipitated the attack. While it was likely guarding a carcass, it was equally likely it was a surprise encounter, it was a bear with cubs or it was a predatory attack. Especially given the volume of human activity in the area while rescuing Carl did not scare the animal away.

After careful consideration, it was decided the significant risk to public safety resulting from the unknown causation of the attack outweighed the risk of a potential bear encounter from a re-entry to the scene. Phone calls were made and a team of seven (7) plus one (1) bear dog was assembled. We met at approximately 1400 hours and after a quick briefing on the situation entered Bakers Hole Campground.

Note: The team consisted of Captain Pankratz, GW Daven Thorne, GW Robert Pohle, USFS LEO Noah Pieprzyca, USFS LEO Linhart, BMS Frey (K9 Loki) and BMS

Jeremiah Smith. All team members were armed with lethal firepower and we had bear spray available.
We began our entry to the attack site, following the Boundary Ski trail that exits out of the south loop of Bakers Hole Campground. All members yelled out randomly making noise to alert a bear, humans were present. K9 Loki added to the noise barking loudly. At approximately the same location responders observed the bear the day prior, USFS LEO Pieprzyca alerted the team he saw something brown moving south towards the attack site. The movement came to the east of our location in a marshy area. It was unknown at that point if it was a bear as there were fresh bison tracks in the snow and mud. The team held that position as multiple cracker shells were fired and more yelling was made in attempts to haze the animal away. After several minutes holding that position and not seeing further movement, we continued down the trail. Along the way the team continued yelling and more cracker shells were fired. Specialist Frey alerted the team that the behavior and loud incessant barking from K9 Loki indicated a bear was nearby. **Note:** We were walking into a northerly breeze which would bring any bear scent directly to K9 Loki.
The attack site is approximately 50 yards to the south east of the main Boundary Ski trail down an old, over grown USFS road. That road had multiple downed trees laying across it and others growing through the former road bed. As we turned that way, we got approximately 30 yards from the attack site when BMS Smith alerted us to a bear. The bear was east of our location, at the edge of a small marshy clearing. It was moving south east before it stopped. At that point the bear looked at us for a split second before immediately changing directions and charging directly towards the team. The bear had to clear the marshy area before encountering willows partially buried in snow. As the bear cleared the marshy area, it hit the snow in the willows and was slowed due to the depth and softness. We held fast yelling as the bear kept pushing through the deep snow in a fashion similar to the way a dog runs through deep snow in a field. As the bear continued, it quickly became apparent this was not a bluff charge. The snow while deepest where the bear was currently located, began to thin before disappearing the closer you got towards the team's location. In the event the bear cleared the deep snow and regained traction, there would be no time for the team to react before contact was made with a human, resulting in serious injury or death.
In the split second it took to process what was taking place, I made the decision I was going to engage the bear and shoot it before it was able to gain traction again. I called out loud that I was taking a shot, before firing my shotgun. Afterwards I learned both Specialist Frey and Smith called out to shoot as well. Multiple shots were fired and I could see the impact of several rounds on the bear's body as they hit. The bear slumped down in the snow before moving again. USFS LEO Pieprzyca was armed with an issued 45/70 government rifle and heavy 540 grain bullets designed for penetration. At the instruction of Specialist Frey, USFS LEO Pieprzyca fired a couple rounds into the bear. **Note:** Once shot, it is absolutely imperative to prevent unnecessary pain and suffering of the bear and for public safety, we ensure the bear is deceased. After the bear stopped moving, the other team members covered Specialist Smith and I as we

Footnote: We were walking into a southerly breeze. The bear was northeast of our location…
It was moving southwest before it stopped.

approached the bear to check it's status. As we still did not know the sex of the bear, we approached ready to engage another animal should it have been a female with cubs. Once confirmed dead, I assisted Specialist Smith in rolling the bear over where we discovered it was an adult male. While others maintained a security perimeter and Bear Management began their checks on the bear, I took pictures of the scene, only to discover that during the charge the bear had run over a cached moose carcass, buried in the marshy area. It was difficult to see the moose as it was mostly buried and I could not smell anything that would indicate there was a carcass there.

I used my OnX Hunt maps to get GPS coordinates of the following locations;

- 44.70168, -111.10067 -- Location of the south loop of Bakers Hole Campground.
- 44.69999, -111.10053 -- Location I was standing at when I shot the charging bear.
- 44.70010, -111.10025 -- Location of deceased bear once rolled over.
- 44.70017, -111.10021 -- Location of cached moose carcass.
- 44.70002, -111.10018 -- Location of the attack site from 04/15/2021.

A brief conversation occurred with BMS Frey and it was evident that the primary causation of the bear attack on Carl was the defense of a food source. It is unknown if Carl knew the carcass was there or why he was in that location. The articles of clothing and Carl's possessions left on scene were collected. The only items retained for evidence were the discharged can of bear spray, a bloody beanie soft cap and the pants collected by IDFG. Reports indicated the attack focused on Carl's head, resulting in major head trauma with very little injury to other parts of his body. As such it is unlikely that the bear would have left any saliva or blood on other articles clothing in significant volume to provide any useable evidence to identify an individual animal. The fact the WHART team experienced a strikingly similar encounter less than 24 hours after the initial attack, resulting in a dead male bear leads one to believe the deceased bear was responsible for the attack. It would be unlikely to have multiple dominate male bears so close to such a valuable food source coexisting as the more dominate would chase the lesser male away.

USFS LEO Linhart arranged for Deputy Gavagan to bring a tracked All Terrain Vehicle (ATV) to retrieve the dead bear, as well as USFS Sawyer to clear the path. The ATV's winch was used to retrieve the bear where it was loaded into Captain Pankratz truck and taken to the BRO. While loading the bear, I noticed a burning, tingling sensation in my nose and lungs, coughing several times. That sensation was consistent with past exposure I have had to bear spray, albeit at a much lower dose. Later, while going through Carl's belongings collected from the attack site, I experienced the same sensation of burning and coughing. This indicates bear spray was discharged some time during the attack, consistent with the empty canister of bear spray found. Whether the spray was successfully deployed on the bear, or if the residue on the bear and Carl's belongings was the result of cross contamination, will forever be unknown.

Note: I was notified there had been a digital camera with Carl after the fact. That camera was passed off to his friends before my arrival during the initial rescue. On April 17, 2021, I met Keith Johnson (DOB 06/15/1985) at Back Country Adventures in West Yellowstone and was able to view the pictures on the memory card for the month of April 2021. I did not observe any pictures on that card similar to the attack site. Whether any pictures were removed before my observation is unknown, as control was lost over the camera.

I was notified the morning of April 17, 2021 by Captain Pankratz that Carl had succumbed to his injuries while in the hospital. As a result, investigators will never know for certain the events that led up to this bear attack.

No Further Action Taken. Robert Pohle FG32

Appendix B:

WYOMING GAME AND FISH DEPARTMENT 5400 Bishop Blvd. Cheyenne, WY 82006 Phone: (307) 777-4600 Fax: (307) 777-4699 wgfd.wyo.gov **GOVERNOR** MARK GORDON **DIRECTOR** BRIAN R. NESVIK **COMMISSIONERS** PETER J. DUBE – President GAY LYNN BYRD – Vice President RALPH BROKAW MARK JOLOVICH RICHARD LADWIG ASHLEE LUNDVALL KENNETH D. ROBERTS

Wyoming Game and Fish Wildlife Forensic and Fish Health Laboratory
1212 South Adams Street
Laramie, WY 82070
Phone: (307) 721-1921

FORENSIC LABORATORY EXAMINATION REPORT LAB NO.
21-27-W-CAF

DATE:
June 14, 2021

SUBMITTERS: Kevin Frey
Grizzly Bear Specialist
AGENCY:
Montana Fish, Wildlife and Parks
1400 South 19th
Bozeman, MT 59718

EXAMINER: Tasha Bauman
Lauren Schumacher
CASE NO.: 2021-04
PURPOSE: Species identification of the submitted item.

EVIDENCE RECEIVED:
Tasha Bauman, Forensic Specialist, received the following item via Federal Express on May 7, 2021:
Item #1: "Possible skin/cartilage tissue from stomach of grizzly bear"

EXAMINATIONS CONDUCTED:
Tests for species and family level identification were performed using serological and enzymatic electrophoretic techniques. Species identification was also performed using an amplified portion of the mitochondrial DNA cytochrome b gene and subsequent sequencing of the amplicon (mcb398 and mcb869). The sequence obtained was matched against sequences in the National Center for Biotechnology Information DNA database (www.ncbi.nlm.hih.gov).

RESULTS:
1) Species identification, by serological and enzymatic electrophoretic techniques, of item #1 was non-reactive.
2) The sequence of item #1 is 99% (max identity) to grizzly bear (*Ursus arctos*) sequences in the GenBank database over (395/401) base pairs indicating the sample originated from grizzly bear.

CONCLUSIONS:
1) Item #1 originated from grizzly bear.

DISPOSITION OF SAMPLES:
The item was retained in the custody of the examiners.

SEROLOGY AND DNA EXAMINER:_____
Tasha Bauman, M.S.
Forensic Specialist

SEROLOGY AND DNA EXAMINER:_____
Lauren Schumacher, M.S.
Forensic Analyst

Appendix C:

MONTANA VETERINARY DIAGNOSTIC LABORATORY

PHONE: (406) 994-4885
FAX: (406) 994-6344
WEBSITE: www.liv.mt.gov/lab
WEB RESULTS: https://mvdl.mt.gov
E-MAIL: mvdl@mt.gov

1911 WEST LINCOLN STREET
BOZEMAN, MT 59718

JENNIFER RAMSEY DVM FW & P
1400 S. 19TH AVE
BOZEMAN MT 59718

CASE:21-18156
Name/ID: FWP Grizzly
Species: Brown Bear (Grizzly)

Sex: Unknown **Age:** 20 Years

Owner: Montana FWP

COMPLETE REPORT 04/19/21

Sample Collection: 04/16/21
Accession: 04/19/21

Case Coordinator Authorization: SH

Previous Reports
04/19/21
04/19/21
04/19/21

RABIES

Rabies	Brain	Verified on: 04/19/21 by: SH
Animal ID	Test	Result
FWP Grizzly	Condition	Fair
	Human Exposure	Yes
	Rabies Final Result	**Negative**

From:	Cooley, Hilary
To:	Diamond, David - FS, BOZEMAN, MT
Subject:	Re: [EXTERNAL] Fw: Annotated agenda
Date:	Tuesday, December 7, 2021 2:03:49 PM
Attachments:	IGBC Board of Review_12 2021.pdf

From: Diamond, David -FS <David.Diamond@usda.gov>
Sent: Monday, December 6, 2021 4:58 PM
To: Cooley, Hilary <hilary_cooley@fws.gov>
Subject: Re: [EXTERNAL] Fw: Annotated agenda

Thanks Hilary, but I can't open this, it asks for a DOI login. If it is too big you can send as a PDF. Thanks!
d.

David Diamond
Executive Coordinator
Interagency Grizzly Bear Committee
10 E Babcock St, Room 234, Bozeman, MT 59771
406-438-1283 (cell)
david.diamond@usda.gov
http://igbconline.org

From: Cooley, Hilary <hilary_cooley@fws.gov>
Sent: Monday, December 6, 2021 1:59 PM
To: Diamond, David -FS <David.Diamond@usda.gov>
Subject: Re: [EXTERNAL] Fw: Annotated agenda

Thanks David.
BOR ppt attached.
Matt will give our agency update.

From: Diamond, David -FS <David.Diamond@usda.gov>
Sent: Monday, December 6, 2021 12:51 PM
To: Jackson, Scott -FS <scott.jackson@usda.gov>; van Manen, Frank T <fvanmanen@usgs.gov>; Cooley, Hilary <hilary_cooley@fws.gov>; Roberts, Lori <LRoberts@mt.gov>; Diamond, David - FS, BOZEMAN, MT <david.diamond@usda.gov>
Subject: [EXTERNAL] Fw: Annotated agenda

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FYI - here is my annotated agenda for this week's meeting. I don't have a briefing packet for members this time. We apparently will be getting a request for USDA Wildlife Services to join the Executive Committee. I am researching

There were notable retirements at the NCDE Subcommittee meeting - I'm hoping Bill Avey will report on those. I have not figured out the Bear Paw protocol yet - and Bill only chaired one meeting, so even though he is retiring, I'm not sure that is in order, right?

Communicate by email or text 406-438-1283 if there is anything wrong or missing here, and if anything new comes up.

If you are using slides, I do appreciate getting them in advance - for Scott, Lori, and Hilary's Board of Review that means tomorrow COB. It is zoom so you can run them or I can, just let me know.

Thanks!

d.

David Diamond
Executive Coordinator
Interagency Grizzly Bear Committee
10 E Babcock St, Room 234, Bozeman, MT 59771
406-438-1283 (cell)
david.diamond@usda.gov
http://igbconline.org

From: Diamond, David -FS
Sent: Monday, December 6, 2021 12:37 PM
To: Buchanan, Jacqueline -FS <jacqueline.buchanan@usda.gov>
Cc: toby.boudreau@idfg.idaho.gov <toby.boudreau@idfg.idaho.gov>
Subject: Annotated agenda

Jacque:
Here is the annotated agenda, with some points for your welcome.

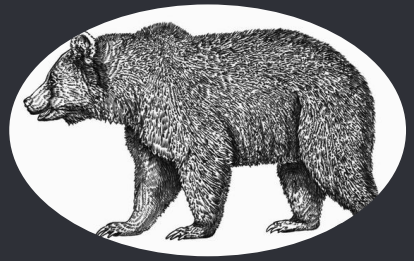
Regarding the USDA Wildlife Services membership request, I'm meeting with Chris Smith this afternoon to get the history on the charter amendment process and how that might work. Stay tuned!

d.

David Diamond
Executive Coordinator

Interagency Grizzly Bear Committee
10 E Babcock St, Room 234, Bozeman, MT 59771
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david.diamond@usda.gov
http://igbconline.org

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Board of Review Recommendations Resulting from Human Fatalities

2021 Human Fatalities

- **April 15, 2021, West Yellowstone MT**

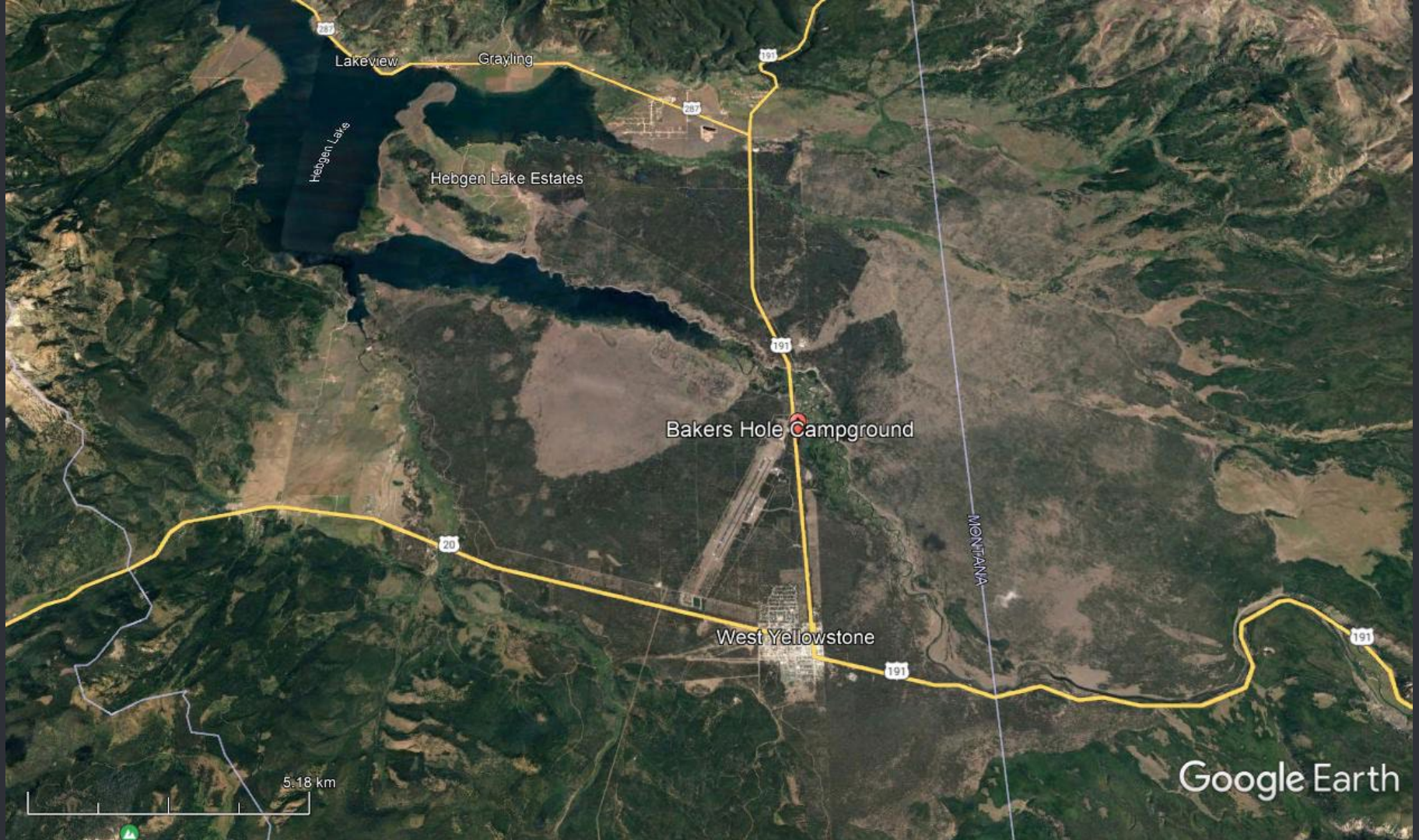
  Carl Mock: West Yellowstone resident; guide for Back Country Adventures

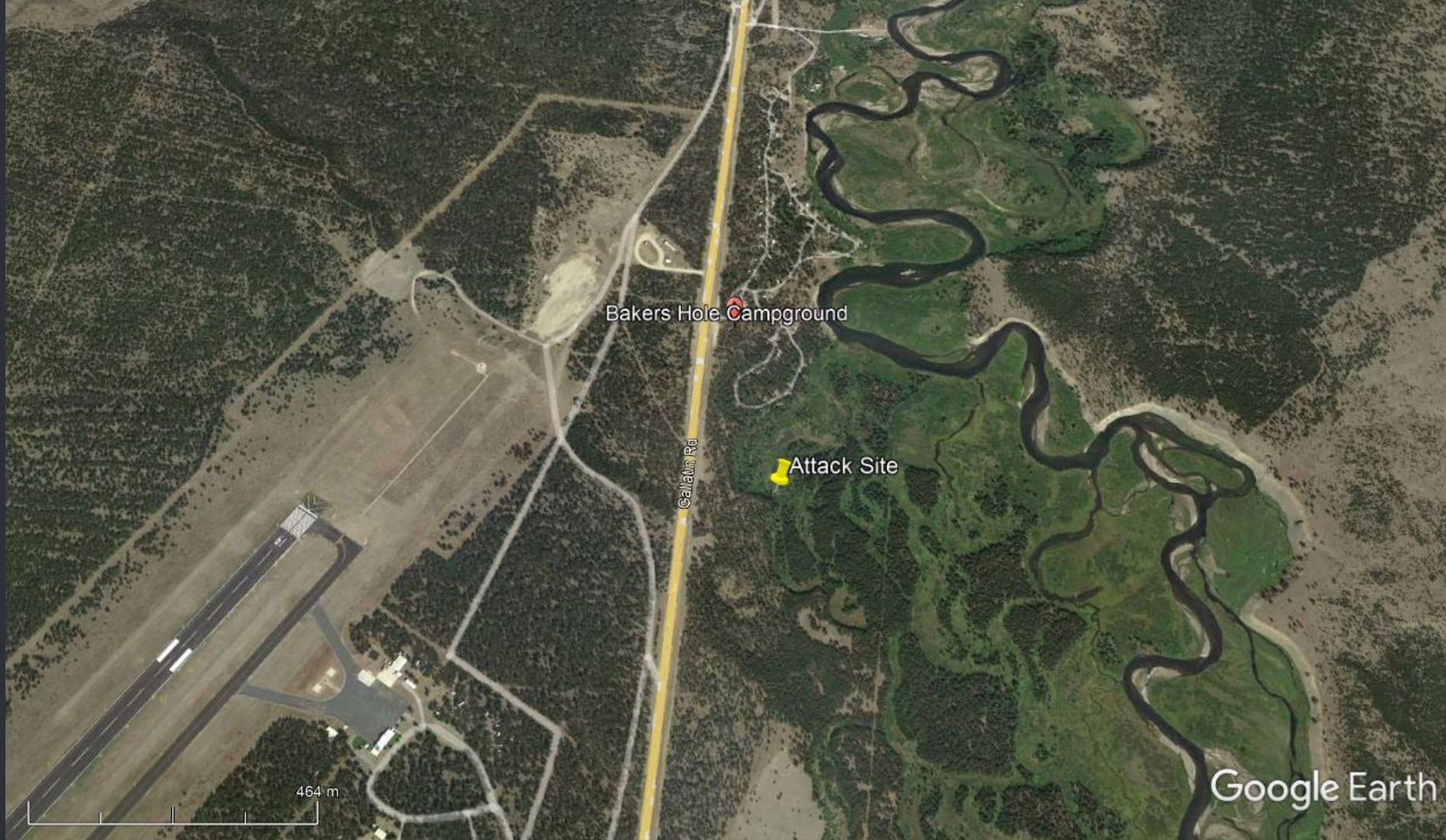
- **July 5, 2021, Ovando MT**

  Leah Davis Lokan: Chico California resident; retired nurse; avid cyclist

Board of Review: Carl Mock, West Yellowstone

- **Interagency Team:** Kevin Frey, Brian Debolt, Kerry Gunther, Mark Haroldson, Jeremy Nicholson, Dan Thompson, Dan Tyers, Hilary Cooley
- **Response & Investigation:** Gallatin County Sherriff's office, West Yellowstone Police Dept, USFS, Gallatin County Search and Rescue, Hebgen Basin Fire, MTFWP
- **Location :** Custer Gallatin NF, near Baker's Hole Campground
- 18th Human Fatality in GYE since 1892.


Lakeview
Grayling
Hebgen Lake
Hebgen Lake Estates
Bakers Hole Campground
West Yellowstone
MONTANA
287
191
20
5.18 km
Google Earth


Bakers Hole Campground
Attack Site
Gallatin Rd
464 m
Google Earth

Summary & Conclusion


191
Campground
Gallatin Rd
bear charged
moose carcass
4-16-21 bear mortality
Investigative team
4-15-21 bear attack
450-500 yards to Madison River
160 yards to US Highway 191
© 2021 Google
Google Earth
163 ft
1985
Imagery Date: 8/15/2015 12 T 492045.18 m E 4949706.45 m N elev 6582 ft eye alt 7347 ft


BEAR
COUNTRY

Recommendations

- Due to an increase in human use, bear population numbers and geographic grizzly bear distribution, more people are encountering grizzly bears. Individuals need to know and follow bear safety recommendations.
- Agencies should continue to provide public information to help reduce dangerous encounters and increase human safety in grizzly bear country.

  - Be constantly alert
  - Hike or hunt with a partner(s)
  - Make noise, if possible, to help avoid surprising a bear
  - Secure food attractants at camps, homes, and work sites
  - Do not run if you encounter a bear
  - Avoid animal carcasses -watch for concentrations of scavengers (i.e. ravens)
  - Carry and know how to use self-defense….bear-spray and or firearms. It is always recommended to carry bear-spray even if individuals carry firearms.

From:	Haroldson, Mark A
To:	Frey, Kevin; Gunther, Kerry A; jeremy.nicholson; Tyers, Daniel - FS; Daniel Thompson; Brian DeBolt
Cc:	Cooley, Hilary
Subject:	Re: [EXTERNAL] MT Baker"s Hole fatality BOR
Date:	Thursday, July 1, 2021 4:26:13 PM
Attachments:	image001.png

I'm available most of the week. Only conflicts are 8-9am and 2-3pm on the 14th, and 3-4pm on the 15th.

The 12, 13, and 16th are totally open dates for me.

Mark

From: Frey, Kevin <KFrey@mt.gov>
Sent: Thursday, July 1, 2021 2:06 PM
To: Gunther, Kerry A <Kerry_Gunther@nps.gov>; Haroldson, Mark A <mharoldson@usgs.gov>; jeremy.nicholson <jeremy.nicholson@idfg.idaho.gov>; Tyers, Daniel - FS <daniel.tyers@usda.gov>; Daniel Thompson <daniel.thompson@wyo.gov>; Brian DeBolt <brian.debolt@wyo.gov>
Cc: Cooley, Hilary <hilary_cooley@fws.gov>
Subject: [EXTERNAL] MT Baker's Hole fatality BOR

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All,
The report is written. Hilary has seen it. Would all of you be available for a few hours session one day during the week or July 11th?
Hilary and I talked….we could do a zoom/teams type thing…share the screen and go over the findings. I would like to get this completed so FWS can post on website.
Dan Tyers if not you, I can ask Jason Brey.
WY Dan & Brian, you guys can decide on one of you or if both want in, we're ok with that.

Let me know early next week if possible.
Thanks,

Kevin Frey
Grizzly Bear Specialist
Wildlife Division
Montana Fish, Wildlife & Parks, Region 3

1400 South 19th
Bozeman, MT 59718

Ph: (406) 577 7876
Montana FWP



THE **OUTSIDE** IS IN US ALL.

From: Gunther, Kerry A
To: Frey, Kevin; Haroldson, Mark A; jeremy.nicholson; Tyers, Daniel - FS; Daniel Thompson; Brian DeBolt
Cc: Cooley, Hilary
Subject: Re: [EXTERNAL] MT Baker"s Hole fatality BOR
Date: Thursday, July 1, 2021 4:18:37 PM
Attachments: image001.png

Any day and time the 13th through the 16th would work for me. The 12th I could possibly do it in the late afternoon.

Kerry Gunther
Bear Management Biologist
Yellowstone National Park
Office: (307)344-2162
Cell: (406)404-0481

From: Frey, Kevin <KFrey@mt.gov>
Sent: Thursday, July 1, 2021 2:06 PM
To: Gunther, Kerry A <Kerry_Gunther@nps.gov>; Haroldson, Mark A <mharoldson@usgs.gov>; jeremy.nicholson <jeremy.nicholson@idfg.idaho.gov>; Tyers, Daniel - FS <daniel.tyers@usda.gov>; Daniel Thompson <daniel.thompson@wyo.gov>; Brian DeBolt <brian.debolt@wyo.gov>
Cc: Cooley, Hilary <hilary_cooley@fws.gov>
Subject: [EXTERNAL] MT Baker's Hole fatality BOR

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Wildlife Division

Montana Fish, Wildlife & Parks, Region 3

1400 South 19th
Bozeman, MT 59718
Ph: (406) 577 7876
Montana FWP

THE **OUTSIDE** IS IN US ALL.

From: Daniel Thompson
To: Gunther, Kerry A
Cc: Frey, Kevin; Haroldson, Mark A; jeremy.nicholson; Tyers, Daniel - FS; Brian DeBolt; Cooley, Hilary
Subject: Re: [EXTERNAL] MT Baker"s Hole fatality BOR
Date: Thursday, July 1, 2021 4:22:46 PM
Attachments: image001.png

I could do 12th, 13th or 16th mornings as of now, happy to help where we can

On Thu, Jul 1, 2021 at 2:18 PM Gunther, Kerry A <Kerry_Gunther@nps.gov> wrote:

> Any day and time the 13th through the 16th would work for me. The 12th I could possibly do it in the late afternoon.
>
> Kerry Gunther
> Bear Management Biologist
> Yellowstone National Park
> Office: (307)344-2162
> Cell: (406)404-0481
>
> ---
>
> **From:** Frey, Kevin <KFrey@mt.gov>
> **Sent:** Thursday, July 1, 2021 2:06 PM
> **To:** Gunther, Kerry A <Kerry_Gunther@nps.gov>; Haroldson, Mark A <mharoldson@usgs.gov>; jeremy.nicholson <jeremy.nicholson@idfg.idaho.gov>; Tyers, Daniel - FS <daniel.tyers@usda.gov>; Daniel Thompson <daniel.thompson@wyo.gov>; Brian DeBolt <brian.debolt@wyo.gov>
> **Cc:** Cooley, Hilary <hilary_cooley@fws.gov>
> **Subject:** [EXTERNAL] MT Baker's Hole fatality BOR
>
> **This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.**
>
> All,
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Montana Fish, Wildlife & Parks, Region 3

1400 South 19th
Bozeman, MT 59718
Ph: (406) 577 7876
Montana FWP



--
Dan J. Thompson, PhD
Large Carnivore Section Supervisor
Wyoming Game and Fish Dept
260 Buena Vista Dr
Lander, WY 82520
(307) 332-2688
Daniel.Thompson@wyo.gov
--

E-Mail to and from me, in connection with the transaction of public business, is subject to the Wyoming Public Records Act and may be disclosed to third parties.

From: Haroldson, Mark A
To: Frey, Kevin; Tyers, Daniel - FS; Gunther, Kerry A; jeremy.nicholson; Daniel Thompson; Brian DeBolt
Cc: Cooley, Hilary
Subject: Re: [EXTERNAL] RE: MT Baker"s Hole fatality BOR
Date: Tuesday, July 6, 2021 4:40:02 PM
Attachments: image001.png

OK.

Mark

From: Frey, Kevin <KFrey@mt.gov>
Sent: Tuesday, July 6, 2021 2:29 PM
To: Tyers, Daniel - FS <daniel.tyers@usda.gov>; Gunther, Kerry A <Kerry_Gunther@nps.gov>; Haroldson, Mark A <mharoldson@usgs.gov>; jeremy.nicholson <jeremy.nicholson@idfg.idaho.gov>; Daniel Thompson <daniel.thompson@wyo.gov>; Brian DeBolt <brian.debolt@wyo.gov>
Cc: Cooley, Hilary <hilary_cooley@fws.gov>
Subject: [EXTERNAL] RE: MT Baker's Hole fatality BOR

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Thanks for the replies. Looks like the 13th or 16th is ok with all. However, no reply from Jeremy.
Lets shoot for the 13th at 10 AM. Should be able to whittle through it in the morning hours.
If the 13th crashes for anyone, we will try for same time on the 16th.
Everyone ok with date/time?
Thanks,
Kevin

From: Frey, Kevin <KFrey@mt.gov>
Sent: Thursday, July 1, 2021 2:06 PM
To: Gunther, Kerry A <Kerry_Gunther@nps.gov>; Haroldson, Mark A <mharoldson@usgs.gov>; jeremy.nicholson <jeremy.nicholson@idfg.idaho.gov>; Tyers, Daniel - FS <daniel.tyers@usda.gov>; Daniel Thompson <daniel.thompson@wyo.gov>; Brian DeBolt <brian.debolt@wyo.gov>
Cc: Cooley, Hilary <Hilary_Cooley@fws.gov>
Subject: MT Baker's Hole fatality BOR

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Kevin Frey
Grizzly Bear Specialist
Wildlife Division
Montana Fish, Wildlife & Parks, Region 3

1400 South 19th
Bozeman, MT 59718
Ph: (406) 577 7876
Montana FWP [gcc02.safelinks.protection.outlook.com]



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From: Tyers, Daniel - FS
To: Gunther, Kerry A; Frey, Kevin; Haroldson, Mark A; jeremy.nicholson; Daniel Thompson; Brian DeBolt
Cc: Cooley, Hilary
Subject: RE: [EXTERNAL] RE: MT Baker"s Hole fatality BOR
Date: Tuesday, July 6, 2021 5:35:52 PM
Attachments: image002.png
image003.png
image004.png
image005.png
image006.png

Yes, thanks Kevin.

Dan Tyers
GYE Grizzly Bear Habitat Coordinator
Forest Service
406-600-8949
daniel.tyers@usda.gov
www.fs.fed.us
Caring for the land and serving people

From: Gunther, Kerry A <Kerry_Gunther@nps.gov>
Sent: Tuesday, July 6, 2021 2:43 PM
To: Frey, Kevin <kfrey@mt.gov>; Tyers, Daniel - FS <daniel.tyers@usda.gov>; Haroldson, Mark A <mharoldson@usgs.gov>; jeremy.nicholson <jeremy.nicholson@idfg.idaho.gov>; Daniel Thompson <daniel.thompson@wyo.gov>; Brian DeBolt <brian.debolt@wyo.gov>
Cc: Cooley, Hilary <hilary_cooley@fws.gov>
Subject: Re: [EXTERNAL] RE: MT Baker's Hole fatality BOR

Ok, that works for me.

Kerry Gunther
Bear Management Biologist
Yellowstone National Park
Office: (307)344-2162
Cell: (406)404-0481

From: Frey, Kevin <KFrey@mt.gov>
Sent: Tuesday, July 6, 2021 2:29 PM
To: Tyers, Daniel - FS <daniel.tyers@usda.gov>; Gunther, Kerry A <Kerry_Gunther@nps.gov>; Haroldson, Mark A <mharoldson@usgs.gov>; jeremy.nicholson <jeremy.nicholson@idfg.idaho.gov>; Daniel Thompson <daniel.thompson@wyo.gov>; Brian DeBolt <brian.debolt@wyo.gov>

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To: Gunther, Kerry A <Kerry_Gunther@nps.gov>; Haroldson, Mark A <mharoldson@usgs.gov>; jeremy.nicholson <jeremy.nicholson@idfg.idaho.gov>; Tyers, Daniel - FS <daniel.tyers@usda.gov>; Daniel Thompson <daniel.thompson@wyo.gov>; Brian DeBolt <brian.debolt@wyo.gov>
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Cc: Cooley, Hilary
Subject: Re: [EXTERNAL] RE: MT Baker"s Hole fatality BOR
Date: Tuesday, July 6, 2021 4:42:56 PM
Attachments: image001.png

Ok, that works for me.

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Bear Management Biologist
Yellowstone National Park
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Cell: (406)404-0481

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From:	Cooley, Hilary
To:	Frey, Kevin; Tyers, Daniel - FS; Gunther, Kerry A; Haroldson, Mark A; jeremy.nicholson; Brian DeBolt; daniel.thompson
Subject:	Re: [EXTERNAL] RE: MT Baker"s Hole fatality BOR
Date:	Tuesday, July 6, 2021 4:32:13 PM
Attachments:	image001.png

Yes works for me. Thanks Kevin

Get Outlook for iOS

From: Frey, Kevin <KFrey@mt.gov>
Sent: Tuesday, July 6, 2021 1:29:52 PM
To: Tyers, Daniel - FS <daniel.tyers@usda.gov>; Gunther, Kerry A <Kerry_Gunther@nps.gov>; Haroldson, Mark A <mharoldson@usgs.gov>; jeremy.nicholson <jeremy.nicholson@idfg.idaho.gov>; Daniel Thompson <daniel.thompson@wyo.gov>; Brian DeBolt <brian.debolt@wyo.gov>
Cc: Cooley, Hilary <hilary_cooley@fws.gov>
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Cc: Cooley, Hilary
Subject: Re: [EXTERNAL] RE: MT Baker"s Hole fatality BOR
Date: Tuesday, July 13, 2021 7:06:10 PM
Attachments: image001.png

That works for me.

Kerry Gunther
Bear Management Biologist
Yellowstone National Park
Office: (307)344-2162
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From: Frey, Kevin <KFrey@mt.gov>
Sent: Tuesday, July 13, 2021 2:37 PM
To: Tyers, Daniel - FS <daniel.tyers@usda.gov>; Gunther, Kerry A <Kerry_Gunther@nps.gov>; Haroldson, Mark A <mharoldson@usgs.gov>; jeremy.nicholson <jeremy.nicholson@idfg.idaho.gov>; Daniel Thompson <daniel.thompson@wyo.gov>; Brian DeBolt <brian.debolt@wyo.gov>
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I am going to list review members in alphabetical order if ok with everyone…..if not, please speak up.

From: Frey, Kevin
Sent: Tuesday, July 6, 2021 2:30 PM
To: Tyers, Daniel - FS <daniel.tyers@usda.gov>; Gunther, Kerry A <Kerry_Gunther@nps.gov>; Haroldson, Mark A <mharoldson@usgs.gov>; jeremy.nicholson <jeremy.nicholson@idfg.idaho.gov>; Daniel Thompson <daniel.thompson@wyo.gov>; Brian DeBolt <brian.debolt@wyo.gov>
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From: Smith, Kate
To: Allen, Bethany
Cc: "hilary_cooley@fws.gov"
Subject: RE: [EXTERNAL] RM-CESU Final Report
Date: Wednesday, January 19, 2022 5:30:46 PM
Attachments: F15AC01157 Narrative Report FY20 FINAL.pdf
SF425 F15AC01157 12.31.20.pdf

Hi Bethany – Attached is the final narrative and financial reports for this project. Please let me know if there is anything else you need.

Thank you!

Kate

.....

Kate Smith
FWS Grizzly Bear Recovery Program
W.A. Franke College of Forestry & Conservation | University of Montana
University Hall, Room 309
Missoula, MT 59812
phone: (406)243-4903

From: Cooley, Hilary [mailto:hilary_cooley@fws.gov]
Sent: Monday, January 10, 2022 4:44 PM
To: Smith, Kate <kate.smith@mso.umt.edu>
Subject: Fw: [EXTERNAL] RM-CESU Final Report

Hi Kate,
Would you please respond...

Thank you!

From: Allen, Bethany <bethany.allen@mso.umt.edu>
Sent: Monday, January 10, 2022 2:35 PM
To: Cooley, Hilary <hilary_cooley@fws.gov>
Subject: [EXTERNAL] RM-CESU Final Report

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Dear **Hilary**,

The Rocky Mountains CESU welcomes the opportunity to update our database of final reports by getting the final products of your project: **Grizzly Bear Recovery: Implementation, Monitoring, Research, Education**

This project was initiated through the Rocky Mountains CESU on **9/5/2017**. The completion date for the project has passed, **9/30/2020**. The task agreement for this project is **F25AC01157**.

According to our records, we have not received the final products from this project. Please let us know the status of the final products and when we might expect them. These could include theses/dissertations, final technical report, journal article(s) or a completion report (see attached template). If your report contains sensitive information (such as locations of special status species or cultural resources), please let us know so we can either redact such information or have only a project summary or completion report publicly available.

If the final products were entered into IRMA, then please send the link to those reports.

Please send an electronic copy of the final products or completion reports to bethany.allen@mso.umt.edu

If you have any questions, please call RM-CESU Executive Coordinator, Lisa Gerloff at lisa.gerloff@mso.umt.edu or NPS Research Coordinator, Brendan Moynahan, at 406-243-4449 or brendan_moynahan@nps.gov.

Thanks for completing the final step of your task agreement with the RM-CESU.

Bethany Allan
Administrative Associate, Rocky Mountains CESU
University of Montana
bethany.allen@mso.umt.edu

Final Narrative Report: Grizzly Bear Recovery – Implementation, Monitoring, Research, Education & Conservation

The University of Montana: Cooperative Agreement Award F15AC01157
Reporting Period: 10/1/2019 – 9/30/2020

Program Accomplishments

Surveys for grizzly bears in peripheral portions of their range

We planned to use digital cameras and hair snares to look for the presence of grizzly bears in southwest Montana, outside the normal range of the species to document range expansion. However, COVID-19 protocols relating to numbers of people in vehicles and housing caused us to postpone this program during 2020. This year, we developed a database for verified sightings within the peripheral portion of the current range of bears. These verified sightings will provide the basis for sample sites in future surveys.

Monitoring of grizzly bears in the Cabinet-Yaak and Selkirk ecosystems

We continue to actively monitor vital rates (survival, cub production), population trend, and distribution of the small grizzly population in the Cabinet-Yaak and Selkirk ecosystems using radio collars, hair snaring, and rub trees. Our field efforts during 2020 were limited due to COVID-19 protocols requiring only one person per vehicle and in housing. We captured and radio-collared 9 grizzly bears in these two recovery areas during the 2020 field season. We monitored 10 grizzly bears with radio collars on both sides of the US/Canada border in the Cabinet-Yaak area and 7 grizzly bears on both sides of the US/Canada border in the Selkirk Mountains area. This included three augmentation bears released in 2018 and 2019 in the Cabinet Mountains. During 2020, we placed 134 hair snare corral/camera sites and collected hair at 447 rub tree sites in the Selkirk Mountains. Trail cameras produced grizzly bear photographs at 49 sites, identifying four females with cubs. In the Cabinet-Yaak, we placed 27 corral/camera sites and collected hair at 345 rub trees. Camera photographs identified grizzly bears at 15 sites including one female with cubs and one female with a yearling. We have been monitoring huckleberry production for more than 25 years in the Cabinet-Yaak ecosystem and expanded the effort to the Selkirk Mountains during 2014. We sampled 5 sites in the Selkirks and 15 sites in the Cabinet-Yaak and found average huckleberry production during 2020.
2019 annual reports can be found at the following links:
https://www.fws.gov/mountain-prairie/es/species/mammals/grizzly/CabYaak2019annualreport.pdf
https://www.fws.gov/mountain-prairie/es/species/mammals/grizzly/Selkirk2019annualreport.pdf

Evaluation of the use of DNA collected at bear rub trees and corrals to estimate the grizzly population

Genetic sample results from the laboratory are not complete until the summer after collection and therefore our results here reflect samples collected in 2019. We sampled 413 rub trees and 118 corrals in the Selkirk Mountains during 2019. Genetic analysis indicated that rub trees produced grizzly bear hair from 26 individuals and corrals produced hair from 23 individuals. Some individuals were identified at both

rubs and corrals. Using all data from rubs, corrals, captures, and photographs we identified 37 different individuals in the Selkirks (20 Females : 17 Males). We sampled 857 rub trees and 29 corrals in the Cabinet-Yaak during 2019. Genetic analysis resulted in the identification of 30 individuals at rubs and 6 individuals at corrals. Some individuals were identified at both rubs and corrals. Using all data from rubs, corrals, captures, and photographs we identified 39 different bears in the Cabinet-Yaak (9 Females : 30 males).

NCDE Trend Monitoring Project

We supported the Northern Continental Divide Ecosystem (NCDE) grizzly bear trend monitoring project by providing funding for one full time employee's salary and benefits. Lori Roberts is a research assistant working with Montana Fish, Wildlife & Parks doing database management and leading a trap team during the summer months. In 2020, we purchased two iridium grizzly bear radio collars and release mechanisms for use in the NCDE by Montana Fish, Wildlife & Parks. *The latest report for this project is attached.*

Conflict Prevention

In 2020, we supported numerous preventative projects throughout Montana, from the East Front to the Northwest corner of the state. Support for state agency, tribal, and non-profit preventative projects totaled more than $60,000. Preventive projects included electric fencing, bear spray distribution, critter gitter devices, and bear-resistant garbage containers.

Defenders of Wildlife's 2020 Electric Fencing Incentive Program worked directly with individuals and communities, non-profit organizations, small businesses, and state, federal and tribal agencies to complete a wide variety of electric fence projects, primarily on private lands. We see tremendous conservation value in providing the financial support and technical expertise to build electric fence systems that effectively deter grizzly bears and other carnivores from accessing anthropogenic attractants. This program is designed to be proactive in preventing conflicts, though they give priority to those with previous or existing bear conflicts. Defenders saw a direct reduction in human-bear conflicts and other wildlife conflicts at these sites where fences are completed and maintained.

Since Defenders of Wildlife's fencing program began in 2010, they have completed 466 electric fences and provided over $149,000 in reimbursements and financial support to participants. In 2020, despite fieldwork limitations surrounding the Covid-19 pandemic, Defenders' 2020 fencing program assisted 54 landowners with technical assistance and reimbursements. *See attached report from 2020.*

Prevention Cost Share Projects with the Blackfoot Challenge

In 2020, the Blackfoot Challenge continued to build electric fences to reduce grizzly bear conflicts in the Blackfoot watershed. We supported four high priority electric fence projects. In addition to electric fence projects, we purchased nine 95-gallon Kodiak bear-resistant garbage containers for the Blackfoot Challenge to distribute to local residents that have experienced grizzly bears in their garbage or would like to prevent grizzly bears getting into their garbage. The program has been very successful at reducing and preventing conflicts throughout the Blackfoot corridor. Cost share on these projects was made possible by landowner contributions, the Blackfoot Challenge, USFWS Partners Program, Vital Ground, Defenders of Wildlife,

Western Bear Foundation and Montana Fish, Wildlife and Parks. *Attached are the latest wolf and bear activity reports.*

Masters Student Project: Grizzly Bear Use of Huckleberries

This project seeks to identify productive huckleberry shrubfields in the Cabinet-Yaak and Selkirk grizzly bear recovery areas by investigating grizzly bear radio location data. The project will develop a predictive model to identify additional productive shrubfields not visited by radio-collared bears. Management actions that produce or maintain the utilized shrubfields (timber harvest, prescribed fire, etc.) may be identified for future management. The graduate student that was enrolled at the University to conduct this research has left the program prematurely and other field staff continued the sampling during 2020. We plan to continue this program with existing staff with completion expected in 2022.

Army Cutworm Moth Use by Grizzly Bears in the Greater Yellowstone Ecosystem

In cooperation with the Shoshone National Forest, this project is investigating the use of stable isotope analysis to assess the dietary importance of army cutworm moths to grizzly bears in the Greater Yellowstone Ecosystem. Since the late 1990s, use of army cutworm moths have been monitored via aerial observations of grizzly bears at confirmed moth sites to measure trends in grizzly bear presence at moth sites. Stable isotope analysis will allow us to estimate the proportion of the assimilated diet that is composed of moths compared to other meat (e.g., other insects and ungulates) and plant matter. Food items and grizzly bear hair were collected in 2020 and will be analyzed in 2021. Moths will be collected from more peaks during 2020 for expanded analysis.

Outreach & Education

The **Be Bear Aware Campaign** educates the public about living with bears and about bear avoidance in order to minimize human-bear conflicts. In 2020, the Be Bear Aware Campaign hosted 50 informal bear avoidance safety seminars and many of these events included its bear spray demonstration course. Be Bear Aware also greatly expanded its outreach and education efforts through new website presentations, YouTube videos, a radio public service announcement, and materials distributed. *See attached for Be Bear Aware Campaign's full 2020 report.*

The mission of **Swan Valley Bear Resources** (SVBR) is to provide community resources to promote coexistence between people and bears. SVBR is a collaborative working group including local non-profit conservation/education organization Swan Valley Connections (SVC) and community members working in partnership with the U.S. Forest Service, Montana Fish, Wildlife & Parks, the U.S. Fish & Wildlife Service and other natural resource entities. By pooling resources, experience, and expertise SVBR provides place-based solutions for minimizing bear conflicts on private and public property in the Swan Valley. To learn more about SVBR's 2020 bear-resistant garbage container loaner, electric fencing program, and outreach and education efforts s*ee attached report.*

We supported the **Blackfoot Challenge Range Rider Program** during this reporting period. The Range Rider Program offers an array of services that include: keeping track of grizzly bear activity on private ranch and agricultural properties; following and monitoring cattle on private lands and federal and state livestock allotments on the summer ranges in order to prevent and document grizzly bear depredation; assisting with monitoring radio collared bears and wolves; and providing support to MFWP's bear /wolf specialist management team during research and management trapping efforts. The Range Rider also assists with the area-wide livestock carcass pick-up program, community bear awareness and education, setting up and educating the public on the use of electric fencing, and grizzly bear management calls involving residential/agricultural attractants. As a result of these efforts, livestock depredations and conflicts and grizzly bear deaths related to improper management of garbage and other attractants have been greatly reduced.

UM Graduate Committees and Lectures

Jennifer Fortin-Noreus and Hilary Cooley are both affiliate faculty at UM and serve on graduate committees and give guest lectures and seminars on campus. During this reporting period, Jennifer and Hilary each served on one graduate committee and Hilary gave a lecture in Careers and TWS.

NORTHERN CONTINENTAL DIVIDE ECOSYSTEM

GRIZZLY BEAR POPULATION MONITORING TEAM

ANNUAL REPORT – 2019



Prepared by:

Cecily M. Costello
Lori L. Roberts

Monitoring Team Cooperators:

Montana Fish, Wildlife & Parks (MTFWP)
U.S. Fish and Wildlife Service (USFWS)
U.S. Forest Service
Blackfeet Nation
Confederated Salish and Kootenai Tribes (CSKT)
National Park Service (NPS), Glacier National Park
Parks Canada, Waterton Lakes National Park, Alberta
British Columbia Ministry of Forests

Core Field Team Members:

Cecily Costello, MTFWP
Stacy Courville, CSKT
Jamie Jonkel, MTFWP
Mike Madel, MTFWP
Tim Manley, MTFWP
Lori Roberts, MTFWP
Wesley Sarmento, MTFWP
John Waller, NPS
Cassie Powell, Blackfeet Nation
Erik Wenum, MTFWP

This annual report summarizes data collection efforts to date. It is not a peer-reviewed document, and data summaries and interpretations are subject to change.

Suggested Citation:
Costello, C.M., and L.L. Roberts. 2020. Northern Continental Divide Ecosystem Grizzly Bear Monitoring Team Annual Report, 2019. Montana Fish, Wildlife & Parks, 490 N. Meridian Road, Kalispell, MT 59901. Unpublished data.

This Annual Report is available on the web at:
http://fwp.mt.gov/fishAndWildlife/management/grizzlyBear/monitoring.html

ABSTRACT

A program to monitor the population trend of grizzly bears in the Northern Continental Divide Ecosystem (NCDE) of Montana was initiated in 2004. The goal of this program is to estimate population trend by monitoring the survival and reproductive rates of radio-marked grizzly bears with the Demographic Monitoring Area (DMA). The DMA is composed of the Primary Conservation Area (PCA; equivalent to the Recovery Zone) and Zone 1 (a buffer area around the PCA). This report summarizes field accomplishments during 2019. During 2019, we captured 28 grizzly bears (13F, 15M) for trend monitoring. An additional 40 bears (16F, 24M) were captured for management or other purposes. Including bears captured in previous years, we monitored 73 bears (50F, 23M) with radio-telemetry for research or management. We documented the deaths of 8 radio-marked bears (3F, 5M). All radio-marked deaths involved bears captured for management. Reproductive status was documented for 28 radio-marked adult females and included 9 with cubs, 8 with yearlings, 3 with 2-year-old offspring, and 7 with no offspring. Survival of accompanying dependent offspring was monitored for 10 females. We documented 4 known or presumed mortalities among 5 cub litters and 2 known mortalities among 5 yearling litters. Including unmarked bears, 51 known or probable mortalities of grizzly bears were documented within the NCDE population. We evaluated various demographic parameters relative to thresholds set forth in the 2018 Conservation Strategy. During the 6-year period of 2014–2019, 22 of 23 BMUs within the PCA and all 7 OUs within Zone 1 were occupied by females with offspring during at least one year, above the minimum thresholds of 21 BMUs and 6 OUs. For the 6-year period 2014–2019, we estimated an annual survival rate of 0.94 (± 0.01 SE) for independent females within the DMA, above the minimum threshold rate of 0.93. Within the DMA, we documented 12 and 17 mortalities of independent (≥2 years old) bears for females and males, respectively. From these, we estimated 16 total reported and unreported (TRU) mortalities for independent females and 26 TRU mortalities for independent males. During 2014–2019, the 6-year average of TRU mortalities for independent females within the DMA was 16, which fell below the maximum threshold of 23. The 6-year average for independent males was 21, which fell below the maximum threshold of 29. Based on radio-monitoring or genotypes for bears sampled through 2018, we found no new evidence of immigration from the Cabinet-Yaak or Selkirk Ecosystems. To date, we have not detected evidence of immigration into the NCDE from the Greater Yellowstone Ecosystem (GYE) or emigration from the NCDE into the GYE.

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1. INTRODUCTION AND STATEMENT OF NEED

The grizzly bear (*Ursus arctos horribilis*) was listed as threatened under the Endangered Species Act in 1975 for lack of information on its population status and habitat requirements. The NCDE has the largest population of grizzly bears in the lower 48 states; population size during 2004 was estimated to be 765 bears (Kendall et al. 2009). Managers and the public agree that information on both population size and trend is needed. Having these estimates will greatly improve our collective knowledge of grizzly bear ecology and provide more measurable and precise information with which to judge the status of the grizzly population in the NCDE. Therefore, in 2004 Montana Fish, Wildlife & Parks (MFWP), in cooperation with other state, federal, and tribal agencies, established a team to monitor the population trend of grizzly bears in the NCDE. The purpose of this long-term program is to monitor grizzly bear survival rates, reproductive rates, and population trend primarily by radio-monitoring grizzly bears, particularly females.

2. PROGRAM OBJECTIVES

The primary objective of this program is to monitor the population trend of grizzly bears in the NCDE using known-fate estimators of survival and documentation of reproductive rates of radio-transmitted grizzly bears. The ultimate responsibility of the monitoring team is to collect life history data on grizzly bears in western Montana and summarize findings in a comprehensive annual report. Major population monitoring categories will initially include:

- population trend,
- grizzly bear survival rates,
- grizzly bear reproductive rates,
- grizzly bear movements and habitat selection,
- grizzly bear distribution in western Montana,
- mortality levels in the NCDE, and
- levels of unreported mortality.

The 2018 Conservation Strategy detailed demographic monitoring protocols and management objectives developed by an interagency team to maintain and enhance a recovered grizzly bear population in the NCDE. It set forth 3 demographic objectives and associated thresholds. Although the Conservation Strategy is intended to take effect upon removal of the NCDE grizzly bear population from threatened status under the Endangered Species Act, the objectives and thresholds represent the most recent monitoring methodologies, therefore we report on these objectives using field data obtained through 2019.

3. GEOGRAPHIC SCOPE OF THE MONITORING PROGRAM

Our trend monitoring program is focused within the Demographic Monitoring Area (DMA; Fig. 1), which encompasses the 23,119-km^2 Primary Conservation Area (PCA: equivalent to the Federal Recovery Zone) and the 19,460-km^2 Zone 1, which roughly correlates to a 10-mile buffer surrounding the PCA (USFWS 1993, NCDE Subcommittee 2018). The DMA includes Glacier National Park, parts of five National Forests (Flathead, Helena, Kootenai, Lewis and Clark, and Lolo); parts of the Blackfeet and Flathead Reservations; Bureau of Land Management lands; state lands, and private lands. The NCDE grizzly bear population is also contiguous with those in the Canadian provinces of British Columbia and Alberta, therefore some captures and monitoring occur north of the United States in Canada. Within the DMA, we designated 9 subunits for localized analyses, based on distinct land ownerships and grizzly bear population management authorities.

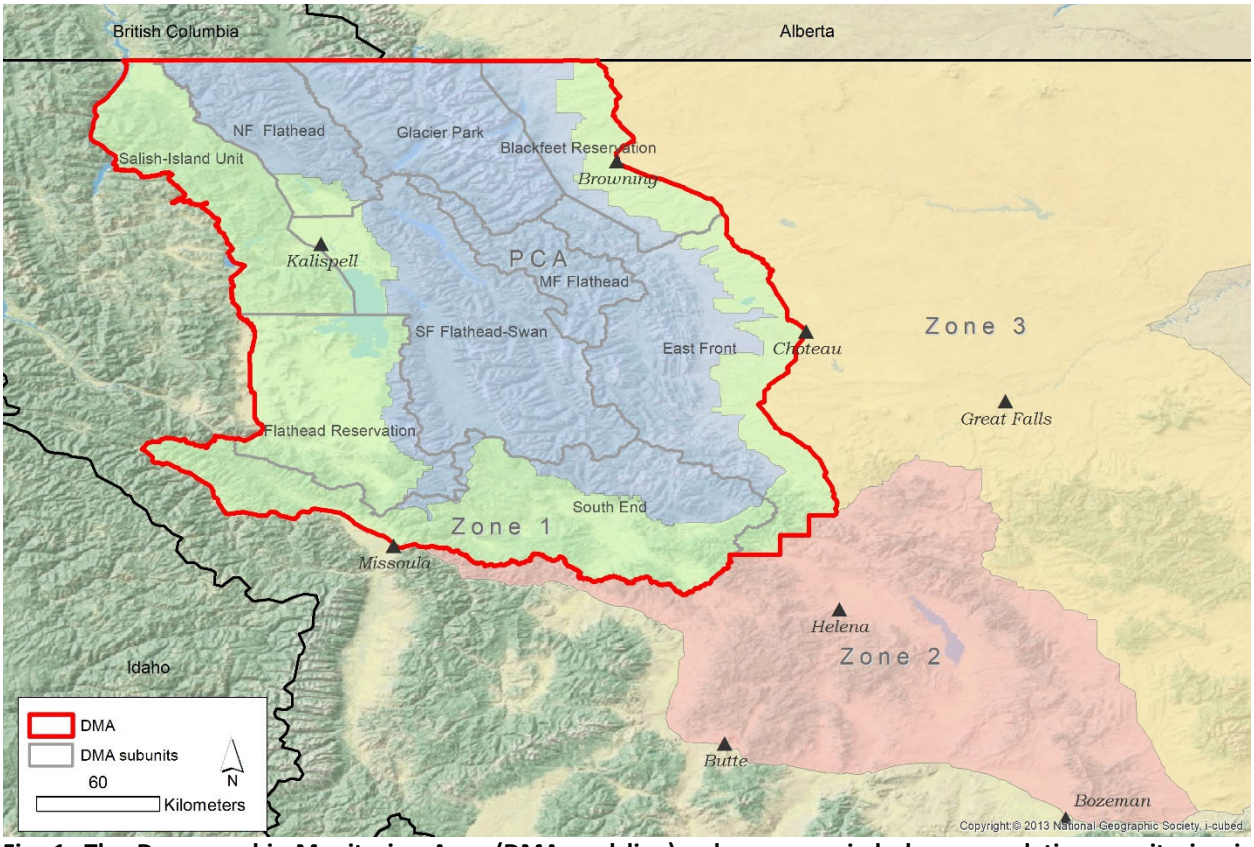


Fig. 1. The Demographic Monitoring Area (DMA; red line), where our grizzly bear population monitoring is conducted, consists of the Primary Conservation Area (PCA; blue) and Zone 1 (green). The DMA is divided into subunits (gray lines) for localized population analyses. Zone 2 (pink) is the area of potential genetic connectivity between the NCDE and the Greater Yellowstone Ecosystem. Zone 3 (orange) is an area occupied by grizzly bears which does not provide habitat linkage to other populations.

Although our focus for trend monitoring is the DMA, we also document mortalities and other observations outside of the DMA. Notable areas include: Zone 2, an area of potential connectivity between the NCDE and the Greater Yellowstone Ecosystem (GYE); and Zone 3, an area occupied by grizzly bears which does not provide habitat linkage to other grizzly bear populations (NCDE Subcommittee 2018).

4. FIELD ACTIVITIES

Methods

Each year, we capture grizzly bears primarily using leg-hold snares and culvert traps. We follow the handling and immobilization procedures found in the Montana Animal Care and Use Committee protocols for grizzly bears and black bears (Montana Fish, Wildlife and Parks 2004). We tag all bears subcutaneously with passive transponder tags and pull a pre-molar tooth for age determination (Stoneberg and Jonkel 1966). We radio-mark most females and a sample of males using a variety of transmitters, including: very high frequency (VHF) neck-mounted collars (Telonics, Inc., Mesa, AZ); VHF ear-tag transmitters (Advanced Telemetry Systems, Inc., Isanti, MN); store-on-board global positioning system (GPS) collars (TGW-4500; Telonics, Inc.); Argos GPS collars (Models TGW-3580 and TGW-3583; Telonics, Inc.); spread-spectrum GPS collars (TGW-3690; Telonics, Inc.), and Iridium GPS collars (TGW-4570-3; Telonics, Inc.). We capture research bears throughout the study area. We attempt to distribute our sample of research females in proportion to relative grizzly bear density, based on the distribution of female bears detected at DNA hair traps in 2004 (Kendall et al. 2009). Grizzly bears are also captured and radio-marked for management purposes. Individual bears are classified as either research bears or management bears using the terminology of Mace et al. (2012).

We monitor survival and reproduction using aerial telemetry flights conducted monthly and by remote downloads of GPS data. We attempt to investigate mortality signals within 2 weeks to ascertain whether the bear died or shed its collar. If a dead bear is found, we conduct preliminary necropsies in the field and collect relevant samples for laboratory analyses. In early spring, when bears are beginning to emerge from dens, we conduct observation flights for adult female bears to ascertain reproductive status, and age of offspring and litter size (if present). We continue to conduct monthly telemetry flights throughout the active season, when possible, to document survival of dependent offspring.

We record and report known and probable mortalities of marked and unmarked grizzly bears each year. Known mortalities involve a carcass or parts which substantiate death; probable mortalities lack a carcass but involve strong evidence that a bear died (e.g., blood loss).

Results

In 2019, we captured 70 individuals during 77 capture occasions (7 recaptures). We captured 28 individuals for trend monitoring purposes (Table 1), including 13 females and 15 males. Eleven females and 2 males were fitted with radio-transmitters. In addition to research captures, bears were captured in association with management actions, although some were non-target individuals. These captures included 16 females and 24 males, and 10 females and 9 males were fitted with radio-transmitters. Trapping for individuals to augment the population in the Cabinet-Yaak Ecosystem (CYE) was also conducted during 2019. One male and one female were captured and translocated to the CYE.

Including bears collared during previous years, we radio-monitored 50 independent female grizzly bears during all or part of 2019: 28 females monitored for trend research and 22 females monitored for bear-human conflict management. We also radio-monitored 1 cub for management. We radio-monitored 23 independent males during 2019: 7 for trend research and 18 for conflict management. We documented the deaths of 3 radio-marked females during 2019: 1 automobile collisions and 2 agency removals. We documented the deaths of 5 radio-marked males during 2019: 2 agency removals and 3 from undetermined cause. All radio-marked deaths involved bears captured for management purposes. No deaths were documented among the research sample. A summary of the fates of radio-marked bears during 2019 are presented in Appendix A.

We recorded the reproductive status of 28 adult females during 2019, including 9 with cubs, 8 with yearlings, 3 with 2-year-old offspring, and 7 with no offspring. First observations for reproductive status ranged from March 14 (ground observation) to October 7 (new capture) and averaged June 4. We documented 5 litters with 1 cub, 3 litters with 2 cubs, and 1 litter with 3 cubs. First observations for these litters ranged from April 16 (flight observation) to October 7 (new capture). Mean date of first verified litter size was June 19. We monitored survival of 5 cub litters (9 cubs) and 5 yearling litters (9 yearlings) through repeated observations during the year. We documented 4 presumed or known cub mortalities and 2 known yearling mortalities. A summary of the reproductive observations of radio-marked females are presented in Appendix B.

Fifty-one known or probable grizzly bear mortalities were documented in the NCDE during 2019 (Table 2). Forty-six occurred within the DMA: 26 inside the PCA and 20 within Zone 1 (Fig. 2). Seven mortalities occurred outside the DMA: 3 in Zone 3 and 2 in Canada. The two mortalities in Canada were included because they were bears captured and radio-marked in Montana and were collared at the time of death. Among 33 mortalities of independent bears, causes of death were: agency removal due to conflict (14); agency removal for augmentation of the Cabinet-Yaak populations (2); agency humane

removal (1); agency handling mortality (1); defense of life kill (2); automobile collision (3); poaching/malicious kill (1); train collision (4); and undetermined or under investigation (5). Eighteen dependent bear mortalities included individuals that died, individuals that were orphaned and then captured and moved to zoos, or cubs that were orphaned and assumed dead (if fate is unknown, cubs are assumed dead). Causes of death were: automobile collision (4); train collision (4); agency removal due to conflict (4); agency removal due to orphaning (2); assumed dead due to orphaning (1); natural (2); and illegal defense of property (1). Two mortalities documented in 2019 involved orphaned offspring that were originally counted as probable mortalities in 2018. There were an additional 2 mortalities that were discovered or reported in 2019, but occurred in 2018. These included an adult that died of undetermined cause and a yearling male killed in defense of life. A summary of all documented mortalities in the NCDE during 2019 is reported in Appendix C.

Table 1. Number of individual grizzly bears captured and fitted with radio-transmitters in the NCDE, 2019.

	Captured			Radio-marked		
Type	Female	Male	Total	Female	Male	Total
Research	13	15	28	11	2	13
Management	16	24	40	10	9	19
Augmentation	1	1	2	0	0	0
Total	30	40	70	21	11	32

Table 2. Number of documented known or probable mortalities of grizzly bears in the NCDE, 2019.

		Sex			
	Ageclass	Female	Male	Unknown	Total
Inside DMA	Dependent	7	8	2	17
	Independent	11	15	3	29
	Total	18	22	5	46
Outside DMA	Dependent	1	0	0	1
	Independent	0	4	0	4
	Total	1	4	0	5

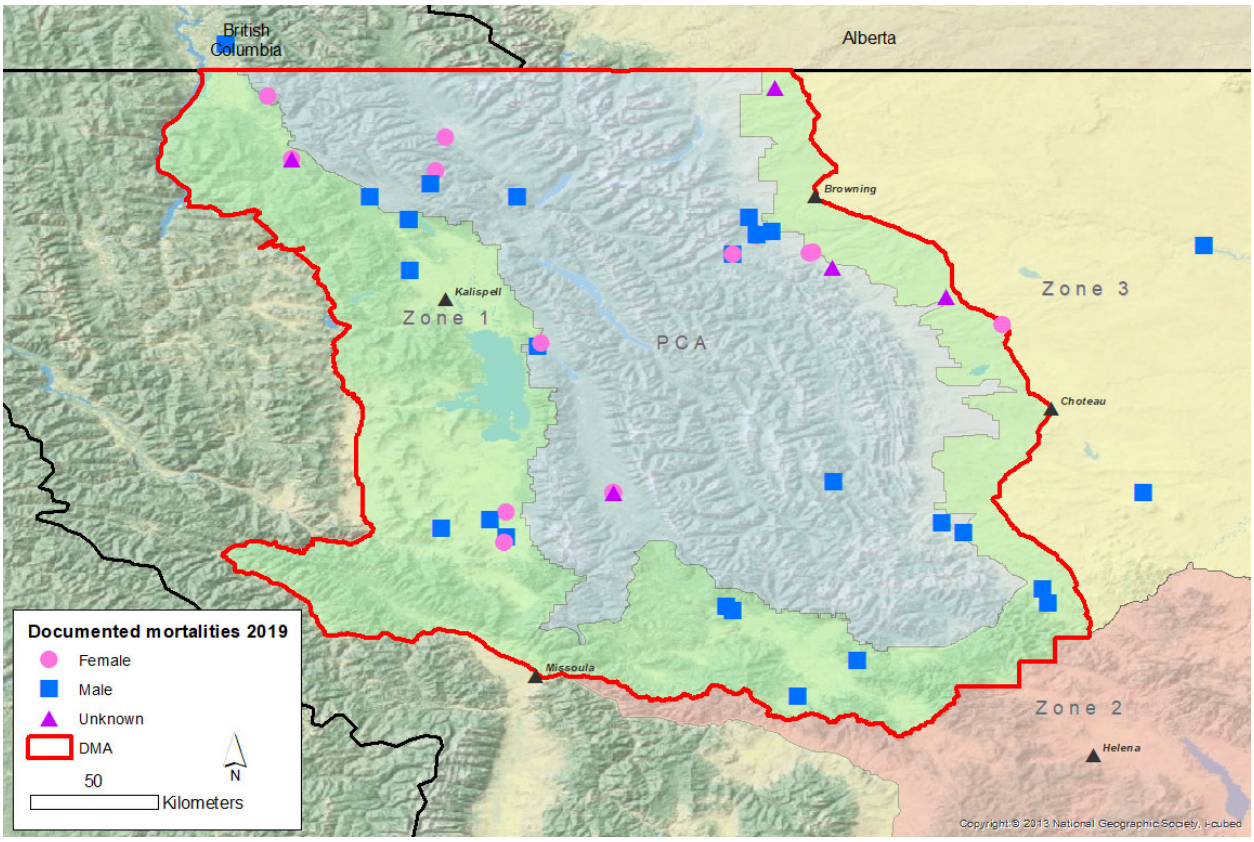


Fig. 2. Location of known and probable grizzly bear mortalities in the NCDE, 2019. Zones as described in Fig. 1.

5. CONSERVATION STRATEGY OBJECTIVES AND THRESHOLDS

The NCDE Conservation Strategy (NCDE Subcommittee 2018) articulated an overarching management goal to maintain a recovered, genetically diverse grizzly bear population throughout the DMA while maintaining demographic and genetic connections with Canadian populations and providing the opportunity for demographic and/or genetic connectivity with other ecosystems, with the following objectives and thresholds:

Objective 1: Maintain a well-distributed grizzly bear population within the DMA

- Occupancy threshold: Maintain the documented presence of females with offspring in at least 21 of 23 BMUs of the PCA and in at least 6 of 7 occupancy units of Zone 1 at least every 6 years.

Objective 2: Manage mortalities from all sources to support a ≥90% estimated probability that the grizzly bear population within the DMA remains above 800 bears, considering the uncertainty associated with all the demographic parameters.

- Independent female survival threshold: Using a 6-year running average, maintain estimated annual survival of independent females within the DMA to: (a) a rate of ≥ 0.90; and (b) a rate at or above the minimum level consistent with a projected ≥90% probability that the population within the DMA will remain above 800 bears based on population modeling.
- Independent female mortality threshold: Using a 6-year running average, limit annual estimated number of total reported and unreported (TRU) mortalities of independent females within the DMA to: (a) a number that is ≤10% of the number of independent females estimated within the DMA based on population modeling; and (b) a number that is at or below the maximum level consistent with a projected ≥90% probability that the population within the DMA will remain above 800 bears based on population modeling.
- Independent male mortality threshold: Using a 6-year running average, limit annual estimated number of TRU mortalities of independent males within the DMA to a number that is ≤15% of the number of independent males estimated within the DMA based on population modeling.

Objective 3: Monitor demographic and genetic connectivity among populations

- Estimate spatial distribution of the NCDE grizzly bear population biennially.
- Identify the population of origin for individuals sampled inside and outside of the DMA to detect movements of individuals to and from other populations or recovery areas.

Methods

Each year, we document presence of females with cub, yearling, or 2-year-old offspring within units, based on visual observations obtained from radio-marked females; verified remote camera photos; other verified visual observations; known or probable mortalities of family units (death of the mother, dependent young, or both); and telemetry or GPS locations of radio-marked females known to have offspring. The PCA component of the threshold represents a continuation of the occupancy targets established within the Recovery Zone prior to delisting (USFWS 1993) and utilizes the same BMUs (Fig. 3). The Zone 1 component utilizes Occupancy Units (OUs) demarcated using established political boundaries (i.e., state/tribal boundaries and FWP regional boundaries) and the boundaries of the two Demographic Connectivity Areas (NCDE Subcommittee 2018).

We estimate survival of independent females within the DMA based on known-fate analysis of data collected from radio-marked female bears within the DMA (Costello et al. 2016). Analysis incorporates the time series of survival data from known-fate monitoring since 2004 and differentiates the most recent 6 years of data to compare to the threshold. Based on the number of known and probable mortalities recorded each year, and the human reporting rate observed among radio-marked bears (Costello et al. 2016), we estimate numbers of TRU mortalities of independent female and male grizzly bears within the DMA and assess the female and male mortality thresholds using an average for the last 6 years. We previously developed thresholds for a 6-year management period during 2019–2023 (NCDE Subcommittee 2018). Thresholds were developed by simulating population growth using current estimates of vital rates (Costello et al. 2016) to year 2012 and then projecting another 25 years to predict effects of changing female and male independent bear survival. Under this scenario, and assuming selection of a 6-year management period of 2019–2023, the minimum threshold for independent female survival was 0.93, the maximum threshold for the number of independent female mortalities was 23, and the maximum threshold for the number of independent male mortalities was 29.

We estimate the distribution of the NCDE grizzly bear population biennially, by applying zonal analysis and ordinary kriging (Bjornlie et al. 2014) to 7-km x 7-km cells with verified grizzly bear locations documented during a 10-year window up to the current year. Verified locations are collected from GPS transmitters; VHF telemetry flights; capture and mortality locations; grizzly bear-human conflict sites; observations (sightings or tracks) or remote camera photos confirmed by agency personnel; and opportunistic samples of grizzly bear hair, blood, scat, or tissue confirmed by DNA analysis. DNA samples obtained during captures or at any of verified grizzly bear sites are analyzed for population of origin to document movement of individuals to and from other populations or recovery areas (Haroldson et al. 2010). Genetic samples are not submitted until the end of each field season and take some time to analyze, therefore there is typically a 1-year lag in reporting results for population of origin.

Results

During 2019, we verified presence of reproductive females within 18 of 23 BMUs (78%) and within 7 of 7 supplementary BMUs (100%; Fig. 3). For the 6-year period 2014–2019, 22 of 23 BMUS were occupied by females with offspring, thus exceeding the objective of 21 of 23 BMUs occupied (Appendix D). All OUs were occupied during the last 6 years, exceeding the objective of 6 of 7 OUs occupied. Using the 6-year tally, the occupancy thresholds for the PCA and Zone 1 have been met each year since 2006.

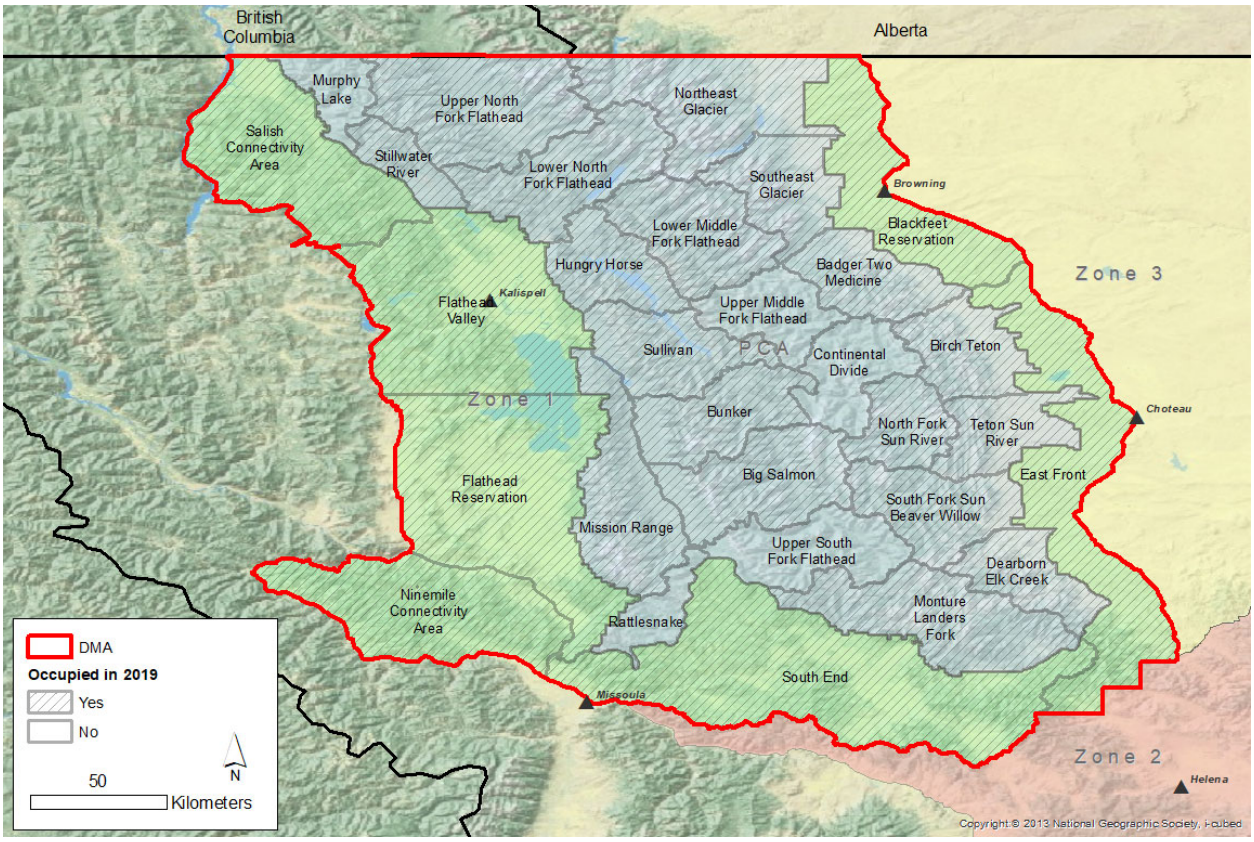


Fig. 3. Documented occupancy of female grizzly bears with offspring in 23 BMUs of the PCA and 7 OU of Zone 1 during 2019. Occupancy has been documented in all units during the last 6 years, except for the Continental Divide BMU in the Bob Marshall Wilderness. Zones as described in Fig. 1.

For the 6-year period 2014–2019, we estimated an annual survival rate of 0.94 (± 0.01 SE) for independent females within the DMA, which meets the minimum threshold rate of 0.93 (Fig. 2; NCDE Subcommittee 2018).

Within the DMA, there were 12 and 17 known mortalities reported for independent females and independent males, respectively (Fig. 2). We estimated the number of total reported and unreported (TRU) mortalities of independent bears within the DMA using these numbers and the reporting rates observed among radio-marked bears. We estimated 16 TRU mortalities of independent females and 26 TRU mortalities of independent males within the DMA (Table 3). During 2014–2019, the 6-year average of TRU mortalities for independent females within the DMA was 16, which falls below the maximum threshold of 23 (NCDE Subcommittee 2018). The 6-year average for independent males was 21, falling

below the maximum threshold of 29 (NCDE Subcommittee 2018). An updated summary of all demographic parameters documented during the 6-year period 2014–2019 are reported in Appendix E.

The biennial population distribution analysis was completed for the 2018 report, therefore we did not update the analysis for this report. Based on genotypes for bears sampled through 2018 (genotypes from 2019 are not yet available), we have not detected evidence of immigration into the NCDE from the GYE or emigration from the NCDE into the GYE.

Table 3. Summary of independent grizzly bear mortalities within the DMA, NCDE, 2019.

	Documented mortalities by method of discovery				Estimated reported and unreported[e]	Estimated total mortality
Sex	Agency removal[a] (A)	Telemetry[b] (B)	Reported[c] (high)	Reported[d] (low)	(C)	(A + B + C)
Female	5	1	5	1	10	16
Male	11	1	3	2	14	26
Total	16	2	8	3	24	42

[a] Count of agency-sanctioned removals, including those involving radio-marked bears

[b] Count of deaths for bears wearing functional radio-transmitters, except for agency removals

[c] Count of non-radioed bear deaths reported by the public or discovered by agency personnel with high reporting rates (illegal defense-of-property, defense-of-life, train collision, automobile collisions, illegal hunting-misidentification)

[d] Count of non-radioed bear deaths reported by the public or discovered by agency personnel with low reporting rates (poaching/malicious, natural, undetermined)

[e] Bayesian estimate of the total number of reported and unreported deaths of non-radioed bears, predicted from the number of reported deaths of non-radioed bears in the high- and low-reporting rate categories (as per Cherry et al. 2002 and Costello et al. 2016).

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Appendix A. Fate of radio-marked grizzly bears monitored with radio-telemetry in the NCDE, 2019.

Sex	Capture type	DMA subunit	Bear ID	Fate
Female	Research	Blackfeet Reservation	81289535	Censored
Female	Research	Blackfeet Reservation	81278116	Alive
Female	Research	Blackfeet Reservation	839821018	Censored
Female	Research	Blackfeet Reservation	839845540	Alive
Female	Research	East Front	41375278	Censored
Female	Research	Flathead Reservation	41299353	Censored
Female	Research	Flathead Reservation	41519364	Alive
Female	Research	Flathead Reservation	79558051	Censored
Female	Research	Flathead Reservation	79558279	Alive
Female	Research	Flathead Reservation	41089770	Censored
Female	Research	Glacier National Park	10876305	Alive
Female	Research	Glacier National Park	36554783	Alive
Female	Research	Glacier National Park	41078883	Alive
Female	Research	Glacier National Park	41515561	Alive
Female	Research	Glacier National Park	839846062	Alive
Female	Research	Glacier National Park	842018043	Alive
Female	Research	Multiple subunits	839828530	Censored
Female	Research	Multiple subunits	839822818	Alive
Female	Research	North Fork Flathead	11052544	Alive
Female	Research	North Fork Flathead	67006850	Censored
Female	Research	North Fork Flathead	79570382	Alive
Female	Research	North Fork Flathead	601618304	Alive
Female	Research	South End	11018035	Alive
Female	Research	South End	11065603	Alive
Female	Research	South Fork Flathead River-Swan Valley	55598849	Alive
Female	Research	South Fork Flathead River-Swan Valley	79050043	Censored
Female	Research	South Fork Flathead River-Swan Valley	839826876	Alive
Female	Research	South Fork Flathead River-Swan Valley	601609326	Alive
Female	Research	South Fork Flathead River-Swan Valley	839839014	Alive
Female	Management	Blackfeet Reservation	11044088	Alive
Female	Management	Blackfeet Reservation	41090260	Alive
Female	Management	Blackfeet Reservation	81279041	Censored
Female	Management	Blackfeet Reservation	839823853	Alive
Female	Management	Blackfeet Reservation	839824884	Alive
Female	Management	Blackfeet Reservation	839828868	Censored
Female	Management	Blackfeet Reservation	839841332	Censored
Female	Management	East Front	39086301	Censored
Female	Management	East Front	39088331	Alive
Female	Management	East Front	41532565	Alive
Female	Management	East Front	41623606	Alive
Female	Management	Multiple subunits	41261364	Dead
Female	Management	Multiple subunits	839825532	Alive

Sex	Capture type	DMA subunit	Bear ID	Fate
Female	Management	North Fork Flathead	11032039	Censored
Female	Management	North Fork Flathead	55577095	Censored
Female	Management	Outside DMA	81289829	Censored
Female	Management	Outside DMA	839815522	Censored
Female	Management	Outside DMA	839825561	Alive
Female	Management	South Fork Flathead River-Swan Valley	41379363	Censored
Female	Management	South Fork Flathead River-Swan Valley	841893590	Alive
Female	Management	South Fork Flathead River-Swan Valley	842005026	Dead
Female	Management	South Fork Flathead River-Swan Valley	839828828	Dead
Male	Research	East Front	41360823	Censored
Male	Research	East Front	41638038	Censored
Male	Research	East Front	41779283	Alive
Male	Research	Glacier National Park	11022885	Censored
Male	Research	South End	41086114	Alive
Male	Research	South End		Censored
Male	Research	South Fork Flathead River-Swan Valley	41382533	Censored
Male	Management	Blackfeet Reservation	11003083	Dead
Male	Management	Blackfeet Reservation	41365620	Censored
Male	Management	Blackfeet Reservation	839824321	Alive
Male	Management	Blackfeet Reservation	11009019	Alive
Male	Management	East Front	41546593	Alive
Male	Management	North Fork Flathead River	80626085	Censored
Male	Management	North Fork Flathead River	55576046	Dead
Male	Management	North Fork Flathead River	601608324	Dead
Male	Management	North Fork Flathead River	601619778	Alive
Male	Management	Outside DMA	11029050	Dead
Male	Management	Outside DMA	839841348	Censored
Male	Management	Outside DMA	839820364	Alive
Male	Management	Outside DMA	839832101	Censored
Male	Management	Outside DMA	839843617	Alive
Male	Management	South End	55584076	Censored
Male	Management	South Fork Flathead River-Swan Valley	601608564	Alive
Male	Management	South Fork Flathead River-Swan Valley	601620113	Dead
Male	Management	South Fork Flathead River-Swan Valley	842010334	Alive

Appendix B. Observed reproductive status and fate of offspring for adult female grizzly bears monitored with radio-telemetry in the NCDE, 2019.

Capture type	DMA subunit	Bear ID	Status	Litter size	Offspring mortality
Management	Blackfeet Reservation	11044088	Yearlings	2	
Research	Blackfeet Reservation	81278116	Cubs	1	
Research	Blackfeet Reservation	839845540	Cubs	1	
Management	Blackfeet Reservation	839841332	Yearlings	1	
Management	East Front	39086301	None		
Management	East Front	41532565	Two-year-olds	1	
Management	East Front	41623606	Cubs	1	
Research	Flathead Reservation	79558279	Yearlings	3	
Research	Glacier National Park	36554783	Cubs	2	1
Research	Glacier National Park	10876305	None		
Research	Glacier National Park	41078883	Yearlings	2	
Research	Glacier National Park	839846062	Yearlings	2	
Research	Glacier National Park	842018043	Cubs	2	
Research	Multiple subunits	839828530	None		
Management	North Fork Flathead River	11032039	Yearlings	2	2
Research	North Fork Flathead River	11052544	Two-year-olds	2	
Research	North Fork Flathead River	79570382	Two-year-olds	2	1
Research	North Fork Flathead River	601618304	Yearlings	2	
Management	Outside DMA	81289829	None		
Research	South End	11065603	Yearlings	1	
Research	South Fork Flathead River-Swan Valley	79050043	None		
Research	South Fork Flathead River-Swan Valley	839826876	None		
Management	South Fork Flathead River-Swan Valley	842005026	Cubs	1	
Research	South Fork Flathead River-Swan Valley	55598849	Cubs	1	
Research	South Fork Flathead River-Swan Valley	601609326	Cubs	2	
Management	South Fork Flathead River-Swan Valley	839828828	Cubs	3	3
Research	South Fork Flathead River-Swan Valley	839839014	None		

Appendix C. Summary of known and probable grizzly bear mortalities in the NCDE, 2019.

Date	Date accuracy	Certainty of death	DMA[1]	Sex[2]	Age Class[3]	Bear ID	Collared[1]	Cause
4/13/2019	Week	Known	Y	M	SA		N	Defense of life
4/22/2019	Day	Known	Y	F	SA		N	Capture mortality
4/23/2019	Day	Known	Y	M	SA		N	Agency (livestock)
5/1/2019	Day	Known	N	M	SA		N	Agency (livestock)
5/6/2019	Day	Known	N	F	CB		N	Automobile
5/2/2019	Day	Known	Y	M	YR	41298369[4]	N	Agency (livestock)
5/3/2019	Week	Known	Y	F	YR	601604350	N	Natural
5/12/2019	Day	Known	Y	M	SA		N	Agency (site conflict)
5/30/2019	Day	Known	Y	M	SA		N	Agency (livestock)
5/30/2019	Day	Known	Y	M	YR	79579003[4]	N	Agency (livestock)
6/1/2019	Day	Known	Y	M	AD		N	Automobile
6/6/2019	Day	Known	Y	F	AD	28517094	N	Train
6/6/2019	Day	Known	Y	M	YR		N	Train
6/6/2019	Day	Known	Y	F	YR		N	Train
6/12/2019	Day	Known	Y	M	YR	601603326	N	Agency (site conflict)
6/12/2019	Day	Known	Y	M	YR	55598300	N	Agency (site conflict)
6/14/2019	Day	Known	Y	M	CB		N	Illegal defense of property
6/5/2019	Month	Known	Y	U	SA		N	Undetermined
7/12/2019	Day	Known	Y	F	SA	72258821	N	Agency (augment)
7/14/2019	Day	Known	Y	M	SA	72107089	N	Agency (augment)
7/18/2019	Day	Known	Y	M	SA	11029050	Y	Agency (site conflict)
7/19/2019	Day	Known	N	M	SA		N	Agency (livestock)
6/15/2019	Season	Known	Y	U	SA		N	Poached/malicious
8/5/2019	Day	Known	Y	M	AD	232	N	Agency (livestock)
8/12/2019	Day	Known	Y	M	AD		N	Agency (livestock)
7/20/2019	Day	Known	Y	M	AD	11003083	Y	Undetermined
9/7/2019	Day	Known	Y	M	SA		N	Agency (site conflict)
9/10/2019	Day	Known	Y	F	AD	839828828	Y	Agency (site conflict)
9/5/2019	Day	Known	Y	F	CB	601625009	N	Agency (orphaned)
9/6/2019	Day	Known	Y	F	CB	842007844	N	Agency (orphaned)
9/10/2019	Day	Probable	Y	U	CB	839828828	N	Orphaned
9/24/2019	Day	Known	Y	F	SA		N	Automobile
9/23/2019	Day	Known	Y	M	SA		N	Agency (humane)
10/1/2019	Day	Known	Y	F	SA		N	Train
10/4/2019	Day	Known	Y	F	CB		N	Automobile
10/6/2019	Day	Known	Y	F	SA		N	Train
10/6/2019	Day	Known	Y	F	SA	41261364	Y	Automobile
10/6/2019	Day	Known	Y	M	SA		N	Train
5/14/2019	Day	Known	Y	F	AD		N	Agency (livestock)
4/18/2019	Year	Known	Y	U	SA		N	Undetermined
10/7/2019	Day	Known	Y	M	AD	11033809	N	Agency (livestock)

Date	Date accuracy	Certainty of death	DMA[1]	Sex[2]	Age Class[3]	Bear ID	Collared[1]	Cause
10/11/2019	Day	Known	N	M	SA	55576046	Y	Under investigation
10/11/2019	Day	Known	N	M	SA	601608324	Y	Under investigation
10/14/2019	Day	Known	Y	F	CB		N	Train
10/14/2019	Day	Known	Y	U	CB		N	Train
10/25/2019	Day	Known	Y	F	AD	842005026	Y	Agency (site conflict)
11/5/2019	Day	Known	Y	M	CB		N	Automobile
11/7/2019	Day	Known	Y	F	AD	41549027	N	Defense of life
11/8/2019	Day	Known	Y	M	SA	601620113	Y	Agency (site conflict)
11/9/2019	Week	Known	Y	M	CB		N	Natural
11/11/2019	Week	Known	Y	F	CB		N	Automobile
7/25/2018[5]	Year	Known	Y	M	YR		N	Defense of life
11/15/2018[5]	Year	Known	Y	M	AD		N	Undetermined

[1] Y = Yes, N = No

[2] F = female, M = male, U = unknown sex

[3] AD = adult (≥5 years old), SA = subadult (2-4 years old), YR = yearling (1 year old), CB = cub (<1 year old)

[4] Known mortalities of orphaned offspring originally counted as probable mortalities in 2018

[5] 2018 mortalities that were discovered or reported in 2019

Appendix D. Observed occupancy of 23 Bear Management Units within the PCA and 7 Occupancy Units within Zone 1 by female grizzly bears with offspring, 2014–2019. Units known occupied during a given year are signified by the symbol ×. Twenty-two of 23 BMUs and 7 of 7 OUs were occupied during a 6-year period ending with 2019.

Bear Management Unit (PCA)	2014	2015	2016	2017	2018	2019
Murphy Lake	×			×		
Upper North Fork Flathead	×	×	×	×		×
Northeast Glacier	×	×	×	×	×	×
Stillwater River	×				×	×
Lower North Fork Flathead	×	×	×	×	×	×
Hungry Horse	×	×	×	×	×	×
Lower Middle Fork Flathead	×	×	×	×	×	×
Southeast Glacier	×	×	×	×	×	×
Sullivan	×	×	×	×	×	×
Upper Middle Fork Flathead	×	×	×	×	×	
Badger Two Medicine	×	×	×	×	×	×
Mission Range	×	×	×	×	×	×
Bunker	×	×	×	×	×	×
Continental Divide						
Birch Teton		×	×	×	×	×
Big Salmon	×				×	×
North Fork Sun River				×	×	×
Teton Sun River	×	×		×		×
Rattlesnake	×		×			
Upper South Fork Flathead	×			×		
South Fork Sun Beaver Willow		×		×	×	×
Monture Landers Fork	×	×	×	×		×
Dearborn Elk Creek				×		×
Occupied during year	18	15	14	19	15	18
Occupied during last 6 years	23	23	23	23	22	22
Occupancy Unit (Zone 1)						
Salish Connectivity Area	×		×	×	×	×
Flathead Valley	×	×	×	×	×	×
Flathead Reservation	×	×	×	×	×	×
Ninemile Connectivity Area					×	×
South End	×	×	×	×	×	×
East Front		×	×	×	×	×
Blackfeet Reservation	×	×	×	×	×	×
Occupied during year	5	5	6	6	7	7
Occupied during last 6 years	7	7	7	7	7	7

Appendix E. Thresholds and observed estimates for demographic parameters described in the 2018 Conservation Strategy including: occupancy of females with offspring within 23 Bear Management Units (BMUs) in the Primary Conservation Area (PCA) and 7 Occupancy Units (OUs) in Zone 1, tallied over the last 6 years; survival rate of independent females within the Demographic Monitoring Area (DMA) averaged over the last 6 years; and numbers of total reported and unreported (TRU) mortalities of independent female and male grizzly bears within the DMA averaged over the last 6 years.

			Year					
Parameter	Area/Sex	Criteria/observed	2014	2015	2016	2017	2018	2019
Occupancy	PCA (BMUs)	Minimum threshold	21	21	21	21	21	21
		Observed	23	23	23	23	22	22
	Zone 1 (OUs)	Minimum threshold	6	6	6	6	6	6
		Observed	7	7	7	7	7	7
Survival rate	Female	Minimum threshold	0.93	0.93	0.93	0.93	0.93	0.93
		Observed	0.95	0.96	0.95	0.95	0.93	0.94
TRU mortalities	Female	Maximum threshold	22	22	22	22	22	23
		Observed	14	14	16	14	15	16
	Male	Maximum threshold	28	28	28	28	28	29
		Observed	16	16	15	19	21[1]	21

[1] Parameter was recalculated based on the additional mortality of an independent male bear discovered in 2019, but assumed to have died in 2018.

Defenders of Wildlife

Electric Fencing Incentive Program

Defenders of Wildlife is dedicated to long term grizzly bear recovery in the lower 48 states. Conflict with people is a major cause of grizzly bear mortality and reduces human tolerance for the species. Defenders' Electric Fencing Incentive Program provides financial and technical assistance to help landowners minimize conflict by securing their livestock, beehives, gardens or other bear attractants. Our program field staff work directly with communities and landowners to improve awareness and implement conflict reduction measures across recovery areas in five grizzly bear ecosystems: Greater Yellowstone, Northern Continental Divide, Cabinet-Yaak, Selkirk and Bitterroot.

In addition to individuals and communities, Defenders collaborates with nonprofit organizations, small businesses, and state, federal and tribal agencies to complete a wide variety of electric fence projects, primarily on private lands. We provide the financial support and technical expertise to build electric fence systems that effectively deter grizzly bears and other carnivores from accessing human-related attractants.

Program Summary

Defenders' electric fencing program is designed to proactively prevent conflicts, with priority given to landowners with past bear problems. At sites with completed fences that are maintained, we see a direct reduction in human-bear and other wildlife conflicts.

Initially, we reimbursed landowners $100 of the cost to install an electric fence around an identified grizzly bear attractant. In 2012, we improved the program to reimburse 50% of the cost of electric fencing around any grizzly bear attractant within priority counties, up to a maximum incentive of $500 per landowner.

This year marks the 10th anniversary of our fencing program, from its humble beginnings in 2010. The popularity and visibility of the program continue to grow, as it now reaches Montana, Idaho, Wyoming and Washington.

Our total number of completed projects since the program began is now 466 electric fences (see the spatial and temporal map of all projects completed to date on page 4) and over $149,000 in reimbursements and financial support to participants. For more information, visit the grizzly bear section of our interactive web feature, Storymapping Coexistence Across the Country.)



Above: Defenders and USDA Wildlife Services staff complete a high tensile, eight-strand electric fence around a calving pasture in Northwest Montana experiencing grizzly bear and wolf activity.

2020 Results

Despite fieldwork limitations surrounding the Covid-19 pandemic, the program directly assisted 54 landowners with technical assistance and reimbursements. Our ongoing partnership with USDA Wildlife Services – Montana yielded an additional 20 projects where we provided materials support. The combined total of 74 completed electric fence projects is a record annual

total for the program. The reimbursements and materials costs totaled $18,743.

We conducted nine site visits with participants, including several direct responses to ongoing bear conflicts. We also attended six outreach events to promote the use of electric fencing to reduce conflicts and contacted well over 100 landowners and livestock producers. Many of these contacts are anticipated to carry over into 2021 as future projects.

Average reimbursement (2020)

- $290 per project

Fence type (2020)

- 72% of participants built permanent fences.
- 17% of participants built semi-permanent fences.
- 11% of participants built temporary fences.

Attractants secured

- In 2020, protecting livestock was the top reason for installing a fence, followed by chickens, bees and fruit trees (Fig. 1).

Program awareness

- In 2020, Wildlife Services was the most commonly cited source of initial information on the program, followed by word of mouth and state and tribal wildlife managers (Fig. 2).

Fig. 1: Percentage of fence projects by type of attractant secured (2020)

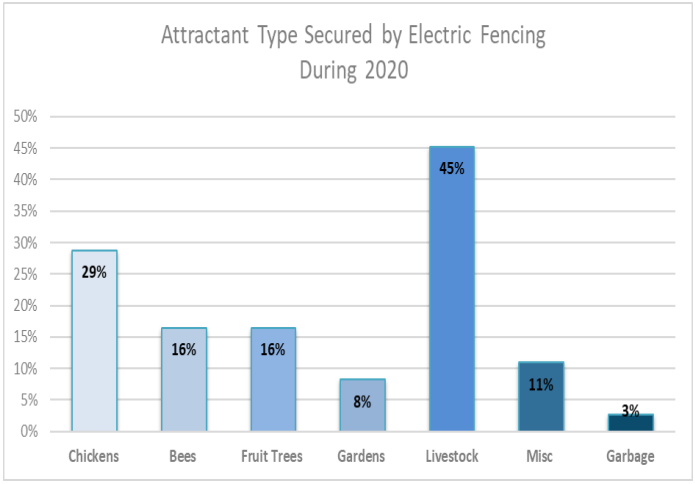
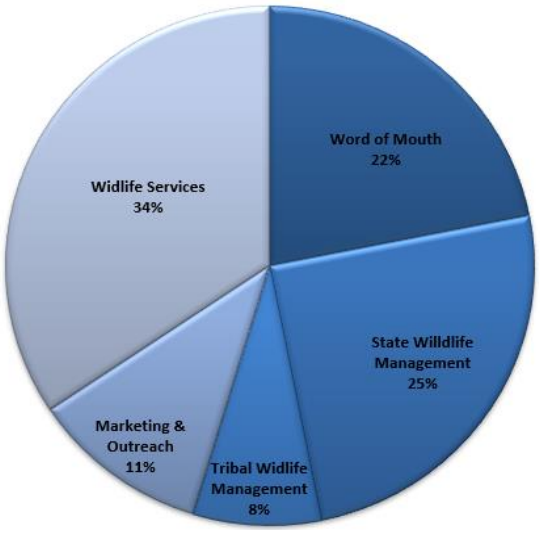


Fig. 2: How participants heard about the program (2020)



2010-2018 Participant Survey Highlights

Defenders monitors pre- and post-fencing success related to human-bear conflicts on private lands by annually surveying participants with electric fences in use for one or more years. Since 2012, we have also been collecting a variety of participant and project data.

Of the 145 participants surveyed to date:

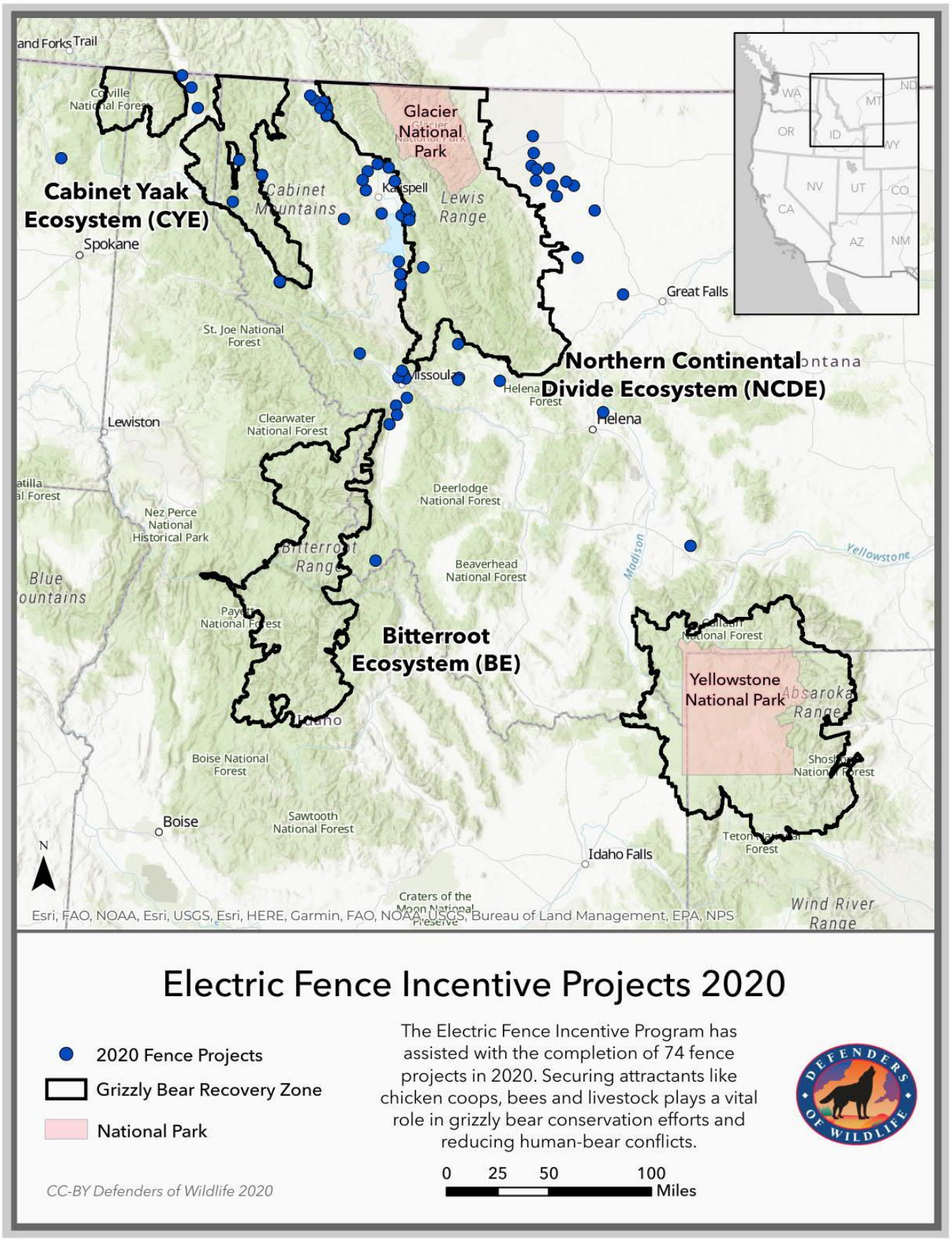
- 51% experienced past bear conflicts at their site.
- 94% report their electric fences are still in use.
- 99% report that their fence has successfully protected the intended attractant.
- 3% report experiencing some type of fence failure resulting in a conflict; each failure was attributed to technical difficulties and/or user error.
- 25% have improved or expanded their fences since the time of installation.

Participant testimonials

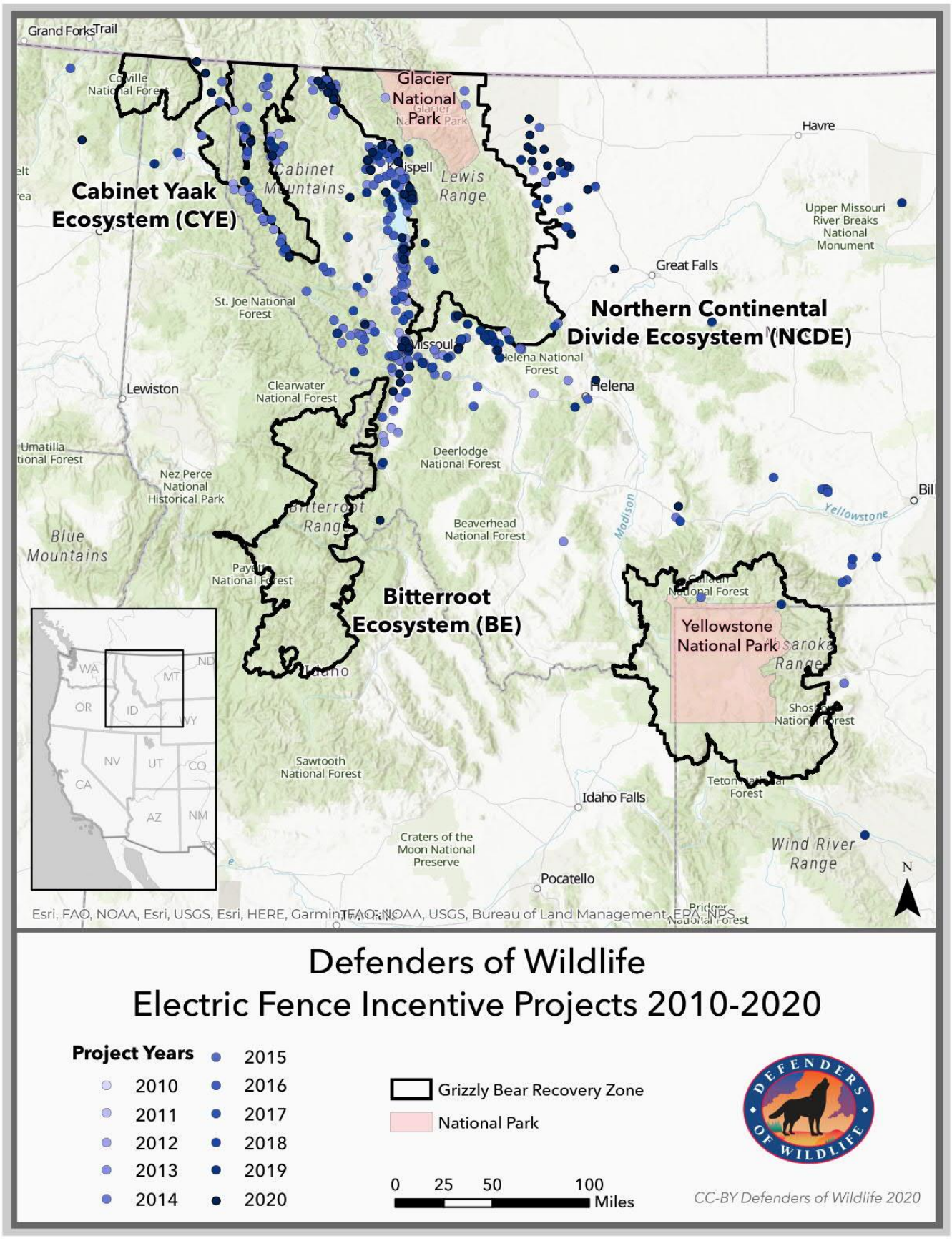
"We know it's working because we've seen bears hit it and move on. They tried climbing in, got shocked, and never came back."
– R. S., Kalispell, MT, 2016 participant

"I believe this support of landowners who might be directly impacted by grizzly bears is an important part of keeping bears out of trouble. Thank you for your work."
– M. G., Roberts, MT, 2018 participant

Erin Edge, Rockies and Plains Representative, eedge@defenders.org, 406-728-9436
Russ Talmo, Rockies and Plains Associate, rtalmo@defenders.org, 406-728-8800



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THE BLACKFOOT WATERSHED WOLF AND BEAR ACTIVITY REPORT FALL 2019/SPRING 2020

In coordination with Montana Fish, Wildlife and Parks (FWP) Region 2 (R2), the Blackfoot Challenge (BC) produces this wolf and bear activity report. These reports are typically compiled during our range rider season in the spring, summer and fall. We were unable to complete a report last fall so that information has been included in this spring update for wolf and bear activity in the Blackfoot watershed.

Most of the grizzly bear management, prevention work and grizzly bear research trapping are handled by Eli Hampson (FWP) and Eric Graham (BC). Jamie Jonkel (FWP) will assist as needed and will handle calls from the public and provide logistical support. We welcome Rory Trimbo who is a bear management technician stationed in the Deer Lodge Valley that will be assisting in the Blackfoot as well.

Wolf, lion and bear depredations or livestock loss reimbursement are handled by Wildlife Services (WS) and the Livestock Loss Board (LLB). When depredations are not an issue - Tyler Parks (FWP) handles all the wolf related management, wolf research trapping and reporting. Eli Hampson (FWP) handles mountain lion related management and black bear management along with (FWP) game wardens. Scott Eggeman (FWP) is the point person for all issues pertaining to elk and deer and all aspects of wildlife in the Blackfoot watershed.

We will continue to work with ranchers throughout the Blackfoot watershed to monitor predator activity, assist with monitoring livestock, communicate with local ranchers and continue operating the livestock carcass pickup program. A special thanks to our range riders – Sigrid Olson, Vicki Pocha and Jordan Mannix. The Blackfoot Challenge Range Rider Program was established in 2008 and is entering its 12th season. We also thank Dan Massee and Barry Gordon who pick up most of the carcasses associated with the carcass pickup program. The Blackfoot Challenge Carcass Pickup Program has been ongoing since 2003.

Thanks again to the ranchers and landowners that make these programs possible. We would like to recognize all of the partners that provide funding and technical assistance - FWP, the United States Fish and Wildlife Service (USFWS), Montana Department of Transportation (MDT), the Bureau of Land Management (BLM), The Nature Conservancy (TNC), the Livestock Loss Board, Defenders of Wildlife, Vital Ground, the Cross Charitable Foundation, Bunting Family Foundation, National Fish and Wildlife Foundation, the Western Bear Foundation and numerous individuals.

If you have any questions about any of the Blackfoot Challenge wildlife programs call the **Wildlife Committee Chair - Randy Gazda (406) 880-4386 or the main office at (406) 793-3900**

CONTACT INFORMATION FOR REPORTING WOLF, BEAR AND/OR LION ACTIVITY:

Jamie Jonkel – MFWP Bear Management Specialist (406) 544-1447
Eric Graham – Blackfoot Challenge Wildlife Program Coordinator (406) 240-3132
Eli Hampson---MFWP Bear/Lion Management Technician (406) 210-3213
Tyler Parks – MFWP Wolf Management Specialist (406) 531-4454
Rory Trimbo—MFWP Deer Lodge Bear Management Technician (406) 465-9343
Scott Eggeman – MFWP Blackfoot Area Wildlife Biologist (406) 542-5542

If you have a suspected livestock depredation, please notify USDA **Wildlife Services** as soon as possible to determine the cause of death. Regarding reimbursement for losses through the **Livestock Loss Board**: If you suspect a livestock loss due to mountain lion/wolf/grizzly bear predation, you can request an investigation to see if the losses were due to a confirmed or probable depredation. The Livestock Loss Board can pay only for confirmed or probable losses as determined by USDA-Wildlife Services (WS).

WS Powell County - Bart Smith (406) 660-0368
WS Missoula County - Ted North (406) 274-4856
WS Lewis & Clark County - John Meidtke (406) 855-8429
Department of Livestock - Livestock Loss Board (406) 444-5609

BLACKFOOT WATERSHED WOLF PACKS

Montana FWP uses a Patch Occupancy Model (POM) to estimate Montana's wolf population and track trends. Details on POM can be found in the Annual Wolf Report on the FWP website http://fwp.mt.gov/fishAndWildlife/management/wolf/. The transition to POM means that collecting minimum pack counts is no longer a high priority for monitoring wolf numbers. Therefore, the pack structure for most of the packs below is unknown. The rough numbers below are based largely on public reports and represent pack counts after the general hunting season, which ended on March 15th, 2020.

ARRASTRA CREEK PACK
Pack Structure: 3 to 4
Collared Wolf: No
Pack Report: Nothing new to report.

AVON PACK
Pack Structure: ~4
Collared Wolf: No
Pack Report: Nothing new to report.

BELMONT PACK
Pack Structure: ~4
Collared Wolf: No

Pack Report: This pack is thought to spend time on the Confederated Salish and Kootenai Tribe reservation.

BUGLE MOUNTAIN PACK
Backcountry

CHAMBERLAIN PACK
Pack Structure: 2
Collared Wolf: Yes (1)
Pack Report: Nothing new to report.

CONGER POINT PACK
Backcountry

HARDSCRABBLE
Pack Structure: 2
Collared Wolf: No
Pack Report: This pack was recognized in 2019 and frequents Alice Creek, Bartlett Creek, Cadotte Creek, and South of Hwy 200 North of Willow Creek.

HUMBUG PACK
Pack Structure: Unknown
Collared Wolf: Yes (1)
Pack Report: Nothing new to report.

INEZ PACK
Pack Structure: 3 Adults
Collared Wolf: No
Pack Report: Nothing new to report.

LANDERS FORK PACK
Pack Structure: Unknown
Collared Wolf: No
Pack Report: Nothing new to report.

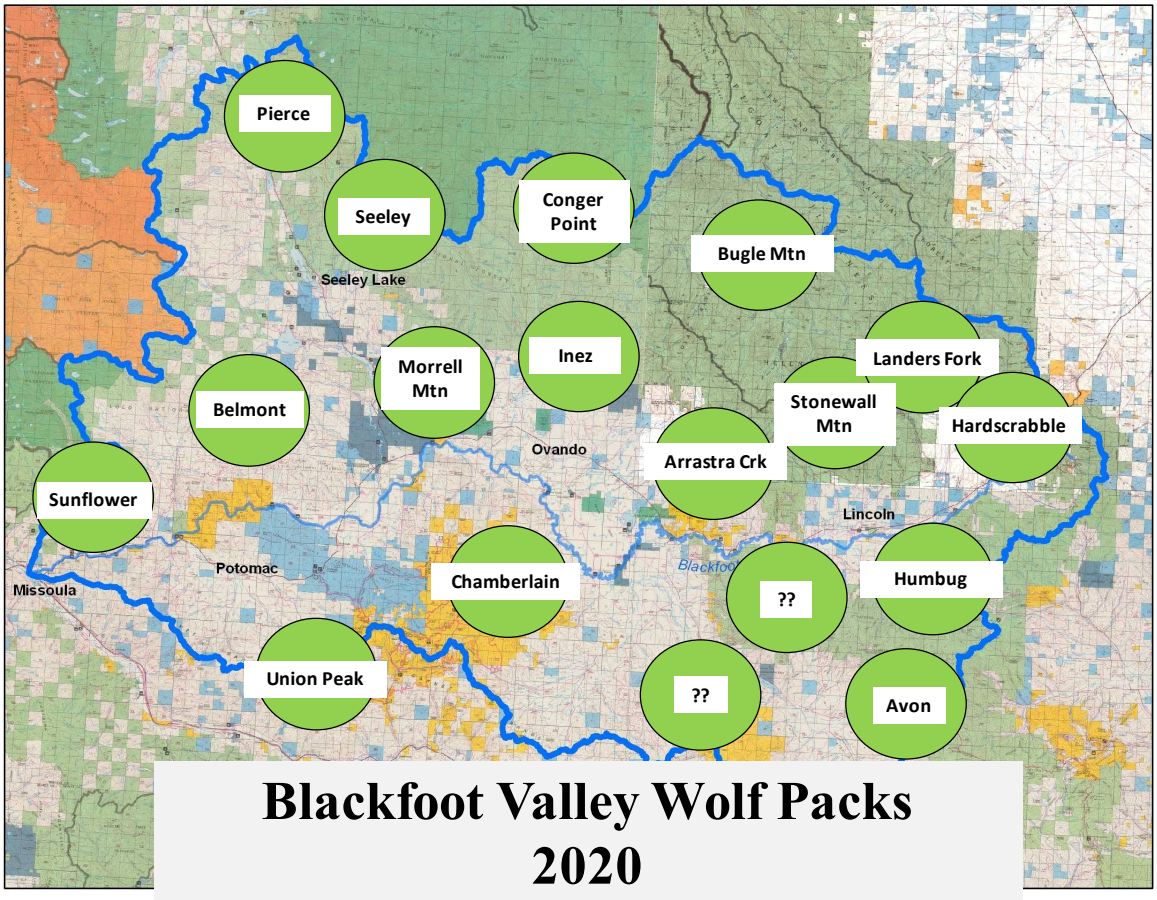
MORRELL MOUNTAIN PACK
Pack Structure: ~3 Adults
Collared Wolf: No
Pack Report: Nothing new to report.

SEELEY LAKE PACK
Pack Structure: ~4 or more Adults
Collared Wolf: No
Pack Report: Nothing new to report.

STONEWALL MOUNTAIN PACK
Pack Structure: ~4 Adults
Collared Wolf: Yes (1)
Pack Report: Nothing new to report.

SUNFLOWER PACK
Pack Structure: ~5 Adults
Collared Wolf: Yes (2)
Pack Report: Nothing new to report.

UNION PEAK PACK
Pack Structure: ~5 or more Adults
Collared Wolf: Yes (1)
Pack Report: Nothing new to report.



WOLF ACTIVITY 2019 SUMMARY

For 2019, in the Blackfoot watershed Wildlife Services confirmed 3 calves and 1 livestock guard dog that were injured by wolves and 5 calves and 4 sheep that were killed by wolves. WS radio collared 4 wolves and lethally removed 15 in response to confirmed wolf depredations. Eleven of the 15 wolves were removed from the chronically depredating Chamberlain wolf pack. Three wolves were removed from the Stonewall pack. A single wolf was removed west of Avon; its pack association is unknown. To assist with wolves around livestock FWP collared eight wolves in Region 2 in 2019, four of which were in the Blackfoot watershed.

UPDATES REGARDING GRIZZLY BEAR ACTIVITY IN THE BLACKFOOT WATERSHED

In 2018 the Blackfoot had its highest number of grizzly bear conflicts on record. In past years, we typically averaged four to five livestock depredations and 15 or so residential conflicts mostly involving uncontained garbage, bird feeders, fruit trees, freezers and grain. But, in 2018, there was an upsurge in conflicts involving uncontained residential and agricultural attractants. Approximately 80 grizzly-related conflicts were reported (six of which were verified livestock depredations and one depredation attempt). The 70 or so home site attractants mostly involved uncontained garbage, pet food, bird seed, chicken feed other livestock feed. As a result, a handful of grizzlies in 2018 learned that uncontained attractants were available, and in 2019 a few of those bears continued to exhibit "food conditioned behavior."

2019 SUMMARY

Through the year there were abundant reports and observations of grizzlies feeding in agricultural crops, traveling through and feeding on natural foods. But, compared to 2018, there was a reduction in the number of conflicts.

The grizzly season started out with grizzly tracks being observed in the foothills and higher ridge lines as early as March 19th and by the end of March we were getting reports of grizzlies on ranch lands in the Blackfoot Valley and from snowmobilers throughout the Clearwater drainage. During the spring we had good moisture and grizzlies were being observed throughout the Blackfoot watershed. In July and August, due to bountiful huckleberry, choke cherry and hawthorn production, sightings and conflicts remained low. But, as with most years, conflicts increased September through November. Historically the highest conflict period in the Blackfoot occurs in the fall. In 2019, there were a total of 47 reported residential conflicts and 4 depredations involving grizzlies. Note, most of the conflicts at residential sites were related to the radio-collared grizzly bear "Stevi" (discussed below) and the two grizzlies he was traveling with. There were, however, several other grizzlies in the Blackfoot valley and at least one lone grizzly and a family group in the Clearwater drainage that exhibited "food-conditioned behavior."

LIVESTOCK DEPREDATIONS AND ONE GRIZZLY EUTHANIZED

Between April and the end of July, the Department of Agriculture's Wildlife Services and FWP R2 responded to four verified livestock depredation incidents and a handful of additional calls about livestock where the cause of death or injury was natural, or not determined. Below is a synopsis of each of the incidents and management actions that occurred in the Blackfoot.

- On 4/19/19, Wildlife Services investigated wounds on a newborn calf at a ranch near Helmville, MT, and determined that the injury was grizzly-related. Due to the amount of time that had passed and the fact that the calf was recovering, trapping was not an option.

- On 4/20/19, Wildlife Services responded to a calf killed near Helmville, MT. During the investigation it was discovered that a second calf had gone missing. Culvert traps and snares were set at site. On the 23rd one of two grizzlies were captured. Even though this was the sub adult male's first offense, after close consultation with the USFWS, it was decided that due to chronic depredations occurring in the area, the 225-pound bear would be euthanized and the second bear was not captured. Adjacent to this ranch, in 2018, there were multiple calf depredations by grizzlies at the neighboring calving ground. Traps were set at this site last year on three occasions, but no bears were captured. For more information you can go to this link: https://www.blackfootvalleydispatch.com/story/2019/05/01/news/grizzly-euthanized-after-cattle-depredations-in-helmville-valley/1001.html

- On 5/23/19 two calves were killed by a grizzly at another ranch near Helmville, MT. Wildlife Services set traps at-site, but the bears had consumed the calves and did not return. Traps were closed after several days of trapping.

- On 6/15/19 another calf depredation was discovered near Helmville, MT. Wildlife Services determined the death to be grizzly related. But, due to the amount of time that had passed trapping was not an option.

- Last spring, Wildlife Services investigated 7 additional calf carcasses where it was determined the calves had died of natural causes and were scavenged on by grizzlies. Two of these incidents occurred in the Avon area. In addition, Wildlife Services documented one calf killed by coyotes that had been scavenged on by grizzlies. Wildlife Services also investigated a calf with a neck wound, near Avon, MT, that was determined to be related to an infection and not a bite wound. After June 15th, there were no additional depredations reported in the Blackfoot watershed.

RESIDENTIAL RELATED CONFLICTS AND TWO GRIZZLIES EUTHANIZED

Two grizzlies were euthanized in 2019 as a result of their extreme food conditioned behavior.

- The first of these bears was "Stevi," a sub adult male, captured the fall of 2018 after digging up worms at the Stevensville Golf Course. This male was translocated from the Bitterroot Valley to the headwaters of Belmont Creek adjacent to the Rattlesnake Wilderness. He came out of his den, located in the southern Mission Range, on March 17th. In mid-April he stumbled onto a residence north of Seeley Lake with a large accumulation of winter garbage. FWP assisted the family with the removal of the trash. But after that episode "Stevi" continued to seek out garbage, dog food, chicken feed and bird feeders. He was suspected to have damaged a house trailer on the Blackfoot Clearwater Game Range and entered open porches, sheds and buildings for garbage, grain, dog food and BBQ grills. He was documented at multiple residences in the Seeley Lake area, Clearwater Junction area, Ovando area and Woodworth area. On July 18th he was captured and euthanized after entering a building and accessing dog food on a porch at a ranch near Woodworth, MT. For more information you can go to this link: https://missoulian.com/news/local/grizzly-that-prowled-stevi-golf-course-euthanized-after-seeley-lake/article_6d24e8a2-2d9d-5565-bc1e-72cb9db35b6b.html

- The second grizzly, euthanized on May 12th, southeast of Seeley Lake in the Woodworth area, did not have a known history, but was observed on multiple occasions traveling with the radio-collared grizzly known as "Stevi". Because of this bear's extreme food-conditioned behavior, after consultation with the USFWS, it was decided to put this bear down after he was captured. This young 250-pound sub adult male grizzly broke a door open to access a secured barn in order to get grain. The bear had also been observed at adjacent home sites accessing unsecured grain, garbage, pet food, chickens and other attractants. Following the incident the landowner took it upon themselves to build bear resistant sliding doors on the barn to prevent future conflicts. It can be assumed that this bear is one of several grizzlies that learned "bad behavior" last year, as a result of some folks not having grain, garbage and other attractants secured. For more information you can go to this link: https://www.seeleylake.com/story/2019/05/30/news/fwp-euthanizes-two-bears-in-the-area-in-the-past-month/4868.html.

- There was a third grizzly traveling with the two bears mentioned above that continued seeking uncontained attractants in the Woodworth and Seeley Lake areas. This bear was not captured. FWP responded to several additional incidents that that involved chicken feed and a female grizzly with cubs. One or two additional grizzlies (may have been the same bear) were reported in the Blackfoot Canyon area west of Lincoln that was involved in several incidents at residential sites involving grain and butchering scraps. FWP responded and erected a temporary electric fence.

ROAD KILLED GRIZZLY BEAR

On 6/6/19 a 500-pound adult male grizzly was killed by a vehicle on Highway 200 near Patterson Prairie. This is the 12th grizzly killed by vehicles in the Blackfoot Valley since 2004. Eight of these grizzlies have been killed along Highway 200 in the Lincoln Canyon between Ovando and Lincoln, MT.

2020 SPRING GRIZZLY BEAR SUMMARY

The first grizzly tracks reported this year were on March 3rd in the Arrastra Creek area and the first grizzly sighting was March 18th east of Placid Lake. Since that time, tracks have been observed in both the Clearwater and Blackfoot drainages. Through April more bears emerged from their dens and traveled to the lower elevations with most females with young out of their dens the first week of May.

GRIZZLY CONFLICTS AND ONE BEAR EUTHANIZED SPRING 2020

On March 28th Wildlife Services investigated wounds on a newborn calf at a ranch near Helmville, MT, and determined that the injury was not grizzly-related.

Between April 10th and the 12th a lone grizzly killed and cached three calves in a pasture bordering a riparian area on the same ranch mentioned above. Due to cold weather and snow it was not feasible to re-locate the cow calf herd. On April 13th Wildlife Services captured a 452-pound adult male. After consultation with the U.S. Fish and Wildlife Service, in accordance with Interagency Grizzly Bear Committee guidelines, it was decided, that because multiple calves had been killed by this individual bear, it would be removed. The hide and skull were salvaged for education purposes and the Blackfoot Challenge has begun working with the ranch on a possible electric fence project.



This is a photo of the 452 pound male grizzly that was euthanized. Photo by Eric Graham

In mid-April there were several incidents of grizzlies in proximity to ranch compounds associated with livestock carcasses. The livestock carcasses were picked up as soon as the reports came in. FWP is recommending that after March all carcasses set aside for pickup, are stored away from ranch premises.

COLLARED GRIZZLY BEARS 2020

Here is a summary of the three radio collared grizzlies in the Blackfoot:

- On April 10th during the spring radio-tracking flight it was discovered that the research female grizzly bear "Silver Queen" had dropped her collar northwest of Silver King Mountain. She had been collared since July 2018. She was originally captured northeast of Lincoln and was observed last fall with her yearling in the headwaters of the Landers Fork of the Blackfoot. This bear spent most of her time ranging the south end of the Scapegoat Wilderness between the Landers Fork and McDonald Pass. "Silver Queen" is an older 245-pound adult female.

- On April 10th the female grizzly bear "Ursa" was located at her den site in the headwaters of Falls Creek on the edge of the Scapegoat Wilderness. "Ursa" was captured last year on August 26th northeast of Lincoln, MT in the Landers Fork. It is not known at this time if she is still with her two cubs. Last year she spent most of her time

ranging the south end of the Scapegoat Wilderness between the Landers Fork and McDonald Pass. “Ursa” is an older 250-pound adult female.

- “Walking Bear”, a 535- pound adult male, recaptured in July 2018, was observed from the air on April 10th. His den site was not determined, but in 2018 and 2019 he denned in Arrastra Creek. The collar has been malfunctioning but he continues to wear his radio collar and spends most of his time ranging the river bottoms around the Aunt Molly Wildlife Management Area, the Blackfoot Canyon and the mountains north and south of Lincoln, MT. In year’s past “Walking Bear” has made two trips from the Blackfoot Valley over the top of the Mission Mountains to visit the corn fields around Ronan, MT.



“Ursa.” Photo by Eric Graham

BLACK BEAR AND MOUNTAIN LION ACTIVITY

2019

Last fall black bear conflicts in the Potomac Valley and Seeley Lake were constant. In Seeley Lake, several lone black bears and a female with cubs were trapped and relocated in response to conflicts. Several black bears were euthanized and multiple other black bears were reported accessing uncontained garbage, bird seed, dog food, chicken feed and other residential attractants. Seeley Lake has an extreme issue with uncontained attractants and last fall black bears were observed accessing garbage and other attractants on a nightly basis.

Last summer in Potomac there was an extreme situation involving bears feeding on residential garbage. At the ends of county roads, multiple homes are required to bring garbage cans to certain sites for garbage service. Most of these cans are left out all week and as a result, resident black bears are obtaining garbage on a nightly basis. Since 2015, FWP has been working with the community to resolve the situation with very little progress. Last year several of these bears began visiting Potomac home sites for garbage and other attractants. In addition, there were multiple incidents of both lions and bears killing small livestock and fowl. Wildlife Services trapped and euthanized one black bear and a lion that killed goats.

Last fall FWP fielded multiple reports of lions throughout the Blackfoot and Clearwater valleys. Similar to year’s past, most of the reports came from the communities of Potomac, Seeley Lake

and Lincoln. These three communities are known for lion activity due to prime habitat and abundant deer. FWP also responded to a handful of lions in the Ninemile Prairie area that were near camp sites. There were four reports of mountain lion attacks on dogs from Placid, Seeley, and the Swan-Clearwater Divide. As a result, two mountain lions were lethally removed.

2020

Black bear activity has been minimal. FWP has fielded reports of tracks and one incident of a black bear accessing garbage in a burn barrel north of Seeley Lake.

Throughout the winter FWP fielded reports of lion activity throughout the Blackfoot and Clearwater valleys. There were a handful of incidents where lions were in proximity to home sites. Similar to year's past, most of the reports come from the communities of Potomac, Seeley Lake and Lincoln. This winter there were a handful of incidents of lions being captured in wolf traps in Region 2. One of these incidents occurred in the Placid Lake area and the lion was safely removed. There were several reports of lions killing house cats in the Potomac area and Wildlife Services removed one lion that killed a goat.

Please report black bear and mountain lion activity/incidents as quickly as possible to Eli Hampson (406-210-3213), Jamie Jonkel (406-544-1447) or Scott Eggeman (406-531-6759).

For detailed information on black bear and lion activity in and around Region 2 check out these two sites:

http://missoulabears.org/
https://www.facebook.com/missoulabears/

GRIZZLY BEAR RESEARCH TRAPPING

There are no plans for any grizzly bear research trapping in the Blackfoot watershed this season. Should one of the collared grizzly bears die or drop their collar, traps will be set for a new bear. However, some opportunistic research trapping may occur depending on resources and time. For more information related to the grizzly bear population monitoring go to:

http://fwp.mt.gov/fishAndWildlife/management/grizzlyBear/monitoring.html

GRIZZLY BEAR ADVISORY COUNCIL UPDATE

Grizzly bear management in Montana is complex. While they are at recovery levels in the Greater Yellowstone (GYE) and Norther Continental Divide Ecosystems (NCDE), they have yet to reach recovery goals in the Bitterroot and Cabinet-Yaak Recovery Zones. In places where bear numbers are on the rise, they are dispersing into places they haven't been for decades, sometimes causing conflicts with people and communities. Last year the Governor of Montana appointed members to the Grizzly Bear Advisory Council. The council has been working

diligently and will eventually have recommendations for grizzly bear management and conservation in Montana.

The Grizzly Bear Advisory Council is comprised of a broad cross section of Montanans with a diversity of views on grizzly bear management, conservation, and recovery. The Council has been tasked with considering broad strategic objectives, such as:

- Maintaining and enhancing human safety
- Ensuring a healthy and sustainable grizzly bear population
- Improving timely and effective response to conflicts involving grizzly bears
- Engaging all partners in grizzly-related outreach and conflict prevention
- Improving intergovernmental, interagency, and tribal coordination

For more information on the advisory council check out this link:
http://fwp.mt.gov/fishAndWildlife/management/grizzlyBear/gbac.html

LIVESTOCK CARCASS PICKUP PROGRAM

The Blackfoot Challenge's Livestock Carcass Pick Up Program runs during calving season from mid-February through mid-May. Thereafter, carcasses in the Blackfoot Valley are picked up by FWP or the Blackfoot Challenge. In the spring of 2018, there were 5 incidents of grizzly bears venturing into ranch compounds to retrieve carcasses left out for the carcass pickup program. Dead calves were either left on the ground or placed on hay bales within high activity areas on the ranch and bears were lured in to feed on the carcasses. **As a result, the pickup protocol was re-evaluated and it is now recommending that starting April 1st all carcasses set aside for pickup be stored away from ranch premises by at least 400 yards.** Carcasses should be stored away from human and livestock activity at an accessible site with good visibility. If needed, the ranch can also call any of the numbers mentioned above for emergency pickup. If there is concern that a carcass will lure in bears before pick up, there is always the option of personally hauling the carcass to the Clearwater Compost site.

CONTACT INFORMATION FOR CARCASS PICKUP

DURING CALVING SEASON:
Dan Massee (406) 793-5639

OUTSIDE OF CALVING SEASON:
Jamie Jonkel (406) 544-1447
Barry Gordon (406) 541-1078
Eric Graham (406) 240-3132
Eli Hampson (406) 210-3213

The carcass will be taken to the compost site near Clearwater Junction to help prevent conflicts with bears and wolves. To learn more about this program, watch "Living with Carnivores: Boneyards, Bear & Wolves." Click here: https://vimeo.com/131528982.

And for information on how to avoid either directly or indirectly feeding wildlife in Montana, visit:
http://fwp.mt.gov/fishAndWildlife/livingWithWildlife/feeding/default.html

ELECTRIC FENCE COST SHARE PROJECTS

Multiple fencing projects have occurred at various ranches and residential sites across the watershed. Over the last two summers the Blackfoot Challenge has assisted multiple families with electrified residential containment fences. In years past the Blackfoot Challenge secured funds to electrify the Helmville Dump, the Ovando Dump, the Seeley Lake Dump and the Clearwater Junction Compost Site. These electric fences have proven effective at deterring bears.



This is an example of a 5 wire electric fence that was built in the Blackfoot to keep grizzly bears out of calving yards and residential home sites. Photo by Eric Graham

Electric fence is an excellent way to protect livestock, fowl and contain residential attractants. Electric fence is a method of ensuring that bears or other predators that check out yard areas will not come back again. A good shock is the best way to teach bears to keep away. Contact Jamie Jonkel (406) 544-1447 or Eric Graham (406) 240-3132 if you would like to talk about cost share programs to install electric fence around home sites, livestock holding pens, chickens,

cattle, pigs, goats, sheep, bee yards, fruit orchards, gardens and other sites that might attract bears or other wildlife. For information on electric fence and another option for cost sharing on electric fence check out this website:
https://defenders.org/got-grizzlies

THE BLACKFOOT WATERSHED WOLF AND BEAR ACTIVITY REPORT SUMMER 2020

In coordination with Montana Fish, Wildlife and Parks (FWP) Region 2 (R2), the Blackfoot Challenge (BC) produces this wolf and bear activity report. These reports are compiled during our range rider season in the spring, summer and fall.

BACKGROUND & CONTACT INFORMATION:

Bear management, preventative management and grizzly bear research trapping are handled by Eli Hampson (FWP) and Eric Graham (BC). Jamie Jonkel (FWP) assists as needed, handles calls from the public and provides logistical support. Rory Trimbo (FWP), who is a bear management technician stationed in the Deer Lodge Valley, assists in the Blackfoot as needed. At this time, we would also like to welcome and introduce Jake Barzen, the new Seeley Lake FWP Game Warden. Jake replaced Game Warden Bill Koppen, who retired last fall.

Wolf, lion and bear depredations or livestock loss reimbursement are handled by Wildlife Services (WS). See WS contact information below. Tyler Parks (FWP) handles all other wolf related management, wolf research trapping and reporting. Eli Hampson (FWP) handles mountain lion-related management. Scott Eggeman (FWP) is the point person for all issues pertaining to elk and deer and all aspects of wildlife in the Blackfoot watershed. And for any other wildlife-related matters and hunting issues needing the attention of a game warden contact Jake Barzen or Ezra Schwalm.

Thanks to the Blackfoot Challenge Range Riders – Sigrid Olson, Jordan Mannix and Vicki Pocha -- who assist with monitoring predator activity. To learn more about our team of range riders, visit the Blackfoot Challenge's blog. We also thank Dan Massee and Barry Gordon who pick up most of the carcasses through the carcass pickup program. The Blackfoot Challenge Range Rider Program was established in 2008 and the Blackfoot Challenge Carcass Pickup Program has been ongoing since 2004.

Thanks again to the many Blackfoot residents that make these programs possible. We would also like to recognize all of the individuals, agencies and foundations that provide funding and technical assistance.

If you have any questions about the wildlife committee or this range rider program call the Blackfoot Challenge **Wildlife Committee Chair Randy Gazda (406) 880-4386.**

TO REPORT WOLF, BEAR AND LION ACTIVITY:

Eric Graham – Blackfoot Challenge Wildlife Coordinator (406) 240-3132
Jamie Jonkel – FWP Bear Management Specialist (406) 544-1447
Eli Hampson---FWP Bear/Lion Management Technician (406) 210-3213

Tyler Parks – FWP Wolf Management Specialist (406) 531-4454
Rory Trimbo—FWP Deer Lodge Bear Management Technician (406) 465-9343
Scott Eggeman – FWP Blackfoot Area Wildlife Biologist (406) 542-5542

TO REPORT A SUSPECTED LIVESTOCK DEPREDATION:

Notify USDA Wildlife Services (WS) as soon as possible to determine the cause of death. Regarding reimbursement for losses through the Livestock Loss Board: If you suspect a livestock loss due to mountain lion/wolf/grizzly bear predation, you can request an investigation. The Livestock Loss Board can pay only for confirmed or probable losses as determined by WS.

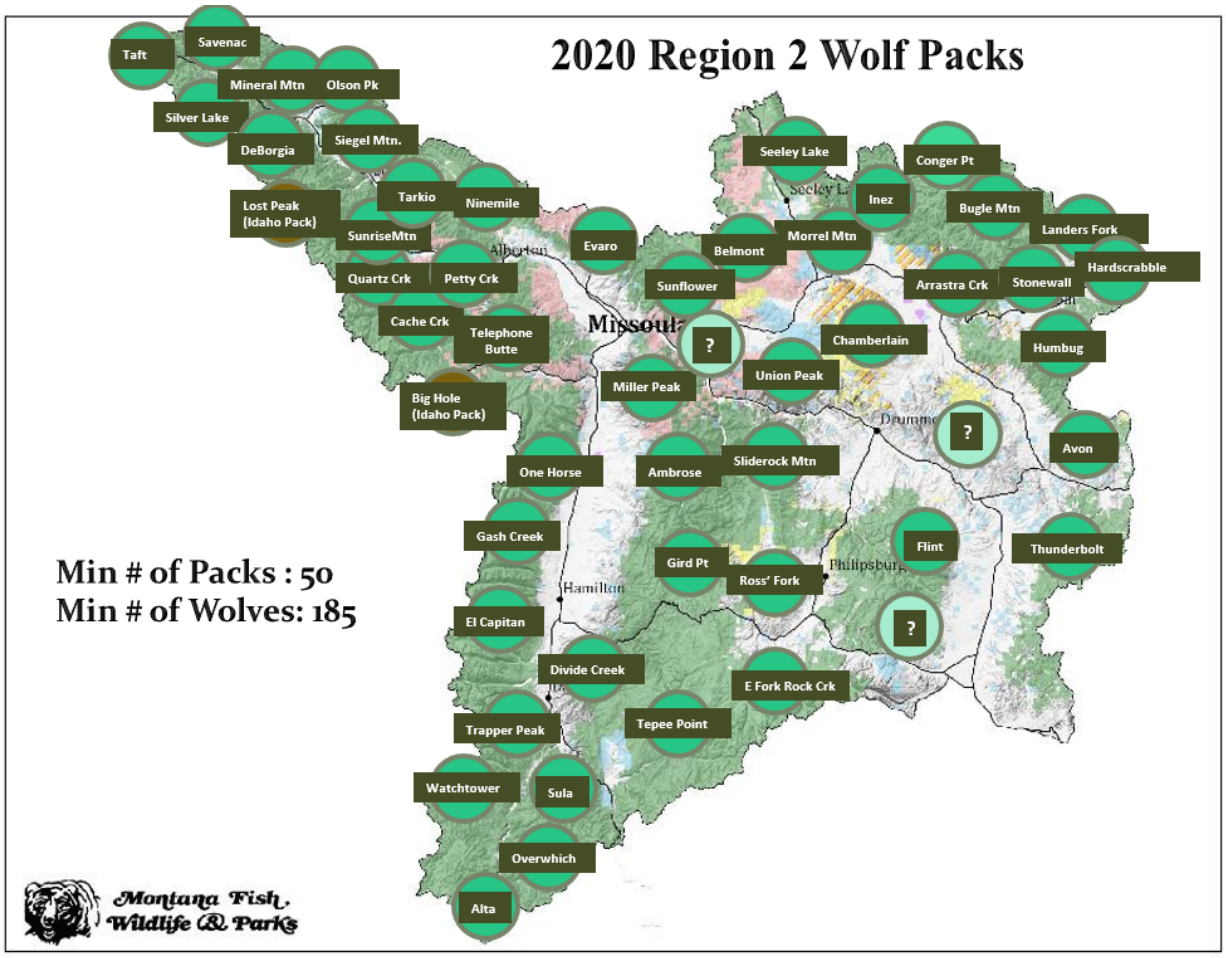
WS Powell County - Bart Smith (406) 660-0368
WS Missoula County - Ted North (406) 274-4856
WS Lewis & Clark County - John Meidtke (406) 855-8429
Western Montana District Supervisor- Kraig Glazier (406) 458-0106
Department of Livestock - Livestock Loss Board (406) 444-5609

For any other wildlife-related matters needing the attention of a **GAME WARDEN**:

Ezra Schwalm– FWP Lincoln Game Warden (406) 438-3666
Jake Barzen – FWP Seeley Lake Game Warden (406) 210-1299

BLACKFOOT WATERSHED WOLF PACKS:

Montana FWP uses a Patch Occupancy Model (POM) to estimate Montana's wolf population and track trends. Details on POM can be found in the Annual Wolf Report on the FWP website (http://fwp.mt.gov/fishAndWildlife/management/wolf/). The transition to POM means that collecting minimum pack counts is no longer a high priority for monitoring wolf numbers. Therefore, the pack structure for most of the packs below is unknown. The rough numbers are based largely on public reports and summer trapping/scouting efforts.



ARRASTRA CREEK PACK

Pack Structure: 3 to 4 Adults, 3 Pups (one report of 7 pups was received, but only 3 pups have been documented using trail cameras)
Collared Wolf: No
Pack Report: Nothing new to report.

AVON PACK

Pack Structure: ~4
Collared Wolf: No
Pack Report: Nothing new to report.

BELMONT PACK

Pack Structure: ~4 Adults, Pups yes but number unknown
Collared Wolf: No
Pack Report: This pack is thought to spend time on the Confederated Salish and Kootenai Tribe reservation. Pup activity was found while scouting for radio collar trapping efforts. The total number of pups is unknown.

BUGLE MOUNTAIN PACK
Backcountry

CHAMBERLAIN PACK
Pack Structure: Unknown
Collared Wolf: No
Pack Report: Involved in multiple livestock depredations this summer.

CONGER POINT PACK
Backcountry

HARDSCRABBLE PACK
Pack Structure: Unknown
Collared Wolf: 1 Possibly from Lander's Fork Pack
Pack Report: Possibly involved in three livestock depredation events this summer. The depredations occurred on the boundary of two packs, the Landers Fork pack may be responsible for the depredations. Wildlife Services collared one wolf and removed two wolves in response.

HUMBUG PACK
Pack Structure: Unknown
Collared Wolf: Yes (1) VHF collar missing (possibly dispersed)
Pack Report: Nothing new to report.

INEZ PACK
Pack Structure: 3 Adults, 3 Pups
Collared Wolf: No
Pack Report: Two pups were collared by FWP this summer. One pup dropped the padded collar that was fitted for an adult and the other was hit and killed by vehicle on Highway 200.

LANDERS FORK PACK
Pack Structure: Unknown
Collared Wolf: No
Pack Report: Possibly involved in three livestock depredation events this summer (see Hardscrabble Pack report).

MORRELL MOUNTAIN PACK
Pack Structure: ~3 Adults
Collared Wolf: No
Pack Report: Nothing new to report.

SEELEY LAKE PACK
Pack Structure: ~4 or more Adults
Collared Wolf: No
Pack Report: Nothing new to report.

STONEWALL MOUNTAIN PACK
Pack Structure: Unknown
Collared Wolf: No
Pack Report: Nothing new to report.

SUNFLOWER PACK
Pack Structure: ~5 Adults, Pups unknown
Collared Wolf: Yes (2)
Pack Report: Nothing new to report.

UNION PEAK PACK
Pack Structure: 3 or more Adults, 2 Pups
Collared Wolf: Yes (1)
Pack Report: Involved in two depredation events this summer. Wildlife Services collared one adult and removed 4 wolves in response.



Trail camera photo of three pups (foreground) and an adult in the Arrastra Creek Pack. Photo courtesy Tyler Parks.

2020 Wolf Depredations and Collar Update (April 26 – Sep 10):

In the Blackfoot watershed, WS confirmed 10 calves and one ewe that were killed by wolves this summer (April 26 to September 10). The Chamberlain, Union Peak, Lander's Fork, Hardscrabble, and Thunderbolt wolf packs were all likely involved in the depredation events. WS radio-collared two wolves and lethally removed seven wolves in response to the confirmed wolf depredations. To assist with wolf monitoring around livestock, FWP collared 5 wolves in Region 2 in 2020, two of which were in the Blackfoot watershed.

2020 GRIZZLY BEAR ACTIVITY:

SUMMARY:

We have had an exceptional year of berry production. As a result, FWP R2 is fielding lots of reports of both black and grizzly bears feeding on chokecherry, serviceberry and hawthorn in the foothill regions, along stream bottoms and in the riparian zones along the rivers throughout the Blackfoot and Clearwater drainages. Huckleberry production in the higher elevations has been excellent. Residents as well as recreationists should use caution and carry bear spray when traveling through areas with abundant berries.

Throughout the spring and summer there have been abundant reports and observations of grizzlies feeding in crops and traveling through and feeding on natural foods. However, compared to past years there has been a reduction in the number of conflicts.

The first grizzly tracks reported this year were on 3/3/20 in the Arrastra Creek area and the first grizzly sighting was 3/18/20 east of Placid Lake. In April, more bears emerged from their dens and traveled to lower elevations. Most of the females with young were out of their dens by the first week of May. During the early spring we had good moisture and grizzlies were being observed throughout the Blackfoot drainage. In July and August, due to bountiful huckleberry, chokecherry and hawthorn berry production, sightings and conflicts remained low. Conflicts are expected to increase September through November -- historically the highest conflict period in the Blackfoot occurs in the fall.

LIVESTOCK DEPREDATIONS: One grizzly euthanized and two bears relocated

Between March and the end of August, the WS and FWP R2 responded to six verified livestock depredation incidents and a handful of additional calls about livestock where cause of death or injury was either natural or not determined.

1. On 3/28/20 WS investigated wounds on a newborn calf at a ranch east of Ovando and determined that the injury was not grizzly-related.

2. From April 10 to 12, a lone grizzly killed and cached three calves, and may have killed a fourth calf, in a pasture bordering a riparian area on the same ranch mentioned above. Due to cold weather and snow it was not feasible to relocate the cow/calf herd. On April 13, WS captured a 452-pound adult male. After consultation with the U.S. Fish and Wildlife Service, and in accordance with Interagency Grizzly Bear Committee guidelines, it was decided that because multiple calves had been killed by this individual bear, it would be euthanized. The hide and skull were salvaged for education purposes and the Blackfoot Challenge has begun working with the ranch on an electric fence project.
3. On 5/6/20, WS responded to a calf being killed near Helmville. Remote cameras on site indicated that multiple grizzlies and wolves were frequenting the area. WS, with the assistance of FWP, set two culvert traps and one snare. On 5/7/20 two grizzlies – a 680-pound adult male and a sub-adult male – were captured. A third grizzly bear, most likely another sub adult, was observed but not captured. Due to the number of bears at site and the inability to determine which of the three bears might have been involved, both bears were relocated. The large adult male, now known as "Wales," was collared and relocated to the Whitefish Range west of Glacier National Park. The second grizzly, a research bear known as "Landers", originally captured in 2019 during a research trapping effort northeast of Lincoln, was recollared and relocated to Glacier National Park.
4. On 5/11/20, WS set two culvert traps for a grizzly that killed a calf NW of Helmville. No bears were captured.
5. On 7/16/20, WS investigated a sheep depredation SW of Helmville. Due to lack of evidence the species of bear was not determined. Traps were set but no bears were captured.
6. On 8/9/20, WS set a snare for a grizzly involved in a calf depredation north of Drummond. Traps were set but no bears were captured.
7. WS investigated additional carcasses where it was determined the livestock had died of natural causes and were scavenged by grizzlies.
8. Note, one additional calf was killed on 5/16/20 in an incident that involved a grizzly bear mortality north of Lubrecht Experimental Forest. But this case is under investigation by the USFWS and cannot be discussed at this time.

AGRICULTURAL AND RESIDENTIAL CONFLICTS:

In mid-April there were several incidents of grizzlies in proximity to ranch compounds. Several of these incidents were associated with livestock carcasses and they were picked up as soon as the reports came in. FWP and the Blackfoot Challenge are recommending that after March all carcasses set aside for pickup be stored away from ranch premises if possible. Most of the residential related conflicts are associated with a grizzly bear accessing garbage in the Seeley Lake area, but there have been a handful of additional incidents:

1. During the month of May multiple grizzlies were observed around Helmville. Residents observed and photographed several lone grizzlies, several grizzly pairs and at least one family group. On 5/11/20 a trap was set for a large adult male grizzly that came into a

ranch compound to feed on a cow carcass. The carcass was removed immediately but the bear continued to be in the area and travel through the ranch compound during calving season. A temporary electric fence was erected around some attractants and no bears were captured.

2. On multiple occasions a lone grizzly and a female with yearlings accessed uncontained grain and pet food and damaged an ATV at a ranch north of Helmville. Traps were set on 7/15/20, but no bears were captured.
3. As mentioned above, most of this year's conflicts are associated with a grizzly hitting the Seeley Lake area. This bear may very well be the same bear that was seeking uncontained attractants in the Woodworth and Seeley Lake areas last year. This bear has obtained garbage from unsecured garbage cans, from improperly locked bear-resistant dumpsters and may have gotten into an outside freezer. The bear was first reported in early July and continues to access garbage at private resorts, rental cabins, businesses and various administrative sites and campgrounds. FWP is actively trapping for this grizzly.

GRIZZLY BEAR MORTALITIES:

In 2020 there have been three confirmed grizzly bear mortalities:

1. The 452-pound adult male captured on 4/13/20 as mentioned above.
2. On 5/3/20, a sub adult male was killed west of Lincoln. This incident is under investigation and cannot be discussed at this time.
3. On 5/16/20, a 660-pound adult male was killed north of Lubrecht Experimental Forest. This incident is under investigation by the USFWS and cannot be discussed at this time.
4. On 7/10/20, FWP received multiple reports of a grizzly struck by a vehicle on Highway 200 near the North Fork of the Blackfoot River. FWP and the USFS responded but no carcass was located. Note, it is legal to retrieve road-killed deer, elk and moose in the state of Montana, but not black bears or grizzlies. For more information on the laws pertaining to salvaging road-kill check out this FWP news release: https://bit.ly/3k9tkBz

COLLARED GRIZZLY BEARS:

1. On April 10 during the spring radio-tracking flight it was discovered that the research female grizzly bear "Silver Queen" had dropped her collar northwest of Silver King Mountain. She had been collared since July 2018. She was originally captured northeast of Lincoln and was observed last fall with her yearling in the headwaters of the Landers Fork of the Blackfoot. This bear spent most of her time ranging the south end of the Scapegoat Wilderness between the Landers Fork and McDonald Pass. "Silver Queen" is an older 245-pound adult female.
2. "Walking Bear", a 535-pound adult male, recaptured last July 2018, was observed from the air on April 10 but he has not been located on subsequent flights. His den site was not determined this spring, but in 2018 and 2019 he denned in Arrastra Creek. He continues to wear his malfunctioning radio collar and spends most of his time ranging

the river bottoms around the Aunt Molly Wildlife Management Area, the Blackfoot Canyon and the mountains north and south of Lincoln, MT. In year's past "Walking Bear" has made two tremendous fast paced trips from the Blackfoot Valley over the top of the Mission Mountains to visit the corn fields around Ronan, MT.

3. On 5/6/20, WS and FWP set several traps at a calf depredation near Helmville and recaptured the research grizzly known as "Landers". Landers was originally captured in 2019 in the headwaters of the Landers Fork. It was difficult to determine if "Landers" was involved in the calf depredation, so he was recollared and relocated on 5/8/20 to Glacier National Park. He spent the summer in Glacier National Park and dropped his collar near the end of July five miles east of Duck Lake on the Blackfoot Indian Reservation, Squaw Flat along the north fork of the Milk River not far from the Canadian Border.
4. On 5/6/20, WS and FWP set several traps at a calf depredation near Helmville and captured a 680-pound adult male grizzly. It was difficult to determine if this new bear, now known as "Wales," was involved in the calf depredation so he was collared and relocated on 5/8/20 to the Whitefish Range West of Glacier National Park. "Wales" dropped his collar in late June north of the Canadian Border and east of Waterton Park along the Belly River.



The 680 pound male grizzly bear named "Wales" in a culvert trap. Photo by Lennie Phillips.

5. On 6/7/20, the Flathead Indian Reservation agreed to have a Blackfoot Reservation grizzly relocated to the Upper Jocko Valley. The collared female grizzly known as "Sue" spent a little bit of time in and around the Swan-Clearwater Divide and was most recently located in the Bob Marshal Wilderness in the central portions of the South Fork

of the Flathead Basin. “Sue” has no management history and was captured and relocated to get her away from some home sites near East Glacier where her chances of survival were limited.

6. On 6/10/20, the female grizzly bear “Ursa” and her two yearlings were in Alice Creek in the headwaters of the Blackfoot River near the Continental Divide. “Ursa” was captured last year on August 26 up the Landers Fork northeast of Lincoln. She spends most of her time ranging the south end of the Scapegoat Wilderness between the Landers Fork and McDonald Pass. “Ursa” is an older 250-pound adult female.
7. On 8/5/20, a sub adult grizzly known as “Trapper” was re-captured for research purposes in the headwaters of Boles Creek west of Placid Lake. The young bear was not collared and was released at site. “Trapper” was originally handled in the late fall of 2018 where he was captured in a leghold trap set for coyotes. To free the cub a helicopter was used to haze the cub’s mother and siblings. The cub was then darted and the trap was removed to allow him to rejoin his mother and siblings.

2020 BLACK BEAR AND MOUNTAIN LION ACTIVITY:

Black bear conflicts in the Seeley Lake have been constant this year. So far three black bears have been captured and euthanized. All three bears were exhibiting extreme food-conditioned behavior and had been observed accessing uncontained attractants at multiple businesses and homesites. At the time of capture the bears were approaching occupied camps and eating food from coolers and BBQ cookouts. Multiple other black bears have been reported accessing uncontained garbage, bird seed and other attractants in and around Seeley Lake. Black bears in the community of Seeley Lake have been regularly observed accessing garbage and other uncontained attractants throughout the bear season. The Potomac Valley and Lincoln area have had very few black bear issues so far this season.

This summer FWP fielded multiple reports of lions throughout the Blackfoot and Clearwater Valleys. Similar to year’s past, most of the reports were from the communities of Potomac, Seeley Lake and Lincoln. These three communities are known for lion activity due to prime habitat and abundant deer. In Seeley Lake, FWP responded to several reports of mountain lions involving attacks on dogs, cats or in proximity to people. Four sub adult mountain lions have been removed this summer from Seeley Lake. There were several reports of lions frequenting homesites in the Potomac area and WS removed one lion that killed a goat.

Please report black bear and mountain lion activity and incidents as quickly as possible to FWP.

For detailed information on black bear and lion activity in and around FWP Region 2, visit:

http://missoulabears.org/ and https://www.facebook.com/missoulabears/

GRIZZLY BEAR RESEARCH TRAPPING

Research trapping for a female grizzly has been ongoing for most of the summer. No new female grizzlies have been captured. "Trapper," a non-target male grizzly, was captured and released. Trapping efforts were focused near the Rattlesnake Wilderness Area and will continue next season. For more information related to the grizzly bear population monitoring, go to: http://fwp.mt.gov/fishAndWildlife/management/grizzlyBear/monitoring.html



Eli Hampson, FWP, with "Trapper". Photo by Eric Graham.

GRIZZLY BEAR ADVISORY COUNCIL UPDATE:

Grizzly bear management in Montana is complex. While grizzly bears are at recovery levels in the Greater Yellowstone (GYE) and Norther Continental Divide Ecosystems (NCDE), they have yet to reach recovery goals in the Bitterroot and Cabinet-Yaak Recovery Zones. In places where bear numbers are on the rise, they are dispersing into places they haven't been for decades, sometimes causing conflicts with people and communities. Last year the Governor of Montana appointed members to the Grizzly Bear Advisory Council. The council has been working diligently and will eventually have recommendations for grizzly bear management and conservation in Montana.

The Grizzly Bear Advisory Council is comprised of a broad cross section of Montanans with a diversity of views on grizzly bear management, conservation, and recovery. The Council has been tasked with considering broad strategic objectives, such as:

1. Maintaining and enhancing human safety
2. Ensuring a healthy and sustainable grizzly bear population
3. Improving timely and effective response to conflicts involving grizzly bears
4. Engaging all partners in grizzly-related outreach and conflict prevention
5. Improving intergovernmental, interagency, and tribal coordination

For more information about the Grizzly Bear Advisory Council: http://fwp.mt.gov/fishAndWildlife/management/grizzlyBear/gbac.html

LIVESTOCK CARCASS PICKUP PROGRAM:

The Blackfoot Challenge's Livestock Carcass Pick Up and Removal Program runs during calving season from mid-February through mid-May. Thereafter, carcasses in the Blackfoot watershed are picked up by FWP or BC employees. The carcass will be taken to the compost site near Clearwater Junction to help prevent conflicts with bears and wolves.

To arrange for carcass pickup during calving season call Dan Massee 793-5639 and for carcass pickup outside of calving season call Jamie Jonkel 544-1447 or Barry Gordon 241-1078.

Due to issues with grizzlies being lured into several ranch compounds for livestock carcasses in past years, it is recommended that after April 1st carcasses be stored at a minimum of 400 yards from human and livestock activity at an accessible site with good visibility. Make sure the carcasses are still convenient for carcass pickup. If possible, place carcass on top of an old hay bale. If there is concern that a carcass will lure in bears before pick up, there is always the option of personally hauling the carcass to the Clearwater Compost site.

To learn more about this program, watch "Living with Carnivores: Boneyards, Bear & Wolves" -- https://vimeo.com/131528982.

Note: Prior to having a horse or livestock animal put down, please consult with your veterinarian about not using pentobarbital based euthanasia drugs if the carcass is being taken to the compost site. Horses, cattle or other livestock put down with barbiturates cannot be taken to the livestock composting site. Instead they must be hauled to the Missoula or Deer Lodge landfill and be buried. Advanced notice is necessary to arrange for an animal to be buried at the Missoula landfill.

Prior to butchering cattle or other livestock be sure to have a tub or bucket available for the guts and be prepared to assist the driver with loading. In some cases the Blackfoot Challenge may be able to provide a container.

SECURING RESIDENTIAL AND AGRICULTURAL ATTRACTANTS:

As detailed above, there are a few grizzlies in the Blackfoot watershed that have developed bad habits in past years. In 2018, for example, a handful of bears learned that homesites and ranches are good places to find unsecured food. Several of these grizzlies were removed in 2019, but any uncontained attractants can train up new bears. Therefore, it is always best to lock up all sheds and barns where garbage, grain and other attractants are stored. If you need additional alarm devices, bear spray, electric fence materials or energizers for containing carcasses or other bear attractants (grain, sweet licks, garbage, etc.) call Eric Graham or James Jonkel.

And for information on how to avoid either directly or indirectly feeding wildlife in Montana, visit: http://fwp.mt.gov/fishAndWildlife/livingWithWildlife/feeding/default.html

ELECTRIC FENCE COST SHARE:

Multiple fencing projects have occurred at various ranches and residential sites across the watershed. Over the last three summers, the Blackfoot Challenge has assisted multiple families with electrified residential containment fences. In years past the Blackfoot Challenge secured funds to electrify the Helmville Dump, the Ovando Dump, the Seeley Lake Dump and the Clearwater Junction Compost Site. These electric fences have proven effective at deterring bears.

Electric fencing is an excellent way to protect livestock, fowl and contain residential attractants. Electric fence is a method of ensuring that bears or other predators that check out yard areas will not come back again. A good shock is the best way to teach bears to keep away. Contact Jamie Jonkel or Eric Graham if you would like to talk about cost share programs to install electric fence around home sites, livestock holding pens, chickens, cattle, pigs, goats, sheep, bee yards, fruit orchards, gardens and other sites that might attract bears or other wildlife. For information on electric fence and another option for cost sharing on electric fence check out this website: https://defenders.org/got-grizzlies



The new electric fence at the compost site near Clearwater Junction. Photo by Eric Graham.

Be Bear Aware Campaign
P.O. Box 7487 • Missoula, Montana • 59807 • 406-239-2315
Email: bearinfo@cfwi.org • **Website:** bebearaware.org • facebook.com/bebearaware

2020 EDUCATIONAL OUTREACH REPORT

Safety for People, Safety for Bears



Missoula Parks & Recreation Summer Camp

2020 Bear Avoidance Safety Seminars and Bear Spray Demonstrations looked a little different this year.

We also had to be creative in getting our safety messages out resulting in virtual seminars, a host of new materials, and a much stronger on-line presence.

Even with the challenges of Covid-19 we did great work for bears and are very proud of our educational outreach accomplishments.

SUMMARY OF 2020 EDUCATIONAL OUTREACH PROGRAM

The start of 2020 was a record year for the Be Bear Aware Campaign. By February we had already scheduled 28 hands-on bear avoidance and bear spray presentations in the states of Montana, Washington, and Idaho. It was our strongest start to a new year and the interest continued to fill our calendar. We couldn't have been more excited.

As our momentum and educational outreach schedule grew, word of the virus would be cancelling large gatherings became a reality. Unfortunately, the Covid-19 pandemic stepped in and caused a rush of cancellations. A lot of good opportunities to reach a diverse audience were lost for 2020.

We realized that in order to make the most of what turned out to be a very challenging year for people and businesses alike, we were going to have to adapt and change the way we reached the public with our Be Bear Aware safety message. And we did.



Small Groups at Travelers Rest



Drive-By Setup in Center of Lolo

We made a strong presence at popular trailheads, along major thorough fares in targeted communities. These areas were selected because of new grizzly bear activities where the grizzly bears had expanded into places such as Seeley Lake, Lolo Hot Springs, Lolo, and Darby. These are areas where citizens were concerned because of recent sightings and encounters. We kept the bear avoidance trailer on the road by placing it in these communities and at trailheads.

Major Bear Avoidance and Bear Spray Training Events



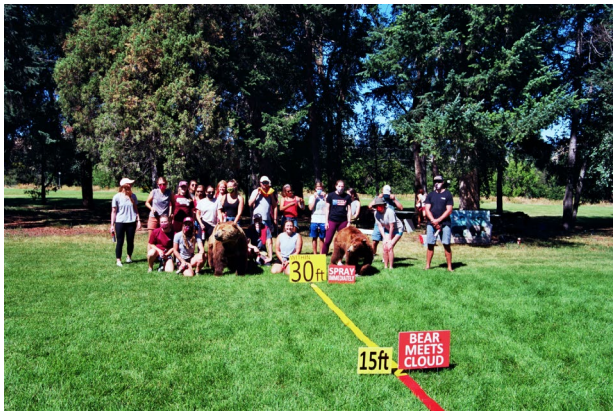
- AmeriCorps Montana Parks
- Fort Owens Youth Expo
- Spokane Great Outdoors Expo
- Missoula Bike Club
- BLM Dillon Youth Day
- BLM Malta
- Missoula Youth Shooting Sports & Outdoor Expo
- NineMile Ranger District Field Training
- BLM Dillon Orientation
- Missoula Parks & Recreation
- Buffalo Jump State Park
- Recon Montana at University of MT
- University of MT Recreation Dept
- Pend Oreille Fair
- BLM Lewistown Chokecherry Festival



Lewis & Clark Visitor Center

UM Wildlife Society Students at Hawthorne Elementary





University of Montana Recreation Department

Informal Presentations & Bear Spray Demonstrations

The Be Bear Aware Campaign conformed to Covid-19 restrictions by separating our educational tables and bear mounts in order to keep visiting groups small. We hosted 50 informal bear avoidance safety seminars and many of these events included our bear spray demonstration course. We even had a black bear run through as we were setting up our bear spray course!

New Products & Special Services Provided in 2020

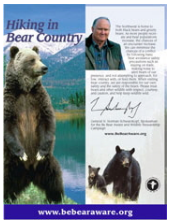
1) We developed a customizable virtual bear avoidance safety presentation and was able to use an on-line forum to keep some events from cancelling for the year. We also provided the presentations to teachers, youth group leaders, and individuals for use in classrooms or at-home learning. https://www.youtube.com/watch?v=JBqi9HoS7RM



2) We were successful in distributing 30,000 black bear-grizzly bear identification cards from our bear avoidance educational set ups. We also distributed them to local businesses, including resorts, lodges, sporting goods stores, and lodges.
https://bebearaware.org/files/2020/08/Bear_ID_4_x_6_Bear_ID.pdf



3) We distributed 10,000 grizzly bear-black bear six-panel brochures listing the various categories for safety in bear country from residential to backcountry camps.
https://bebearaware.org/files/2020/03/HikingInGrizCountry_GrizzlyBear.pdf



4) We developed a new video: Bear Spray Scenarios & Demonstration that has already received 44,000 views on YouTube in four months. It focuses on how to be prepared and properly deploy bear spray in the four most common charging scenarios - when a bear charges from 60 feet, 30 feet, and two 15-foot scenarios.
https://www.youtube.com/watch?v=TZ5HJHZ8Mfw



5) We created a new guide: Deploying Bear Spray Against a Highly Agitated Charging Bear. This is a companion to the video but also includes guidelines for purchasing a quality bear spray; proper way to hold and deploy bear spray; how bear spray effects a bear; and tips for avoiding close encounters.
https://bebearaware.org/files/2020/02/BearGuide8Aug42019.pdf



6) We redeveloped our website to be more user friendly and offer more educational information. We have posted a majority of our educational brochures, cards, posters, instructor's guides, wildlife stewardship guides, and PowerPoint presentations for on-demand viewing, downloading, and printing. We are thrilled to be receiving inquiries from as far away as New England, Florida, New Mexico, Illinois, along with a more local audience. https://bebearaware.org



7) We strengthened our presence on YouTube by adding numerous bear avoidance and bear spray educational videos, along with some fun bear scenarios captured on video. We have also developed educational playlists for recreationists, hunters, teachers, etc. and are still in the process of improving our channel with additional educational materials. youtube.com/bebearaware

8) We created a radio public service announcement that aired on four popular Montana radio stations this summer and is also posted on our YouTube site. https://www.youtube.com/watch?v=RWdYlxSAiMk

9) We conducted numerous television and newspaper interviews focused on hiking safely in bear country, the importance of bear spray and how to properly use it, and also regarding the UDAP bear spray recall due to damaged spray triggers and the flawed recommendation to test your can before heading out.



10) Set up photoshoots to emphasize bear activity signs that joggers, bikers, and hikers may encounter along trails. Our surveys have shown that very few recreationists realized that while we were interviewing them, they were standing right next to a bear sign.



Swan Valley Bear Resources 2020 Annual Report

The mission of Swan Valley Bear Resources (SVBR) is to provide community resources to promote coexistence between people and bears. Since 2007, SVBR has been a collaborative working group including local non-profit conservation/education organization Swan Valley Connections (SVC) and community members working in partnership with the U.S. Forest Service (USFS), Montana Fish, Wildlife & Parks (FWP), U.S. Fish & Wildlife Service (USFWS) and other natural resource entities. By pooling resources, experience, and expertise SVBR provides place-based solutions for minimizing bear conflicts on private and public property in the Swan Valley.

Private Property Projects:

SVBR focuses on private property projects that provide interested residents with materials, information, and conflict response needed to secure bear attractants and minimize risk of bear conflicts. SVBR creates site-specific solutions for each situation, and our collaboration with private property owners may come by a variety of different means such as landowner interest or response to a bear conflict. Some on-going examples of collaboration with private property owners in the Swan Valley include: providing advice on securing bear attractants, loaning bear-resistant garbage containers, helping build electric fences around attractants, removing animal carcasses, helping remove ripe fruit from trees, installing motion-sensor activated cameras to monitor bear conflicts, and contacting FWP management specialists in the event of a conflict. In 2020, SVBR staff provided numerous private property consultations that involved different methods for securing bear attractants.

Bear-Resistant Garbage Container Loaner Program

SVBR's Bear-Resistant Garbage Container Loaner Program allows community members to check out bear-resistant garbage containers for free and on an indefinite basis, with a suggested donation. Bear-resistant containers are also available for purchase. SVBR purchases containers for the program with a combination of funds pooled from SVC, the USFWS Grizzly Bear Recovery Program, the USFS, Defenders of Wildlife, and private donors. The loaner container program provides local residents a means to securely store garbage. SVBR staff will deliver containers to residents' properties free of charge and take the opportunity to offer advice on how to secure other bear attractants that may be present. In 2020, SVBR distributed 28 bear-resistant garbage containers to local residents. Currently, 300 containers and 28 dumpsters have been distributed to community members or businesses as part of the program throughout the Swan Valley. SVBR also worked with FWP grizzly bear management specialists to distribute several bear-resistant garbage containers to residents during a timeframe when FWP did not have any available. In addition, SVBR assisted three landowners needing help to fix or replace their broken bear-resistant dumpsters.

Electric Fencing Program

From 2009 to 2019, SVBR assisted 26 private landowners with construction of permanent electric bear exclusion fences. SVBR assists with the entire fence building process including site identification, fence design, technical specifications, help to secure funding sources, purchase of materials, and final hands-on fence construction. Fencing projects are done opportunistically with interested landowners as needs and opportunities arise. SVBR has seen an increase in residents raising small livestock in the Swan Valley, and this has led to an increasing need for electric fencing projects to minimize bear conflicts.

In 2020, SVBR assisted five residents with construction of permanent electric fences. For three of the resident locations, SVBR built electric fences that had experienced previous bear conflicts due to chickens, small livestock, livestock grain, and orchard fruit, while the other two locations included residents eager to take proactive preventative measures. SVBR also provided three property consultations for residents seeking to build electric fences without SVBR staff, and our advice helped them to do so according with the best

technical specifications and practices. Finally, SVBR helped four residents fix their electric fences that had been damaged from windthrow or improper maintenance.

Attractants that have been secured by these 31 permanent electric fence projects are: chickens, turkeys, ducks, goats, sheep, pigs, rabbits, bees, miniature horses, outside chest freezers, livestock grain, orchard trees, compost bins, and gardens. Partners on these projects have included: SVBR, USFWS' Partners for Fish and Wildlife Program, FWP, Defenders of Wildlife, and the landowners.

Educational Events:

Every year SVBR partners with various agencies, organizations, and businesses to provide educational events aimed at promoting human-bear coexistence. Unfortunately, COVID-19 interrupted our plans for public events in 2020. In April, in lieu of our annual Spring Bear Wake-Up Social, SVBR produced an educational video reminding residents of SVBR's services and empowering their own efforts to contain their bear attractants as bears emerged from hibernation. The video was posted on SVC's website and on our social media platforms. The video can be viewed at: https://www.swanvalleyconnections.org/swan-valley-bear-resources.

In lieu of hosting an annual Bear Fair, SVBR organized a Zoom presentation by Confederated Salish and Kootenai Tribes Wildlife Biologist, Kari Eneas. 100 people attended this online event, which featured educational information on bear ecology, behavior, research, conservation, conflict management, and different resources available to secure bear attractants. SVC staff recorded the event so that it can remain available for others to view. The event is currently available to be viewed on SVC's Facebook page, and will be posted on our webpage soon.

Outreach and Education:

In addition to educational events, SVBR also provides outreach through other avenues. SVBR annually publishes Swan Valley Bear News, included in SVC's fall newsletter, which reaches nearly 2,000 of SVC's subscribers. Swan Valley Bear News typically includes articles written by SVBR staff or local agency bear management specialists concerning annual natural bear food availability, research, biology, conflict management, new data, interesting bear stories, or SVBR activities. The goal of the publication is to provide another form of outreach to educate people about living in bear country.

SVC's Visitor Center contains a mounted grizzly bear, Counter Assault pepper spray, bear-related books for sale, and free SVBR brochures and pamphlets. SVC's full-time Office Manager staffs the Visitor Center year-round, providing answers to many bear-related questions, and tips about how to safely recreate, store food, and camp in bear country. New residents that stop by the Visitor Center can receive a free 'Living with Wildlife' packet that contains information about living in bear country, securing attractants, and resources available for minimizing bear conflicts. With help from SVBR staff, inert cans of bear pepper spray are also available for visitors to get hands-on experience with proper deployment. Some SVBR staff have office space in the Visitor Center and are readily available to answer any bear-related questions that may arise from visitors.

SVBR also provides ongoing outreach through SVC's social media channels and website https://www.swanvalleyconnections.org/swan-valley-bear-resources/.

FEDERAL FINANCIAL REPORT

(Follow form instructions)

1. Federal Agency and Organizational Element to Which Report is Submitted	2. Federal Grant or Other Identifying Number Assigned by Federal Agency (To report multiple grants, use FFR Attachment)	Page	of
USDI-Fish Wildlife Service	F15AC01157	1	1 pages

3. Recipient Organization (Name and complete address including Zip code)

Unversity of Montana
32 Campus Drive
Missoula, MT 59812-4101

4a. DUNS Number	4b. EIN	5. Recipient Account Number or Identifying Number (To report multiple grants, use FFR Attachment)	6. Report Type	7. Basis of Accounting
010379790	81-6001713	M65836	☐ Quarterly ☐ Semi-Annual ☐ Annual X Final	☐ Cash X Accrual

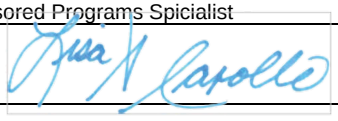
8. Project/Grant Period From: (Month, Day, Year)	To: (Month, Day, Year)	9. Reporting Period End Date (Month, Day, Year)
9/5/2015	9/30/2020	9/30/2020

10. **Transactions**	Cumulative
(Use lines a-c for single or multiple grant reporting)	
Federal Cash (To report multiple grants, also use FFR Attachment):	
a. Cash Receipts	1,929,994.89
b. Cash Disbursements	1,929,560.35
c. Cash on Hand (line a minus b)	434.54
(Use lines d-o for single grant reporting)	
Federal Expenditures and Unobligated Balance:	
d. Total Federal funds authorized	1,930,002.00
e. Federal share of expenditures	1,929,560.35
f. Federal share of unliquidated obligations	
g. Total Federal share (sum of lines e and f)	1,929,560.35
h. Unobligated balance of Federal funds (line d minus g)	441.65
Recipient Share:	
i. Total recipient share required	
j. Recipient share of expenditures	
k. Remaining recipient share to be provided (line i minus j)	0.00
Program Income:	
l. Total Federal program income earned	
m. Program income expended in accordance with the deduction alternative	
n. Program income expended in accordance with the addition alternative	
o. Unexpended program income (line l minus line m or line n)	0.00

	a. Type	b. Rate	c. Period From	Period To	d. Base	e. Amount Charged	f. Federal Share
11. Indirect Expense	Predetermined	17.50%	09/05/15	09/30/20	1642179.23	287,381.37	287,381.12
						0.00	
				g. Totals:		287,381.37	287,381.12

12. *Remarks: Attach any explanations deemed necessary or information required by Federal sponsoring agency in compliance with governing legislation:*

13. Certification: By signing this report, I certify that it is true, complete, and accurate to the best of my knowledge. I am aware that any false, fictitious, or fraudulent information may subject me to criminal, civil, or administrative penalities. (U.S. Code, Title 18, Section 1001)

a. Typed or Printed Name and Title of Authorized Certifying Official	c. Telephone (Area code, number and extension)
Lisa Carollo, Sponsored Programs Spicialist	406-243-5078
	d. Email address: awards@umontana.edu
b. Signature of Authorized Certifying Official 	e. Date Report Submitted (Month, Day, Year): 1/20/2021
	14. Agency use only:

Standard Form 425
OMB Approval Number: 0348-0061
Expiration Date: 10/31/2011

Paperwork Burden Statement

According to the Paperwork Reduction Act, as amended, no persons are required to respond to a collection of information unless it displays a valid OMB Control Number. The valid OMB control number for this information collection is 0348-0061. Public reporting burden for this collection of information is estimated to average 1.5 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0060), Washington, DC 20503.

From: michele dieterich
To: Cooley, Hilary
Subject: Re: [EXTERNAL] transplant...
Date: Thursday, July 16, 2020 3:40:04 PM

Doesn't that mean that every time that you move a bear you are violating that regulation?:) The writing team is ignoring me, but I think I will still try to write something up to have it ready. Still waiting to hear from Bill. Is he gone from his gov address as well? I know he was staying on to support.
Michele

From: Cooley, Hilary <hilary_cooley@fws.gov>
Sent: Thursday, July 16, 2020 8:14 AM
To: michele dieterich <telechele@hotmail.com>
Subject: Re: [EXTERNAL] transplant...

Yes, it's MT state code - a regulation.
And yes, it's very vague! This was the regulation that Ken McDonald brought up when I asked that we identify additional relocation sites after Stevi. He basically interprets it as, "if you put in a trap and move the trap 10 feet, that's another part of the state". I do not agree, but it is very vague. I heard Bill say that that probably was not the intent; perhaps is was moving bighorn sheep to another area / re-establishing a population. I think part of Ken's point was that we need a public process before doing that and he wanted to wait for the council to weigh in on this before moving forward.

From: michele dieterich <telechele@hotmail.com>
Sent: Thursday, July 16, 2020 8:00 AM
To: Cooley, Hilary <hilary_cooley@fws.gov>
Subject: [EXTERNAL] transplant...

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Hi Hilary
Is this the law? It sounds like taking from one area and putting into another. If the bear is already there... not sure if this applies. I have a question into Bill about it.
But wanted to check with you. They define transplant as... "Transplantation" means the release of or attempt to release, intentional or otherwise, wildlife from one place within the state into another part of the state. It is pretty vague and I think the definition might be what we have to change. What are your thoughts on this?
Michele

87-5-711. Control of importation for introduction and transplantation or

introduction of wildlife

(1) Except as otherwise provided, the importation for introduction or the transplantation or introduction of any wildlife is prohibited unless the commission determines, based upon scientific investigation and after public hearing, that a species of wildlife poses no threat of harm to native wildlife and plants or to agricultural production and that the transplantation or introduction of a species has significant public benefits.

(2) With regard to the transplantation or introduction of a fish species not previously legally transplanted to a specific water body within the state or not previously legally introduced to the state, the requirement for scientific investigation in subsection (1) may be satisfied only by completion of an environmental review conforming to the provisions of Title 75, chapter 1, part 2.

From: Cooley, Hilary
To: michele dieterich
Subject: Re: [EXTERNAL] transplant...
Date: Thursday, July 16, 2020 10:14:38 AM

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From: Cooley, Hilary
To: michele dieterich
Subject: Re: [EXTERNAL] transplant...
Date: Thursday, July 16, 2020 4:45:47 PM

I believe Ken said that this applies to areas outside of occupied recovery zones, so moving within an occupied recovery zone is fine. Anything else is not. But not sure where that came from.
I haven't heard from Bill in a while, but I thought he just moved into a different position at FWP, so would still keep his email address.

From: michele dieterich <telechele@hotmail.com>
Sent: Thursday, July 16, 2020 1:40 PM
To: Cooley, Hilary <hilary_cooley@fws.gov>
Subject: Re: [EXTERNAL] transplant...

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To: michele dieterich <telechele@hotmail.com>
Subject: Re: [EXTERNAL] transplant...

Yes, it's MT state code - a regulation.
And yes, it's very vague! This was the regulation that Ken McDonald brought up when I asked that we identify additional relocation sites after Stevi. He basically interprets it as, "if you put in a trap and move the trap 10 feet, that's another part of the state". I do not agree, but it is very vague. I heard Bill say that that probably was not the intent; perhaps is was moving bighorn sheep to another area / re-establishing a population. I think part of Ken's point was that we need a public process before doing that and he wanted to wait for the council to weigh in on this before moving forward.

From: michele dieterich <telechele@hotmail.com>
Sent: Thursday, July 16, 2020 8:00 AM
To: Cooley, Hilary <hilary_cooley@fws.gov>
Subject: [EXTERNAL] transplant...

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Hi Hilary

Is this the law? It sounds like taking from one area and putting into another. If the bear is already there... not sure if this applies. I have a question into Bill about it.

But wanted to check with you. They define transplant as... "Transplantation" means the release of or attempt to release, intentional or otherwise, wildlife from one place within the state into another part of the state. It is pretty vague and I think the definition might be what we have to change. What are your thoughts on this?

Michele

87-5-711. Control of importation for introduction and transplantation or introduction of wildlife

(1) Except as otherwise provided, the importation for introduction or the transplantation or introduction of any wildlife is prohibited unless the commission determines, based upon scientific investigation and after public hearing, that a species of wildlife poses no threat of harm to native wildlife and plants or to agricultural production and that the transplantation or introduction of a species has significant public benefits.

(2) With regard to the transplantation or introduction of a fish species not previously legally transplanted to a specific water body within the state or not previously legally introduced to the state, the requirement for scientific investigation in subsection (1) may be satisfied only by completion of an environmental review conforming to the provisions of Title 75, chapter 1, part 2.

From: Cooley, Hilary
To: Allen, Lydia R -FS
Subject: Re: Bitterroot Ecosystem Discussions--Final Notes
Date: Monday, February 3, 2020 7:04:43 PM
Attachments: image001.png
image002.png
image003.png
image004.png
01212020_BE Recovery.pdf

Thanks Lydia. Nice job on the notes to Carly.
My ppt is attached...

From: Allen, Lydia R -FS <lydia.allen@usda.gov>
Sent: Monday, February 3, 2020 4:18 PM
To: Mark, Chuck -FS <chuck.mark@usda.gov>; Probert, Cheryl -FS <cheryl.probert@usda.gov>; Upton, Carolyn -FS <carolyn.upton@usda.gov>; Anderson, Matthew D -FS <matthew.anderson3@usda.gov>; Beverlin, Steven K -FS <steven.beverlin@usda.gov>; Bush, Jodi <jodi_bush@fws.gov>; Conard, Ben <ben_conard@fws.gov>; Cooley, Hilary <hilary_cooley@fws.gov>; Fortin-Noreus, Jennifer K <jennifer_fortin-noreus@fws.gov>; Swanson, Christopher <christopher_swanson@fws.gov>; Fisher, Sandi <sandi_fisher@fws.gov>; Berglund, Laura G <laura_berglund@fws.gov>; Kasworm, Wayne <wayne_kasworm@fws.gov>; Labrum, Kevin C -FS <kevin.labrum@usda.gov>; Pruss, Michael - FS <michael.pruss@usda.gov>; Barr, Matthew - FS <matthew.barr@usda.gov>; Ford, Tom -FS <tom.ford@usda.gov>; Lockman, Dave -FS <dave.lockman@usda.gov>; Savage, Christopher S -FS <christopher.savage@usda.gov>; Jackson, Scott -FS <scott.jackson@usda.gov>; Jacobson, Lee -FS <lee.jacobson@usda.gov>; Gump, Robert L -FS <robert.gump@usda.gov>; Gustina, Gregory W -FS <gregory.w.gustina@usda.gov>; Lewis, Carly <carly_w_lewis@fws.gov>
Cc: Probasco, Diane M -FS <diane.probasco@usda.gov>
Subject: [EXTERNAL] Bitterroot Ecosystem Discussions--Final Notes

All-

Here are the final notes from our January meeting. I'm working on getting the interagency BOX site set up for materials associated with this and future engagements.

If you presented materials at this meeting that you would like to share (ppts, maps, handouts, etc), please send them to me and I will organize the BOX site once it's established. I already have the FEIS and various FR documents associated with the Bitterroot experimental population.

Thank you,
Lydia

Lydia Allen
Regional Program Leader
Threatened, Endangered and Sensitive Species

U.S. Forest Service
Northern Region (R1)

p: 406-329-3558

Lydia.Allen@usda.gov

26 Fort Missoula Road
Missoula, MT 59804
www.fs.fed.us

From: Allen, Lydia R -FS
Sent: Tuesday, January 28, 2020 11:01 AM
To: Mark, Chuck -FS <chuck.mark@usda.gov>; Probert, Cheryl -FS <cheryl.probert@usda.gov>; Upton, Carolyn -FS <carolyn.upton@usda.gov>; Anderson, Matthew D -FS <matthew.anderson3@usda.gov>; Beverlin, Steven K -FS <steven.beverlin@usda.gov>; Jodi Bush <Jodi_Bush@fws.gov>; ben_conard@fws.gov; Hilary Cooley (hilary_cooley@fws.gov) <hilary_cooley@fws.gov>; Jennifer_fortin-noreus@fws.gov; 'Swanson, Christopher' <christopher_swanson@fws.gov>; 'Sandi Fisher' <sandi_fisher@fws.gov>; 'Laura Berglund' <laura_berglund@fws.gov>; wayne_kasworm@fws.gov; Labrum, Kevin C -FS <kevin.labrum@usda.gov>; Pruss, Michael - FS <michael.pruss@usda.gov>; Barr, Matthew - FS <matthew.barr@usda.gov>; Ford, Tom -FS <tom.ford@usda.gov>; Lockman, Dave -FS <dave.lockman@usda.gov>; Savage, Christopher S -FS <christopher.savage@usda.gov>; Jackson, Scott -FS <scott.jackson@usda.gov>; Jacobson, Lee -FS <lee.jacobson@usda.gov>; Gump, Robert L -FS <robert.gump@usda.gov>; Gustina, Gregory W -FS <gregory.w.gustina@usda.gov>; carly_lewis@fws.gov
Subject: Bitterroot Ecosystem Discussions--Draft Notes

Good morning. Here are the draft notes from last week's 2-day meeting. Carly did a great job of capturing a lot of information and discussion, and I weighed in to ensure all of our identified 'NEEDS' (page 7) and Priorities/Assignments (page 14) were captured. **Please review and get your corrections/comments back to me by February 3**. In the interim, I will see about setting up an interagency site for sharing of materials from our discussion (i.e. ppt, reports, NEPA documents, etc).

Thank you!
Lydia

Lydia Allen
Regional Program Leader
Threatened, Endangered and Sensitive Species

U.S. Forest Service
Northern Region (R1)

p: 406-329-3558

Lydia.Allen@usda.gov

26 Fort Missoula Road
Missoula, MT 59804
www.fs.fed.us

From: Allen, Lydia R -FS
Sent: Monday, January 27, 2020 3:04 PM
To: Mark, Chuck -FS <chuck.mark@usda.gov>; Probert, Cheryl -FS <cheryl.probert@usda.gov>; Upton, Carolyn -FS <carolyn.upton@usda.gov>; Anderson, Matthew D -FS <matthew.anderson3@usda.gov>; Beverlin, Steven K -FS <steven.beverlin@usda.gov>; Jodi Bush <Jodi_Bush@fws.gov>; ben_conard@fws.gov; Hilary Cooley (hilary_cooley@fws.gov) <hilary_cooley@fws.gov>; Jennifer_fortin-noreus@fws.gov; Swanson, Christopher <christopher_swanson@fws.gov>; Sandi Fisher <sandi_fisher@fws.gov>; Laura Berglund <laura_berglund@fws.gov>
Cc: Savage, Christopher S -FS <christopher.savage@usda.gov>; Jackson, Scott -FS <scott.jackson@usda.gov>; Jacobson, Lee -FS <lee.jacobson@usda.gov>
Subject: Bitterroot Ecosystem Discussions
Importance: High

Good afternoon. Please find the talking points that Chris and I developed regarding last week's Bitterroot grizzly bear ecosystem meeting between FS and FWS leadership.

I should have the draft notes circulated by tomorrow morning.

Lydia

Lydia Allen
Regional Program Leader
Threatened, Endangered and Sensitive Species

U.S. Forest Service
Northern Region (R1)

p: 406-329-3558

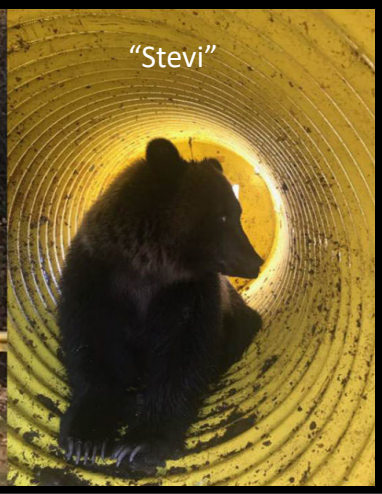
Lydia.Allen@usda.gov

26 Fort Missoula Road
Missoula, MT 59804
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Grizzly Bear Recovery in the Bitterroot

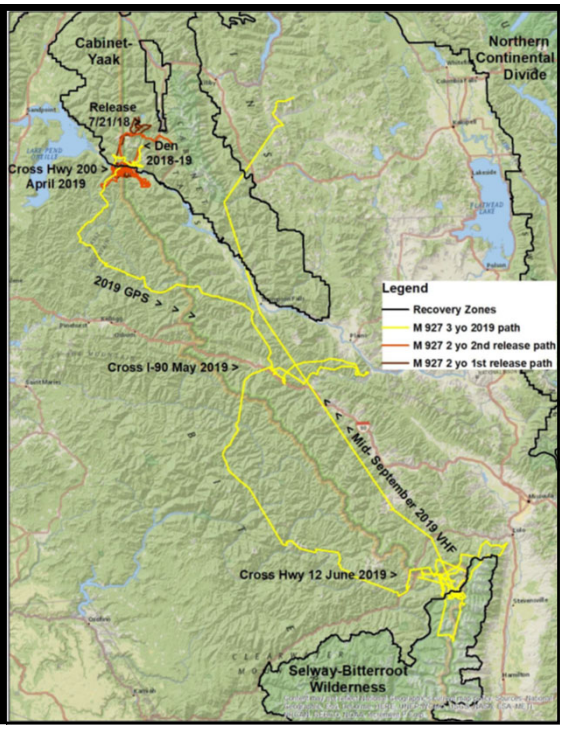




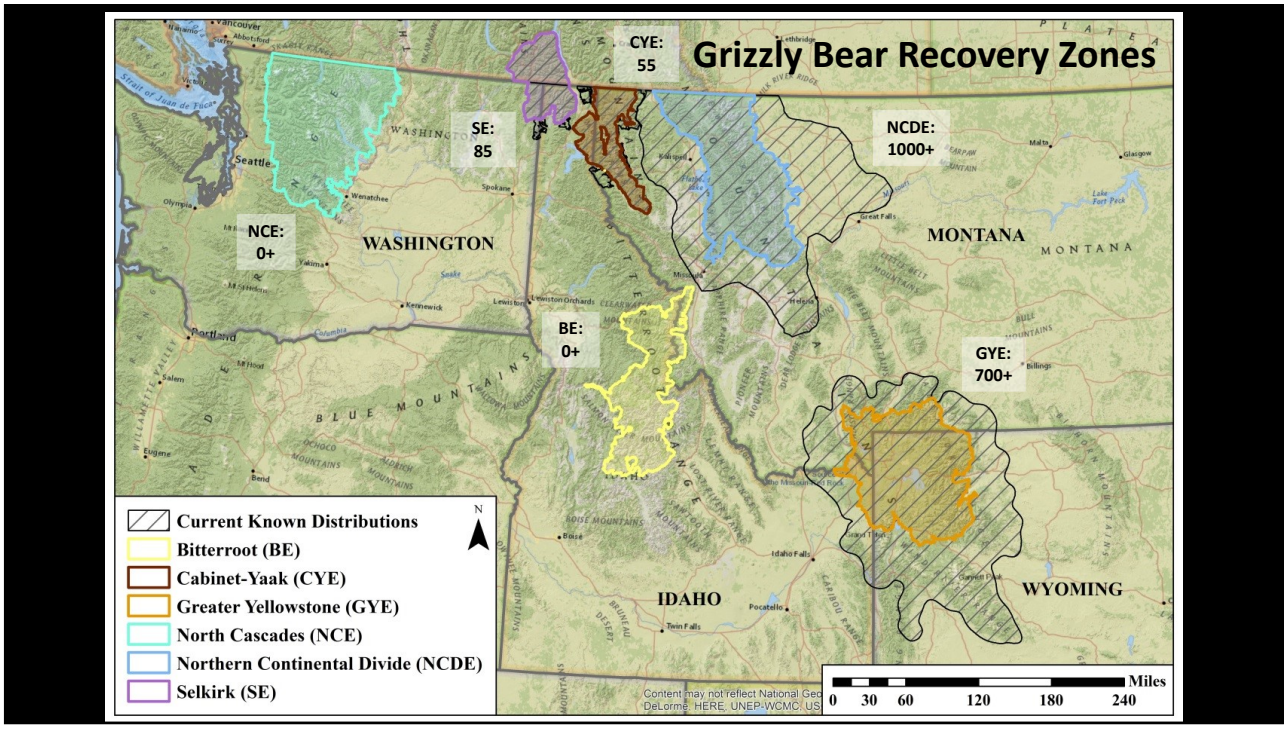
U.S. Fish and Wildlife Service
Grizzly Bear Recovery Program

Bear 927 travels to Bitterroot in 2019






Sightings in BE Increase: Confirmed?
07:13AM 06/23/2019 0143 BEAR 2
12:51PM 09/11/19
WGI_3557.JPG
07:26AM 08/30/19
07:37AM 09/14/19


Grizzly Bear Recovery Zones
CYE: 55
SE: 85
NCDE: 1000+
NCE: 0+
BE: 0+
GYE: 700+
WASHINGTON
MONTANA
IDAHO
WYOMING
Current Known Distributions
Bitterroot (BE)
Cabinet-Yaak (CYE)
Greater Yellowstone (GYE)
North Cascades (NCE)
Northern Continental Divide (NCDE)
Selkirk (SE)
Miles
0 30 60 120 180 240



Bitterroot Ecosystem

- One of the largest block of federal land in lower-48
- Largest block of wilderness in lower-48

Bitterroot Recovery Timeline

- 1940s: last known grizzly bear killed
- 1982: Recovery Plan – called for evaluation of BE as a potential recovery area.
- 1991: IGBC endorsed BE as a recovery area
- 1993: Updated Recovery Plan – BE: "develop planning documents"
- 1996: BE Recovery Chapter developed – "Grizzly Bear recovery will require reintroduction of bears from other areas"
  - Recovery criteria
  - Future tasks determined through EIS
  - Bitteroot Grizzly Bear Evaluation Area

Bitterroot Recovery Timeline

- 2000: Final EIS: Grizzly Bear Recovery in the BE
- 2000: Designated BE as 10j nonessential experimental population
- 2001: ID lawsuit; DOI conceded the case
- 2001: Proposed rule to select the “no action” alternative; did not finalize
- 2001: Proposed rule to remove 10j regulations; did not finalize
- 2007: GB killed in North Fork Clearwater
- 2018: GB captured in Stevensville
- 2019: Bear 927 spends 2 months in BE; additional sightings

Bitterroot Recovery Plan Chapter (1996)

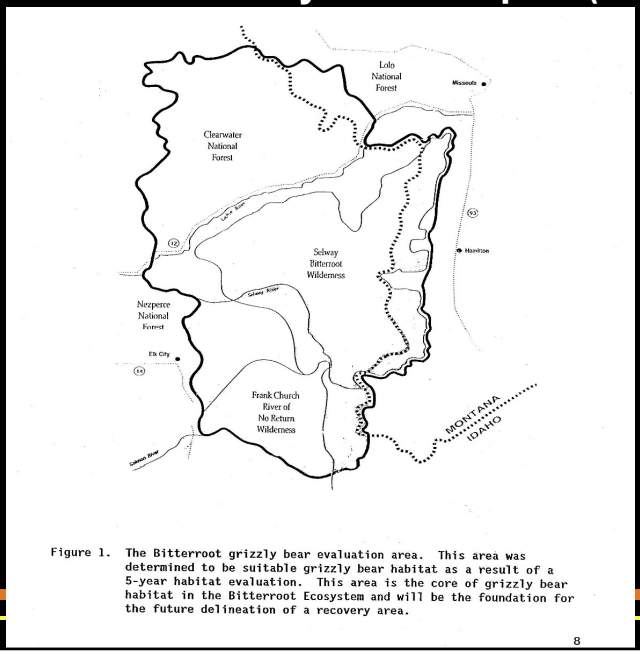


Figure 1. The Bitterroot grizzly bear evaluation area. This area was determined to be suitable grizzly bear habitat as a result of a 5-year habitat evaluation. This area is the core of grizzly bear habitat in the Bitterroot Ecosystem and will be the foundation for the future delineation of a recovery area.

8

Exptl Population Area & Recovery Area for EIS Alternative 1

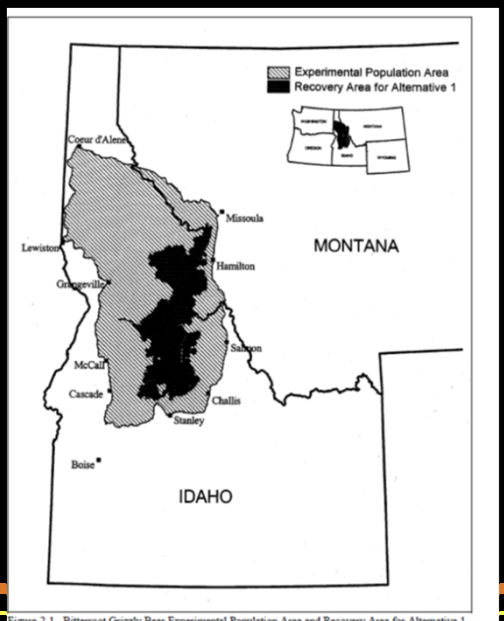


Figure 2-1. Bitterroot Grizzly Bear Experimental Population Area and Recovery Area for Alternative 1 - *Restoration of Grizzly Bears as a Nonessential Experimental Population with Citizen Management.*

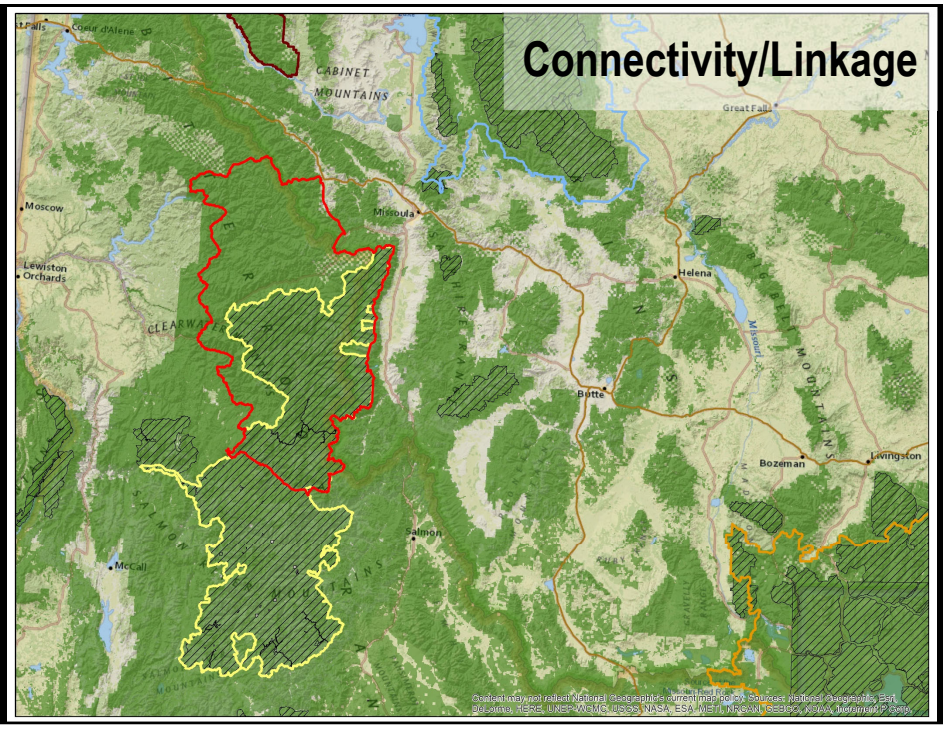
BE Recovery Area for EIS Alternative 2: Natural Recovery



Figure 2-6. The Bitterroot Grizzly Bear Recovery Zone for Alternative 2 - *The No Action Alternative - Natural Recovery.*

Additional Tasks Outlined in EIS

- Designate Recovery Zone
- Establish long-term recovery goal
- Conduct I&E program
- Evaluate sightings
- Manage habitat
- Evaluate adequacy of land-use restrictions in recovery zone & linkage areas
- Apply IGBC nuisance guidelines
- Implement land-use restrictions when necessary



Connectivity/Linkage

- Early 2000s effort to identify linkage zones between ecosystems.
- Identified potential linkage areas (undeveloped) and severely fractured areas (private lands, development) between BE & CYE, BE & NCDE
- Linkage Zone Action Plan:
  - ID where movement opportunities still exist (new study possible)
  - Prioritize linkage areas
  - Develop management strategies for public lands and highways
  - Develop a cooperative plan to work with local groups & county gvts
- What is necessary to maintain linkage opportunities on public lands?

10j Status in BE

- Intent of 10j rule was to allow management flexibility for a reintroduced population
- We have not reintroduced bears
- Therefore, grizzly bears that are present in the BE are considered Threatened
- Normal Section 7 consultation obligations apply

Identify Baseline Conditions within Recovery Zone

- Demographic Recovery Criteria: tentative criteria in RP
  - Females with Cubs
  - Occupancy of BMUs
  - Human-Caused Mortality
- Habitat Based Recovery Criteria: TBD
  - Established for GYE & NCDE
  - Baseline conditions and thresholds for habitat factors compatible with a stable to increasing GB population
  - Secure Habitat/Road Densities, Livestock Allotments, Developed Sites

Connectivity/Linkage Areas: NCDE Examples

- 9-Mile & Salish Demographic Connectivity Area
  - Purpose to support female occupancy and eventual dispersal to BE & CYE
  - No increase in open motorized routes
- Zone 2: managed to provide opportunity for GBs to move between NCDE & GYE
  - Habitat direction compatible with goal of providing for genetic connectivity will be maintained

From: Davis, Ellen -FS
To: Mark, Chuck -FS
Cc: hilary_cooley@fws.gov
Subject: RE: Bitterroot letter to IGBC - Chuck Mark
Date: Wednesday, February 27, 2019 1:29:19 PM
Attachments: image001.png
image002.png
image003.png
image004.png

Chuck, thanks for the clarification. That makes much more sense. It is crazy to think you have a conflict of interest as the BE Chair because you are doing your forest plan revision on the Salmon Challis. There was talk about forest plan revisions at Dave Mattson's presentation Saturday night as well with a focus to be vocal and get involved locally when the Bitterroot NF begins there revision in 2020 especially in regards to the Butterfly timber sale and road density on the forest.

From: Mark, Chuck -FS
Sent: Wednesday, February 27, 2019 11:01 AM
To: Davis, Ellen -FS <ellendavis@fs.fed.us>
Cc: hilary_cooley@fws.gov
Subject: RE: Bitterroot letter to IGBC - Chuck Mark

Hi Ellen. This letter was not a letter to the IGBC, this was a letter to the editor for our local paper addressing some local constituents who believe that my serving as the chairman for the Bitterroot Ecosystem Subcommittee is a conflict of interest because my Forest is in Forest Plan Revision. I talked to Rob Chaney at the Missoulian yesterday and I was clear about my intent regarding this "letter to the editor." If you would like to talk further about this, I would be glad to. Chuck.

Charles A. Mark, CF
Forest Supervisor
Forest Service
Salmon-Challis National Forest
p: 208-756-5111

c: 208-303-8100
f: 208-756-5151
chuck.mark@usda.gov

1206 South Challis Street
Salmon, ID 83467
www.fs.fed.us

Caring for the land and serving people

From: Davis, Ellen -FS
Sent: Wednesday, February 27, 2019 10:50 AM
To: Mark, Chuck -FS <cmark@fs.fed.us>; Baumer, Amy E -FS <abaumer@fs.fed.us>
Cc: Frank van Manen <fvanmanen@usgs.gov>
Subject: FW: Bitterroot letter to IGBC - Chuck Mark

Hi Chuck. Hilary forwarded this article to me (see link below). Did you send this letter to IGBC Chair Matt Hogan? I hadn't seen it so wasn't sure.
Also, FYI. I attended a presentation Saturday night (flyer attached) talking about some of the same issues you bring up in your letter. In fact Dave Mattson believes the Salmon Selway-Bitterroot could actually support up to 450 grizzlies bears. I'm not sure how those numbers compare with what some of our folks think but nevertheless, those are some of the number floating out there.
Also, as you have noted in the past, the interest and focus of grizzlies making their way here to the Bitterroot ecosystem has increased enormously. Especially since the bear (Arnie, after Arnold Palmer, named by Friends of the Bitterroot) made his way to

the Stevi golf course. There were about 50-60 people in attendance for Dave's presentation and it was by invitation only, not even open to the public. Hope you are doing well in all this snow! Ellen

From: Cooley, Hilary [mailto:hilary_cooley@fws.gov]
Sent: Monday, February 25, 2019 2:55 PM
To: Davis, Ellen -FS <ellendavis@fs.fed.us>
Cc: kannis@mt.gov; Lori Roberts <lroberts@mt.gov>; Dillon Tabish <dillon.tabish@mt.gov>; Smith, Kate <kate.smith@cfc.umt.edu>
Subject: Bitterroot letter to IGBC - Chuck Mark

Hi Ellen,

I just came across this news story and letter from Chuck Mark to IGBC. Have you seen and do you know about it? I had not seen the letter and just downloaded from the news website. Is this official and if so, probably need to share with I&E committee to consider putting on IGBC website?

Hilary Cooley
Grizzly Bear Recovery Program
U.S. Fish & Wildlife Service
406-243-4903

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From: Arnold, Randy
To: Crowser, Vivaca; Thompson, Michael; hilary_cooley@fws.gov
Subject: RE: draft Stevi grizzly bear news
Date: Thursday, July 18, 2019 5:21:55 PM
Attachments: image002.png
image003.png
image004.png
image005.png
image006.png
image007.png

Looks great, Vivaca, thanks!

Randy

Randy Arnold
Regional Supervisor
Montana Fish, Wildlife & Parks, Region 2

3201 Spurgin Rd
Missoula, MT 59804
O: (406) 542-5504 | C: (406) 552-8708
Montana FWP



THE **OUTSIDE** IS IN US ALL.



From: Crowser, Vivaca
Sent: Thursday, July 18, 2019 2:51 PM
To: Arnold, Randy <rarnold@mt.gov>; Thompson, Michael <mthompson@mt.gov>; hilary_cooley@fws.gov; Crowser, Vivaca <Vcrowser@mt.gov>
Subject: draft Stevi grizzly bear news

Hi, all-
Please see the attached draft news release for your review.

Thanks,
Vivaca

Vivaca Crowser
Information and Education Program Manager
Montana Fish, Wildlife & Parks; Region 2

3201 Spurgin Rd
Missoula, MT 59804

O: (406) 542-5518 | C: (406) 240-2004
Montana FWP | Montana Outdoors Magazine

THE **OUTSIDE** IS IN US ALL.

From:	Jennifer Fortin-Noreus
To:	David Diamond
Cc:	Hilary Cooley
Subject:	RE: materials for the retreat
Date:	Friday, June 14, 2019 9:44:00 AM
Attachments:	GBear Recovery Timeline_jf.docx

David - I made a few edits. Please let me know if you have any further questions. J

From: Diamond, David <david_diamond@nps.gov>
Sent: Thursday, June 13, 2019 10:32 AM
To: Jennifer Fortin-Noreus <jennifer_fortin-noreus@fws.gov>
Subject: Fwd: materials for the retreat

I think Hilary meant to copy you...
d.

---------- Forwarded message ---------
From: **Cooley, Hilary** <hilary_cooley@fws.gov>
Date: Wed, Jun 12, 2019 at 4:23 PM
Subject: Re: materials for the retreat
To: Diamond, David <david_diamond@nps.gov>

Hi David,

See attached for Gbear Recovery Timeline. Let me know if this is what you were thinking. Jen: would you mind just checking to see if I missed or mis-stated anything?

I won't be available via email tomorrow or Friday, but feel free to call on my cell if you have questions.

FYI: I talked with Frank v today. He is definitely in agreement that IGBC is not about delisting and that, in fact, it becomes even more important after delisting.

Hilary Cooley
Grizzly Bear Recovery Program
U.S. Fish & Wildlife Service
406-243-4903

On Wed, Jun 12, 2019 at 9:16 AM Diamond, David <david_diamond@nps.gov> wrote:

> Thank you Jennifer!
>
> What I'm thinking of is a max 2 pager from the USFWS statutory perspective, which is unique among this group of federal land mangers and state wildlife managers. So, just the facts on population and ESA legal status through time. I don't want to create work for you, this is just an idea - Hilary weigh in if you think this would be useful, and feel free to call

me with questions.

1975 listing
1982, 93 recovery plan
2007 GYE delisting (why, recovery criteria met, etc)
2009 GYE relisting (why? whitebark, etc)
2017 GYE delisting (why, very short explanation)
2018 GYE relisting:

> -The Service violated the ESA under the standards set forth in the APA by delisting the Greater Yellowstone segment without analyzing the impact of delisting on other continental grizzly populations.
> -The Service's failure to require a recalibration provision in the Conservation Strategy is arbitrary and capricious.
> -The Service's determination that it need not provide for either natural connectivity or translocation is contrary to the best available science.

2019 GYE appeal
-don't have to be comprehensive - (some explanation of recent case law on DPSs)
-FWS experts know more about genetic diversity than the judge

Any other milestones for other zones?

You don't need to put next step strategy in writing, FWS reps at the meeting can share as appropriate...

One thing I am hearing in my interviews- some folks see IGBC as all about ESA status, and therefore it ends at delisting. However there is another group that sees ESA status as almost irrelevant to IGBC - you got to the recovered end of the spectrum through a lot of hard work. Sort of like losing weight, once you reach your goal, you still have to go to the gym!

d.

On Wed, Jun 12, 2019 at 8:14 AM Jennifer Fortin-Noreus <jennifer_fortin-noreus@fws.gov> wrote:

> Hi David,
> I got your message and wanted to let you know that the posters are printed and ready to go. Would you please provide a few more details as to what you have in mind for history of grizzly bears and the ESA?
> Thanks!
> Jennifer

--
David Diamond
Executive Coordinator
Greater Yellowstone Coordinating Committee
10 E Babcock St, Room 234, Bozeman, MT 59771
406-697-3094 (cell)

406-587-6733 (office)
david_diamond@nps.gov
www.fedgycc.org

--

David Diamond
Executive Coordinator
Greater Yellowstone Coordinating Committee
10 E Babcock St, Room 234, Bozeman, MT 59771
406-697-3094 (cell)
406-587-6733 (office)
david_diamond@nps.gov
www.fedgycc.org

Grizzly Bear Recovery Timeline

1975: Grizzly Bears listed as Threatened in lower-48 States.

1982: Recovery Plan published.

1993: Revised Recovery Plan published.

2007: GYE DPS delisted due to recovery. The population had been increasing at 4 to 7 percent annually and was near to or at carrying capacity inside Yellowstone National Park. Final rule challenged in U.S. District Court for Montana. Concurrently published supplements to the 1993 Recovery Plan that added habitat-based recovery criteria and revised the demographic recovery criteria for the GYE.

2009: GYE DPS relisted due to court decision. U.S. District Court for Montana vacates and remands GYE delisting rule. Opinion indicated that regulatory mechanisms were inadequate because they were not legally enforceable and the FWS had not fully analyzed the potential effects of climate change on whitebark pine, an important food source for some grizzly bears in the GYE.

2011: Appeals courts partially affirms District Court Decision. The Ninth Circuit Court of Appeals reversed the district court's decision, holding that the Service's consideration of regulatory mechanisms was permissible. However, the Ninth Circuit upheld the district court's decision on whitebark pine.

2017: GYE DPS delisted due to recovery. New research indicated that whitebark pine decline did not pose a threat to grizzly bears. Concurrently published revised demographic recovery criteria for the GYE. Final rule challenged in U.S. District Court of Montana by 6 groups (Earthjustice, Western Environmental Law Center, Alliance for the Wild Rockies, Humane Society of the US, tribal representatives, Robert Aland). Intervenors include State of Wyoming, Montana, Idaho, Safari Club International, NRA, Sportsman's Alliance Foundation, Rocky Mountain Elk Foundation.

2017: North Cascades NP & FWS publish Draft Grizzly Bear Restoration Plan/Environmental Impact Statement for the North Cascades Ecosystem. Final EIS on hold.

2018: GYE DPS relisted due to court decision. U.S. District Court for Montana vacates and remands GYE delisting rule. Opinion indicated:

- Service must prepare a comprehensive review of the entire listed species, not just an isolated population segment.
- Service improperly assessed threats to the GYE bears by failing to require a recalibration method in the Conservation Strategy.

- Service also acted arbitrarily in relying on genetics studies indicating that GYE bears could be genetically at risk without new genetic input over the long term.

Court opinion has implications for how we delist other grizzly bear populations. The opinion followed the reasoning of a prior D.C. Circuit Court opinion, *Humane Society of the U.S. v. Zinke*, 865 F.3d 585 (D.C. Cir. 2017) related to a final rule delisting western great lakes DPS, and ruled that the Service failed to consider how the GYE delisting would impact remaining grizzly populations.

2018: NCDE Habitat-Based Recovery Criteria finalized. A 1996 court settlement requires FWS to publish HBRC for each recovery zone prior to delisting.

2018: NCDE subcommittee finalizes Conservation Strategy. A necessary step for delisting.

October 2018: Grizzly Bear trapped on edge of Bitterroot. Bear relocated to NCDE due to lack of designated relocation sites in that area. "Stevi" is representative of an increasing number of bears using areas between ecosystems.

December 2018: NCDE scheduled for proposed delisting due to recovery. Plan placed on hold due to GYE litigation and the intent to delist NCDE as a DPS while leaving the rest of the range listed.

2019: U.S. files appeal with US Court of Appeals for the 9th Circuit. The state of Wyoming and Montana also filed appeals.

From:	Tyers, Daniel - FS
To:	Frey, Kevin; Gunther, Kerry A; Haroldson, Mark A; jeremy.nicholson; Daniel Thompson; Brian DeBolt
Cc:	Cooley, Hilary
Subject:	RE: MT Baker"s Hole fatality BOR
Date:	Thursday, July 1, 2021 4:09:32 PM
Attachments:	image002.png image003.png image004.png image005.png image006.png

---

I'm available. Thanks.

Dan Tyers
GYE Grizzly Bear Habitat Coordinator
Forest Service
406-600-8949
daniel.tyers@usda.gov
www.fs.fed.us
Caring for the land and serving people

From: Frey, Kevin <KFrey@mt.gov>
Sent: Thursday, July 1, 2021 2:06 PM
To: Gunther, Kerry A <Kerry_Gunther@nps.gov>; Haroldson, Mark A <mharoldson@usgs.gov>; jeremy.nicholson <jeremy.nicholson@idfg.idaho.gov>; Tyers, Daniel - FS <daniel.tyers@usda.gov>; Daniel Thompson <daniel.thompson@wyo.gov>; Brian DeBolt <brian.debolt@wyo.gov>
Cc: Cooley, Hilary <Hilary_Cooley@fws.gov>
Subject: MT Baker's Hole fatality BOR

All,
The report is written. Hilary has seen it. Would all of you be available for a few hours session one day during the week or July 11th?
Hilary and I talked….we could do a zoom/teams type thing…share the screen and go over the findings. I would like to get this completed so FWS can post on website.
Dan Tyers if not you, I can ask Jason Brey.
WY Dan & Brian, you guys can decide on one of you or if both want in, we're ok with that.

Let me know early next week if possible.
Thanks,

Kevin Frey
Grizzly Bear Specialist
Wildlife Division
Montana Fish, Wildlife & Parks, Region 3

1400 South 19th
Bozeman, MT 59718
Ph: (406) 577 7876
Montana FWP



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From:	Sperry, Charlie
To:	Costello, Cecily; Harris, Rich; Stokes, Heather; Crowser, Vivaca; Hilary Cooley; Schenk, Bill; Tabish, Dillon; Bertellotti, Gary; Johnson, Shawn
Subject:	RE: Presenters for Transplant Protocols Topic - GBAC January Meeting
Date:	Tuesday, December 31, 2019 11:37:38 AM

I didn't see Shawn on the previous emails so I added him to this one.

Rich and I visited on the phone this morning. While he won't be able to attend the meeting in Polson, he offered to talk with Tim or other potential speakers ahead of the meeting to help guide them toward a beneficial and efficient use of the Council's time. Shawn and Heather, are we at a point now where we know who we want to invite?

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Subject: RE: Presenters for Transplant Protocols Topic - GBAC January Meeting

I agree with Rich about Tim Manley. I think it might be good to have someone from the Flathead National Forest, too, to talk about their considerations when moving bears. Tim would be able to suggest some one.

Sent from my Verizon, Samsung Galaxy smartphone

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Date: 12/31/19 6:37 AM (GMT-07:00)
To: "Stokes, Heather" <heather.stokes@umconnect.umt.edu>, "Crowser, Vivaca" <Vcrowser@mt.gov>, "Sperry, Charlie" <csperry@mt.gov>, Hilary Cooley <hilary_cooley@fws.gov>, "Costello, Cecily" <cecostello@mt.gov>, "Schenk, Bill" <BSchenk@mt.gov>, "Tabish, Dillon" <Dillon.Tabish@mt.gov>, "Bertellotti, Gary" <GBertellotti@mt.gov>
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I'd suggest capping it at that, lest we again tip the balance of the Council's work away from discussing amongst themselves and beginning to draft recommendations and toward (more) listening. Makes more sense to me to save GYE and East Front presenters for meetings closer to them. If info they share suggests that initial drafts of recommendations need revising, there's time for that.

(By the way, I'm unsure why Gary's response email on the topic isn't included in this conversation thread - some techical reason I guess).

Rich Harris
Grizzly Bear Planning Coordinator
Montana Fish Wildlife and Parks
Home cell: (406) 214-7484
Office cell (406) 210-5008
richard.harris@mt.gov

From: Stokes, Heather <heather.stokes@umconnect.umt.edu>
Sent: Monday, December 30, 2019 4:20 PM
To: Crowser, Vivaca; Sperry, Charlie; Hilary Cooley; Costello, Cecily; Schenk, Bill; Tabish, Dillon; Bertellotti, Gary; Harris, Rich
Subject: [EXTERNAL] Re: Presenters for Transplant Protocols Topic - GBAC January Meeting

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Thanks,

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Subject:	Re: Presenters for Transplant Protocols Topic - GBAC January Meeting
Date:	Monday, December 30, 2019 6:21:00 PM

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To:	Johnson, Shawn; Sperry, Charlie; Costello, Cecily; Harris, Rich; Stokes, Heather; Crowser, Vivaca; Hilary Cooley; Tabish, Dillon; Bertellotti, Gary
Subject:	RE: Presenters for Transplant Protocols Topic - GBAC January Meeting
Date:	Tuesday, December 31, 2019 3:42:39 PM

HI everyone,
I just got caught up on this email string. I don't disagree with anyone's points about bringing in Tim Manley or someone from the Flathead NF. My only concern is the panel getting too big. Everyone needs a chance to talk, so it will take time. There was discussion of having Randy, Mike and Jamie to talk about the Stevensville Bear. It makes me wish we could have a part A and B to the panel discussion. A being some general info on transplant protocols and B being a case study of the Stevi bear.

Very early in this email string Gary mentioned something that no one else has mentioned or elaborated on – and I think that's good. Gary mentioned the possibility of having someone talk about the potential liability associated with transplant. I would steer away from this as a discussion topic. Not that it's not relevant, but it could end up being a black hole. And, the only realistic legal response to the question is "it depends." On what? On the circumstances and whether protocols were followed and all the usual stuff that goes along with a claim of liability like causation and damages. We may get those questions eventually, but I wouldn't put it front and center in a panel.

FYI: Ken submitted to me a list of questions associated with translocation. I have formulated some thoughts on them but have asked Ken for an opportunity to discuss before taking pen to paper. Questions and answers will be available to all when ready.

Happy New Year
Bill
406-444-4042

From: Johnson, Shawn <shawn.johnson@mso.umt.edu>
Sent: Tuesday, December 31, 2019 10:04 AM
To: Sperry, Charlie <csperry@mt.gov>; Costello, Cecily <cecostello@mt.gov>; Harris, Rich <Richard.Harris@mt.gov>; Stokes, Heather <heather.stokes@umconnect.umt.edu>; Crowser, Vivaca <Vcrowser@mt.gov>; Hilary Cooley <hilary_cooley@fws.gov>; Schenk, Bill <BSchenk@mt.gov>; Tabish, Dillon <Dillon.Tabish@mt.gov>; Bertellotti, Gary <GBertellotti@mt.gov>
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Thanks, Charlie. Good to catch up on this thread. All makes good sense.

I'm working through updates to the agenda (including desired speakers) today and tomorrow. We'll be in a position to reach out with invites by Thursday.

Best,
Shawn

Shawn Johnson
Center for Natural Resources & Environmental Policy
University of Montana
(406) 381-2904 | shawn.johnson@umontana.edu
www.naturalresourcespolicy.org

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All

My view is that we'd like the Council to focus primarily on the issue of moving bears from one "place" (ecosystem? recovery zone? PCA? best not to get caught up in terminology for now) to another (because this gets at the critical issue "Where does Montana want grizzlies and how do we accomplish that?). For this, I'd think having Chuck Mark present would be very useful, probably on the same panel as Jamie (who I think is critical for Polson). A secondary, related but separate topic, is that of moving bears within areas. For that, an appropriate speaker would be Tim Manley. Like Jamie, he's been in front of the Council before. However, when I spoke (at length!) with Tim last week, he expressed a frustration at his limited time in Missoula, and would, I think, welcome the chance to provide more input and answer questions. He's moved more grizzlies than anybody else, and has also given considerable thought (and, in some ways, revised some protocols) regarding within-area translocations. He told me he was planning to attend in any case, and is located quite close (lives in Bigfork).

I'd suggest capping it at that, lest we again tip the balance of the Council's work away from discussing amongst themselves and beginning to draft recommendations and toward (more) listening. Makes more sense to me to save GYE and East Front presenters for meetings closer to them. If info they share suggests that initial drafts of recommendations need revising, there's time for that.

(By the way, I'm unsure why Gary's response email on the topic isn't included in this conversation thread - some techical reason I guess).

Rich Harris
Grizzly Bear Planning Coordinator
Montana Fish Wildlife and Parks

Home cell: (406) 214-7484
Office cell (406) 210-5008
richard.harris@mt.gov

From: Stokes, Heather <heather.stokes@umconnect.umt.edu>
Sent: Monday, December 30, 2019 4:20 PM
To: Crowser, Vivaca; Sperry, Charlie; Hilary Cooley; Costello, Cecily; Schenk, Bill; Tabish, Dillon; Bertellotti, Gary; Harris, Rich
Subject: [EXTERNAL] Re: Presenters for Transplant Protocols Topic - GBAC January Meeting

Yeah, might not be the right fit in trying to stay focused on protocols. Chuck can speak more to the difference regarding social tolerance on the ID vs MT side for the Bitterroot. He can also speak to how this is impacting forest planning revision. It has more to do with readiness to allow for transplants rather than the actual protocols at this time. The IGBC Bitterroot subcommittee has stepped up their membership as activities for 2020 as a result of the Stevi bear so still related but worthy of different time slot in the agenda.

Heather Stokes
Center for Natural Resources & Environmental Policy
University of Montana
(917) 553-0602 | heather.stokes@umontana.edu
www.naturalresourcespolicy.org

From: Crowser, Vivaca <Vcrowser@mt.gov>
Sent: Monday, December 30, 2019 4:17 PM
To: Stokes, Heather <heather.stokes@umconnect.umt.edu>; Sperry, Charlie <csperry@mt.gov>; Hilary Cooley <hilary_cooley@fws.gov>; Costello, Cecily <cecostello@mt.gov>; Schenk, Bill <BSchenk@mt.gov>; Tabish, Dillon <Dillon.Tabish@mt.gov>; Bertellotti, Gary <GBertellotti@mt.gov>; Harris, Rich <Richard.Harris@mt.gov>
Subject: RE: Presenters for Transplant Protocols Topic - GBAC January Meeting

I don't know him, so not sure. Specific to the topic that Jamie/Mike/Randy could cover on the Stevi bear and other transplant protocols that Jamie has worked on through the years, I don't think he's a fit. But, he might have perspective on a separate issue.

From: Stokes, Heather <heather.stokes@umconnect.umt.edu>
Sent: Monday, December 30, 2019 4:16 PM
To: Crowser, Vivaca <Vcrowser@mt.gov>; Sperry, Charlie <csperry@mt.gov>; Hilary Cooley <hilary_cooley@fws.gov>; Costello, Cecily <cecostello@mt.gov>; Schenk, Bill <BSchenk@mt.gov>; Tabish, Dillon <Dillon.Tabish@mt.gov>; Bertellotti, Gary <GBertellotti@mt.gov>; Harris, Rich <Richard.Harris@mt.gov>
Subject: [EXTERNAL] Re: Presenters for Transplant Protocols Topic - GBAC January Meeting

Thanks Gary, Vivaca, and Charlie!

Chuck Mark is planning on attending the first day of this meeting - he is the Forest Supervisor for the Salmon - Challis. He is also the IGBC Bitterroot Subcommittee Chair. Would his dynamic work on the Jamie, Randy, Mike panel?

Heather Stokes
Center for Natural Resources & Environmental Policy
University of Montana
(917) 553-0602 | heather.stokes@umontana.edu
www.naturalresourcespolicy.org

From: Crowser, Vivaca <Vcrowser@mt.gov>
Sent: Monday, December 30, 2019 3:05 PM
To: Sperry, Charlie <csperry@mt.gov>; Stokes, Heather <heather.stokes@umconnect.umt.edu>; Hilary Cooley <hilary_cooley@fws.gov>; Costello, Cecily <cecostello@mt.gov>; Schenk, Bill <BSchenk@mt.gov>; Tabish, Dillon <Dillon.Tabish@mt.gov>; Bertellotti, Gary <GBertellotti@mt.gov>; Harris, Rich <Richard.Harris@mt.gov>
Subject: RE: Presenters for Transplant Protocols Topic - GBAC January Meeting

Yep, I had the same thought…Jamie Jonkel, Randy Arnold, Mike Thompson could all handle this and actually having several of them present together would be a good dynamic, I think.

From: Sperry, Charlie <csperry@mt.gov>
Sent: Monday, December 30, 2019 2:43 PM
To: Crowser, Vivaca <Vcrowser@mt.gov>; Stokes, Heather <heather.stokes@umconnect.umt.edu>; Hilary Cooley <hilary_cooley@fws.gov>; Costello, Cecily <cecostello@mt.gov>; Schenk, Bill <BSchenk@mt.gov>; Tabish, Dillon <Dillon.Tabish@mt.gov>; Bertellotti, Gary <GBertellotti@mt.gov>; Harris, Rich <Richard.Harris@mt.gov>
Subject: RE: Presenters for Transplant Protocols Topic - GBAC January Meeting

Good reminder, Viv. Randy has a good handle on this incident and topic as well; perhaps an alternative if the others are not available. Randy is always welcome anyway!

Charlie

From: Crowser, Vivaca
Sent: Monday, December 30, 2019 2:23 PM
To: Stokes, Heather <heather.stokes@umconnect.umt.edu>; Sperry, Charlie <csperry@mt.gov>; Hilary Cooley <hilary_cooley@fws.gov>; Costello, Cecily <cecostello@mt.gov>; Schenk, Bill <BSchenk@mt.gov>; Tabish, Dillon <Dillon.Tabish@mt.gov>; Bertellotti, Gary <GBertellotti@mt.gov>; Harris, Rich <Richard.Harris@mt.gov>
Subject: Re: Presenters for Transplant Protocols Topic - GBAC January Meeting

Heather-

As we talked about a bit on our last call, and Rich mentioned in an email as well, I think Jamie Jonkel would be great to have to talk about the Stevi bear specific decision making process and all of his experience with transplant protocols in general. We could consider having R2 Wildlife Manager, Mike Thompson, present with him.

Thanks,

Vivaca

From: Stokes, Heather <heather.stokes@umconnect.umt.edu>
Sent: Monday, December 30, 2019 12:43 PM
To: Sperry, Charlie; Hilary Cooley; Costello, Cecily; Schenk, Bill; Crowser, Vivaca; Tabish, Dillon; Bertellotti, Gary; Harris, Rich
Subject: [EXTERNAL] Presenters for Transplant Protocols Topic - GBAC January Meeting

Hi Team,
We are in the process of refining the GBAC January agenda.

We would appreciate your help in identifying presenters for addressing the transplant protocols topic. Please indicate what aspect the person would address and from what perspective.

It would be helpful to do a reply all so that we are all on the same page. We can then extend the invitations.

Thanks,
Heather and Shawn

Heather Stokes
Center for Natural Resources & Environmental Policy
University of Montana
(917) 553-0602 | heather.stokes@umontana.edu
www.naturalresourcespolicy.org

From: Jonkel, James
To: Fortin-Noreus, Jennifer; Cooley, Hilary
Subject: RE: Verified grizzly activity in the outlying areas of R2
Date: Friday, January 24, 2020 6:13:43 PM
Attachments: 1-16-20 Draft Prt 2 Verified R2 Grizzly Update for Hilary Cooley.pdf

---

Part 2.

From: Jonkel, James
Sent: Friday, January 24, 2020 4:08 PM
To: 'Fortin-Noreus, Jennifer' <jennifer_fortin-noreus@fws.gov>; Cooley, Hilary <hilary_cooley@fws.gov>
Subject: Verified grizzly activity in the outlying areas of R2

Jennifer: I am still working on this but here's what I have thus far---I had to break it into 2 parts to send it. Take care, JJJ.

James Jonkel
Bear Management
MFWP R2
406-544-1447
jajonkel@mt.gov
Prevention is the key, teach bears to keep away and not to come and stay!

Turah/Clinton/Beavertail/Bearmouth Area (5/14/09 to 6/4/09)









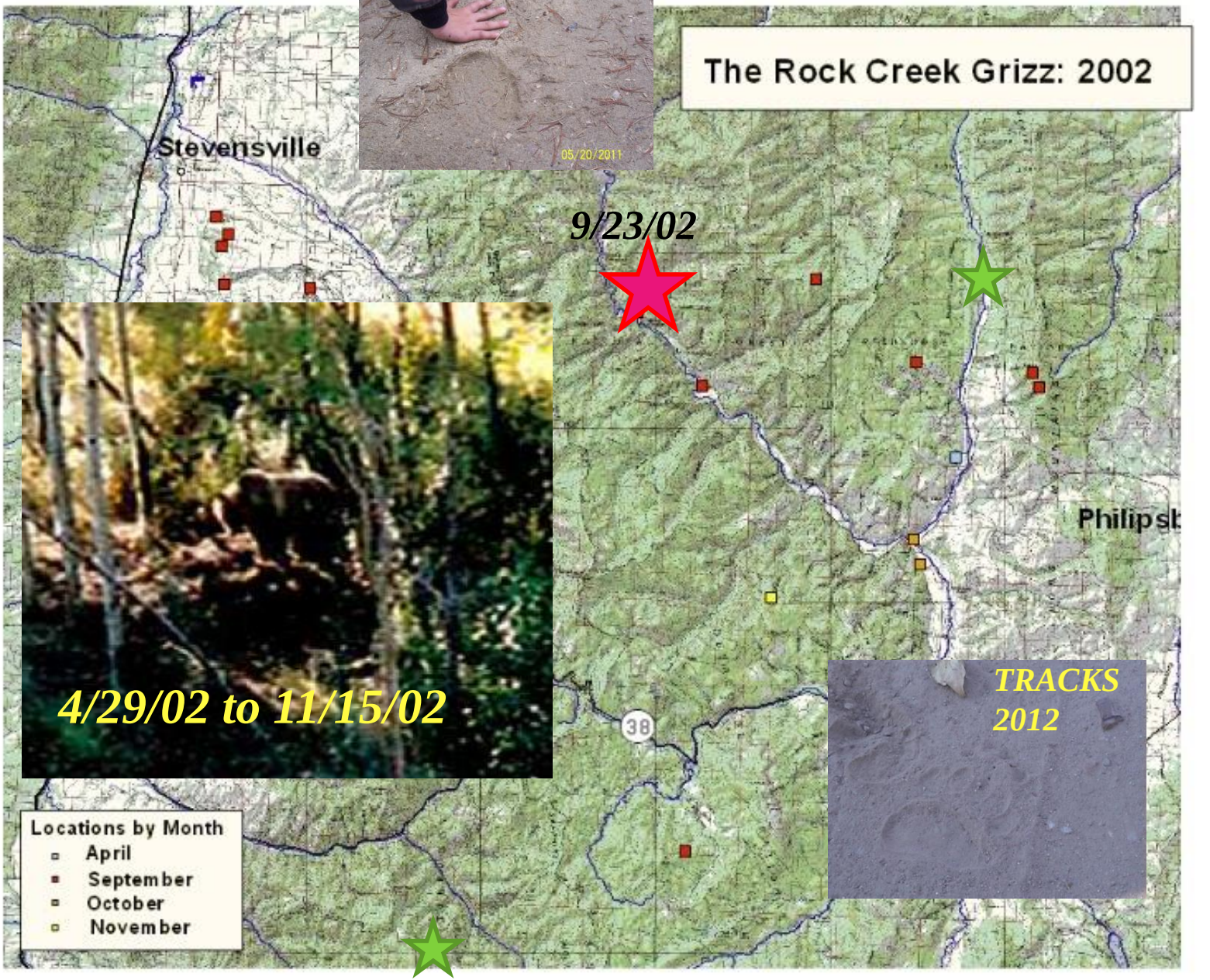
Female and three subadults----Gillespie Creek 2018



Observation and track 5/13/18

First documentation of a female with young on south side of Interstate 90

Sapphire Mountains/Rock Creek!



Helena Area-Canyon/Little Prickly Pear/Wolf Creeks

--- 2 conflicts, sightings, hair sample!



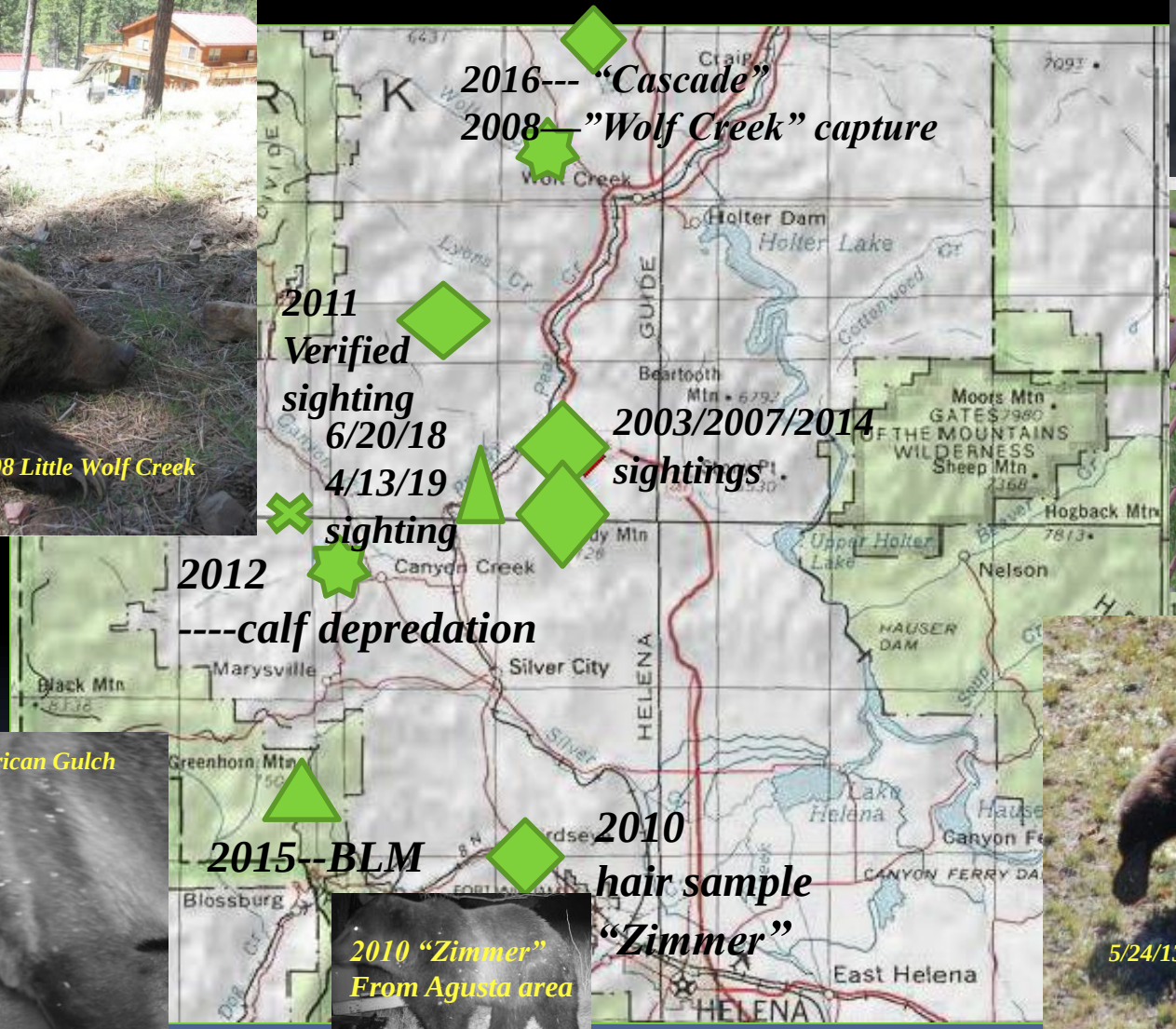
5/16/2008 Little Wolf Creek



5/29/14 Sieban



6/15/16 Lepley Creek



2016--- "Cascade"
2008—"Wolf Creek" capture

2011
Verified
sighting

6/20/18
4/13/19
sighting

2003/2007/2014
sightings

2012
----calf depredation

2015--BLM

2010
hair sample
"Zimmer"



2010 "Zimmer"
From Agusta area



8/20/15 American Gulch



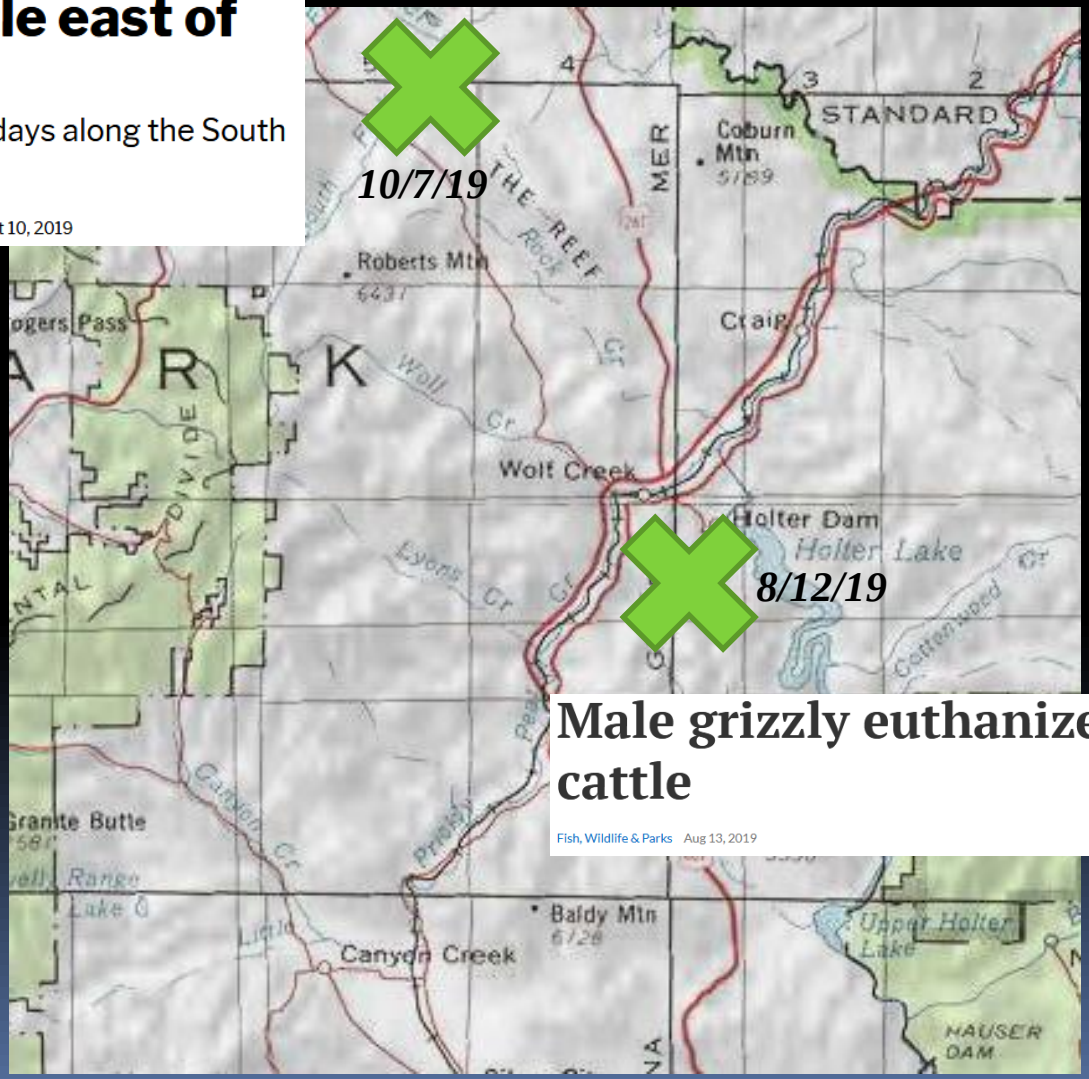
5/24/13 Mitchel Mountain

Two grizzlies removed Wolf Creek area----2019

Grizzly bear euthanized after killing cattle east of Rogers Pass

The bear had spent about 10 days along the South Fork of the Dearborn River

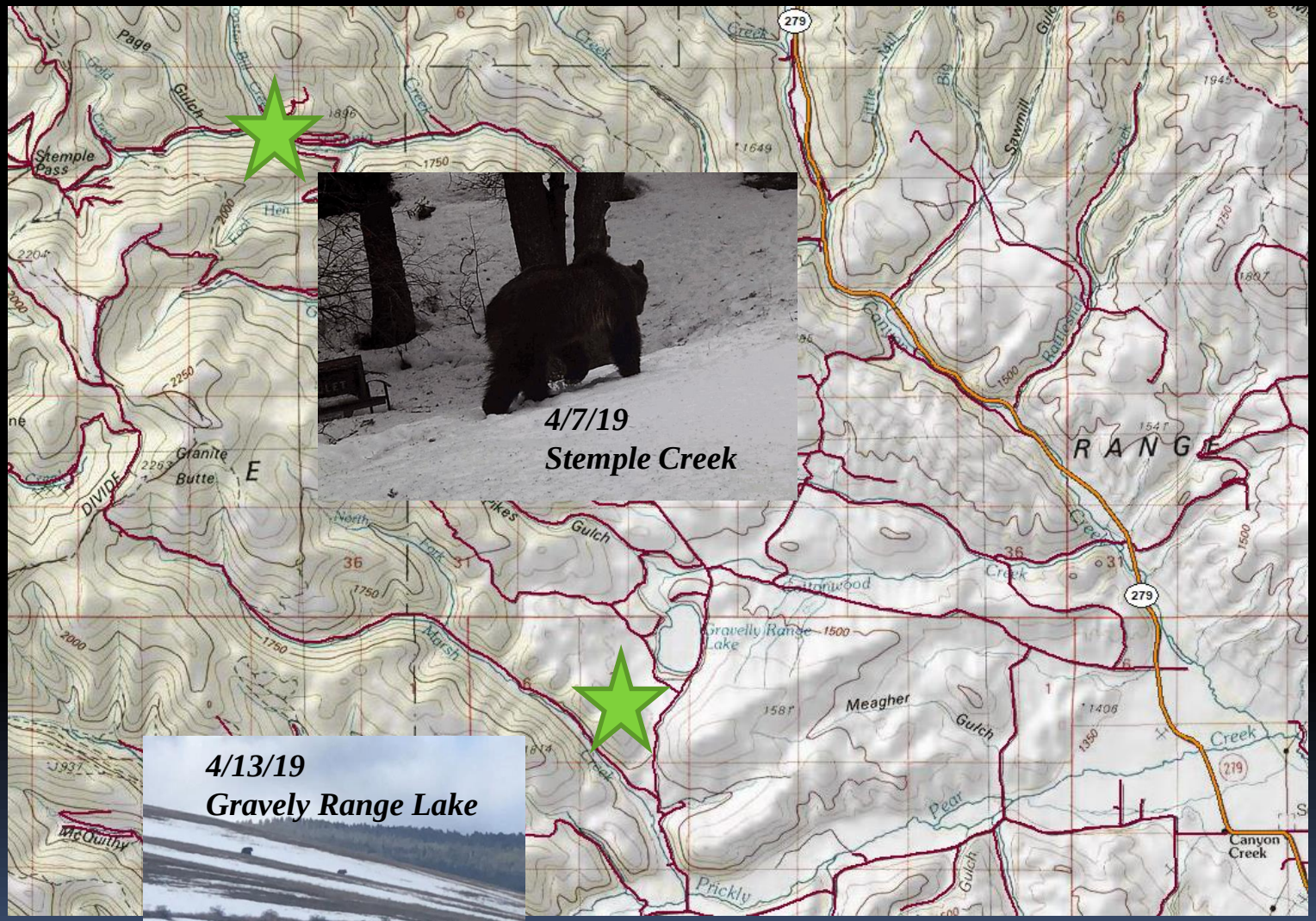
Posted: 3:58 PM, Oct 10, 2019 **Updated:** 3:58 PM, Oct 10, 2019



Male grizzly euthanized after killing cattle

Fish, Wildlife & Parks Aug 13, 2019

Stemple Pass/Gravely Range Lake 2019







Grizzly bear photographed in Big Belt mountains

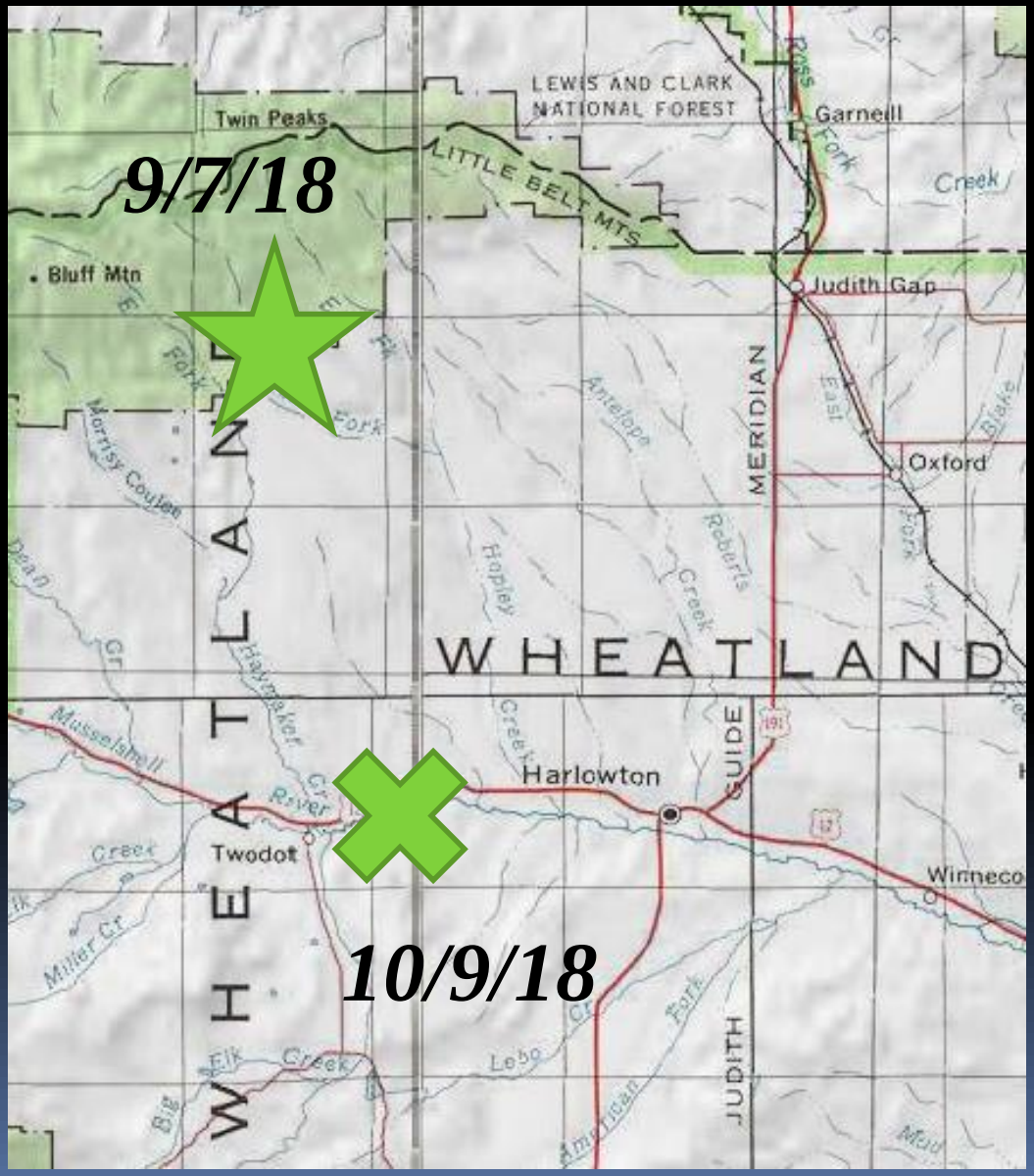
Karl Puckett, kpuckett@greatfallstribune.com Published 2:59 p.m. MT July 19, 2017 | Updated 5:35 p.m. MT July 19, 2017

FWP euthanizes two male grizzlies after livestock depredation near Stanford

6/26/17

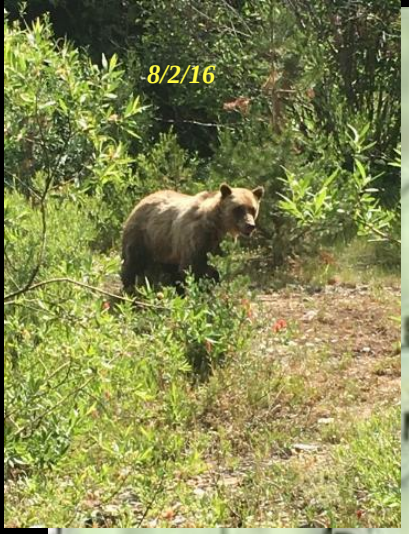


Little Belt Mountains---2018



-photo 9/17/18
-depredation 10/9/18





Basin Creek Male Conflict/Capture

8/2 to 8/16/16





Butte/Boulder River Basin



5/11/16 Butcher Gulch



7/13/16 Boulder River



8/4/16 Berkeley Pit

6/29/16 DNA Sample



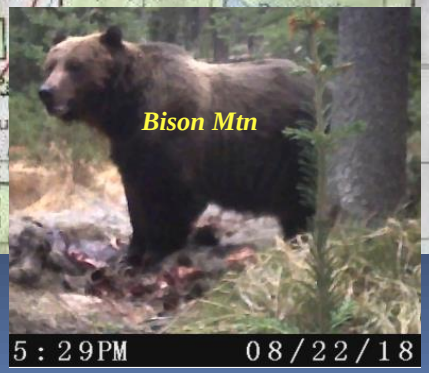
7/14/16 Parke Lake



6/18/16 Eagle Creek



8/4/16 Cottonwood Lake



Bison Mtn

7/2/15 Female with cub
Cataract Basin
7/23/18 Lone grizzly



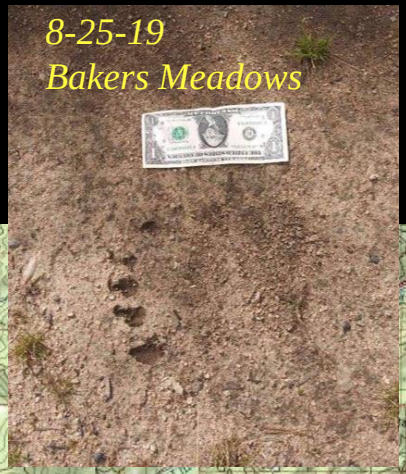


8/5/16 Lowland Creek

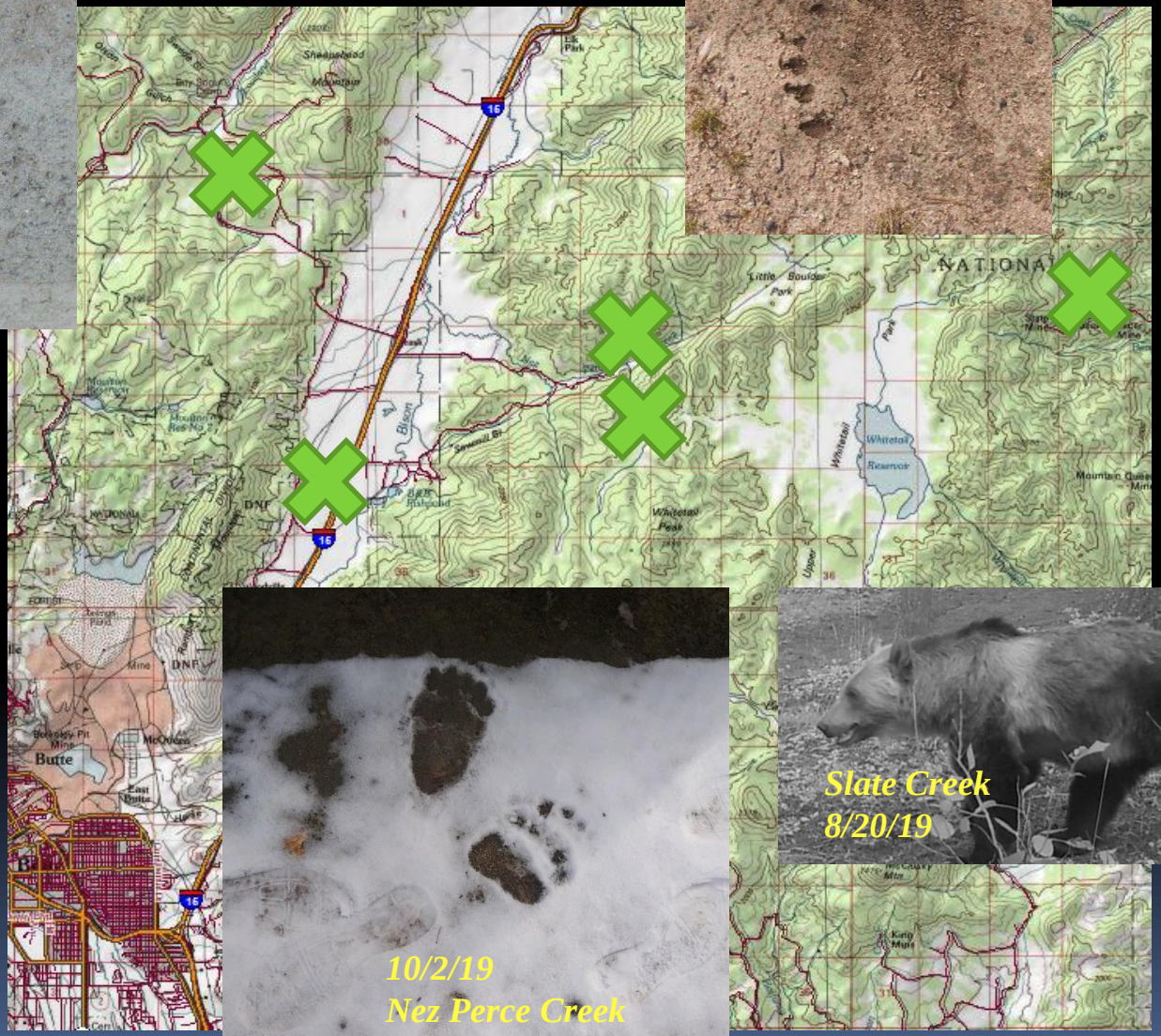
Butte Area---2019

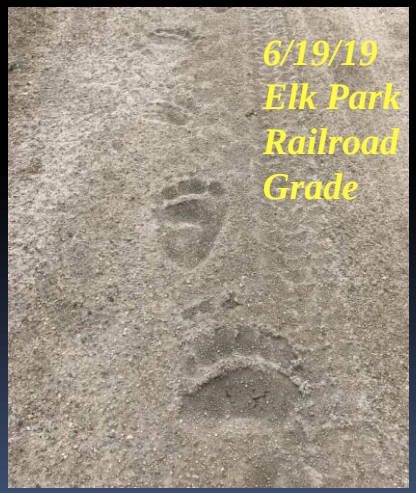


5-16-19
Maney Lake



8-25-19
Bakers Meadows





6/19/19
Elk Park
Railroad
Grade



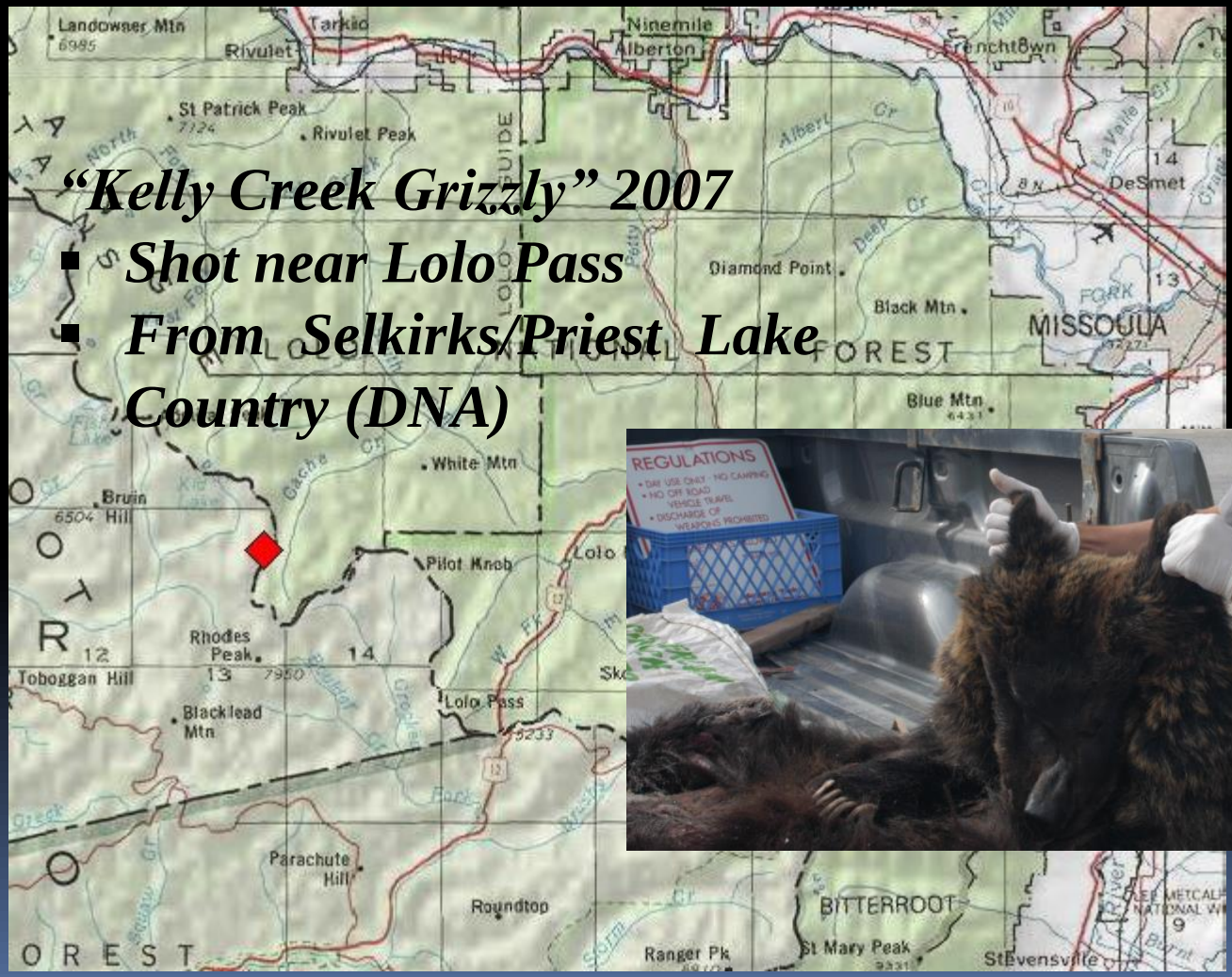
10/2/19
Nez Perce Creek



Slate Creek
8/20/19

Five Valleys/Missoula Area

----one confirmed mortality in the Bitterroot Range!



- *"Kelly Creek Grizzly" 2007*
- *Shot near Lolo Pass*
- *From Selkirks/Priest Lake Country (DNA)*



Ninemile area---one capture, tracks and photos!



2001 "Ninemile" (VHF)



2008 Photo



4/25/19 Dixon

5/29/18 Road-kill cub

2017/2019 Tracks (USFS/Tribe)

5/19/18 Video



Sixmile Creek 2010 & 2013

1998 Track/visual (USFS)



8/23/16 Grass Valley

Evaro/Arlee Area: "Pistol" & "Valley"
Non-target captures April 2012





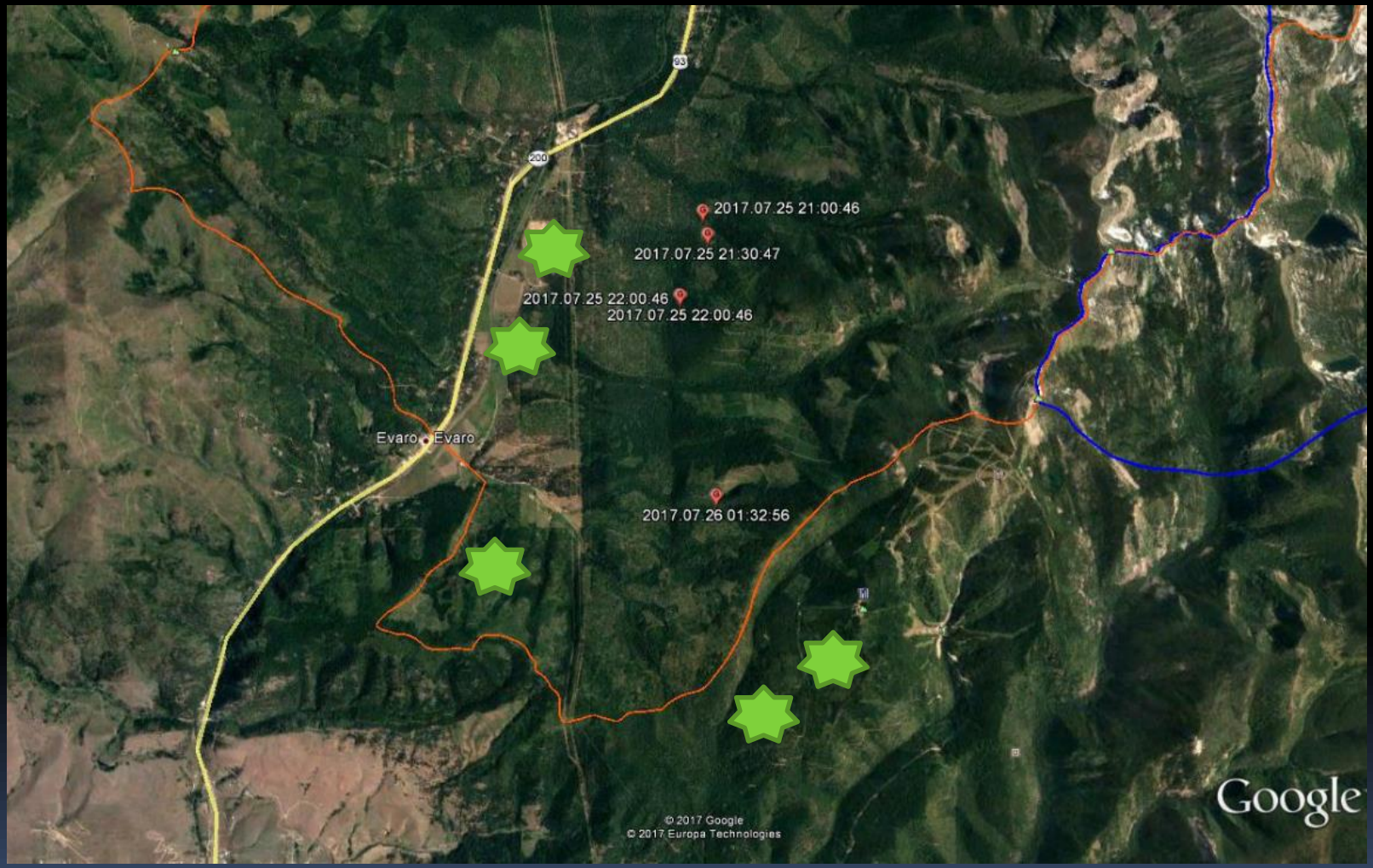




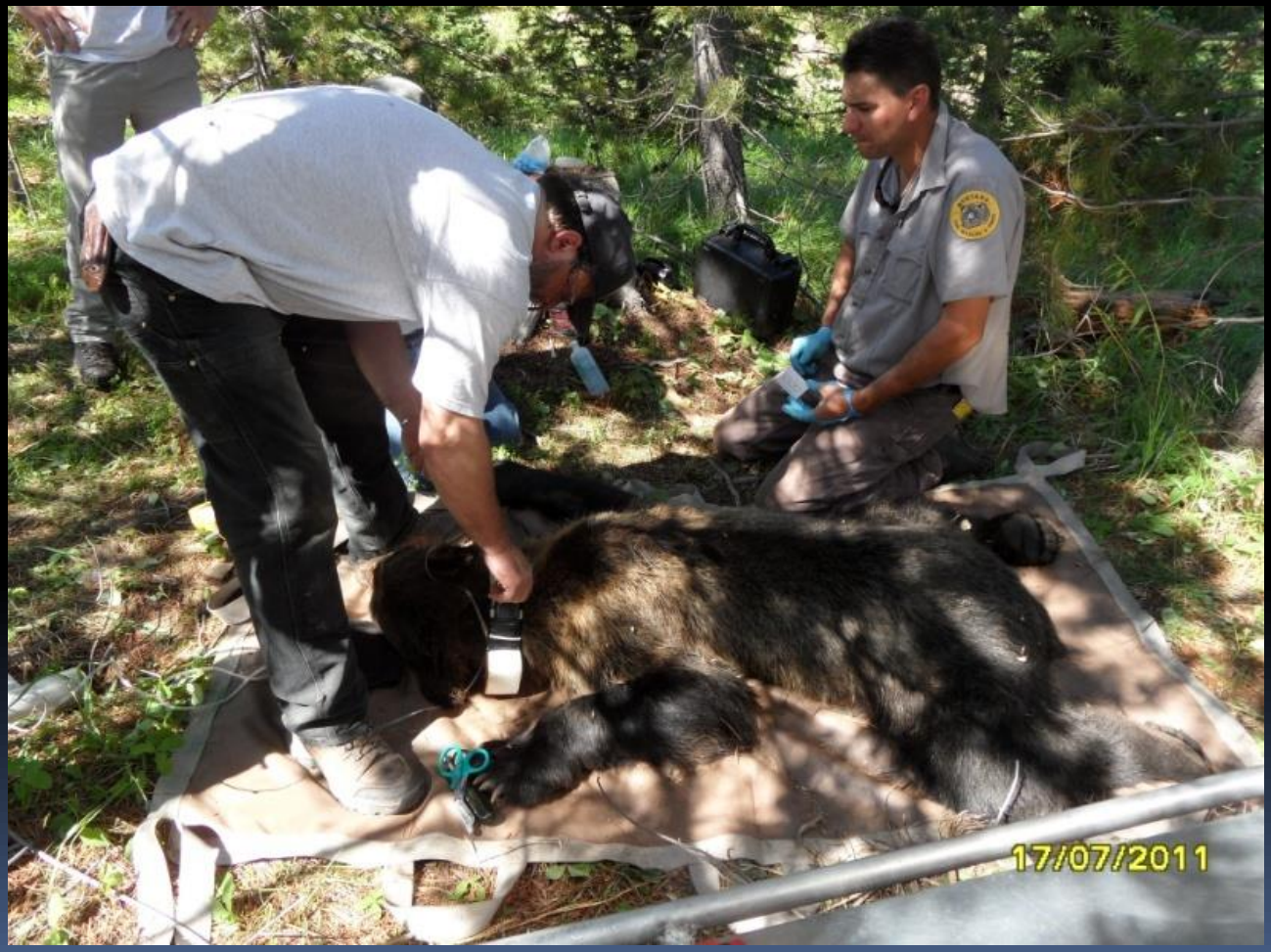


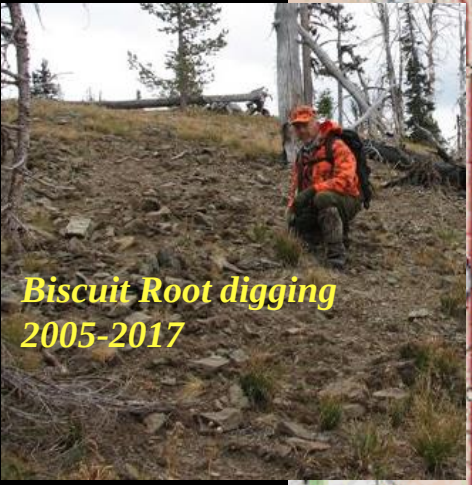
First radio-collared grizzly to visit the Missoula Valley (2011) !!

"Baptiste" July, 2017 & April, 2018



Rattlesnake Wilderness Grizzly Bears
Sub Adult Male Grizzly "Eight Ball" (2011)
-other sightings and sign





Biscuit Root digging
2005-2017

"EIGHT BALL" LOCATIONS 2011



2011



2012 den



2009 photo/2011 hair sample



Unmarked Grizzly 2017

April 2017 Gold Creek



McCleod Pk
10/1/18

Missoula

Officials investigating grizzly bear shooting death

The Associated Press Published 9:21 a.m. MT May 31, 2017 | **Updated 9:21 a.m. MT May 31, 2017**



(Photo: File image)

5 CONNECT | TWEET | LINKEDIN | COMMENT | EMAIL | MORE

MISSOULA — State and federal wildlife officials are investigating after a black bear hunter reported shooting a grizzly bear about 5 miles northeast of Missoula.

U.S. Fish and Wildlife Service spokesman Ryan Moehring says the bear was killed on May 16 north of Bonner.

Moehring says the Fish and Wildlife Service and Montana Fish, Wildlife and Parks officials are investigating and will make more information public when they can. He told the Missoulian on Tuesday it was U.S. Department of Justice policy not to comment on ongoing investigations. He did not release the age or sex of the dead bear.

Grizzly bears are a protected species under the Endangered Species Act.

Andy Lennox, who lives a mile north of Bonner, said he was upset to have heard about the shooting second hand.

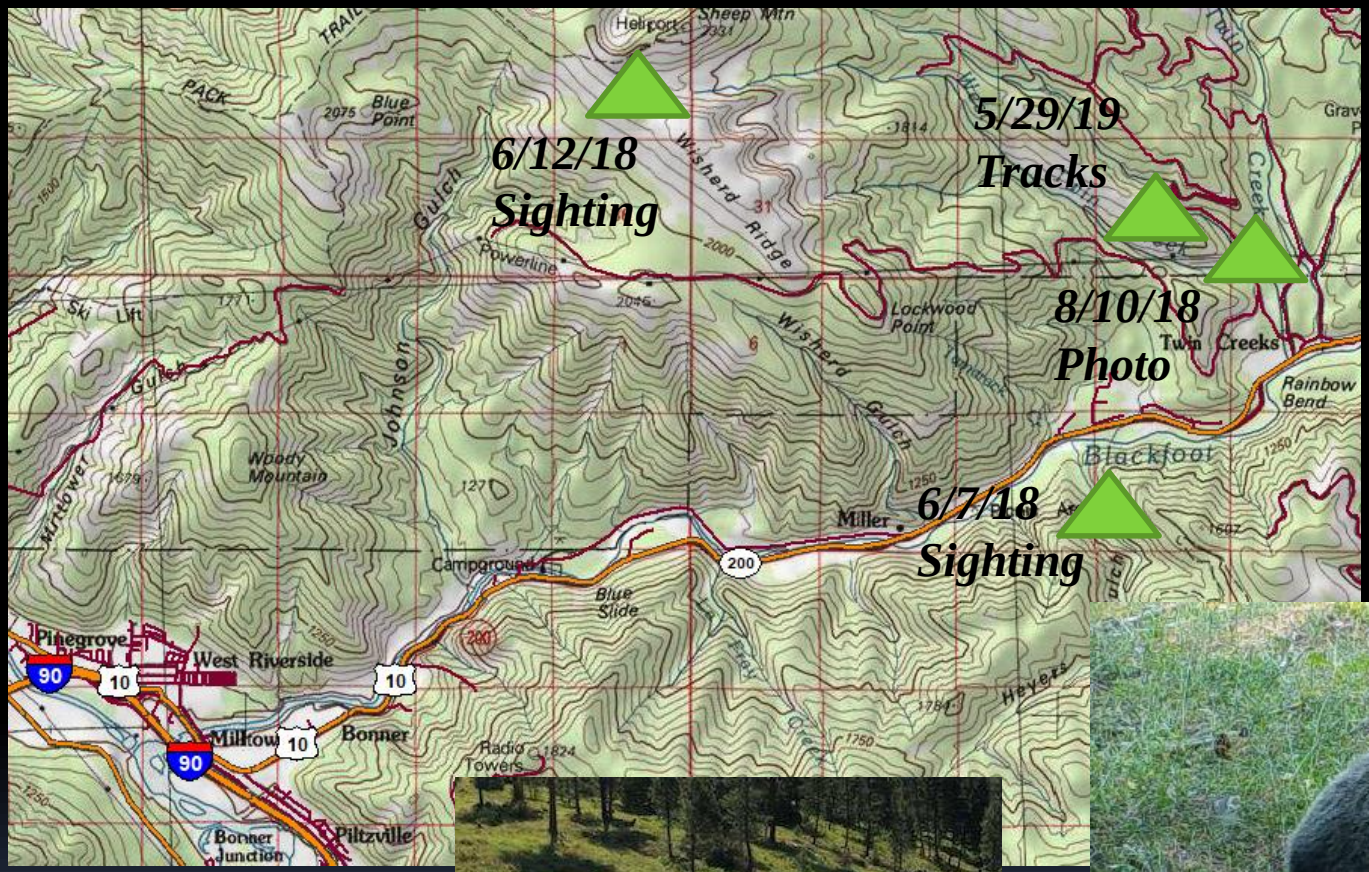




Bonner, Montana

5/16/17

Bonner Area observations---2018/2019

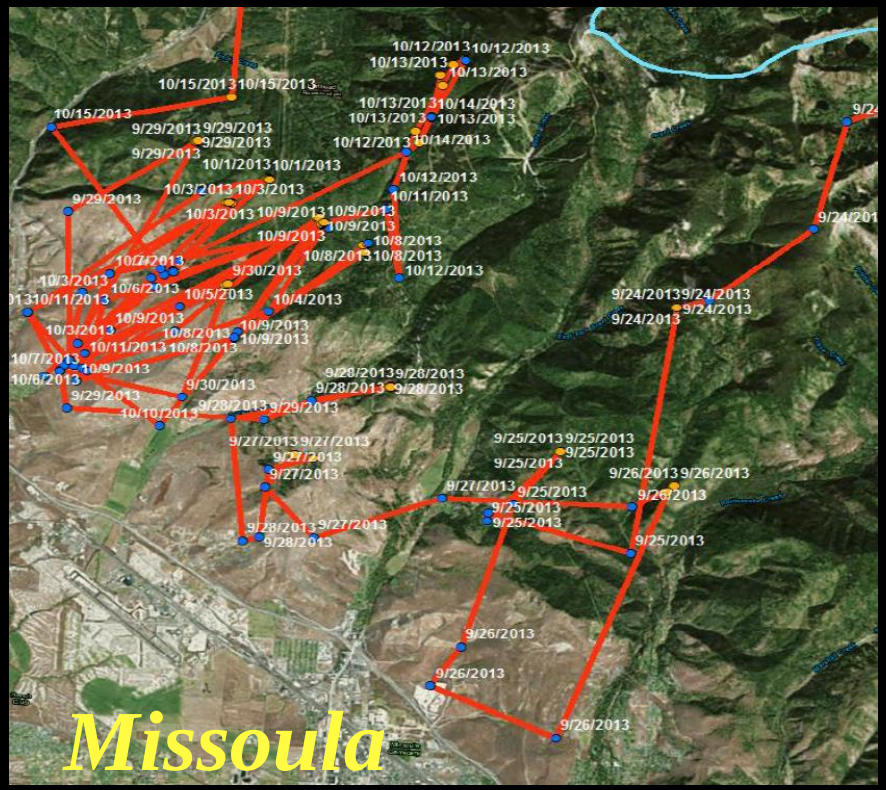


Gold Peak 3/25/2019









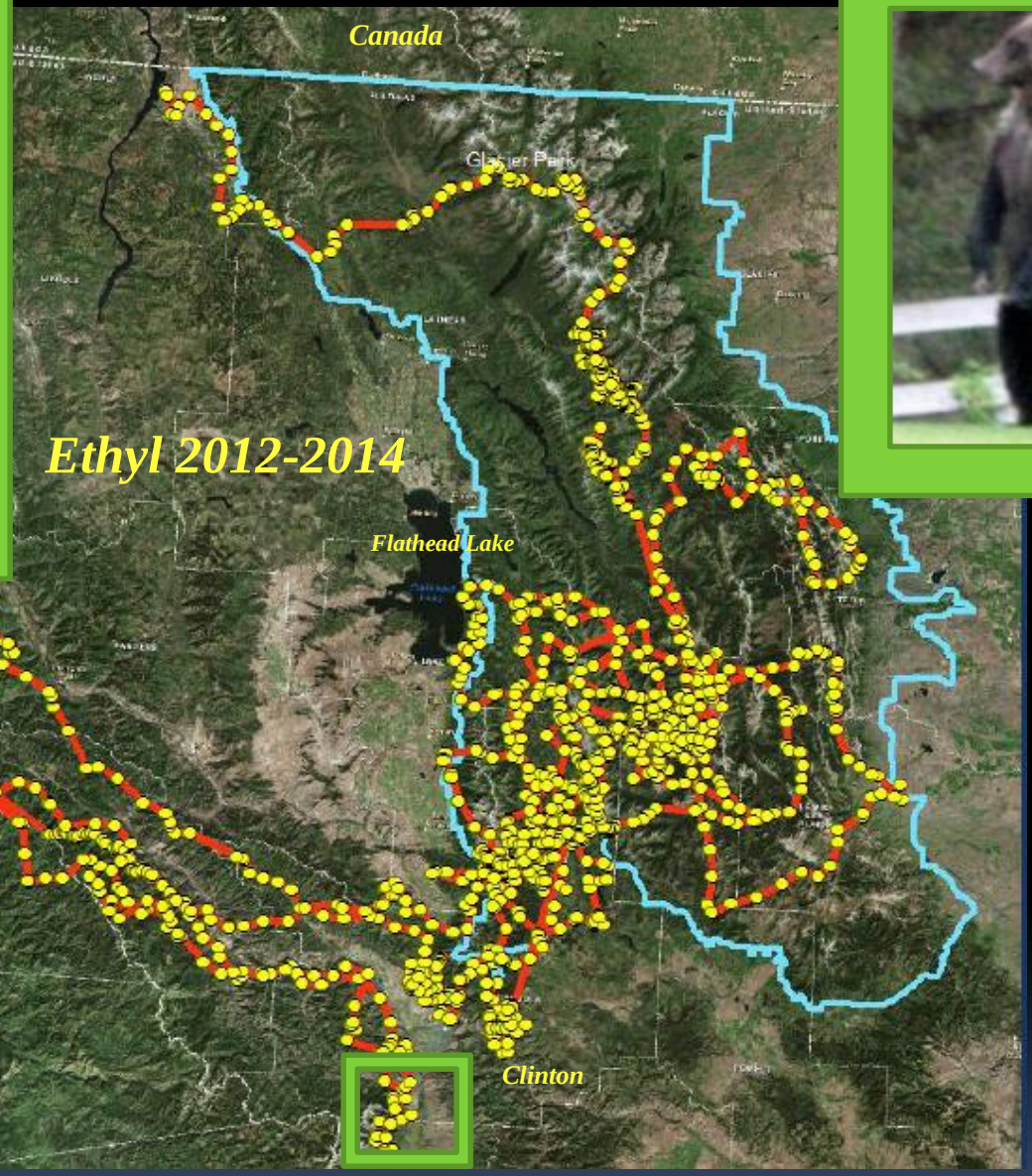






The grizzly known as "Ethyl" 2012/2013

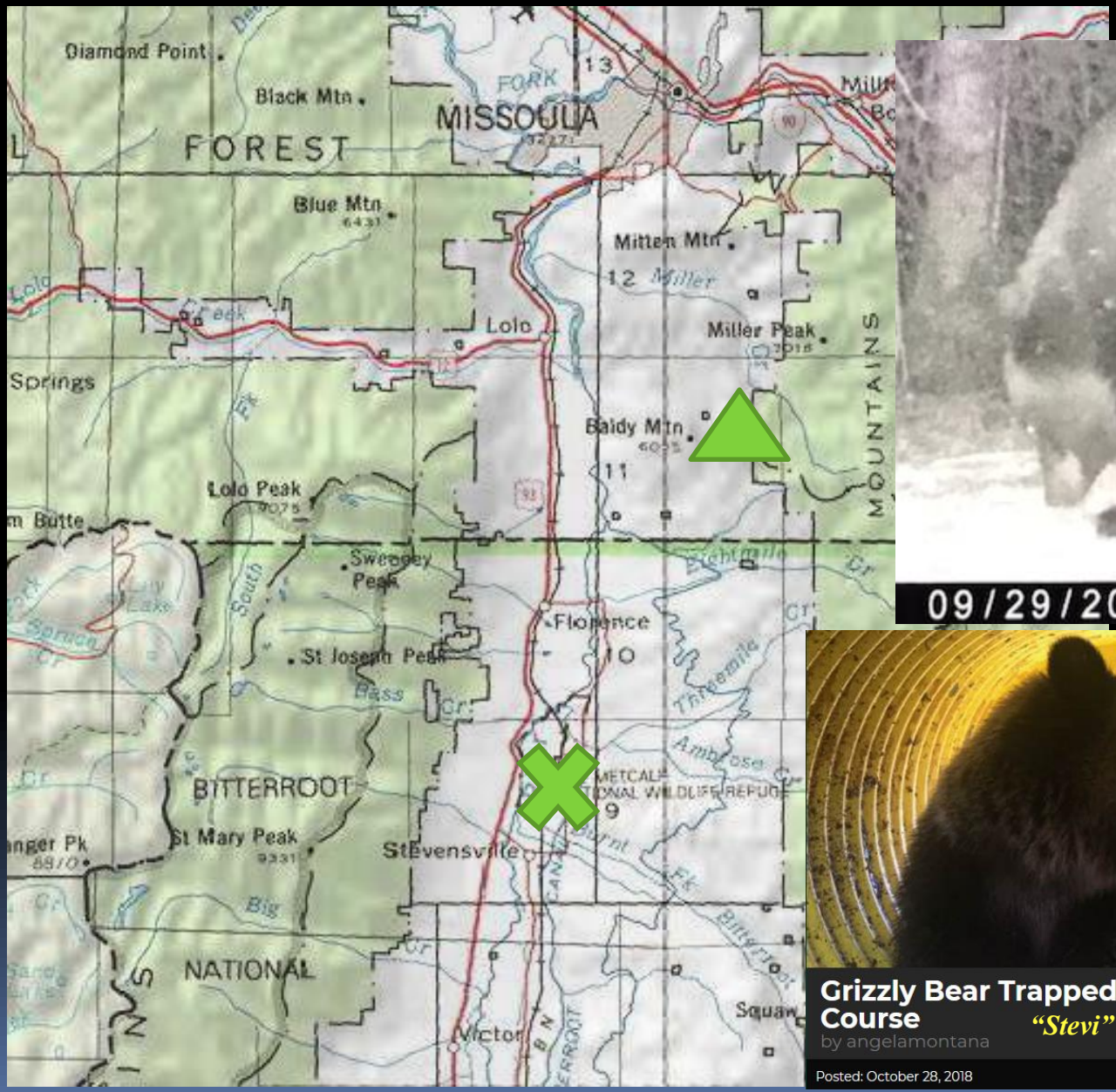






Female extraordinaire---
Ethyl goes on a "walk about"!!

Bitterroot Valley---2018







"Stevi" captured and relocated 10/27/18

"Stevi"---7/18/19 Euthanized in Seeley area!



- *DNA--- born to a female in Swan Valley*
- *Denned northwest of Seeley Lake*
- *In early spring near home sites*
- *Accessed uncontained garbage*
- *Accessed uncontained grain*
- *Damaged campers*
- *On porches for BBQ and pet food*
- *Entered buildings/at tent sites*

Did he learn bad Bad habits in The Bitterroot, Blackfoot or Swan?



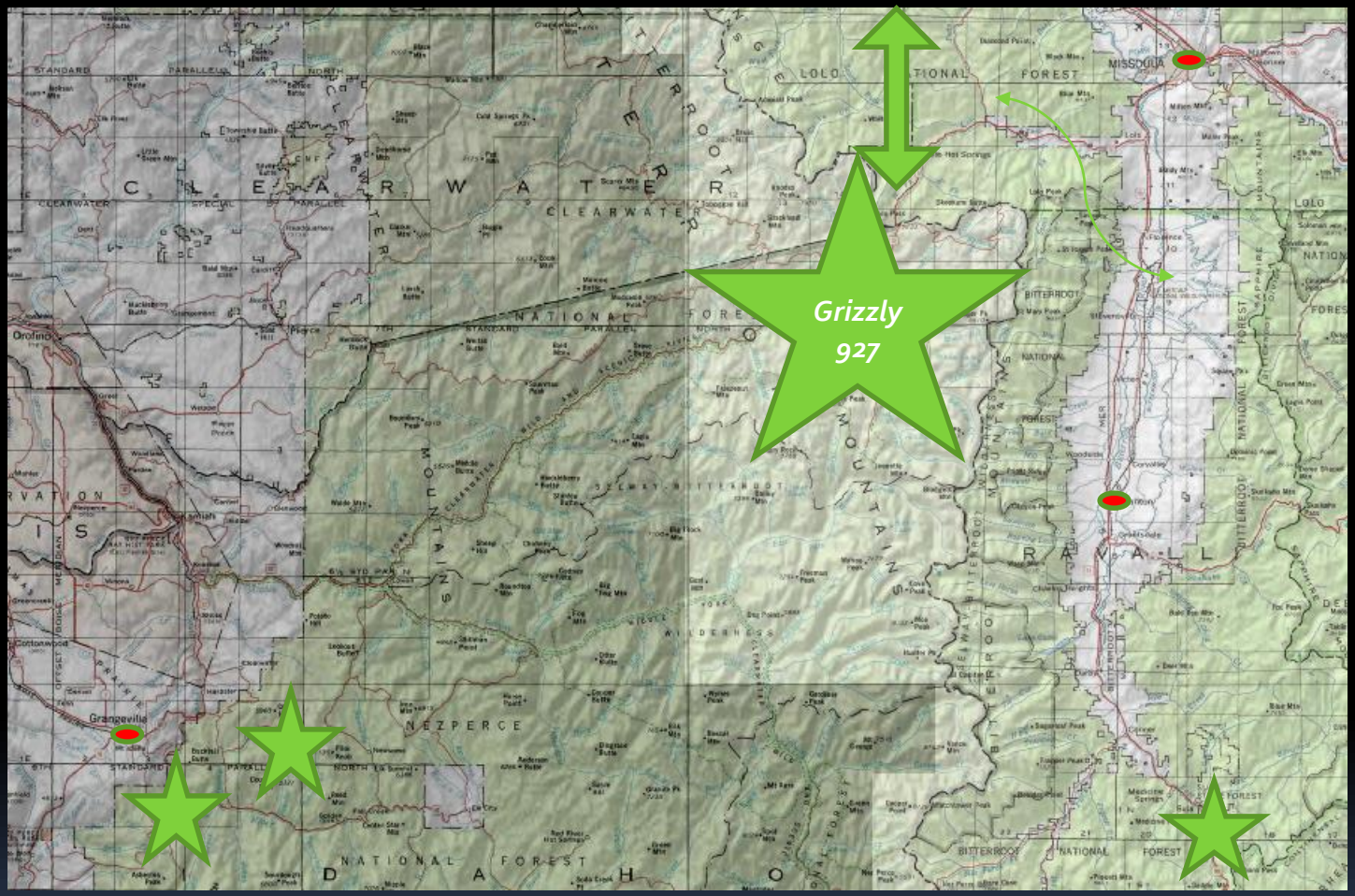








Bitterroot Ecosystem---2019



- *Grizzly 927's Southern adventure*
- *False alarm at Lolo Pass*
- *Tracks at Lookout Pass*
- *White Bird and Elk City, Idaho Grizzlies*

Grizzly Bear 927:

- *Crossed I90 6/3/19*
- *Kelly Creek 6/16 to 6/23/19*
- *Photographed Bungalow 6/20/19*
- *Photographed Locksa 6/25/19*
- *Crossed Hwy 12 heading South 7/5/19*
- *Big Lake, MT 7/12/19*
- *Mill Creek MT 7/15/19*
- *Hucks in Brushy Fork (July and Aug)*
- *Black bear baits (Sept)*
- *Cross Hwy 12 heading North 9/20/19*
- *Photo is Fish Creek 9/25/19*
- *Located Fish Creek 10/8/19*
- *Back in the Cabinet-Yaak 11/22/19*

Bungalow, Id
6/20/19

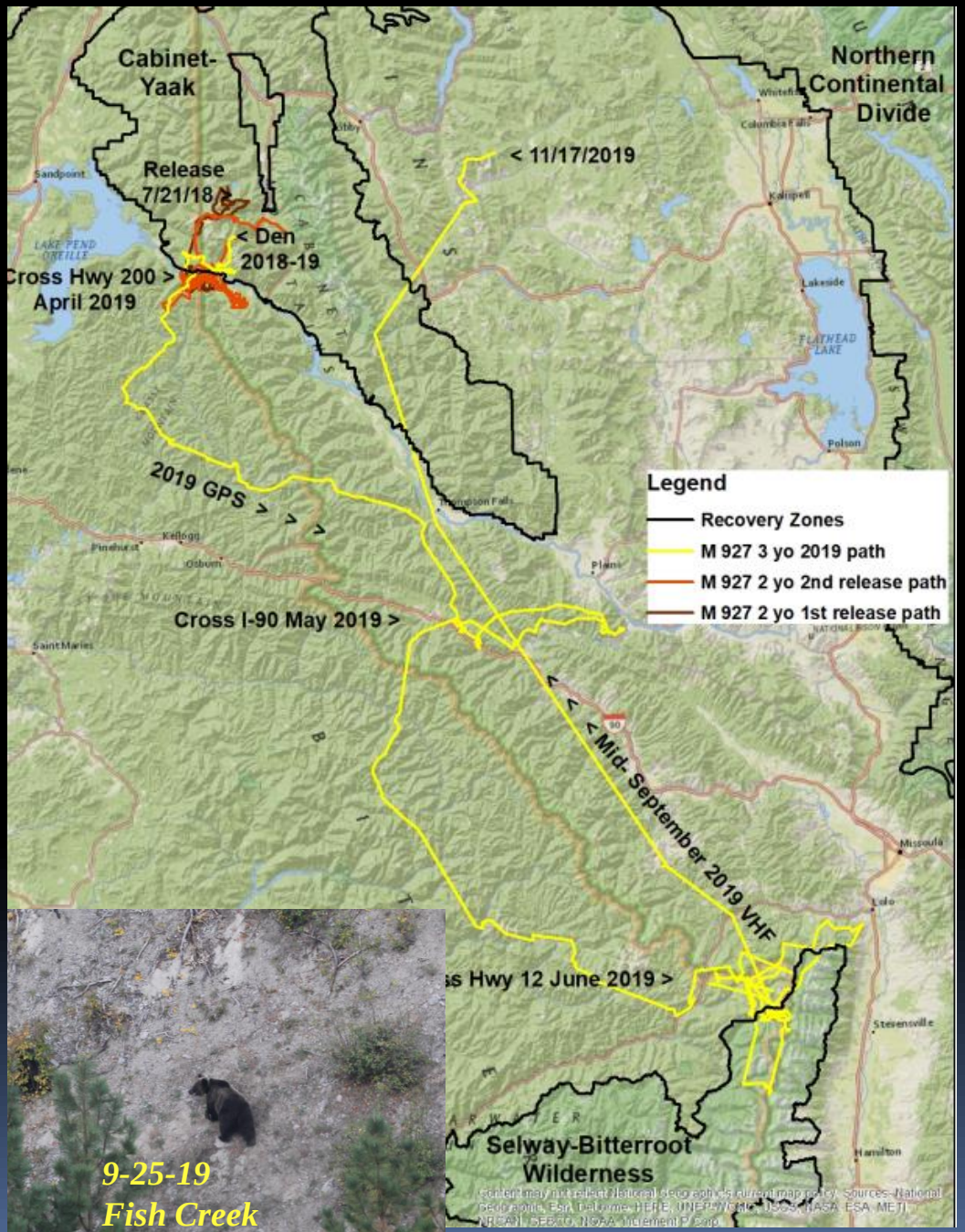




Locksa
6-28-19



9-25-19
Fish Creek
& heading back





Grizzly 927 spent time feeding on huckleberries but also Idaho black bear baits.









Was there a 2nd grizzly With 927?

- *Trying to determine*
- *Working with hunters*
- *Working with outfitters*







10/3/19



Was Grizzly 927 at Lolo Hot Springs?

- *nope!*
- *false report*
- *photo from Hebgan Lake*
- *photo of black bear at odd angle*
- *black bear tracks/not grizzly*








Lost Trail Ski area
11/11/19

White Bird, Id---- where did this bear come from?



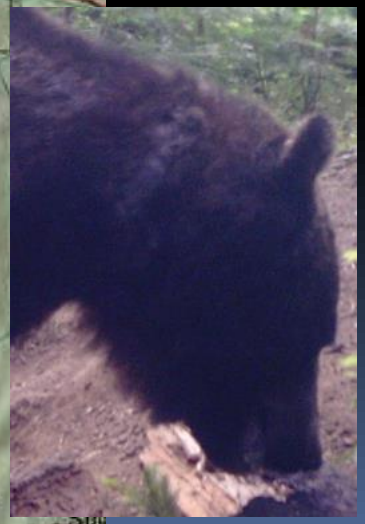












Elk City, Id----

And another grizzly in 2019!



A picture of a bear that wildlife experts say most likely is a grizzly was captured last fall at a baiting station in the Newsome Creek drainage near Elk City.

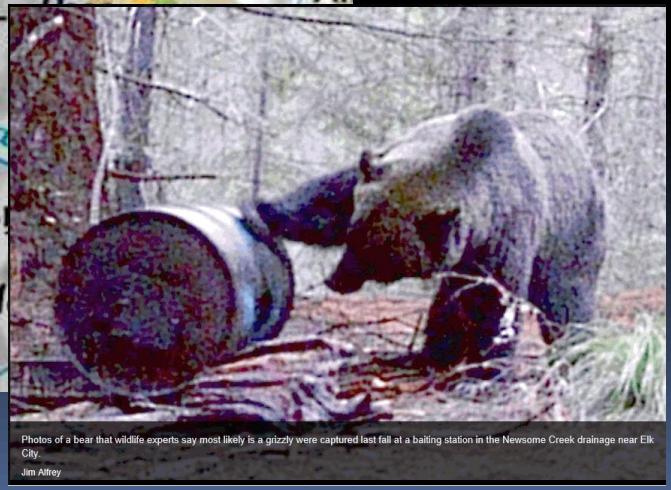
Jim Alfrey



Second grizzly likely visited north central Idaho last year

Lapwai man caught images of bear on trail camera

By Eric Barker, of the Tribune Jan 17, 2020 Updated Jan 17, 2020



Photos of a bear that wildlife experts say most likely is a grizzly were captured last fall at a baiting station in the Newsome Creek drainage near Elk City.

Jim Alfrey



IDAHO /*MONTANA BORDER*

Officials trying to recapture Montana grizzly bear sighted along Coeur d'Alene River

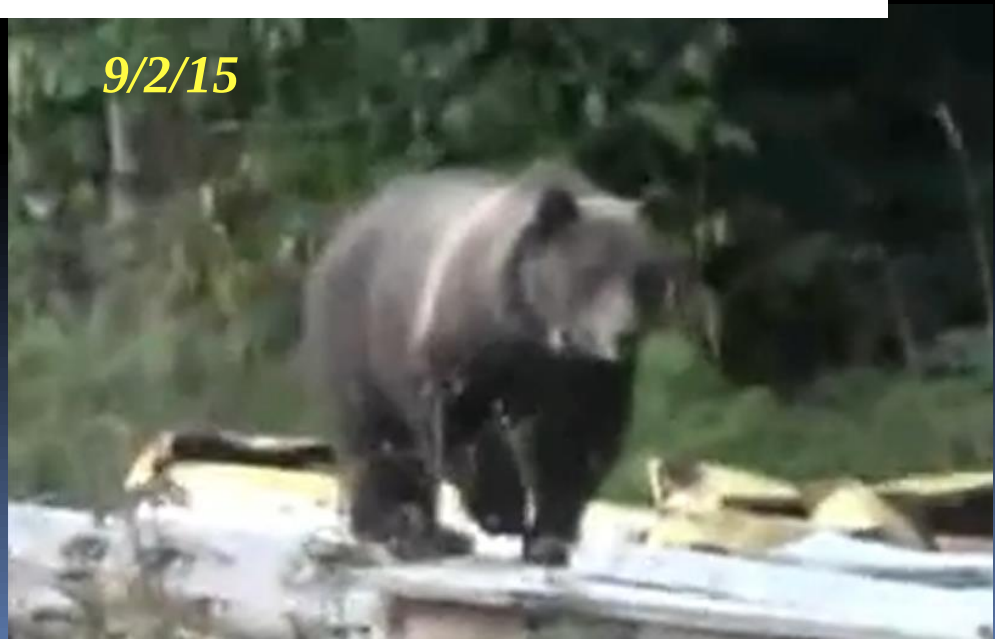
Fri., Sept. 11, 2015, 10:14 a.m.

Thought it was a black bear.

Thu., Oct. 1, 2015, 4:58 p.m.

Hunter kills well-publicized collared grizzly bear near Wallace





Elk farmer shoots grizzly in N. Idaho

Thu., June 11, 2009

By Becky Kramer
beckyk@spokesman.com
(509) 459-5466

Bear dug under 12’ farm fence and killed an elk.

Man near Rose Lake says he mistook endangered animal for black bear





Big Hole Valley -- YSE or NCDE?



Bow hunters relinquish elk to grizzly in Big Hole *11/16*

DAVID MCCUMBER For the Ravalli Republic Sep 6, 2016









Miffin Creek Grizzly-----Big Hole 8/28/19











The Sage Creek Grizzly
N of Lima 7-25-14.

Questions?

From: Sarmento, Wesley
To: Cooley, Hilary
Subject: Sarmento annual report 2021
Date: Monday, January 3, 2022 5:33:48 PM
Attachments: Sarmento Annual Report 2021.pdf

Happy New Year Hilary!

Attached is my annual report for 2021. Please let me know if you have any questions or concerns on it.

Thanks for all you do.

Sincerely,
Wesley

Wesley Sarmento
Grizzly Bear Management Specialist
Montana Fish, Wildlife and Parks

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2021 - Grizzly Bear Management Efforts – Region 4 Conrad Office

Period Covered: 01/01/2021 – 12/31/2021

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Synopsis

The 2021 work season differed from past efforts because FWP administrative Region 4 was not divided into two separate grizzly bear management districts. This year, both bear managers shared the entire region, with whoever closest and available responding to bear calls. Thus, these summary statistics don't necessarily provide the whole representation of bear management efforts across the region, but instead reflect the work coordinated by the Conrad field office. Grizzly bears in the area remain federally protected via the Endangered Species Act, thus final management authority is under the United States Fish and Wildlife Service.



Figure 1: Public meeting and safety training in the town of Big Sandy, following observations of grizzlies in the area.

Conflict Prevention and Response Efforts

- Participated in 10 organized education events involving over 364 people, including public meetings in Lewistown and Big Sandy, where grizzlies are just showing up (Fig. 1)
- Provided bear spray training to over 160 people
- Donated ≥ 33 bear sprays to public
- Installed 16 new steel bear aware signs
- Communicated 156 bear aware alerts to let people know about bear presence

- Established first call tree for Dupuyer
- Answered 144 service requests, 208 contacts for information, 49 bear observations, & 44 bear complaints (445 phone contacts total)
- Helped create a bird hunter bear aware video
- Removed the carcasses of 45 dead animals
- Supervised carcass driver who picked up 96 dead animals for 34 producers
- Cleaned up >19,596 lbs. of spilled grain (Fig. 2)
- Provided 1 bear proof garbage can
- Distributed 5 air horns
- Provided 1 guard dog to grain producer for conflict prevention and research project (Fig.3)
- Deployed ≥ 56 scare devices
- Deployed ≥ 65 trail cameras
- Helped obtain a $4,000 Vital Ground grant for new Choteau bear team
- Loaned out grain vacuum trailer to Choteau team and Blackfeet Fish and Wildlife
- Obtained 12 grizzly bear DNA samples
- Lent one paintball marker
- 279 trap nights total for capturing grizzly bears
- Hazed grizzly bears 22 times with 54 cracker-shells, > 50 paintballs, and 3 rubber bullets
- Built 10 permanent electric fences, 5 temporary electric fences, and repaired 4 fences
- Helped identify grizzly bear relocation sites for public comment and commission review
- Coordinated FWP R4 maintenance team building/installing 1 bear-proof grain bin door
- Helped establish range rider pilot program on Upper Dupuyer Creek
- Coauthored successful $70k Safari Club International grant for conflict preventionist
- Grizzlies detected for the first time in the Upper Missouri Breaks National Monument



Figure 2: Thousands of pounds of spilled grain that we removed, then donated to neighbor for feed (was e-fenced).



Figure 3: Livestock guard dog deployed at farm with grain spills to test its deterrence efficacy.

Human-Grizzly Bear Complaints

2021 was a relatively mild year for grizzly bear conflicts. We received 44 complaints about bears this year, of which nine were transferred to the Choteau team, and 33 were confirmed as bear issues by the Conrad team (Fig 4). Of those confirmed bear issues, 20 were conflicts where bears caused property damage or obtained reasonably secured attractants, while 13 complaints were preemptive responses where bears were near people or obtaining unsecured attractants (Fig. 5). Of the conflicts, there were 15 livestock depredations and five property damage complaints. Livestock loss caused by grizzlies totaled ten calves, two cows, one beehive, and four sheep.

Complaint type	Number
Cattle	12
Near people	5
Property damage	5
Harvested grain	3
Garbage	2
Birdseed	2
Sheep	2
Beehives	1
Encounter	1
Total	**33**

Figure 4: Bear complaints confirmed by Conrad team in 2021.

Most of the livestock loss occurred on Dupuyer creek (Fig. 6). Bears caused property damage on; two grain bags, one haylage bag, two bird coops. For bears using unsecured food – twice each for birdseed and garbage, and three times for grain spills. There were no attacks this year, but one encounter – people bumped a bear at close range and it ran off. We received five complaints about bears near people without any attractant being acquired. We responded to all calls as quickly as possible, with most of our bear complaint responses occurring within 30 minutes.

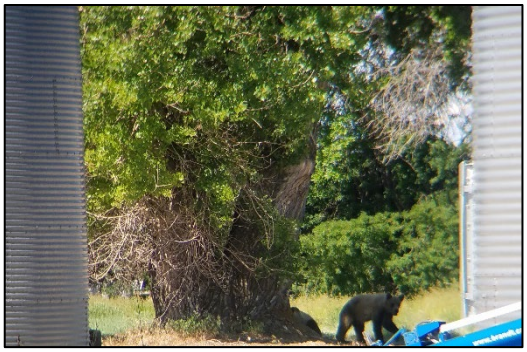


Figure 5: Two yearling grizzlies at unoccupied farm eating spilled grain.

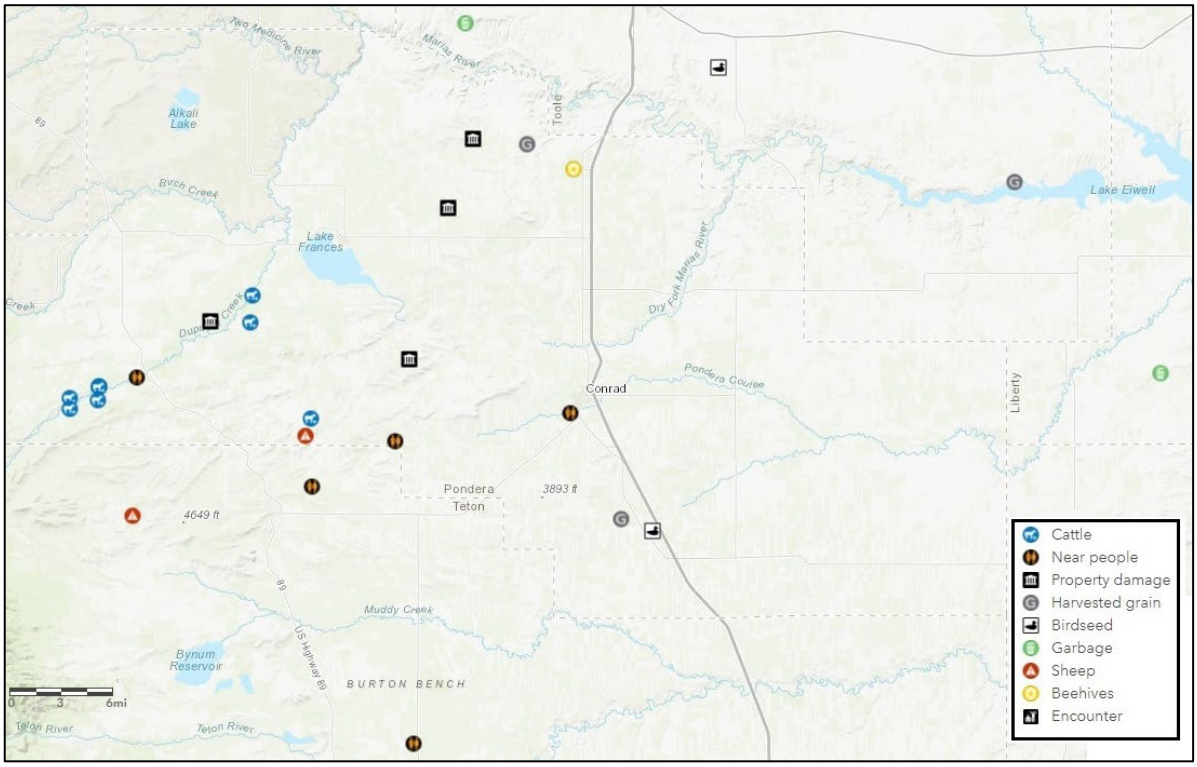


Figure 6. Map of 2021 grizzly bear complaints. Six complaints are outside map area, including two calf depredations near Augusta, two cow depredations in the Big Snowy mountains, and one bird coop damage and encounter near Sun River.

Grizzly Bear Captures

1) In conjunction with USDA, a non-target adult female captured on Dupuyer Creek and relocated to Glacier National Park (4/28).
2) In conjunction with USDA, an adult male euthanized in Fergus County due to depredation on two adult cows, as relocation wouldn't have reasonably eliminated the issue (5/12).
3) In conjunction with USDA, an adult male euthanized on Dupuyer Creek for several calf depredations, as relocation would not have reasonably eliminated the threat (5/26).
4) Yearling male caught south of Conrad for accessing spilled grain near residence and not responding to hazing or conflict prevention equipment (6/23). Relocated to Pike Creek.
5) Subadult female caught for a research project testing if guard dogs are an effective bear deterrent for farmsteads with abundant grain spills (8/20).

6) Subadult female for a research project testing if guard dogs are an effective bear deterrent for farmsteads with abundant grain spills (8/29).
7) Subadult male caught for a research project testing if guard dogs are an effective bear deterrent for farmsteads with abundant grain spills (9/6).
8) An adult male caught for a research project testing if guard dogs are an effective bear deterrent for farmsteads with abundant grain spills (9/14).
9) An adult female caught for a research project testing if guard dogs are an effective bear deterrent for farmsteads with abundant grain spills (9/16).
10) A subadult female caught for a research project testing if guard dogs are an effective bear deterrent for farmsteads with abundant grain spills (10/16).

Grizzly Bear Mortalities

1) Adult male euthanized in the Big Snowy Mountains (Fergus County) due to depredation on two adult cows (5/12).
2) Adult male euthanized on Dupuyer Creek for several calf depredations (5/26).
3) Adult male bear was found dead near Marias River (10/20). Death under investigation.

Acknowledgements

Support for conflict prevention work was provided by Western Bear Foundation, Vital Ground Foundation, Defenders of Wildlife, United States Fish and Wildlife Service, Utah State University, Conservation Collaborative, Natural Resources Defense Council, and Montana Outdoor Legacy Foundation. We greatly appreciate USDA Wildlife Services management efforts – Skippy Sims, John/Kurt Miedtke, Glenn Hall, Luke Peebles, Dymond Running-Crane, Kraig Glazier, and Dr. Young. Big thanks to our call coordinators for keeping communities informed. We also thank local and county law enforcement for their assistance. We appreciate people inviting us out to give presentations. Also, thanks to the folks who proactively prevent bears from coming near residences, and for communicating with us nicely when they do. Thanks to producers for their patience, allowing conflict prevention work, and for coordination with Rocky Mountain Front Ranchlands group and Marias River Livestock Association. Additionally, we thank FWP biologists, managers, wardens, maintenance crew (George Larson), and support staff for their assistance with resolving human-bear conflicts. Thanks to the NCDE bear management team – John Waller, Tim Manley, Jamie Jonkel, Chad White, Daniel McHugh, Cecily Costello, Lori Roberts, Hilary Cooley, et al. Thanks to Glacier Park and US Forest Service for relocation sites. We appreciate the collaborative efforts with Blackfeet Fish and Wildlife. Thanks to our guard dog technician, Ali Morgan, for her work and our range rider, Preston Spotted Eagle, for his (Fig 6). Thanks to Sarah Zielke and other volunteers for their responsive efforts. Thanks to the carcass pickup driver. Finally, a special thanks to Rock Creek Airedales for donating a dog.



Figure 6: Dupuyer creek range rider, Preston Spotted Eagle, saddles up for a ride with our wolf management specialist, Ty Smucker.