

## WHO/WHERE WE ARE

**Lakewood, CO:** Pam Sponholtz, Project Leader; JoAnn Wise, Budget Admin

**Buckley Air Force Base, Aurora, CO:** Krystal Phillips, Wildlife Biologist, Dustin Casady, Fish and Wildlife Biologist

**Peterson, Schriever, Cheyenne Mtn Air Force Bases, Colorado Springs, CO:** Max Canestorp, Wildlife Biologist

**US Air Force Academy, Colorado Springs, CO:** Brian Mihlbachler, Biological Scientist; Melissa Whittingslow, Wildlife Biologist; R. Joe Murphy III, Forester

**Rocky Mountain National Park, Estes Park, CO:** Chris Kennedy, Fish Biologist

**Warren Air Force Base, Cheyenne, WY:** Alex Schubert, Fish and Wildlife Biologist

**McCannell Air Force Base, Wichita, KS:** Laura Mendenhall, Fish and Wildlife Biologist

**Pueblo Chemical Depot, Pueblo, CO:** Clark Jones, Wildlife Biologist

**Gunnison, CO:** Cole Brittain, Aquatic Biotechnician

# Colorado Fish and Wildlife Conservation Office



OCTOBER 2017

## Species Conservation & Management

**Infected Tree Removal** One of USAFA Natural Resources' main priorities is to ensure the health of the forest. Prompt removal of any beetle infested tree is a necessity to combat a large beetle outbreak. In October, Natural Resources and its contractors removed 63 beetle infested trees.

**Air Force Bald and Golden Eagle Compliance Strategy** The Air Force has initiated a study to look at bald and golden eagle absence/presence at installations to create a national compliance strategy. The Center for Environmental Management of Military Lands- Colorado State University has been tasked as the project lead to gather existing data. Krystal Phillips provided pertinent bald and golden eagle information garnered from Buckley AFB's annual raptor reports. The golden eagle was the third most observed raptor on Buckley AFB during the 2016-2017 raptor surveys.



**Pronghorn doe at FE Warren AFB.**

**Pronghorn Survey** Alex Schubert and Taylor Hackemack performed a pronghorn survey at F. E. Warren AFB. There were 250 pronghorn counted in October—28 fewer than were counted the previous month. It is possible that the drop in population is related to the recent archery hunting season that has been on-going on the base

since August 2017. Three additional pronghorn bucks were harvested in October. This brings the total to 11 bucks for the 2017 pronghorn archery season.

**Prairie Dog Colony Mapping** Cabel Patterson, SCA intern, mapped prairie dog colonies on Schriever AFB. It appears the colonies, and the burrowing owls nesting within them, are about the same in size and number, respectively, as they were in 2016.

**Pest Management** Dustin Casady reviewed the Integrated Pest Management Plan (IPMP) and provided comments to the lead entomologist on Buckley AFB. The IPMP is used as a tool to reduce pesticide use, enhance environmental protection, and maximize the use of integrated pest management techniques and was created to establish long-range, comprehensive, and operational strategies and meth-



## Region 6 Priority: Reverse the Declining Trend of Monarch Butterflies & Other Endemic Pollinators

**Monarch Tagging** Laura Mendenhall and Nicole Brown tagged 32 Monarch butterflies on McConnell AFB during the fall migration in October. This tagging effort is part of a larger study led by Monarch Watch in which tagged Monarchs are recovered in their overwintering grounds to help quantify survival. The monarchs were nectaring in the newly-established pollinator gardens and some late-season aster found in bioswales and lawns around the base.



# ...more Species Conservation & Management

ods for conducting a safe, effective, and environmentally sound integrated pest management program at the base.

**Hunting Season** The cow elk season at USAFA has begun. Melissa Whittingslow has been escorting hunters on USAFA during the hunt. Currently one hunter has filled his tag.

**Undergraduate Research Presentation – CSU and Pueblo Chemical Depot** In October, several students from Colorado State University – Pueblo presented research findings from wildlife investigations conducted at Pueblo Chemical Depot at the CSU Undergraduate Research Symposium. Clark Jones and CSU professor Dr. Claire Ramos assisted several students this past summer with establishing avian monitoring protocols for several species including burrowing owls and lark buntings. These projects are part of CSU’s Communities to Build Active STEM Engagement program which has provided numerous opportunities for undergraduates to participate in research design, data collection, and analysis.



**Connor Dowd and Dr. Claire W.V. Ramos at the CSU undergraduate research symposium.**

**Restoration Project Meeting** Brian conducted a site walk and project kick-off meeting for the Black Forest Creek (Middle Tributary) channel stabilization and habitat restoration project. Construction will begin in November 2017 and be completed in 30 days. Post-construction revegetation will occur in spring 2018 to replace a



## Region 6 Priority: Cutthroat Trout Recovery

**Recovery Assessment** Chris Kennedy conducted electrofishing surveys at three sites on the Roaring River within Rocky Mountain National Park to assess the recovery of greenback cutthroat trout following flooding in 2013. Fish were more abundant at both sites than the last time it was surveyed, but the population is still not fully recovered.

**Sampling the Trinchera Ranch for Rio Grande Suckers** USFWS teamed up with Colorado Parks & Wildlife to sample the Trinchera



Ranch, the largest private land holding in the state of Colorado. The Trinchera Ranch has reclaimed their headwaters and restored the Rio Grande Cutthroat and Rio Grande Sucker to their native environments. Healthy populations of each species were found in multiple tributaries.

**Rocky Mountain National park employee Kevin Barron packing out electrofishing gear after surveys on the Roaring River.**

cattail marsh with wetland and riparian grasses and shrubs.

**Moose Exclusion & Beaver Dams** Brent Croft, Taylor Hackmack, and Alex Schubert inspected the proposed location for a moose exclusion fence at F. E. Warren AFB. Brent plans to follow up with Base personnel to obtain engineering specifications for the fence, if needed. After the first site visit to the proposed moose fence location, a second site visit was conducted to inspect the current conditions of the hiking trail. Beaver dam building activity and recent heavy rains were found to have partially flooded portions of the hiking trail. Following this finding, Alex and Taylor then donned waders and dismantled several new beaver dams. In addition to the flooded areas of the trail, Brent, Taylor, and Alex discovered that someone had recently discarded several live house plants including marigold flowers and rosemary herbs next to the trail.

**Small Mammal Trapping** Laura Mendenhall and Nicole Brown con-

cluded the 2017 small mammal trapping effort in restoration areas across McConnell AFB. The team set 80 Sherman traps in the newly-restored demonstration prairie in the most urban area on base. After multiple nights of stolen bait and small mammal predation, a game camera and some tracks in the mud identified the likely culprits: a skunk and a feral cat. One new species of small mammal was documented during this effort, though it is a non-native species: the house mouse (*Mus musculus*).



**Mus musculus at McConnell AFB.**

# Habitat Conservation & Management



**Before and after of tree removal project on Buckley AFB.**

*Habitat Management for BASH* Acting Buckley AFB Natural Resource Manager, Dustin Casady and SCA intern, Taylor Cassidy, began a project to cut down and chemically treat the stumps of all trees on base that present a greater risk for bird air strikes to occur. This effort took several weeks to accomplish and included help from both USDA Wildlife Services, as well as base Pest Management Shop personnel. The trees were cut down, limbed, and bucked using chainsaws and the stumps were treated with the herbicide Ranger Pro. By reducing the number of perches and roosts available, avian presence on base will likely lessen and further alleviate BASH issues. In addition, by eliminating ornamental and volunteer trees, opportunities for restoration of historic native mid-short grass prairie increase. The future goal is to remove all dead trees and trees that provide roosting and hunting habitat for avian species.

*Sapling Control* Nicole Brown cut numerous saplings growing in some of the riparian vegetation along the "distinguished visitor" route at McConnell AFB. Many of the saplings were seeded from nearby ornamental trees including the much maligned Callery "Bradford" pear.

*Removing Barriers and Installing Fish Passage* Old road culverts acting as height barriers, are currently being replaced with fish passage structures to restore connectivity and increase access for native fish on the Baca National Wildlife Refuge. Crucial stretches of Crestone Creek have been inaccessible to large portions of aboriginal Rio Grande Suckers and Rio Grande Chubs. Removing barriers will increase connectivity between isolated populations and promote access to critical habitat.

*Defensible Space Project Update* Due to the dormant season in Gambel Oak, herbicide applications will not be effective in treating a basal stump cut. Thus the USAFA SOQ Defensible Space project will be on hold until after "green up". The project has completed 12 houses to date with 8 left to be finished in the spring of 2018.



**New fish passage-friendly culvert.**

*Mitigation Cutting Coordination* Max Canestorp coordinated the chemical treatment of Gambel oak on Cheyenne Mountain AFS in an effort to mitigate the potential for wildfires. Canestorp participated in meetings with contractors to masticate the standing dead oak after the herbicide has taken effect. The intent is to turn these ladder-fuel areas into grasslands.

*Native Grass Restoration* Alex Schubert coordinated with base heavy equipment operator personnel regarding

the completion of native grass seedlings on F. E. Warren AFB. Alex provided the bags of native grass seed to TSgt Meiers. The team used an F. E. Warren AFB tractor and the warm season grass drill that was borrowed earlier in the year from Buckley AFB.

**"Removing barriers [to fish passage] will increase connectivity between isolation populations and promote access to critical habitat."**

*Footbridge Construction* Brian Mihlbachler and Melissa Whittingslow completed a construction contract to add three wooden footbridges on the Falcon Trail. The bridges will improve user safety and access, and will help minimize mountain bike and hiking impacts (e.g., erosion, sedimentation) within the riparian and aquatic habitat.

*Channel Stabilization Project* Brian Mihlbachler met with a Center for Environmental Management of Military Lands (CEMML) landscape architect to identify harvesting locations for willows and cottonwoods to be used for restoration of a channel stabilization project on Black Forest

Creek (Middle Tributary).

Plant materials will be collected and planted in spring 2018.

*Aquatic Habitat Measurements* Chris Kennedy replaced water temperature loggers at five locations (Fern, Spruce, Poudre and Timber Lakes, and the Big Thompson River) within Rocky Mountain National Park. These loggers are deployed in cutthroat trout populations to assess temperatures for recruitment of cutthroat trout and detect changes associated with climate change, wildfire and beetle kill.

# Leadership in Science & Technology



Trap locations on USAFA

October marked the end of the Douglas Fir Tussock Moth and Gypsy Moth study. The gypsy moth is an invasive species introduced to the US in the mid-19<sup>th</sup> century. The Douglas Fir Tussock Moth is a native species that has cyclical outbreaks that may occur in intervals of 7 to 10 years. Both are defoliators that can severely damage and kill entire stands of trees. Traps were set with pheromones throughout USAFA and Farish. These traps were left in place or approximately 5 months. After examination by USFS Health Protection, it was determined that there were no active Gypsy or Tussock Moths present.

Pest Management Brian meet with USAFA environmental staff and the

Air Force Installation and Mission Support Center (AFISMC) to review and discuss the Air Force Academy's pest management program and pesticide and herbicide usage. USAFA is in compliance with Air Force regulations, but the pest management plan needs updating and AFISMC expressed concern that the base should use more pollinator-friendly chemicals for forest insect control.

*Owl Nest Project* Melissa Whittingslow worked with a Boy Scout to complete his Eagle Scout project. The Boy Scout created Owl nesting platforms and boxes and placed them 15-20 ft. high in trees along Monument Creek and West Monument Creek. The owl boxes were mapped and will be monitored to see if they are utilized during the nesting season.

## Partnerships & Accountability

“[...]plans to nominate several archaeological sites to the National Register [...] to enable perpetual conservation of these resources.”

*Cultural Resources* Clark Jones met with the Pueblo Chemical Depot (PCD) commander, COL. Christopher A. Grice to obtain the final signature for the newly updated Integrated Cultural Resource Management Plan. This plan is updated every five years and addresses management needs for cultural resource preservation on the depot. PCD plans to nominate several archaeological sites to the National Register in the next year to enable perpetual conservation of these resources.

*Forest Health Symposium* Joe Murphy attended the 2017 Pikes Peak Forest Health Symposium. Topics discussed focused on wildfire preparedness and forest health in the region. The event featured multiple presentations from numerous forest, fire, and community experts. Harris Sherman, Former USDA Under Secretary and Mayor John Suthers, Colorado Springs also spoke. The event provided collaboration with land management professionals in the area and pertinent information on forest/ fire management in the Pikes Peak Region.

*Bird Monitoring Partnership* Alex Schubert, Krystal Phillips, Dustin Casady, and Clark Jones participated in a conference call discussion regarding migratory bird inventories at military bases. Rob Schorr from the Colorado Natural Heritage Program and Chris Wright and Nick Van Lanen from the Bird Conservancy of the Rockies were also on the call. The group brainstormed different options for conducting bird surveys on the bases in future years. A follow-up discussion has been planned.

*INRMP Update Preparation* Max Canestorp completed the Peterson AFB, Schriever AFB, and Cheyenne Mountain AFS INRMP updates for 2017, and submitted them to the Sikes Act cooperating parties for review.

*Black-footed Ferret Survey* Laura Mendenhall assisted the Kansas Field Office with their semi-annual Black-footed Ferret (BFF) Survey on a private ranch in western Kansas. The objective of the October survey is to document survival and reproduc-

tion and capture individuals for plague vaccination.



Pam Sponholtz at Hanalei NWR.

*Detail* Pam Sponholtz finished up her 60 day detail as the Region I Lands Division Chief. Part of her duties included going to Hawaii for two weeks to look at several rights of way, easements and potential land acquisitions on the islands. The detail was part of the Service's Advanced Leadership Development program that helps training emerging leaders for future challenges.