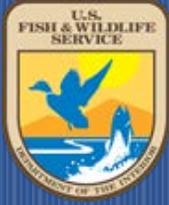


Montana Fish and Wildlife Conservation Office



BILLINGS – BOZEMAN – GREAT FALLS –
LEWISTOWN

April-May 2016

Sikes Act work, Malmstrom Air Force Base, MT.

Several of our on-going efforts at Malmstrom were re-initiated after winter's grip gave way to warmer weather during April and May. Armed with a small contingent of volunteers from the Big Sky Upland Bird Association, Dr. Elin Pierce completed the second and last year of a Greater Sage Grouse (GSG) monitoring effort.

This year, nearly 30 missile sites were surveyed. On the list of sites were those not surveyed previously, some that were surveyed last year but had negative results, and some that were surveyed last year that needed further investigation or additional confirmation—survey protocols required a resurvey in a different year if there was adequate sagebrush habitat but no signs of GSG.

Of the sites surveyed in 2016:

A) GSG sign or GSG individuals were observed at 5 sites where GSG were not recorded last year. The determinations were made by either finding a lek within 3.5 miles of the missile site, or by finding multiple sites where there were GSG pellets (scat) within this buffer distance, indicating the birds used the area for foraging and/or breeding;

B) Two missile sites identified as potential GSG occurrence sites in 2015 were definitively excluded as occurrence sites;

C) The remaining sites were resurveyed confirming our previous findings of no GSG; and

D) Three new sites were surveyed with no signs of GSGs.

Special thanks to the Big Sky Upland Bird Association volunteers Ben Deeble, Jay Gore, and Scott Patterson.

Also in May, Judy Kobus-Fisk, USFWS, joined Dr. Pierce in a 2-day Arbor Day event. Numerous trees were planted at various locations on base.

In addition to planting trees, Dr. Pierce held the first meeting of the Malmstrom Air Force Base Tree Board and Montana Department of Natural Resource

Conservation (MTDNRC) arborist, Josh Stoychoff, held a tree climbing demonstration and a tree planting and care class for interested Airmen and the public, as well as, awarded the base with its 23rd annual Tree City USA designation.

Many thanks to all the the Air Force volunteers from the Force Support Squadron, Security Forces, Med Group, Fire Dept., and the CES "DirtBoyz", as well as to USFWS volunteer Jon Barnhill, and MTDNRC Arborist Josh Stoychoff—all of whom contributed significantly to a successful event.



*Sikes Act work,
Malmstrom Air Force
Continued...*

Other notable activities include:

- Installation of 20 nest boxes (for chickadees, bluebirds) on trees or fence posts around the base;
- Completed early electrofishing efforts on Powwow Pond;
- Coordinated invasive weed control efforts with 341 CES/CEOE, 341 CES/CEOIE, and 341 CES/CEIE;
- Coordinated stocking efforts with Montan FWP and Ennis National Fish Hatchery to support Kid's Fishing Day to be held 04 June.



Lt Col Joel D. Purcell, Commander, 341 Civil Engineering Squadron, USAF AFGSC 341 CES/CC (left) receiving Arbor Day Foundation 'Tree City USA' recognition from Mr. Josh Stoychoff, licensed arborist, NELO Service Forester, Montana DNRC (Right).



Montana FWCO biologist, Josh Melton, with a Largemouth Bass collected from Powwow Pond during spring 2016 surveys.



Dr. Elin Pierce (front left) and Judy Kobus-Fisk (front right) along with some of the volunteers who made the 2016 Arbor Day events a success.

Grayling efforts at Red Rock Lakes National Wildlife Refuge.

Year 4 of a 5-year non-native Yellowstone Cutthroat (YCT) suppression effort was initiated with the installation of a weir and trap in Red Rock Creek on April 19th.

MT FWCO biologist Andrew Gilham and technician Mat Erickson, collected 703 individual YCT at the trap. The first 182 male YCT were Floy tagged and released upstream, while 536 YCT were removed, euthanized, and transferred to local food banks. Floy tagged males were released for mark-recapture population estimates. Red Rock Creek (upstream of the fish weir) was sampled via electrofishing by MT FWCO staff on May 3rd, and all YCT (not marked at the trap) were marked with Floy Tags. 126 YCT were caught during electrofishing surveys, 48 were recaps from the fish trap and 78 were untagged fish. This section was subsequently sampled by Montana Fish Wildlife and Parks. With these data we will be able to

more accurately estimate the number of YCT remaining in Red Rock Creek.

In addition to using the weir and trap to suppress non-native trout, we also collect Arctic Grayling as they ascend the stream for spawning.

At this time, causes for decline are unknown. Further investigation using population data, genetics, and age and growth data will offer insights.



Adult Arctic Grayling collected during 2016 sampling, Red Rock Creek, Red Rock Lakes NWR. Photo USFWS

Unfortunately, spawning Arctic Grayling numbers appear to have declined substantially since 2015.

This year only 74 individuals were observed at the trap. Over the last 3 years, between 700-1000 Grayling have been observed, annually.

Red Rock Lakes continued...

Jason Marsh and Billy Sharp began electrofishing targeted reaches of both Picnic and Elk Springs creeks—the latter being a tributary to Upper Red Rock Lake.

All collected fish were implanted with a Passive Integrated Transponder tag (PIT). These fish will offer additional insight and understanding about movement within the Elk Springs/Picnic Creek complex prior to the planned restoration of the Elk Springs Creek outlet later this year.



Jason Marsh fine tuning a PIT tag reading array on Elk Springs Creek, Red Rock Lakes National Wildlife Refuge. Photo USFWS/Billy Sharp

Bull Trout Recovery:

Jim Mogen continues to facilitate Bull Trout recovery in the St. Mary River watershed of north western Montana. His work continues to include working with the Bureau of Reclamation (USBR) on various project items, ongoing correspondence with members of the Biological Review Team, and USFWS Ecological Services personnel regarding the development of the proposed structures at the St. Mary diversion, and working closely with Justin Kucera (USBR Natural Resource Specialist) and the USBR contractor on analysis and interpretation of our cumulative 1997-2014 St. Mary Bull Trout data set.

Over the past several months, much effort has been put towards producing two of the several planned reports expected from this thorough examination of our data. The first report – *“Monte Carlo estimation of bull trout entrainment in the major irrigation canal on the St. Mary River, Montana, and an assessment of the effect on that fish’s international, migratory population”* is in final “rough” draft form and has been distributed to external professional reviewers as part of the scientific journal publication process.

Other happenings:

The Montana FWCO continues to provide support to internal and external partners on a variety of issues. Items of interest occurring during the reporting period include:

- Josh Melton, continues to develop a Draft Yellowstone Cutthroat Trout management plan for the Crow Tribe.
- George Jordan began revising the IUCN update for Pallid Sturgeon.
- As part of our tribal trust responsibilities and in association with our USBR funded St. Mary Bull Trout studies, George, Jim, Andrew, and Josh met with the new Director of Blackfeet Fish and Wildlife, Dona Rutherford, in Helena. As a result of this meeting, the Montana FWCO has begun preparations to gill-net four lakes on the Blackfeet Reservation. We plan on sampling Duck, Mission, Kipp and Four-Horn lakes during June. These data will be used for stock assessments to guide future stocking rates in these lakes.

The Montana FWCO would like to welcome our newest seasonal employees:

Mr. William Sharp started 18 April at the Bozeman sub-office and Ms. Marlene Fisher started at the Lewistown sub-office 16 May. Welcome aboard Billy and Marlene.

For more information, click on the following logos
Or feel free to contact any of the Montana FWCO
Team members below:



George Jordan
Project Leader
2900 4th Ave. North, Room 301
Billings, MT 59101
Phone: 406-247-7365
Email: george_jordan@fws.gov

Jim Mogen
Fisheries Biologist
4052 Bridger Canyon Road
Bozeman, MT 59715
Phone: 406-585-9010
Email: jim_mogen@fws.gov

Judy Kobus-Fisk
Administrative Support Officer
4052 Bridger Canyon Road
Bozeman, MT 59715
Phone: 406-585-9010
Email: judy_kobus-fisk@fws.gov

Andrew Gilham
Fish and Wildlife Biologist
4052 Bridger Canyon Road
Bozeman, MT 59715
Phone: 406-585-9010
Email: andrew_gilham@fws.gov

Jason Marsh
Seasonal Biotech
4052 Bridger Canyon Road
Bozeman, MT 59715
Phone: 406-585-9010
Email: jason_marsh@fws.gov

Mat Erickson
Seasonal Biotech
4052 Bridger Canyon Road
Bozeman, MT 59715
Phone: 406-585-9010
Email: mathew_erickson@fws.gov

William Sharp
Seasonal Biotech
4052 Bridger Canyon Road
Bozeman, MT 59715
Phone: 406-585-9010
Email: william_sharp@fws.gov

Michael (Josh) Melton
Fish and Wildlife Biologist
335 Airport Road 61
Lewistown, MT 59715
Phone: 406-535-2800 ext 23
Email: michael_melton@fws.gov

Marlene Fisher
Fish and Wildlife Biologist
335 Airport Road 61
Lewistown, MT 59715
Phone: 406-535-2800 ext 22
Email: marlene_fisher@fws.gov

Elin Pierce, PhD.
Fish and Wildlife Biologist
Malmstrom Air Force Base
Great Falls, MT 59715
Email: elin.pierce@us.af.mil