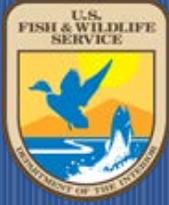


Montana Fish and Wildlife Conservation Office



BILLINGS – BOZEMAN – GREAT FALLS –
LEWISTOWN

June 2015

National Fishing and Boating Week

June 6-14 was National Fishing and Boating Week. The focus is to highlight the importance of recreational fishing and boating in enhancing the quality of life for those that choose to engage. Not coincidentally, it also is when most state's offer their Free Fishing Days.

Today's U.S. Fish and Wildlife Service can trace its roots back to the U.S. Commission on Fish and Fisheries which was created by Congress in 1871. During the 1930s the Bureaus of Fisheries and Biological Survey were transferred to the Department of Interior, where they were combined in 1940 to form the U.S. Fish and Wildlife Service. Subsequently, in 1956, the Fish and Wildlife Act established two bureaus: the Bureau of Commercial Fisheries and the Bureau of Sport Fisheries and Wildlife. Then, in 1970, the Bureau of Commercial Fisheries was transferred to the Department of Commerce and renamed the National Marine Fisheries Service, whereas the Bureau of Sport Fisheries was retained within the U.S. Fish and Wildlife Service.

Thus, there is a long standing record of the U.S. Fish and Wildlife Service recognizing the importance of recreational fishing and the benefits it affords the American public.

In support of National Fishing and Boating Week, staff from the Montana Fish and Wildlife Conservation Office (MTFWCO) participated in two separate Kid's Fishing Day events; one at Malmstrom Air Force Base, Great Falls and the other at the U.S. Fish and Wildlife Service's Bozeman Fish Technology Center.

Both events were well attended with many kids experiencing the joy of catching their first fish.

See also "[Kids catch fish plus fun](#)"

Special thanks to:

Malmstrom Air Force Base, Montana Fish Wildlife and Parks, Ennis National Fish Hatchery, and the Bozeman Fish Technology Center.

"...to conserve, restore, and enhance aquatic systems to provide for increased recreational fishing opportunities nationwide..."

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In 1995, President William Jefferson Clinton issued [Executive Order 12962](#).

This Executive Order highlights the Federal Government's recognition of and commitment to recreational fishing and sound aquatic habitats.





Airmen look on as rainbow trout from Ennis National Fish Hatchery are released in Powwow Pond, Malmstrom Air Force Base, in advance of the Kid's Fishing Day event.

Photo: USFWS

Red Rock Lakes NWR Arctic Grayling:

Elk Springs Creek was once a historically important spawning tributary for Arctic grayling. Today, this spring creek is eerily devoid of this species.

The prevailing hypothesis relates to an early 1900s re-routing of the streams course to flow into Swan Lake and then out to Upper Red rock Lake (see map on next page).

This diversion may have resulted in Swan Lake serving as a barrier of sorts due to potentially inhospitable habitat for immigrating adults and/or emigrating fry.

The study efforts include early larval drift evaluations, as well as, studying young-of-year movement within the Elk Springs Creek system to assess if

immigration, emigration, or both are limiting.

Working in partnership with Red Rock Lakes National Wildlife Refuge and Montana Fish Wildlife and Parks, we utilized remote site incubators (RSI) to rear Arctic grayling eggs. Emergent fry will be followed to gain insights into larval drift behavior.

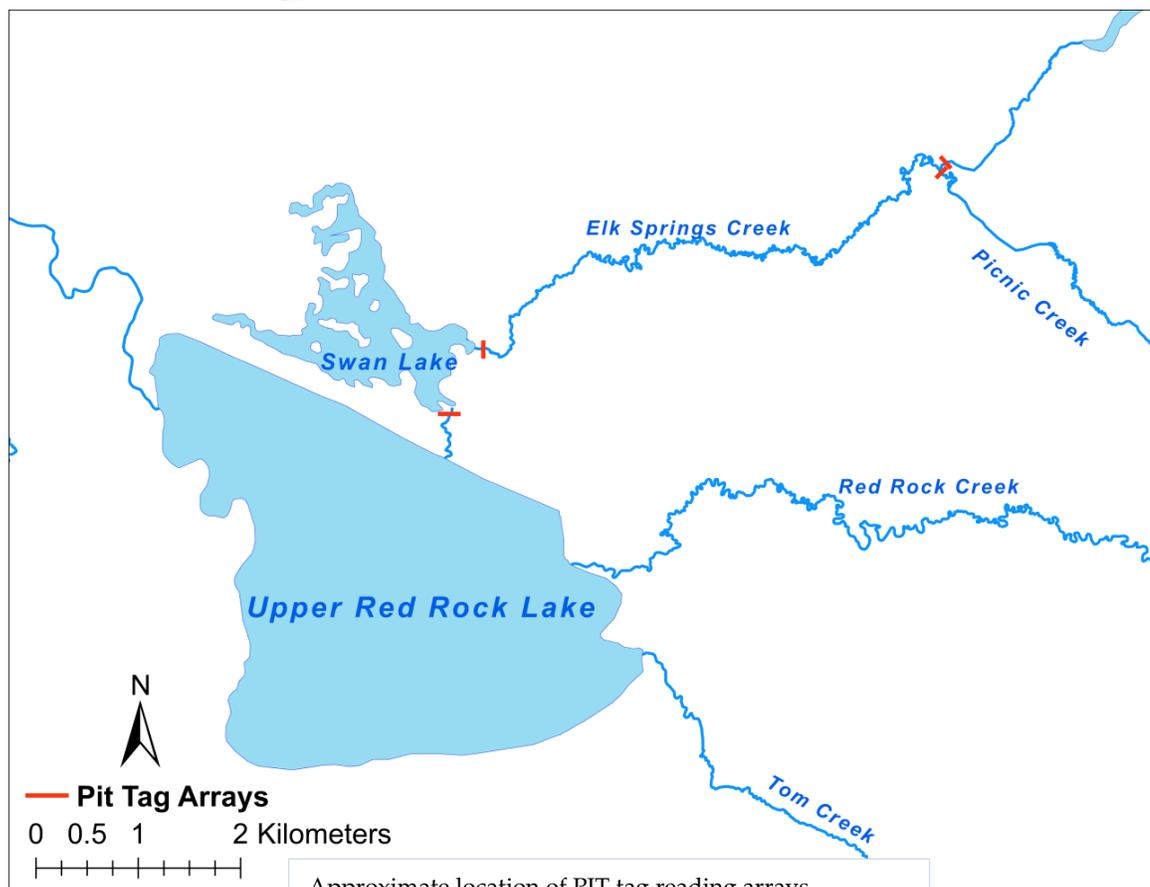
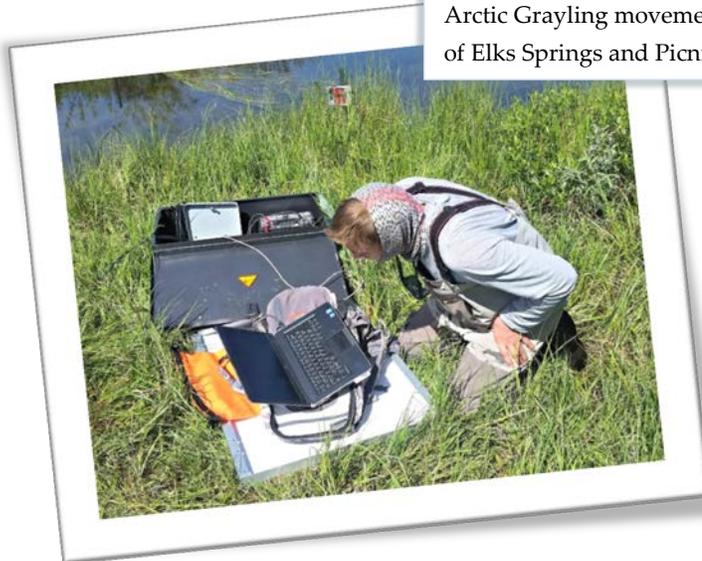
Red Rock Lakes NWR Arctic Grayling (Cont.):

In order to further understand Arctic grayling early life-history behavior in this system, approximately 33 yearling grayling, the result of last year's RSI efforts, were implanted with PIT (passive integrated transponder) tags. These tags, coupled with PIT tag reading arrays at strategic locations (see map below) will provide valuable insights into yearling movements and behavior.

These efforts are part of the preliminary data collection efforts necessary to allow the Montana FWCO to assist the refuge with subsequent monitoring of a planned

effort to restore Elk Springs Creek into its historical channel to improve/restore connectivity to Upper Red Rock Lake.

Jason Marsh deploying one of several stationary Passive Integrated Transponder tag reading arrays. These arrays will monitor Arctic Grayling movements within, in, and out of Elk Springs and Picnic creeks. *Photo: USFWS*



Air Force and USFWS collaborate on Natural Resource Management under the Sikes Act:

While National Arbor Day was officially April 24, 2015, Malmstrom Air Force Base and the Montana FWCO recognized the importance and intent of the day, founded by J. Sterling Morton, by planting trees in June.

The 2015 Arbor Day tree planting event occurred 18-19 June with an Arbor Day Tree City Proclamation ceremony culminating the events on June 19.

A total of 19 trees were planted: 8 Colorado spruce (4'-5' tall), 4 Colorado spruce (8-10' tall), and 8 Canada Red Chokecherries (10' tall).

In addition to Montana FWCO staff, there were 30 volunteers, both civilian and Air Force from various squadrons, who made this event possible.

See also:

[*"Planting my first tree on Arbor Day"*](#)

"There is no aristocracy in trees. They are not haughty. They will thrive near the humblest cabin on our fertile prairies, just as well and become just as refreshing to the eye and as fruitful as they will in the shadow of a king's palace."

— J. Sterling Morton



USFWS biologist, Dr. Elin Pierce, (right foreground) and some of the civilian and Air Force volunteers standing beside a few of the newly planted trees.

Photo: USAF

Air Force and USFWS collaboration (cont.):

WEED CONTROL:

As part of our ongoing invasive weed control work at Malmstrom Air Force base, Montana FWCO biologists Robbin Wagner and Michael Melton focused their efforts on targeting Whitetop (*Cardaria spp.*) in June.

Whitetop is exotic mustard likely introduced to the US in contaminated alfalfa seeds. This plant grows in a variety of soil types with moderate moisture.

Our current control method is the application of Telar® at the manufacturer's prescribed rate.

POWWOW POND:

Montana FWCO biologists have been coordinating with Montana Fish Wildlife and Parks to pursue stocking Fathead Minnows (*Pimephales promelas*) as an additional prey base for the Largemouth Bass (*Micropterus salmoides*) in the pond.

As part of the process, the minnows must be disease free and the state fish board must approve the transfer. As of this writing, the minnows have passed disease testing and we are waiting on the state fish board's approval. There is also preliminary planning to exploring alternative methods to be used in conjunction with electrofishing for removing invasive Goldfish (*Carassius auratus*) from the pond. Options being considered are; an array of modified fyke nets, short set gill nets, and/or large minnow traps.

Crow Tribal Support for Yellowstone Cutthroat Trout:

Approximately 1,700 juvenile Yellowstone Cutthroat Trout (*Oncorhynchus clarki bouvieri*) were released into Shiveley Creek (700) and Lost Creek (1,000). This species is recognized as a species of special concern by the Crow Tribe. Since 2002, Yellowstone Cutthroat Trout conservation and restoration has been a conservation partnership between the Crow Tribe and Montana FWCO.



Native Yellowstone Cutthroat Trout seeking cover shortly after being stocked in Shiveley Creek, Crow Reservation, Montana.

Photo: USAF

Fish Passage:

Much of June was spent preparing agreement packages with Montana Fish Wildlife and Park and the U.S. Forest Service's Custer-Gallatin and Bighorn National Forests. Following are brief descriptions of these new projects:

Odell Creek, Montana:

This project will remove an unused and undersized 6' diameter, approximately 50' long culvert crossing O'Dell Creek, a tributary to the Tongue River. Once removed, a natural channel will be constructed for aquatic organism passage.

Sixteenmile Creek, Montana:

This project will provide fish passage and connectivity along two unnamed tributaries to the South Fork Sixteenmile Creek by replacing two perched culverts within the larger seven mile Westslope Cutthroat Trout (*Oncorhynchus clarki lewisi*) restoration project area.

National Fish Passage Program



The [National Fish Passage Program](#) (NFPP) is a voluntary, non-regulatory initiative in the U.S. Fish and Wildlife Service that provides financial and technical assistance to remove or bypass artificial migratory barriers to help improve population levels.

If you want more information or are interested in partnering on a Montana NFPP eligible project, please contact George Jordan, Montana FWCO project leader.



One of two perched culverts in the Sixteenmile Creek drainage to be replaced.

Photo: USFS

Fish Passage (cont.).

Musselshell River, Montana:

When completed this project will remove the Egge Diversion Dam and restore natural flow patterns and bank lines of the Musselshell River. This will create approximately 24 miles of connected river between Painted Robe and Big Coulee creeks.



Egge Diversion Dam on the Musselshell River, Montana

Photo: Montana FWP

French Creek, Montana:

The goal of this project is to remove a perched culvert and replace it with a step-pool structure to restore Arctic Grayling and Westslope Cutthroat Trout passage to 3.5 miles of upstream habitats.

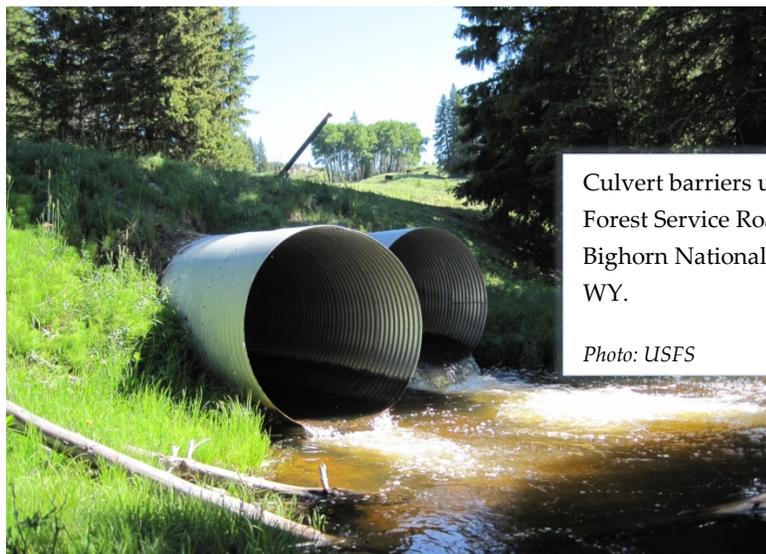


Perched culvert in French Creek to be removed.

Photo: Montana FWP

Canyon Creek, Wyoming:

This project will remove perched culverts and replace them with a bottomless concrete box to reconnect native Yellowstone Cutthroat Trout habitat, restore natural channel geometry, and lower sediment delivery to stream.



Culvert barriers under Forest Service Road 25, Bighorn National Forest, WY.

Photo: USFS

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

Andrew Gilham
Pathway's Intern
4052 Bridger Canyon Road
Bozeman, MT 59715
Phone: 406-585-9010
Email: andrew_gilham@fws.gov

Robbin Wagner
Fisheries Biologist
335 Airport Road 61
Lewistown, MT 59715
Phone: 406-535-2800 ext 23
Email: robbin_wagner@fws.gov

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

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

Michael (Josh) Melton
Fish and Wildlife Biologist
335 Airport Road 61
Lewistown, MT 59715
Phone: 406-535-2800 ext 22
Email: michael_melton@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

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

Elin Pierce
Fish and Wildlife Biologist
Malmstrom Air Force Base
Great Falls, MT 59715
Email: elin_pierce@fws.gov