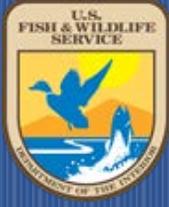


# Montana Fish and Wildlife Conservation Office



BILLINGS – BOZEMAN – GREAT FALLS –  
LEWISTOWN

Winter 2016

## *Though field season has ended, much work continues.*

During the first quarter of 2016, Montana FWCO staff have been making equipment ready for the coming field season, as well as, working with partner agencies to coordinate our projects across Montana. While preparations to monitor Arctic Grayling in the Centennial Valley and Sage Grouse near Lewistown, MT have been taking precedent in the last few weeks much of the winter had Montana FWCO biologists in Bozeman, Lewistown, and on Malmstrom AFB hard at work developing management plans, compiling and analyzing data, attending meetings with partner agencies, and gathering volunteers and resources to complete many natural resource studies and conservation efforts planned for the 2016 field season. Following are a few highlights.

Andrew Gilham and Mat Erickson spent time working with Mike Duncan aging Arctic Grayling scales collected in 2015 from Red Rock Lakes National Wildlife Refuge (NWR).

Andrew presented the resulting length-at-age data and his conclusions to the Centennial Valley Arctic Grayling Workgroup.

He found discrete length-at-age relationships in age-1 and age-2 Arctic Grayling, but not in age-3 and age-4 fish. Because there is overlap in lengths between age-3 and age-4 fish, determining age solely by taking lengths would be inaccurate in this population. Thus, tissue and scale samples will continue to be collected and analyzed to accurately determine age, as well as, to estimate the

number of breeding adults in Red Rock Creek.

Andrew also presented to the Centennial Valley Arctic Grayling WorkGroup some summary statistics associated with our non-native hybrid Yellowstone Cutthroat Trout suppression effort at Red Rock Lakes NWR.

Data presented include catch-per-unit-effort (CPUE), size structure, and number of trout removed since the project began (Figure 1).

The significant decline in CPUE during the suppression effort, suggest we we are reducing the non-native cutthroat trout abundance.

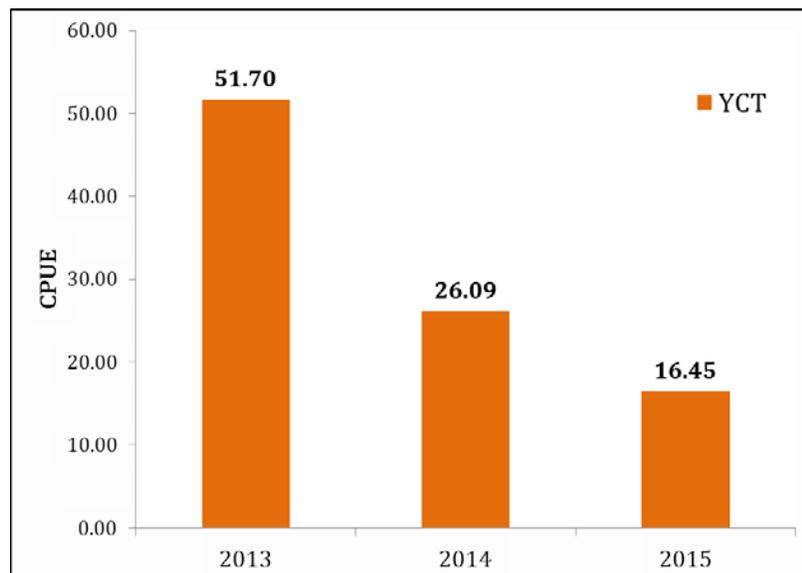
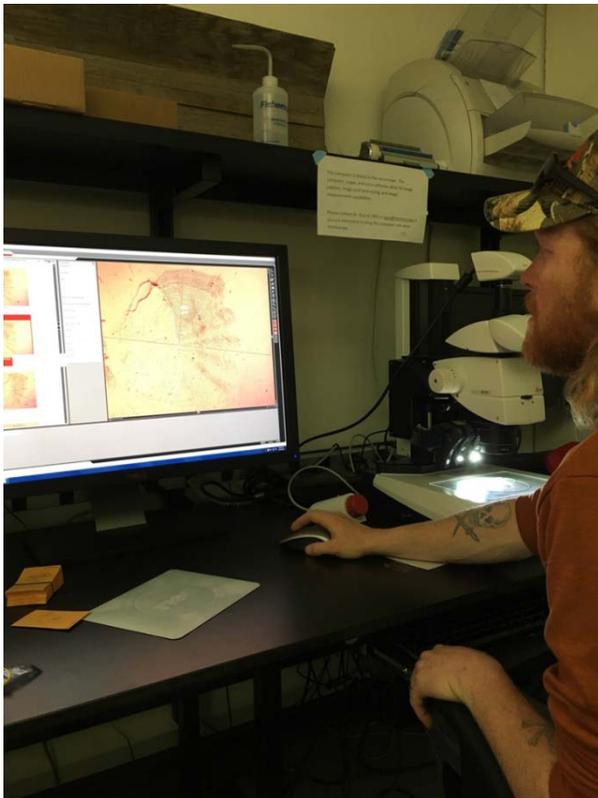


Figure 1. Yellowstone Cutthroat Trout CPUE (fish/trap day) 2013-2015, YCT suppression began in 2013.

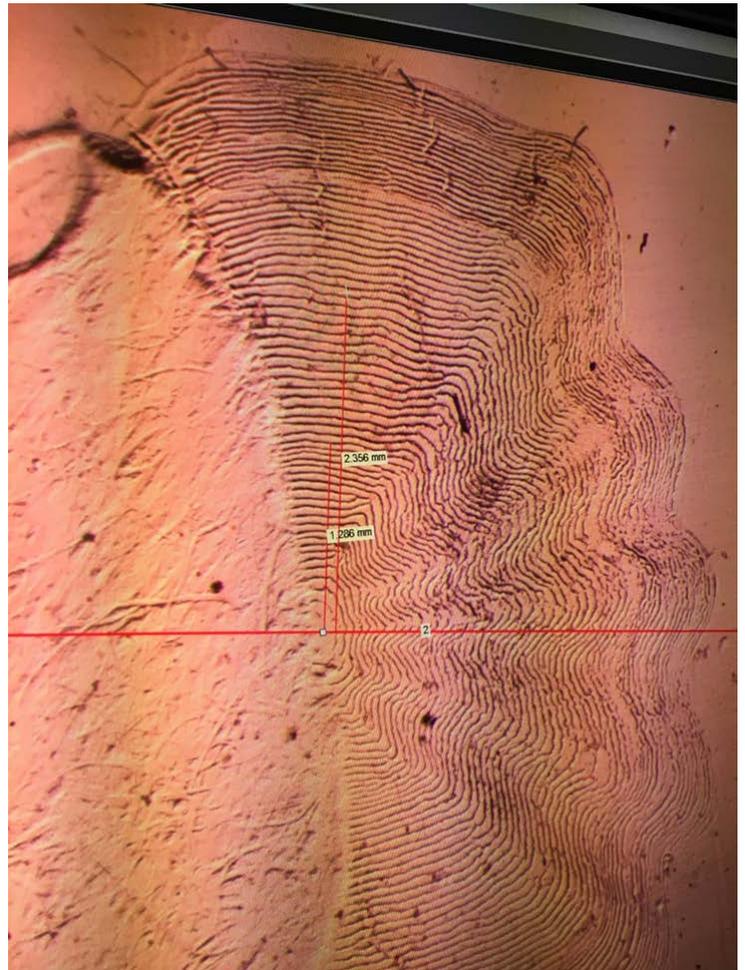
However, there is no significant change in size structure indicating we have not effectively reduced recruitment.

The maintenance of the hybrid-trout size structure also indicates that our weir captures all size classes of trout in the spawning run.

In addition to our usual monitoring activities, this season we will run a mark-recapture project to estimate the hybrid-trout population size in Red Rock Creek.



Montana FWCO bio-tech, Mat Erickson back calculating Arctic Grayling age from scales collected by MTFWCO from Red Rock Creek, Red Rock Lakes National Wildlife Refuge. Photo: USFWS/Andrew Gilham



Magnified Arctic Grayling scale used to back calculate length at age. Photo: USFWS/Andrew Gilham

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

Congratulations to Malmstrom's 341st CES for winning the 2015 General Thomas D. White Natural Resources Conservation Award: Small Installation Category.

This Natural Resources Conservation Award is given out in recognition to bases that promote excellence in every aspect of the Air Force environmental programs.

As a U.S. Fish and Wildlife Service Employee, Dr. Elin Pierce has been embedded with Malmstrom's 341st CES, serving as the base's natural resource manager. Dr. Pierce has become an integral part of the natural resource program at Malmstrom Air Force Base, supporting operations and conducting and completing many projects.

This winter, Dr. Pierce has been hard at work implementing a game camera program to monitor wildlife on base.

Working with interested Airmen, game cameras have been strategically placed near potential points of entry. This program will be expanded within the Base's missile field

during 2016. The intent is to establish cameras at specific missile sites located within the ranges of listed or sensitive species to better understand potential interactions between these species and activities at those facilities.



**With the installation of strategically placed game cameras, biologists can assess movement patterns, areas of ingress and egress, and gain insights into behavior. Photo: USFWS/Elin Pierce**

In addition, she has been busy conducting meetings and giving presentations on natural resources conservation; securing funding and contract details for a goat-grazing project to control invasive plant species; and reviewing and submitting comments related to several planned Base projects.

Again, congratulations Dr. Pierce and Malmstrom's 341st CES for winning the 2015 General Thomas D. White Natural Resources Conservation Award: Small Installation Category.



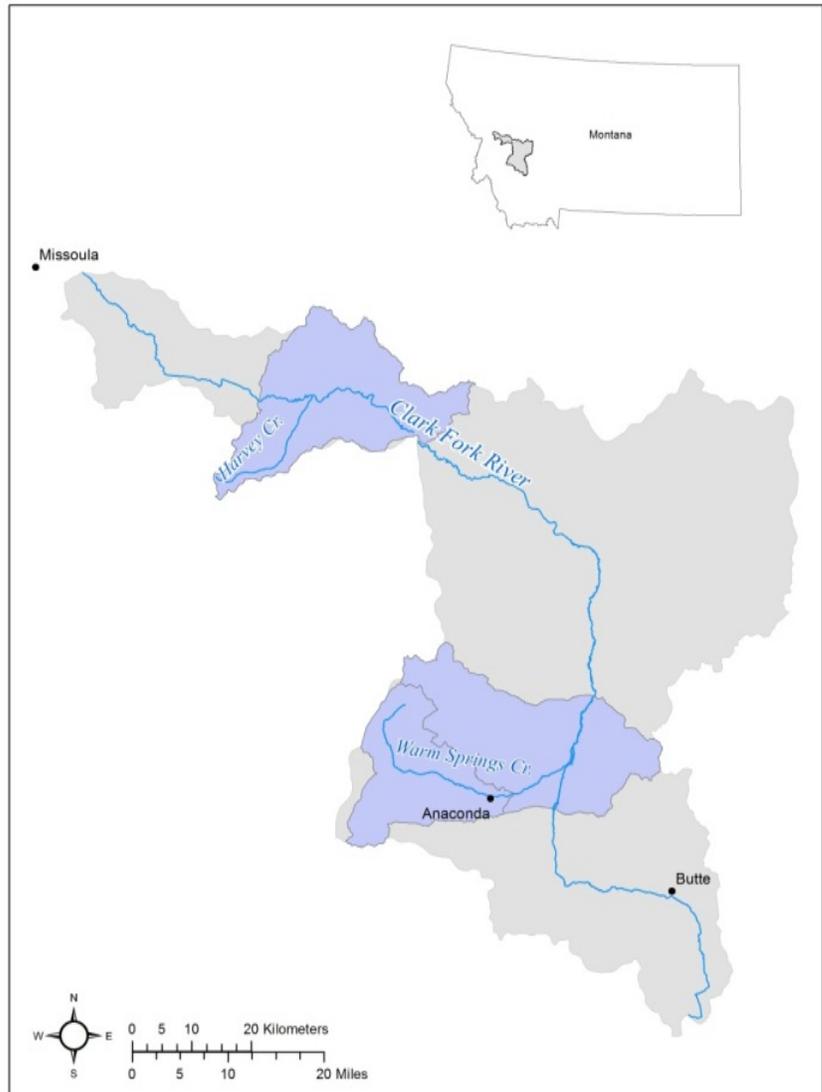
## ***Bull Trout Recovery:***

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 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.

Additionally, Montana FWCO worked collaboratively with Trout Unlimited (TU) to develop and submit a National Aquatic Connectivity Initiative proposal for a pilot fish passage focal effort in the Upper Clark Fork River to help recover Bull Trout. This proposal was not funded.

However, approximately \$140,000 from the National Fish passage Program will be committed to initiate and implement passage at some of the key-locations within the

historically important tributaries to the Clark Fork River—Warm Springs and Harvey creeks.



**Harvey and Warm Springs creeks sub-basins in context within the Upper Clark Fork River watershed, Montana.**

## *Other happenings:*

The Montana FWCO continues to provide support to internal and external partners on a variety of issues. Notable accomplishments over the winter months include:

- Josh Melton, at the Montana FWCO Lewistown office, continues to develop a Yellowstone Cutthroat Trout management plan for the Crow Tribe.
- George Jordan convened the Intake Biological Review Team to develop and finalize the biological success criteria for the proposed fish passage project at Intake Dam, Montana.
- The Montana FWCO was contacted by Dona Rutherford, the new Director for the Blackfeet Fish and Wildlife Department. A meeting is planned in early spring to discuss how the Montana FWCO can support the Blackfeet Fish and Wildlife program.

The Montana FWCO would like to welcome two new seasonal employees:

Mr. William Sharp will start 18 April at the Bozeman sub-office and Mrs. Marlene Fisher will start at the Lewistown sub-office 16 May. Welcome aboard Billy and Marlene, we look forward to having you.

*For more information, click on the following logos  
Or feel free to contact any of the Montana FWCO  
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