



## Monthly Accomplishments

## April 2015

### Fisheries Activities

Stephen Davenport, Thomas Sinclair and Weston Furr completed baseline fish community monitoring on the Rio Mora within the Rio Mora National Wildlife Refuge.

Chris Kitcheyan and Dustin Myers assisted the Navajo Nation Department of Fish and Wildlife with annual spring fish community surveys.

Chris Kitcheyan assisted the Jicarilla Apache Nation Department of Game and Fish with Navajo River fish community surveys.

Angela James, Tristan Austring and Andy Dean assisted personnel from the Pueblo of Santa Ana Department of Natural Resources with quarterly fish monitoring on the Rio Grande and Jemez River.

With the assistance of New Mexico Ecological Services Field Office (NMESFO) and Utah Division of Wildlife Resources, several New Mexico FWCO staff completed a nonnative fish marking and endangered species monitoring trip on the San Juan River from Shiprock, New Mexico to Mexican Hat, Utah. Channel catfish and common carp were tagged with individually numbered anchor

tags in an effort to generate population estimates and exploitation rates. The data will be used to guide future management decisions for these two invasive fishes. Recapture information will be collected during regular nonnative fish removal trips scheduled throughout 2015.



**Sampling crews on San Juan River, Utah.**

Stephen Davenport, Andy Dean, and Tristan Austring completed Pecos River fish community monitoring at twelve sites near Roswell, New Mexico. Data from these monitoring efforts are used to define the status of the fish community, with emphasis on Pecos Bluntnose Shiner.

Stephen Davenport assisted New Mexico Department of Game and Fish (NMDGF) with annual Pecos Pupfish monitoring at Bitter Lake National Wildlife Refuge, Bottomless Lakes State Park, and Bureau of Land Management's overflow wetlands/Area of Critical Environmental Concern.

In cooperation with USFWS Grand Junction (Region 6), Utah Division of Wildlife Resources, and American Southwest Ichthyological Researchers several New Mexico FWCO staff completed the first of four nonnative fish removal and endangered species monitoring trips along the San Juan River from Shiprock, New Mexico to Mexican Hat, Utah. Nonnative fish removal is one management tool used by the San Juan River Basin Recovery Implementation Program for the recovery of the endangered Colorado pikeminnow and razorback sucker.

In cooperation with Pueblo of Isleta Environment Department, Thomas Archdeacon and Tristan Austring completed monthly monitoring for Rio Grande silvery minnow. Monitoring determines presence/absence of visible implant elastomer tagged fish from augmentation and research efforts.

Dustin Myers and Chris Kitcheyan assisted NMESFO

and USFWS Partners for Fish and Wildlife in the Moreno Springs restoration project on The Nature Conservancy property. Dustin and Chris aided in collection of Chihuahua Chub and Chiricahua Leopard Frog to hold on site during restoration activities. The springs were deepened and widened to reestablish open pools for the benefit of the chub and frog. Both species were returned after the completion of the project.



Excavation of Moreno Springs.



Chihuahua Chub

Dustin Myers aided Trout Unlimited and U.S. Forest Service with the removal of three boulders reducing the efficacy of the West Fork Falls Barrier, Gila National Forest. U.S. Forest Service crews from Montana blasted and manually removed boulders that were trapping debris below the falls within the river. The natural barrier aids in restricting movement of nonnative salmonids into Gila Trout recovery sections of the West Fork Gila River. Funding

for this project was provided to U.S. Forest Service by New Mexico FWCO through a Service First Agreement.



West Fork Falls prior to removal of lower boulders.



West Fork Fall during removal of lower boulders.



West Fork Fall after removal of two large boulders.

In collaboration with U.S. Forest Service and Trout Unlimited, Dustin Myers completed several Gila Trout recovery activities within the Gila National Forest. Crews completed population monitoring within McKenna Creek. Langstroth Canyon was surveyed to determine if the

stream remained fishless, if it had suitable habitat to allow for stocking, and if the barriers were in good condition. In addition, fin clips were collected from Gila trout above and below the West Fork Falls on the West Fork River for population comparisons. And lastly, while working through each stream crews deployed temperature dataloggers along McKenna, White Creek and West Fork Gila above the barrier.

## Meetings and Trainings

Thomas Sinclair met with representatives from Trout Unlimited and the Carson National Forest to assess the feasibility of constructing artificial barriers on Italianos and Yerba Creeks to protect two native Rio Grande cutthroat trout populations from nonnative salmonids. The barriers are tentatively planned to be sited at the Creeks' confluence with the Rio Hondo just north and east of Taos, New Mexico. This effort resurrects a Western Native Trout Initiative project that was previously postponed due to budget constraints.



Italianos Creek.

Chris Kitcheyan and Andy Dean completed the Motorboat Operators Certification Course in Lake Havasu City, Arizona.

Stephen Davenport participated in a meeting with NMESFO and New Mexico State University to review a potential graduate study involving the White Sands Pupfish.

Stephen Davenport attended the Pecos River Commission meeting in Santa Fe, New Mexico.

Stephen Davenport participated in the Pecos River Stakeholders Meeting held in Roswell, New Mexico. His presentation was entitled *2014 Pecos Bluntnose Shiner Status and Trends*.

Thomas Archdeacon attended the Minnow Action Team meeting to develop biological based recommendations for the overall improvement of the status of the RGSM.

Thomas Archdeacon completed The NCTC sponsored course *Data Analysis III: Ecological Modeling Using R* held in Vero Beach, Florida.

## Education and Outreach

Angela James participated in Earth Week hosted by the Pueblo of Laguna Environmental and Natural Resources Department. She discussed the importance of macroinvertebrates as indicators of water quality and as a food base. Approximately 23 middle school students then used dichotomous keys to identify various species of the aquatic bugs found in a local stream.

Angela James participated in the Next Generation Conservationist Career held at Valle de Oro National Wildlife Refuge. The Career Fair was intended to connect youth with over 30 Natural Resource and Conservation Professionals interested in educating, employing and developing our next generation of conservationists.



MiKayla trying on a electrofishing backpack shocker at the Career Fair.



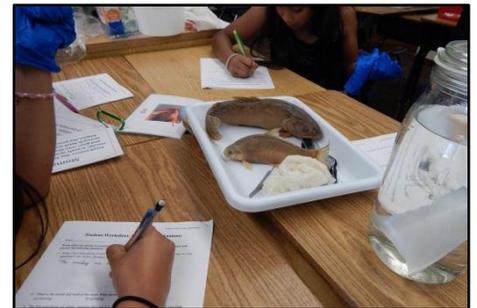
Angela James and the New Mexico FWCO booth at the Career Fair.

Angela James led the activity, Anatomy, to approximately 150 fifth grade students from Monte Vista, Emerson and Governor

Bent Elementary Schools. The hands-on activity is a component of the Native Fish in the Classroom (NFIC) project. The activity included a discussion of anatomy as an insight into the environment a species lives, an examination of anatomical features, and comparing and contrasting various fish species from the Rio Grande. The fish specimens were provided by the University of New Mexico – Southwestern Museum of Biology - Fisheries Division.



Angela showing students trout eggs.



Students comparing and contrasting a Rio Grande Cutthroat Trout and a River Carpsucker.

Angela James presented How Many Fish to approximately 100 5<sup>th</sup> grade students from Emerson Elementary School. The presentation included an overview of how and why fish surveys are completed and how the data is used. By the conclusion of the activity the classes had calculated population estimates for each year class of

Pinto Fish and developed a population trend line utilizing a mark-recapture formula. The activity emphasized the importance of having a strong math foundation to solve seemingly complex problems. Emerson Elementary is an active participant of the Native Fish in the Classroom project.



Students using the mark-recapture method to estimate the size of their Pinto Fish (pinto beans) population.

Several staff from NMFWCO participated in the Fish for a Day event hosted by Sandia Environmental Department. Participants included 22 Head Start students (3-5 years old), teachers and parents from the Pueblo of Sandia. Students rotated through stations including fish of the Rio Grande, fish collections methods, macroinvertebrate identification, and fish painting.



Head Start students learn firsthand how a fyke net works.



Head Start students and parents look for macroinvertebrates.

## Upcoming Activities

Activities and meetings currently scheduled are listed below.

### May 2015

2<sup>nd</sup> : NFIC Field Day, Pilar, New Mexico

5<sup>th</sup> : NFIC Field Day, Albuquerque, New Mexico

5<sup>th</sup>-7<sup>th</sup>: Fish community monitoring, Rio Hondo

11<sup>th</sup>-12<sup>th</sup>: SJRIP Annual Meeting, Durango Colorado

11<sup>th</sup>-15<sup>th</sup>: Post-fire monitoring and nonnative fish removal, Iron & Willow Creek

18<sup>th</sup>-22<sup>nd</sup>: Nonnative fish species risk assessment, Pecos Reservoir

18<sup>th</sup>-22<sup>nd</sup>: Bluehead Sucker annual monitoring, Navajo Nation

26<sup>th</sup>-29<sup>th</sup>: Annual lake surveys, Navajo Nation

### June 2015

3<sup>rd</sup>: Off Road Utility Vehicle training, Bosque del Apache NWR

14<sup>th</sup>-20<sup>th</sup>: Rio Grande Silvery Minnow Salvage operations, Bosque del Apache NWR

15<sup>th</sup>-19<sup>th</sup>: Annual fish community and nonnative fish removal on West Fork Gila, Gila National Forest

19<sup>th</sup>-21<sup>st</sup>: Native American Fish and Wildlife Society Youth Practicum, Arizona

June 17-26<sup>th</sup>: Endangered Fish Monitoring and Nonnative Fish Removal and Control from Shiprock, NM to Mexican Hat, UT.

29<sup>th</sup>-30<sup>th</sup>: Rio Grande Silvery Minnow monthly monitoring, Middle Rio Grande

U.S. Department of the Interior  
U.S. Fish & Wildlife Service  
Southwest Region  
Fisheries and Aquatic Resource Conservation



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## Current staff members

Thomas B. Sinclair ..... Project Leader  
Jason E. Davis ..... Assistant Project Leader  
Angela Carrillo..... Administrative Officer  
Kimberly M. Flowers ..... Office Assistant  
Stephen R. Davenport ..... Supervisory Fish Biologist  
D. Chris Kitcheyan ..... Supervisory Fish Biologist  
D. Weston Furr ..... Fish Biologist  
Thomas P. Archdeacon..... Fish Biologist  
Dustin J. Myers..... Fish Biologist  
Angela P. James..... Fish Biologist  
Bobby R. Duran..... Fish Biologist  
Andy T. Dean ..... Fish Biologist  
Ernest Teller Sr. .... Biological Science Technician  
Tristan L. Austring ..... STEP Student