



Monthly Accomplishments

September 2014

Fisheries Activities

In cooperation with USFWS Grand Junction (Region 6), Utah Division of Wildlife Resources (UDWR), and American Southwest Ichthyological Researchers, L.L.C. (ASIR), staff completed the third nonnative fish removal and endangered fish monitoring trip of the year. The trip consisted of Bobby Duran, Ernie Teller, Thomas Sinclair, Jason Davis, Rebecca Cook and Kjetil Henderson rafting the San Juan River, while electroshocking, from Shiprock, New Mexico to Mexican Hat, Utah. Nonnative fish removal is one management tool employed by the San Juan River Basin Recovery Implementation Program for the recovery of endangered razorback sucker and the Colorado pikeminnow.



Figure 1. Jason Davis holding an endangered Colorado pikeminnow.

Dustin Myers, in cooperation with New Mexico Department of Game and Fish (NMDGF), worked to complete nonnative fish removal on Willow Creek,

Gila National Forest. Crews also worked to complete habitat suitability assessments on Mineral Creek; however, both efforts were hampered by high flows from rainfall caused by tropical storm Odile.

Bobby Duran, Jason Davis, and Ernie Teller assisted USFWS Grand Junction (Region 6) and NMDGF with annual small-bodied and adult fish community monitoring on the San Juan River from Shiprock, New Mexico to Mexican Hat, Utah. Additional support was provided by New Mexico Ecological Services Field Office (ESFO), University of New Mexico (UNM), ASIR, NMDGF and UDWR.

In collaboration with New Mexico ESFO, Andy Dean and Chris Kitcheyan completed presence/absence surveys in Little Creek, West Fork Gila River, and Middle Fork Gila River, Gila National Forest for headwater chub. Headwater chub were present in West Fork and Middle Fork, but absent in Little Creek. In addition, the crew was attempting to collect brown trout eDNA samples for Arizona Game and Fish Department (AGFD). The AGFD are attempting to develop an eDNA marker for the invasive brown trout that will be detectable in water samples. No brown trout were collected during surveys.

In cooperation with Navajo Nation Department of Fish and Wildlife and New Mexico ESFO, Chris Kitcheyan completed fall monitoring for bluehead sucker and the endangered Zuni bluehead sucker. Crews surveyed seven streams located on Navajo Nation.

As of 30 September 2014 the Salvage Crew, Bureau of Reclamation (BOR) and volunteers salvaged Rio Grande silvery minnow (RGSM) from 17.0 unique river miles of the Rio Grande. Fourteen miles were located within the San Acacia Reach, which lies between the south boundary of Bosque del Apache National Wildlife Refuge and near Brown's Arroyo. Three miles of drying occurred in the Isleta Reach of the Rio Grande. A total of 44 RGSM were collected and transported to flowing water. Nineteen of the 44 RGSM were hatchery marked fish. Thomas Archdeacon, Tristan Austring, Kjetil Henderson, and Rebecca Cook make up the 2014 Salvage Crew.

In cooperation with Pueblo of Isleta and Pueblo of Sandia, Thomas Archdeacon and Tristan Austring completed monthly monitoring for RGSM. Monitoring determines presence/absence of visible implant elastomer tagged fish from augmentation and research efforts.

Chris Kitcheyan and Angela James assisted New Mexico ESFO with nonnative fish removal from Agua Remora, Cibola National Forest for the benefit of the Zuni bluehead sucker. The Zuni bluehead sucker was listed in August 2014 as endangered.



Figure 2. The endangered Zuni bluehead sucker.

Thomas Sinclair, Thomas Archdeacon, Kjetil Henderson and Rebecca Cook assisted Southwestern Native Aquatic Resources and Recovery Center with Visible Implant Elastomer (VIE) tagging of RGSM. Crews VIE tagged 81,000 RGSM and are expected to tag an additional 169,000 fish in October and November 2014. Staff will begin to stock RGSM in October 2014 in accordance with the RGSM Augmentation Plan.

Stephen Davenport and Andy Dean completed Pecos River fish community monitoring at eleven of 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.

Angela James assisted NMDGF and UNM with collection of lengths and weights for the Colorado pikeminnow housed at

NMFWCO for an ongoing isotopic fractionation study. The study, in collaboration with UNM and NMDGF, intends to explain trophic relationships among Colorado pikeminnow and their potential prey in the San Juan River. The study is expected to continue for another three months.



Figure 3. Scanning of a Colorado pikeminnow for its PIT tag.

Meetings and Trainings

Thomas Sinclair and Jason Davis participated in the 2014 Project Leaders meeting.

Thomas Sinclair and Jason Davis participated in the San Juan River Basin Recovery Implementation Program (SJRRIP) – Coordination Committee conference call. Participants discussed the 2015 Annual Work Plan.

Jason Davis participated in the San Juan River Basin Recovery Implementation Program (SJRRIP) – Biology Committee conference call. Participants discussed the recent proposal from Bureau of Reclamation (BOR) and Program Office that would modify how end-of-year storage is calculated which in

turn would help in determining the following year's spring flow releases. In addition, participants discussed a Habitat Restoration Scope of Work submitted by The Nature Conservancy.

Chris Kitcheyan participated in a Federal Emergency Management Agency (FEMA) Meeting hosted by the Pueblo of Santa Clara. Participants included BOR, Army Corp of Engineers, Senator Udall's Office and all tribal departments. The meeting reviewed ongoing projects within Santa Clara Canyon, which was burned during the Los Conchas fire in 2011.

Angela James participated in the Middle Rio Grande Environment, Education, and Employment Alliance meeting hosted by Open Space Visitors Center in Albuquerque, New Mexico.

Jason Davis and Thomas Archdeacon attended a RGSM Catch per Unit Effort (CPUE) Workshop planning meeting. The working meeting reviewed known research and results associated with CPUE and RGSM and information gained from the meeting will aid in the development of questions to be examined during an upcoming CPUE Workshop. Participants included BOR, Middle Rio Grande Conservancy District, Albuquerque Bernalillo County Water Utility Authority, and Interstate Stream Commission.

Education and Outreach

Over the course of three days, 25 Bosque School students assisted Angela James and Stephen Davenport collect fish from the Rio Grande for the 2014-2015 Native Fish in the Classroom project. While students were helping with fish collections they were also learning how to seine, identify fish, and follow the monitoring protocols for the RGSM. With the students help NMFWCO collected western mosquitofish, red shiners, flathead chub, river carpsucker, and fathead minnows. The fish will be delivered to classrooms in January 2015.



Figure 4. Angela James instructing students on how to seine.



Figure 5. Bosque students seining for fish.

Angela James participated in the 2014 Dragonfly Festival hosted by Bitter Lake National Wildlife Refuge (BLNWR). During the Festival, she led a session in the

Youth Wildlife Discovery Tour which included fish, amphibians, reptiles, and birds of BLNWR. Our fisheries session displayed both drawings and live fish species of the Pecos River drainage. Youth also had an opportunity to hold various fish that were caught in a minnow trap set out to demonstrate sampling methods in spring habitats.



Figure 6. Fisheries display for the Youth Wildlife Discovery Tour.



Figure 7. Youth holding a fish of the Pecos River drainage.

Angela James completed work on a new coloring book entitled *Silvery Minnow, What Makes This Home for You?*. The coloring book is available for download from the NMFWCO Outreach and Education website (<http://www.fws.gov/Southwest/fisheries/nmfwco/education.html>).

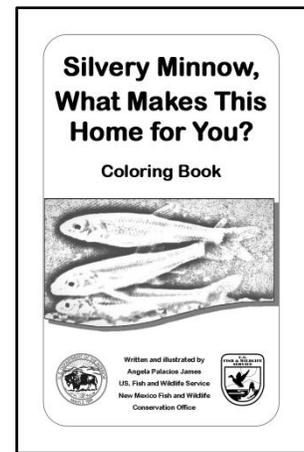


Figure 8. Title Page of *Silvery Minnow, What Makes This Home for You?*

Noteworthy

Stephen Davenport rescues a hawk from the banks of Pecos River. The hawk was found wet, tired and unable to fly. Using the seine net, he was able to collect the bird from the river and get it to dry land.



Figure 9. Steve Davenport moving a hawk from the river to dry land.



Figure 10. A hawk recovering from his plunge in the Pecos River.

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U.S. Fish & Wildlife Service
Southwest Region
Fisheries and Aquatic Resource Conservation



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Current staff members

Thomas Sinclair	Project Leader
Jason Davis	Assistant Project Leader
Angela Carrillo.....	Administrative Officer
Kimberly Flowers.....	Office Assistant
Stephen Davenport	Supervisory Fish Biologist
Chris Kitcheyan	Supervisory Fish Biologist
Weston Furr	Fish Biologist
Thomas Archdeacon.....	Fish Biologist
Dustin Myers.....	Fish Biologist
Angela Palacios James.....	Fish Biologist
Bobby Duran	Fish Biologist
Andy Dean.....	Fish Biologist
Kjetil Henderson	Fish Biologist
Rebecca Cook.....	Fish Biologist
Ernest Teller Sr.	Biological Science Technician
Tristan Austring	STEP Student