

SOUTHWESTERN NATIVE AQUATIC RESOURCES AND RECOVERY CENTER



December 2014 Monthly Activity Report



Guzman beautiful shiner (*Cyprinella formosa*) Photo credit: Tom Kennedy

IN THIS ISSUE

Partnerships and Accountability..... 1

Aquatic Species and Conservation Management 2

Leadership in Science and Technology..... 3

Workforce Management 3

Additional Activities 4

Upcoming Events..... 5

Partnerships and Accountability

Wade Wilson attended the Gila Trout and Chihuahua Chub Recovery Team Meeting held in Albuquerque, New Mexico. In preparation for this meeting, 87 wild Gila trout collected in 2014 from West Fork and White Creek were sequenced to examine genetic variation. Species fact sheets for Chihuahua chub (*Gila nigrescens*) and Guzman beautiful shiner (*Cyprinella formosa*) were updated and provided to the group for discussion and future planning efforts.

STAFF

Center Director	Manuel Ulibarri
Deputy Center Director	Vacant
Administrative Officer	Maria Bullard
Administrative Technician	Michelle Bell
Office Assistant	Stephanie Callicutt
Fish Biologist	William Knight
Fish Biologist	Ian Paige
Fish Biologist	Garrad Poole
Fish Biologist	Tracy Diver
Bio Science Technician	Vacant
Maintenance Mechanic	Vacant
Maintenance Worker	Vacant
Maintenance Worker	Vacant

RESEARCH

Research Unit Leader	Wade Wilson
Research Fish Biologist	Renee Martin
Fish and Wildlife Biologist	Vacant
Fish Biologist (Genetics)	Morgan Robinson
Fish Biologist (Genetics)	Vacant

FISH HEALTH

Fish Health Leader	Teresa Lewis
Fish Health Biologist	Marlene Rodarte
Fish Health Biologist	Jason Woodland
Fish Health Biologist	David Hampton
Microbiologist	Linda Vannest
Fish and Wildlife Biologist	Ashlie Rademacher



Stocking Rio Grande silvery minnow at Shaffer's Crossing near Dryden, Texas, USFWS Photo

Aquatic Species Conservation Management

With the fish culture season winding down, 70,523 Rio Grande silvery minnow were stocked into the Rio Grande this month. This is the second year fish have been stocked at Shaffer's Crossing near Dryden, Texas, which is southeast of Big Bend National Park. In addition, 850 PIT tagged bonytail $\geq 300\text{mm}$ in total length were stocked in Lake Havasu, AZ at the Bill Williams National Wildlife Refuge. Bonytail that did not reach the target stocking size were PIT tagged and returned to the rearing ponds for additional grow out. Staff

anticipate stocking the fish into the Lower Colorado River in early spring 2015.

Fish Health staff conducted a Wild Fish Health Survey on Eufaula Lake, near Eufaula, Oklahoma in collaboration with USFWS Oklahoma Fish and Wildlife Conservation Office and Tishomingo National Fish Hatchery staff. The survey was conducted to establish a pathogen base line for paddle fish (*Polyodon spathula*) in Lake Eufuala. Samples from 14 fish were collected for virology and bacteriology. In addition, these fish were microscopically examined for internal parasites. The lab also received 57 fish from 6 species of Centrachids from the Comal River, Texas for parasitology virology and bacteriology testing.



Jesse Trujillo and Garrad Poole PIT tagged bonytail. USFWS Photo

In addition, Williams Creek National Fish Hatchery provided 150 Apache trout ovarian fluid samples from their initial winter spawning effort. Virology and bacterial kidney disease (the causative agent of *Renibacterium salmoniarum*) assays will be conducted. Testing will be completed in January.

Southwestern ARRC submitted Rio Grande silvery minnow for histology preservation. A total of 10 fish per lot maintained at the facility were preserved for screening for an emerging amoebic pathogen recently identified at a partner captive propagation facility.

FISH DISTRIBUTION for December 2014

<i>Species</i>	<i>Number</i>	<i>Size</i>	<i>Agency</i>	<i>Site</i>
Rio Grande silvery minnow	70,523	52mm	USFWS	Rio Grande at Shaffer's Crossing near Dryden, Texas
Bonytail	850	325mm	BOR	Lower Colorado River-R3, Multi-Species Conservation Program, Lake Havasu, Arizona

Leadership in Science and Technology

In December, Molecular Ecology Laboratory (MEL) staff completed genotyping 178 Upper Colorado River Basin humpback (*Gila cypha*) and roundtail chub (*Gila robusta*) samples. They also received 44 wild Spruce Creek Gila trout (*Oncorhynchus gilae gilae*) fin clips from the Mora National Fish Hatchery. DNA was isolated, and the samples were genotyped using 13 microsatellite markers multiplexed in four primer sets. The data was used to assist with spawning efforts in 2015. Wade Wilson assisted with annual field surveys of White Sands pupfish (*Cyprinodon tularosa*) and staff completed the screening of 48 unlabeled microsatellite markers for use on the species.



Ashlie Rademacher (left) and Marlene Rodarte (right) participate in the Wild Fish Health Survey at Eufaula, OK. USFWS Photo

Workforce Management

Ian Paige successfully competed and was selected for the TERM Fish Biologist position in the Fish Culture part of program. Ian has provided invaluable support with the implementation of Southwestern ARRC's fish propagation program. Congratulations, Ian!



Ian Paige, 2014 SNAFU award recipient. USFWS Photo

Teresa Lewis continued her work detail as the acting Project Leader at the Uvalde National Fish Hatchery in Uvalde, Texas.

Jesse Trujillo (NWR Pathways Intern) assisted the Fish Culture program during his winter break from school at Eastern New Mexico University.

Stephanie Callicutt completed several courses on DOI Learn and administrative staff closed out Budget Fiscal Year 2014 base accounts.

Staff participated in a number of conference calls this month, including the Region 2 Fisheries & Aquatic Conservation monthly call; Fish Technology Centers Conference call; R2FAC Budget conference call; RO Admin Conference Planning Committee call; and the GRCA Fisheries and HBC translocation conference call.

The annual holiday party was held on December 18. A potluck luncheon provided by the staff was enjoyed, as well as a white elephant gift exchange. The highlight of the party was the annual selection of the Center's SNAFU award for 2014. This year the award went to Ian Paige.

Additional Activities



Base-coarse material placed on the new C series ponds, levees and roads. USFWS Photo

Cirilo Alonzo from the Uvalde NFH assisted with the placement of base-coarse material on the new C series ponds, levees and roads. During this period, staff completed renovations on four additional earthen ponds in preparation for spring use.

Center staff cleaned and disinfected all heavy equipment, attachments and distribution trucks prior to being stored for the winter. Grounds and facilities maintenance included trimming weeds and raking out all debris from the well enclosures; collecting trash and debris from around all of the buildings and removing tumble weeds and debris that had blown into the rearing ponds. Batteries were replaced on the auto crane truck, dump truck, and the road grader.

Several private contractors were onsite providing maintenance repairs and services this month. Van Winkle Roofing from Roswell, NM continued replacing the south side roof of the Fish Culture building. Stewart & Stevenson from Lubbock, TX completed repairs to water pump on the Administrative building back-up generator and Rocky Mountain Cummins from Hobbs, NM replaced the computer board on the transfer switch on the Isolation/Quarantine building generator.



Fish Culture building roof repair near completion. USFWS Photo

Coats Plumbing from Artesia, NM unclogged the Administrative building drain lines. Green Field Electric from Dexter replaced several burnt-out relays and repaired the electronic switch at Well # 4. Repairs were also completed on the 9700 thermal cycler and Qiagen plate centrifuge in the Research Lab.

Printer and toner cartridges that were no longer compatible with our operating systems were provided to local schools. Six pounds of used ink cartridges and 230 lbs. of cardboard were recycled this month.

The area experienced below average ambient temperatures. Day highs were in the mid 30 degrees and night lows in the teens. The Center received 3 visitors for the month of December.

UPCOMING EVENTS

January 7- 8	<i>Colorado River Aquatic Biologist Annual meeting, Laughlin, NV</i>
January 13 - 14	<i>Upper Colorado River Endangered Fish Recovery Program and the San Juan River Basin Recovery Implementation Program's Annual Researchers Meeting, Moab, UT</i>
February 5-7	<i>Joint AZ / NM AFS and TWS Meeting, Las Cruces, NM</i>
February 9-13	<i>Administrative Conference, Albuquerque, NM</i>
February 23-25	<i>Bonytail Broodstock Coordination Meeting, Dexter, NM</i>