

# SOUTHWESTERN NATIVE AQUATIC RESOURCES AND RECOVERY CENTER



## November 2014 Monthly Activity Report

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The first snowfall of the season came on November 17 providing a beautiful landscape at the Southwestern ARRC. USFWS PHOTO

### Partnerships and Accountability

Center staff hosted biologists from the Arizona Game and Fish Department (AZGFD), Bubbling Ponds SFH and the Native Fish Conservation Facility on November 19. The group toured the Center and discussed AZGFD's plans to renovate and expand the outdoor facilities at Bubbling Ponds to meet future native species captive propagation needs and requirements.

#### STAFF

Center Director	Manuel Ulibarri
Deputy Center Director	Vacant
Administrative Officer	Maria Bullard
Administrative Technician	Michelle Bell
Office Assistant	Stephanie Callicu
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 M. n
Fish and Wildlife Biologist	Vacant
Fish Biologist (G)	Morgan Robinson
Fish Biologist (G)	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

## FISH DISTRIBUTION for November 2014

<i>Species</i>	<i>Number</i>	<i>Size</i>	<i>Agency</i>	<i>Site</i>
Colorado pikeminnow	393,442	55mm	BOR	San Juan River, Farmington, NM
Colorado pikeminnow	248	77mm	BOR	San Juan River at Hogback Diversion, Farmington, NM
Colorado pikeminnow	205	183mm	BOR	San Juan River at Hogback Diversion, Farmington, NM
Razorback sucker	212	160mm	BOR	San Juan River at Hogback Diversion, Farmington, NM
Rio Grande silvery minnow	152,383	56mm	USFWS	Middle Rio Grande, NM Reach
Wound n	4,500	50mm	UDWR	Wahweap State Fish Hatchery, UT



Third and final RGSM tagging, USFWS PHOTO

### *Aquatic Species Conservation Management*

The third and final tagging effort of Rio Grande silvery minnow (RGSM) occurred this month. A total of 233,033 age-0 fish were Visible Implanted Elastomer (VIE) tagged this year. Subsequently the fish were stocked into 12 locations in the middle Rio Grande, New Mexico. An additional 70,000 age-0 fish will be stocked into the Big Bend National Park, Texas reach of the Rio Grande in November. Total RGSM production for the year (Big Bend and Middle Rio Grande reaches) equaled 303,556 fish with an average total length of 52mm and average weight of 120 grams each.

On November 6, 393,442 age-0 Colorado pikeminnow were stocked into the San Juan River at the PNM weir; Bird, Boyd and River Park locations near Farmington, New Mexico. Later in the month 4,500 woundfin were provided to the Wahweap State Fish Hatchery in Utah for growout and use as broodstock.

As temperatures dipped down to the single digits this month, 2 D-series and 7 C-series ponds were prepped, boarded, filled, and bird netted to receive fish. These ponds are being used for overwintering of the 2014 year class of bonytail, woundfin, Rio Grande silvery minnow and Pecos bluntnose shiner. At the end of the month, Desert pupfish, Guzman beautiful shiner, Comanche Springs pupfish, and Big Bend gambusia were collected by seining from the refuge ponds. Approximately 500-1000 individuals from each species are held indoor during the winter months. One pond of bonytail was harvested for sorting, tagging, and eventual stocking into the lower Colorado River, Reach 3, Lake Havasu, Arizona area in December.

Fountain darters from the San Marcos and Comal Rivers in Texas were received this month. San Marcos Aquatic Resource Center provided sixty fish from each location for virology testing. Ten fish from each of the site were also microscopically examined for parasite enumeration. In addition, the Fish Health Unit responded to a request from Mora National Fish Hatchery to conduct a diagnostic examination on Iron Creek and South Diamond Gila trout. The facility was experiencing higher than normal mortalities. In total, five Gila trout were collected and sampled for bacterial and viral pathogens. Microscopic examination on skin and gills was also performed.



Third and final RGSM tagging, USFWS PHOTO

## Leadership in Science and Technology

In November, Molecular Ecology Laboratory staff, Morgan Robinson and Renee Martin, completed genotyping 234 Gila trout (*Oncorhynchus gilae gilae*) representing the 2012 South and Main Diamond lineages held at Mora National Fish Hatchery. The 10% QAQC of these samples and secondary scoring was also completed. The samples were genotyped using 13 microsatellite markers. The data will be used in the 2015 spawning. The lab also isolated DNA and began genotyping 178 Upper Colorado River Basin humpback chub (*Gila cypha*) and roundtail chub (*Gila robusta*) samples.

Genetic monitoring of Rio Grande silvery minnow (*Hybognathus amarus*) continued. Fin clips were collected from 100 Rio Grande silvery minnow representing fish that were stocked into the Isleta and San Acacia reach of the Rio Grande. The fin clips were transferred to the University of New Mexico for genetic analysis.

New Mexico State University student Meredith Campbell continued her research project in investigating the sensitivity of two methods for screening of Asian tapeworm, *Bothriocephalus acheilognathii*. Sample extractions from bonytail fecal swabs have been completed. Completion of PCR assays are pending.



RGSM n clipping,  
USFWS PHOTO



Renee Martin, USFWS PHOTO

## Workforce Management

Renee Martin successfully competed and was selected for a fulltime permanent Research Fish Biologist position at the Center. Renee will continue as the lab manager and her new duties include conducting additional research as the Unit rebuilds and grows.

Wade Wilson also changed positions with a promotion to Research Unit Leader. Wade will continue to direct the genetics program and act as the Regional Geneticist. He will also oversee and direct the Physiology and Pathobiology programs at the Southwestern ARRC.

The Center's quarterly staff and safety meeting was held on November 4. Unit updates were provided. After the meeting, a pot luck luncheon provided by the staff was enjoyed by all.

On November 17, Teresa Lewis began a work detail as the acting Project Leader at the Uvalde National Fish hatchery in Uvalde, Texas. The detail will continue until January 10, 2015. In her absence, Marlene Rodarte is the Acting Fish Health Unit Leader and will coordinate work for the lab in interim.

Administrative staff met with Manuel Ulibarri and Teresa Lewis to discuss arrangements for the upcoming Fish Biologist Meeting. Maria Bullard also participated in the conference call for the upcoming Administrative Workshop to be held in Albuquerque.

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Wade Wilson, USFWS PHOTO

Center staff attended a webinar on the Most Common Retirement Planning Mistakes presented by FEDweek and participated in the Advanced Topics in Conservation Genetics Webinar series.

Marta Estrada, San Marcos Administrative Officer, visited the facility and reviewed the procedure for processing reimbursable contracts with Maria Bullard.

Staff participated in a number of conference calls this month, including the RO Admin Conference Call and Planning Committee for the upcoming R2 Administrative Conference, Region 2 Fisheries & Aquatic Conservation monthly call, and the Virgin River Recovery Program Technical Committee call.



### Additional Activities

Annual preventative maintenance was scheduled for the ABI 7300 real-time PCR systems, the Qiagen plate centrifuge and 3130xl genetic analyzer. A 9700 thermal cycler was also sent in for repair.

Fish Culture staff continued general maintenance of all facilities including changing light bulbs, repairing flat tires, performing oil changes on UTV carts, and mowers, and mowing and trimming weeds around ponds and buildings.

Jack Pantusa, from Roswell, NM rewired new fresh-flo aerators and associated rheostats on the two compartment fiberglass fish hauling tank.

Repair and replacement of the south side of the Fish Culture Building roof began in November. The structure was damaged by high winds in July. Center staff also worked with Regional Engineering and Contracting divisions on developing a scope of work for the Administrative Building Boiler Replacement project.

The Center received 10 visitors, 1.65" of rain and the first snow of the year.

Repair of the Fish Culture building's south side roof, USFWS PHOTO

### UPCOMING EVENTS

December 01-05	<i>Fish Health sta will be conduc ng a Wild Fish health Survey at Eufaula Lake, Oklahoma</i>
December 03	<i>RGSM stocking into Big Bend, Rio Grande, TX Reach</i>
December 03-04	<i>White Sands pup nual monitoring</i>
December 09-10	<i>Bonytail stocking into Lower Colorado River, Lake Havasu, AZ</i>
December 18-19	<i>Gila Trout and Chihuahua Chub Recovery Team mee ng, Albuquerque, NM</i>
January 7- 8	<i>Colorado River Aqua c Biologist Annual mee ng, Laughlin, NV</i>
January 13- 14	<i>Rocky Plains Fish Pathologists mee ng in Denver, CO. The mee ng is hosted by the Colorado Department of Wildlife Aqua c Animal Health Laboratory.</i>
January 13 -14	<i>Upper Colorado River Endangered Fish Recovery Program and the San Juan River Basin Recovery Implementa on Program's Annual Researchers Mee ng, Moab, UT</i>