Conserving Aquatic Species

Spawning and stocking activities resumed this month. Adult razorback sucker were harvested from their winter holding ponds, sorted and spawned on March 30. Young of year woundfin were harvested, sorted, VIE tagged and three thousand target sized fish stocked into the Virgin River near Hurricane, Utah. Bonytail production ponds were harvested as well and fish measuring >305 mm were inventoried, hauled and stocked into Reach #4 of the Lower Colorado River and stocked into the Oxbow and A10 backwater area near Ehrenberg, Arizona, on behalf of the Bureau of Reclamation, and the LCR Multi–Species Conservation Program. In addition, 400 adult bonytail were transported and stocked into protected backwater areas near Katherine’s Landing, Lake Mohave, Arizona for use in the final year of a study to investigate the genetic diversity of progeny produced in a backwater setting. Project partners include the Bureau of Reclamation Nevada Office and the University of New Mexico.
Fish Distribution during the Month of March

<table>
<thead>
<tr>
<th>Species</th>
<th>Number</th>
<th>Size</th>
<th>Agency</th>
<th>Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bonytail</td>
<td>1,289</td>
<td>326mm</td>
<td>BOR</td>
<td>Lower Colorado River- R4 (Oxbow - A10 backwater) Multi-Species Conserva-</td>
</tr>
<tr>
<td>Bonytail</td>
<td>400</td>
<td>272.5mm</td>
<td>BOR</td>
<td>Lower Colorado River - R2 (Backwater Study) Multi-Species Conservation Program, Lake Mohave, Arizona</td>
</tr>
<tr>
<td>Bonytail</td>
<td>1,267</td>
<td>234mm</td>
<td>USFWS</td>
<td>Mora National Fish Hatchery, Mora, NM (Second BTC Refuge Population)</td>
</tr>
<tr>
<td>Woundfin</td>
<td>3,000</td>
<td>65mm</td>
<td>STG</td>
<td>Virgin River near Hurricane, UT</td>
</tr>
</tbody>
</table>

The Willow Beach NFH annual aquatic animal health inspection was conducted on March 1. Four lots of razorback sucker were collected by Fish Health staff and transported to the Center for processing. Fish health also received ovarian fluid samples collected from 239 Gila trout at Mora NFH and one adult fish for diagnostic examination. These samples will be included in Mora NFH’s annual aquatic animal health inspection report. The Albuquerque Biopark Rio Grande Silvery Minnow (RGSM) Refugium submitted several RGSM samples for virology, bacteriology and histopathological diagnostics.

Tracy Diver completed one molecular confirmation case for bacterial kidney disease (BKD) and two independent cutthroat trout virus (CTV) cases. In addition, she sequenced all positive suspect cases for FY16 to confirm results.

Scientific Capacity

The Molecular Ecology Laboratory (MEL) received larval Colorado pikeminnow (*Ptychocheilus lucius*) samples collected from the Upper Colorado River Basin. Center staff will be assessing the genetic variation of upper basin populations and comparing results to the broodstock at Southwestern ARRC.

The life stage developmental series for the ninth and final Pecos River species, the manantail roundnose minnow (*Dionda argentosa*) was initiated this month. Fish Culture staff successfully induced the minnow to spawn and the various life stages will be collected over the next few months. The series consist of 30+ collections of 6 to 10 fish at designated time frames over a three month period. The project is a collaborative effort with the Bureau of Reclamation, Museum of Southwestern Biology - University of New Mexico, American Southwest Ichthyological Researchers and USFWS New Mexico and Texas Fish & Wildlife Conservation Office. Results from this project will be used to develop an illustrated guide to the cypriniform (minnows and suckers) fish larvae of the Pecos River, New Mexico, to aide in effective management of the species.

Michael Schwemm genotyped over 700 Neosho Smallmouth Bass (*Micropterus dolomieui velox*) tissue samples for our collaboration with the Oklahoma Fish and Wildlife Cooperative Research Unit. Sandra Bohn assisted with the QAQC on the project and finished genotyping over 600 samples of Humpback Chub (*Gila cypha*), Bonytail (*G. elegans*), and Roundtail Chub (*G. robusta*) from the Upper Colorado River Basin for 19 microsatellite markers. Tracy Diver completed the QAQC for this project.
Workforce Management and Training

Kary Allen, Chief, Office of Diversity and Civil Rights, provided EEO and Diversity Training to the entire Southwestern ARRC staff. Several employees that were unable to attend completed the required training in DOI Learn. William Knight also completed Veterans Hiring training and Uniformed Service Employee training.

The 2016 FISSA Training and Mid-Year Performance Reviews were completed by all staff this month. In addition; Martha Keller completed the requirements necessary to obtain her New Mexico State Veterinary License; Wade Wilson completed a 3 week detail to San Marcos Aquatic Resource Center as the acting Center Director and Cecilia Lamb assisted with day-to-day fish culture activities at the Uvalde NFH.

On March 28 through April 1, Ashlie Peterson and Martha Keller took part in the National Fish Health Biologists’ meeting held in Seattle, WA. This meeting brings together fish health center staff members throughout the nation to discuss topics related to fish health. Topics on the agenda for this year included revisions to the Service’s Aquatic Animal Health Policy (713FW), options for pursuing lab accreditations, implementation of a quality improvement program for all centers, and discussions regarding working with non-fish aquatic animals. The final day took place with our USGS partners at the USGS Western Fisheries Resource Laboratory. Staff received tours of the facility, learned about the research that USGS was performing, and discussed future needs and opportunities for collaborative partnerships moving forward.

Colby Crouse, Fish Biologist in the Fish Culture part of the program, resigned his position effective March 18. Colby will be returning to school to pursue a nursing degree. Best wishes to Colby. Interviews were conducted for the vacant Maintenance Mechanic, WG-4749-10 and Fish Biologist, GS-0482-7/9, positions.

Engaging and Educating the Public and Our Partners

On March 23, Southwestern ARRC staff participated in the “Positive Change Fair” at the Dexter High School. Casey Booth, Ashlie Peterson, Ian Paige and Tracy Diver represented the Center. The event presents an excellent opportunity to introduce students to job opportunities available in the local area. It is also a great way for students to engage with current employees and ask questions about the field of wildlife conservation, employee backgrounds and the qualifications needed for particular positions. A total of 87 students stopped by the booth to view a USFWS careers video and speak with the staff.

Michael Schwemm coauthored a talk, “Genetic variation in catostomid suckers of Colorado, with emphasis on genetic contribution to larval drift in streams of the Gunnison River basin” with coauthors Kevin Thompson (Colorado Parks and Wildlife), and Evan Carson and Thomas Turner (University of New Mexico). This talk was presented at the 2016 Western Division of the American Fisheries Society, Reno, Nevada on March 23.

Center staff participated in the Region 2 Fisheries & Aquatic Conservation monthly conference call, and several conference calls discussing the findings of Bacterial Kidney Disease (BKD) at federal and tribal facilities in the region. Discussions centered on options for fish currently being held at the facility as well as increasing wild fish health surveys in nearby waters to better evaluate the prevalence of BKD in the wild.

Southwestern ARRC received 31 visitors this month.
**Additional Activities**

Darik’s Boot and Nuke (DBAN) was completed on all retired computers; paperwork was prepared to place the machines on GSAXcess where local schools can go through “Computers for learning” and claim the machines. This year Dexter Schools will receive the available computers.

Maintenance and Fish Culture staff conducted general up-keep of Southwestern ARRC grounds and facilities including pond liner repairs, mowing, weed eating and cleaning of buildings. Preventive maintenance was completed on all generators and the water pumps in the mechanical room of the administrative building. New air regulators were installed in the maintenance shop and a hose for the hydraulic oil tank on a Kubota RTV repaired. Several earthen and lined ponds were prepped to receive fish for the summer.

J&J mufflers in Las Cruces, New Mexico replaced an axle on the gooseneck fish distribution trailer after one of the hubs broke off. All of the equipment on the trailer was inspected for repairs and the bearings and tires serviced. Fulkerson Plumbing from Roswell, New Mexico, diagnosed and repaired the air conditioning unit in the Fish Culture Building; a new motor and variable speed controller were installed. The alternator and belt tensioner on the NorAm Road Grader was also replaced.

Coats Pump from Dexter, New Mexico refurbished well #3. StoreFront Specialists & Glazing from Albuquerque, New Mexico completed the replacement of the skylight in the Administrative Building lobby. Southwest CM, LLC also from Albuquerque completed the Morton Building loft renovations. This was a 2015 deferred maintenance project awarded in September, 2015. Michael Zamora (Region 2, Construction Inspector) visited the station and completed the final inspections for both projects.

The Center recycled 7 lbs. of empty printer toner cartridges this month.

**Upcoming Events**

- April 4 – Seminar - Michael Schwemm presenting on *Gila* genus in the Gila River basin as part of the upcoming AFS-ASIH naming committee.
- April 5 – Aquatic Animal Health Inspection at Alchesay/Williams Creek NFH
- April 12 – Wild Fish Health survey on the Grand Lake O’ The Cherokees, OK
- April 18 – Razorback sucker stocking at Navaho Nation - NAPI ponds
- April 18 – Pahranagat roundtail chub spawning
- April 25 – Bonytail spawning
- April 26 – Aquatic Animal Health Inspection at Byron, OK SFH