



Uvalde National Fish Hatchery

Monthly Activity Report

February 2016



Staff

Project Leader • Patricia Duncan

Fish Biologist • vacant

Engineering Equipment Operator • Cirilo Alonzo

Maintenance Worker • Rene Guerra

Administrative Assistant • Mark Dietrich

Volunteers • Thomas Jetzer and Patricia Schenk

Partnerships and Accountability

As identified in approved Recovery Plans, refugia efforts continued for the Texas Wild Rice, Fountain Darter, Comanche Springs Pupfish, Devils River Minnow, and San Marcos salamander in January.

The station continued to maintain communications with the San Marcos Aquatic Resource Center (SMARC) for existing and upcoming refugia activities of threatened and endangered species native to the Edwards Aquifer system.

In collaboration with the Southwestern Native Aquatic Resources and Recovery Center (SNARRC) and other partners, Uvalde NFH will be raising Rio Grande silvery minnow again in 2016. These fish produced at Uvalde will augment the numbers released to the Rio Grande in recovery efforts.

On February 5 Thomas Jetzer, Patricia Schenk and Pat Duncan visited San Marcos for the 20th annual “we’re still here luncheon”. They toured the facilities and consulted with staff on the

chlorination system designs, and invertebrate and fish culture systems. They also consulted with staff on Texas wild rice cultivation systems and reactivation of the Friends group at Uvalde.

Workforce Management

Mark Dietrich attended the administrator’s conference at the regional office in Albuquerque from February 1-4.

The job announcement for the vacant fish biologist position was processed at the Regional office and steps were taken to begin the job advertisement and selection process for the position.

Volunteers Thomas Jetzer and Patricia Schenk continued to work on a variety of projects at Uvalde.

In late February, Cecilia King from Southwestern Native Aquatic Resource and Recovery Center (SNARRC) began a two week detail at Uvalde NFH. Cecilia began work as an animal caretaker at SNARRC in July 2015. The extra help provided by Cecilia was greatly appreciated.

Progress continued on the processing of the Uvalde Student Conservation Association (SCA) Career Discovery Internship Program (CDIP) student this season. Student candidates who submitted applications for the position were identified and the process of selection initiated. The student will begin work at Uvalde in late May.

Cirilo Alonzo completed his annual herbicide and pesticide training in San Antonio on February 25.

Pat Duncan attended Aquaculture 2016 of the World Aquaculture Society in Las Vegas, Nevada from February 22-27.

Aquatic Species Activities

Temperatures continued to be low for most of February causing pond water temperatures to range from 11.1°C to 22.3 °C . Young of the year channel catfish continued to thrive although feeding was decreased due to the seasonal low water temperatures. The smaller size class averaged approximately 10 inches while the larger fish were approximately 15 inches in length.

Cleaning of wild rice raceways continued and pumps were removed for maintenance. Both older raceways and the new larger raceways were cleaned and new drain pipes and pump heads installed to better control water movement and adjust flow rates. Debris and any weeds were cleaned out and plants were resituated into cleared tanks with improved flow rates for growth and tiller development. Rice plants that had overgrown their pots were separated and repotted.

Production of Devils River minnow continued in the tank house raceways. Transfer of gravel trays from tanks with broodstock Devils River minnows to net cages for collection and hatching of eggs and larval fish rearing continued in February. Larger fry from fish spawned in January were moved from screen net cages to grow-out raceways.

Comanche springs pupfish continued to be reared in outdoor ponds and inside in raceways. Solar operated aeration systems were put into operation on pond 23 holding Comanche Springs pupfish where filamentous algae and aquatic weeds had become problematic. Within two weeks of operation of the aerators plus selected physical removal of the algae and aquatic macrophytes, the pond surface was

cleared of vegetation without the use of any chemical herbicides.

Research aquaria recirculating systems were repaired, cleaned and equipped for upcoming research with pupfish and Devils River minnow reproductive performance, egg and early life history survival. Another group of aquaria were prepared in order to put another recirculating aquaria system into operation.



Additional repaired and installed chilled water recirculating aquaria systems

Fountain darter refugia tank modifications were completed with the addition of small biofilters to each of the combination flow-through and recirculating chilled systems. A 14h light and dark photoperiod with grow lights was also added to the systems.

Facility Maintenance

Major work and repairs were completed in February on the Spurgeon Well control system and on the main water pipes to the ponds. Software programmer Howard Wiedknecht worked with the Spurgeon well water control system to determine the problem with the automatic control of the system. It was determined that the electronics on the flow meter were faulty and not relaying a signal, so the flow meter and prop were sent to be repaired and recalibrated. While Mr. Wiedknecht was on site, it was determined that the Spurgeon Well pump had never been programmed so that it could not be turned below 40 hertz. To ensure safe operating conditions for the Spurgeon pump, the system

was programmed so that controls could not be turned down to operate the pump below 40 hertz, which is how the operating controls are set for the Wilson Well pump.



Housing with Spurgeon Well pump and electronic controls.

Two major valves on the two ends of the main water line delivering water to all ponds in the row from pond 33 to pond 17 were dug out and repaired. This allowed proper water flow again to all ponds along this area of the station. The clamp at the 10 inch valve from the Wilson well also had to be repaired during February.

A number of projects were completed by the hatchery volunteers Patricia Schenk and Thomas Jetzer. A number of new aquaria were prepared and/ or repaired and installed to provide an additional research aquaria system. The volunteers refitted the small photovoltaic aeration systems with new more efficient surface aerators instead of the ice breaker type aerators which were originally installed. The volunteers then placed the new refitted systems into the pupfish pond number 23. Since these systems are on carts, they can be moved around to different ponds as needed. Equipment for additional similar systems have been ordered so that Patricia and Tom will be able to build two more systems before their volunteer time is up.

The volunteers also repaired, refitted and cleaned another chilled water recirculating system with aquaria which can now be used again as a refugium.

Outreach

On February 11, Mark Dietrich and Pat Duncan presented information on opportunities in fisheries and wildlife management at the Uvalde High School Career Day. They provided information about Uvalde NFH and fishery career opportunities to approximately 1,300 high school and 370 junior high school students during the day long event.

Plans continue for working with area Girl Scouts and Boy Scouts to develop scouting projects at the hatchery.

Weather

Temperatures for February ranged from a low of 26°F to a high of 85°F with an average temperature of 57°F. Pond water temperatures ranged from a low of 11.1°C to a high of 22.3°C for the month of January. There was 1.58 inches of measured rainfall in February in Uvalde.

Upcoming Events

March 22 Uvalde Tourism Council Meeting

March 28 Tour for Leakey Independent School Environmental Science class.

Uvalde National Fish Hatchery

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<http://www.fws.gov/southwest/fisheries/ualde/index.html>

Uvalde National Fish Hatchery February 2016

Species	Year Class	Geographic Origin	Approximate Number
Channel Catfish Broodstock	2014	Domestic Strain	200
Channel Catfish	2015	Domestic Strain	5,943
Comanche Springs Pupfish (Pond)	Mixed	Phantom Springs	152,058
Comanche Springs Pupfish (Tank)	Mixed	Phantom Springs	145
Devils River Minnow (F1)	2013	San Felipe Springs	217
Devils River Minnow (F2)	2014	San Felipe Springs	40
Devils River Minnow (F2)	2015	San Felipe Springs	420
Fountain Darter (W)	2012-2014	Upper Comal River	11
Fountain Darter (W)	2012-2014	Lower Comal River	14
Fountain Darter (F1)	2013/2014	Comal River Mix	250
Fountain Darter (F1)	2015	Upper Comal River	31
Fountain Darter (F1)	2015	Lower Comal River	19
Fountain Darter (F1)	2015	Comal River Mix	60
San Marcos Salamander (M)	2013	San Marcos River	4
San Marcos Salamander (F)	2013	San Marcos River	7
Texas Wild Rice	N/A	San Marcos R. (A)	63
Texas Wild Rice	N/A	San Marcos R. (B)	36
Texas Wild Rice	N/A	San Marcos R. (C)	15
Texas Wild Rice	N/A	San Marcos R. (D)	11
Texas Wild Rice	N/A	San Marcos R. (F)	15
Texas Wild Rice	N/A	San Marcos R. (G)	22
Texas Wild Rice	N/A	San Marcos R. (J)	3
Texas Wild Rice	N/A	San Marcos R. (K)	11
Texas Wild Rice	N/A	SMR (Unknown)	80

Species and number at Uvalde NFH at the end of the month.