



Uvalde National Fish Hatchery

Monthly Activity Report

June 2014



Staff

Project Leader • Grant Webber

Engineering Equipment Operator • Cirilo Alonzo

Maintenance Worker • Rene Guerra

Fish Biologist • Rick Echols

Administrative Technician • Sandra Castañeda

Pathways Student • Rueben Mendoza

Volunteer • Ian Westmeyer

Volunteer • Neal Tobias

Uvalde NFH is preparing to accept salvaged fish if the need arises.

The hatchery has been coordinating with the Texas Fish and Wildlife Conservation Office to provide approximately 1,600 channel catfish to the Alabama-Coushatta Tribe, located in northeast Texas. Delivery of the fish is scheduled for July 1st.

Workforce Management

Rueben Mendoza continued his work at Uvalde NFH as a member of the Pathways Program. He participated in a conference call on June 20th where he introduced himself and talked about his on-the-job experiences. Reuben continues to be an exemplary worker.

Partnerships and Accountability

As identified in approved Recovery Plans, refugia efforts continue for the Texas Wild-rice, Fountain Darter, Comanche Springs pupfish, and Devil's River minnow. All species continue to be performing well. The station continues to maintain communications with the San Marcos Aquatic Resource Center and Edwards Aquifer Recovery Implementation Program for existing and upcoming refugia activities of threatened and endangered species native to the Edwards Aquifer system. In addition, an agreement is in place for the Uvalde National Fish Hatchery to provide 700-F1 juvenile fountain darters to the USGS facility in West Virginia.

Water levels continue to decline in the range of the Devil's River Minnow near Del Rio, Texas. New access has been granted and teams (including the Texas Fish and Wildlife Conservation Office) are preparing for salvage efforts, especially on Pinto Creek. Through coordination with the Fish Health Center, the



FWS Pathways Student Rueben Mendoza stocking fish for Fishing Derby

Ian Westmeyer continued to volunteer with us during the month of June. For the month, he logged 62 hours. He has taken on daily care responsibilities for fountain darters and Devil's River minnow. He will also be assisting in mending the damaged bird netting and clean rice plants this summer.

Neal Tobias, who last volunteered with us over his Christmas break from college 6 months ago, volunteered at the hatchery for one day this month. His timing was perfect as he was quickly put to work repairing support systems for bird netting that was damaged a recent storm. In addition, he created several Texas wild rice pots out of old bleach bottles.

Cirilo Alonzo made another trip to the Southwestern Native Aquatic Resource Center in Dexter, NM to assist them with heavy equipment work related to pond creation.

Project Leader, Grant Webber, left for a 30-day detail to Panama City Field Office. Since he has experience in both Ecological Services and Fisheries, he was asked to assist that office as the acting Deputy Field Supervisor. The office has both Ecological Service and Fish and Wildlife Conservation Office responsibilities. During his detail, he will be assisting the Field Supervisor with issues associated with both Fisheries and Ecological Services.

Aquatic Species Activities

Staff placed 3,000 channel catfish into a one acre pond early this month to provide fish for future derby events and to replace broodstock.

All 2011 and 2013 year class channel catfish were harvested this month and placed into transfer raceways. Two hundred 2013 YC CCF were placed into a one half acre pond to serve as hatchery broodstock for the next two years. The bulk of the remaining catfish will be stocked into Tribal waters. This will greatly reduce the number of catfish we keep on station and reduce the associated costs in feed, labor, and water usage.

The station continues to hold 700+ juvenile fountain darters destined for life history studies at the USGS office in West Virginia.

Copper sulfate is the most widely used aquatic chemical at Uvalde NFH to control algae. Although it is an effective tool against problematic algae, it is not currently used in ponds holding Comanche Springs pupfish since we do not know the effects to the species. Since their tolerance levels are unknown, we have begun studying the effects of varying dosage levels of copper sulfate on the species. We have begun tank studies in which pupfish are subjected to increasing levels of copper sulfate. We expect to determine the LC50 for Comanche Springs pupfish exposed to copper sulfate. Our preliminary findings suggest that pupfish can tolerate copper sulfate levels that are typically used to control algae.

Pupfish are also very territorial. We also seek to learn if individuals will leave areas of high concentration of copper sulfate or stay to defend their territory, regardless of chemical concentration. This is important knowledge since spraying sometimes creates "hot spots" before the natural mixing occurs.

Michelle Crawford's light intensity PhD project continued to progress this month. Initial seed germination was poor, but has recently been experiencing more successful germination. She will soon be placing the study plants in treatment groups with varying light intensities.

Additional Facility Activities

Uvalde NFH passed its annual health inspection again this year meaning that we maintain our "class A" rating for another year.

Facility Maintenance

Mark Orton and Art Tourjee visited the hatchery to survey the new electrical needs of the hatchery. The tankhouse's current electrical set-up is no longer meeting the needs of the station's new intensive aquaculture activities. The station is now focused primarily on intensive culture of various species, which

include fountain darter, San Marcos salamander, and Devils River minnow. These species require recirculation pumps, lighting, and chiller units, which were not originally configured into the tankhouse's building design. Engineering has provided plans to the Project Leader for review and approval. Approved plans were submitted to the Engineering, Fisheries, and Contracting offices for finalization. We hope to have the project advertised for bid within the next couple of weeks.

A contract has been awarded to replace two soffit areas on the hatchery's Administrative building Complex. However, an adjacent wall to the one of the soffit replacement areas (veranda area for tankhouse), was damaged during a tornado storm event that occurred the evening of June 12th. Since the damage occurred adjacent to one of the contracted project areas, the awarded contractor was requested by the Contracting Office to provide a bid for the additional repair work. The bid will be provided to the Contracting Office for evaluation and consideration. The heavy winds caused the veranda wall to bow inward popping off drywall panels and bending metal wall beams. In addition, the soffit area for the Administrative Building entrance was also damaged; however, no structural damage occurred, only damage to the soffit panels, which were to be demolished as part of the soffit contract work. Due to safety concerns, hatchery staff removed all of the soffit tiles and hanging structures.



Hatchery sign blown off its supports during the storm.



Damage to the front entrance area of the main building.



Shredded bird netting resulting from 80 mph winds.

Safety

The Michelin Tire Company instituted a large tire recall. Grant checked all tires on station and reported that the station does not have tires subject to the recall.

Recycling Efforts

Staff recycled 30 pounds of cardboard, 15 pounds of paper, 8 pounds of glass, and 20 pounds of plastic this month.

Facility Visitors

Hatchery visitation was down significantly this month as school field trips ended with the end of the school year. However, a tour of the facility was provided to 18 youth as part of the Discovery Child Care Center, Uvalde, Texas. In addition to the tour, at least 35 individuals visited the hatchery this month, one family from as far off as California. Visitors toured the hatchery and participated in photography, hiking, and bird watching.

Weather

On the evening of June 12, a strong line of thunderstorms moved through the Uvalde area. The hatchery sustained damage to the east wall of the tank house. This external wall was left bowed with supporting beams twisted. The walk out door will no longer open. Eighty mile per hour winds destroyed bird netting from two ponds, and a piece of roofing metal came loose from the rice holding area. Raceways that were being stored outdoors, under a canopy structure were knocked over and scattered throughout the area. Several trees had limbs broken off throughout the hatchery. The stations road to the well area was completely blocked by damaged or downed trees. Although no tornado was observed by hatchery staff, residents of Uvalde reported what appeared to be a tornado passing through the area. Regardless, winds in excess of 80 miles per hour came through the hatchery causing damage to the facility building and grounds.

Temperatures for June ranged from a low of 68°F to a high of 105°F. Overall, high temperatures were slightly above normal with the reported average high for the month at 93°F and the observed at 93.7°F. Low temperatures were above normal with the long term average for the month at 71°F versus the observed 73.2°F. Measurable rainfall occurred on 11 days in June with precipitation totaling 2.81 inches. According to The Weather Channel, the monthly precipitation average for Uvalde in June is 3.54 inches. The fall in the level of the aquifer accelerated this month as crop irrigation continued in earnest and rainfall was below normal. Nearby locations did receive more rain (up to 15 inches in a 24 hour period).

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