



Uvalde National Fish Hatchery

Monthly Activity Report

May 2015



Staff

Project Leader • Vacant

Acting Project Leader • Rick Echols

Fish Biologist • Rick Echols

Engineering Equipment Operator • Cirilo Alonzo

Maintenance Worker • Rene Guerra

Administrative Assistant • Mark Dietrich

Biological Science Technician • Catherine Baxter

Pathways Program • Rueben Mendoza

Directorate Fellowship Program • Justin Crow

needed for other research, so trials will continue in the fall.

Communications continue between staff at Uvalde NFH and SMARC regarding the implementation of a San Marcos salamander reproductive study.

Workforce Management

Rick Echols continued the role of acting project leader during May.

Rueben Mendoza has returned to our facility to complete the third year of his Pathways Program. He is conducting a study to see if our hatchery is suitable for raising Rio Grande Silvery Minnow for reintroduction in the Rio Grande River at Big Bend National Park.

Partnerships and Accountability

As identified in approved Recovery Plans, refugia efforts continue for the Texas Wild Rice, Fountain Darter, Comanche Springs Pupfish, Devil's River Minnow, and San Marcos salamander. All species are thriving.

The station continues 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.

Uvalde National Fish Hatchery continues to consult with Dave Straus and Cindy Ledbetter of the Harry K. Dupree Stuttgart National Aquaculture Center to work out details of a copper sulfate toxicity study on Comanche Springs Pupfish. Tank systems are currently



Justin Crow and Rueben Mendoza with aquaria used for pairwise mating of Comanche Springs pupfish

Justin Crow began his Directorate Fellowship Program intern position here in late May. He immediately got to work on his project that will establish a pairwise mating protocol for Comanche Springs pupfish. He has completed an initial investigation that will determine fecundity of the fish. He is currently working out procedural details of the study and will be

pairing fish and conducting his study starting in early June.

Catherine Baxter completed her 60 day temporary hire on May 7. She became a valuable member of the team and finding her niche in the Comanche Springs copper sulfate toxicity trials she performed while with us.

The entire staff attended an All Employee Meeting in Austin on May 14. Catherine Baxter volunteered to cover the hatchery in order to make this possible.

Aquatic Species Activities

The annual fish health inspection was performed by Dave Hampton and Linda Vannest on May 5th. Comanche Springs pupfish, fountain darters, Devil's River minnow, and channel catfish were all tested. Results are pending.

Copper sulfate toxicity experiments on Comanche Springs Pupfish were conducted through the first week of May. After a summer hiatus to allow pairwise mating of pupfish, copper trials will again get underway in the fall.

Channel catfish spawning was completed by the end of May. Five thousand fry will be kept to provide fish for next year's fishing derby.



Week old channel catfish fry

Monthly monitoring of Comanche springs pupfish continued in May. Monitoring is done with 4 unbaited minnow traps set for 24 hours.

Each trap is checked daily for 2 days for a total of 8 trap nights. Updated May pond population estimates are provided at the end of this document.

Facility Maintenance

Our Chevy S-10 was placed on surplus this month to comply with a request to reduce our fleet of vehicles. This truck had previously been used for our auto crane used for fish harvest. A rack has been built that allows easy attachment to our forklift. The new system performed perfectly during its initial test run.



Excessed Chevy S-10



Forklift mounted auto crane for fish harvest

An analog sensor on our well monitoring system stopped working during a storm event on May 14 that resulted in not being able to detect water flow to hatchery ponds from the computerized monitoring system. The failure of the component was attributed to age and not the storm event because the system was equipped with fuses and surge protectors that

were not affected. A service call was performed by the system designer and a replacement component has been ordered. In addition, staff was given a lesson in the overall functionality and troubleshooting of the system.

Excessive rainfall has been a concern for stations in Texas and Oklahoma throughout May. Fortunately Uvalde NFH thus far has escaped the brunt of the damage that other areas have had to deal with. On three separate occasions water draining in an adjacent wheat field raced through our slough, but our levees were never inundated. Overflow pipes properly sent water to unused ponds where it can be retained until it leaches into the soil or evaporates, thus keeping our fish on station. Recent rains have resulted in these retention ponds being at half capacity. Fortunately a drying period is forecasted.

Additional Facilities Activities

Four new large fiberglass tanks were delivered in late May. They will be used to hold Texas wild rice and allow the hatchery to keep the 430 plants that are recommended to maintain genetic diversity of the species.



Outreach

The annual Uvalde NFH Kids Fishing Derby was held on May 30 this year from 8 a.m. to noon. Children from age 3 to 15 enjoyed fishing for the big one. In addition to the 2,000 1-lb

channel catfish, 125 6-8lb fish were available. A cool damp morning did not deter enthusiastic anglers as we registered 397 children. Including adults, attendance was well over 750 individuals. This marked the second year in a row that we doubled the turnout of the previous year (102 in 2013 and 242 in 2014). A second pond is needed in the future if the attendance trend continues.

Many fish were caught with one child reaching his 6 fish limit within the first 15 minutes. The action slowed considerably by 10:00 a.m., so it paid to be early. Hotdogs, sodas, and water were provided by local businesses, and 45 fishing rods were given away as door prizes.



Volunteers Alexandra Echols, Gina Dietrich, and Gwendolyn Powell register eager anglers



Staff member Cirilo Alonzo takes time to pose with his grandson as another lucky angler holds his catch



Happy Anglers



Anglers were shoulder to shoulder for most of the morning

In early May, Mark Dietrich represented the hatchery at the annual Dalton Elementary School Career Day. Children were able to view channel catfish and 3 species of gar in our viewing tank. Participants learned about conservation jobs and were encouraged to do well in school so they may choose a meaningful career.

Facility Visitors

Outside of the fishing derby, the hatchery hosted approximately 30 visitors for the month. Activities ranged from bird watching to hatchery tours.

Weather

Temperatures for May ranged from a low of 48°F to a high of 90°F. Overall, high temperatures were well below normal with the observed average high for the month at 82°F compared to the 111 year average of 88°F. Low

temperatures were slightly below normal as the average for the month was 66°F and the 111 year average was 67°F. Measurable rainfall occurred on 23 days in May with precipitation totaling 11.63 inches. According to US Climate Data, May's monthly precipitation averages 3.28 inches. Abundant rainfall this month has added 13.7 feet to the Edwards Aquifer which is currently at 838.3' compared to 824.6' in March and 830.8' this time last year.

Upcoming Events

A project leader has been chosen for Uvalde NFH. Patricia Duncan will be reporting for work on June 15. She has a PhD from Auburn University and has most recently conducted recirculation tilapia research at Fort Valley State University in Georgia.

Cirilo Alonzo and Rene Guerra will be lending their heavy equipment to the San Juan Project in Farmington, NM for a week in late June.

Uvalde National Fish Hatchery

754 County Road 203
Uvalde, Texas 78801
PHONE:
(830) 278-2419
FAX:
(830) 278-6042

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

Uvalde National Fish Hatchery May 2015			
Species	Year Class	Geographic Origin	Approximate Number
Channel Catfish Broodstock	2013	Domestic Strain	95
Channel Catfish	2014	Domestic Strain	1,000
Comanche Springs Pupfish	Mixed	Phantom Springs	206,987*
Devils River Minnow (F1)	2013	San Felipe Springs	235
Devils River Minnow (F2)	2014	San Felipe Springs	40
Devils River Minnow (F2)	2015	San Felipe Springs	110
Fountain Darter (W)	2012-2014	Upper Comal River	40
Fountain Darter (W)	2012-2014	Lower Comal River	39
Fountain Darter (F1)	2013/2014	Comal River	426
Fountain Darter (F1)	2015	Upper Comal River	24
San Marcos Salamander (M)	2013	San Marcos River	8
San Marcos Salamander (F)	2013	San Marcos River	10
Texas Wild Rice	N/A	San Marcos R. (A)	53
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)	12
Texas Wild Rice	N/A	San Marcos R. (F)	15
Texas Wild Rice	N/A	San Marcos R. (G)	16
Texas Wild Rice	N/A	San Marcos R. (J)	3
Texas Wild Rice	N/A	San Marcos R. (K)	12
Texas Wild Rice	N/A	SMR (Unknown)	22

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

*Recent spawning activity may make pupfish more susceptible to trapping resulting in an overestimate of numbers