



# Uvalde National Fish Hatchery

## Monthly Activity Report

December 2013



### ***Uvalde National Fish Hatchery Staff***

*Project Leader – Grant Webber*

*Administrative Technician – Sandra Castaneda*

*Engineering Equipment Operator – Cirilo Alonzo*

*Maintenance Worker – Rene Guerra*

*Fish Biologist – Rick Echols*

*Animal Caretaker – Vacant*

### **Partnerships and Accountability**

As identified in approved Recovery Plans, refugia efforts continue for the Texas Wild-rice, Fountain Darter, Comanche Springs Pupfish, and San Marcos salamander. All species continue to be performing well.

### **Workforce Management**

Volunteers Thomas Jetzer and Patricia Schenk arrived on December 3<sup>rd</sup>, nearly a week early for their 3<sup>rd</sup> winter at Uvalde NFH. Their arrival has been long anticipated as their “to do” list has expanded greatly. They are both great problem solvers and work well with their hands. Repeat volunteers are always the best because they are familiar with how things operate. Since their arrival, they have been working on installing new salamander tank systems, populating a terrarium, and collecting invertebrates to feed fountain darters and San Marcos Salamanders.

Cornelius “Neil” Tobias began an unpaid internship with the Uvalde NFH in mid-December. Neil, a Uvalde native, is a senior majoring in biology at Ursinus College in Pennsylvania. Upon graduation, he plans to pursue a career in nursing. He will be with us for a total of five weeks throughout his Christmas break. He will assist hatchery staff to conduct routine

aquaculture and grounds maintenance activities.



**Intern Neil Tobias builds “salamander houses” out of acrylic glass.**

### **Additional Facility Activities**

With budgets getting tighter, it has become more important than ever to be frugal with money. We have recently made a few good free government surplus acquisitions. An over/under washer and dryer set was acquired through the government surplus system. The washer and dryer unit will be utilized by hatchery staff to re-use rags, wash RV bedding and towels used by hatchery on-site guests, and volunteers. Another free surplus item acquired was a deluxe refrigerator, which will replace a much older and less energy efficient unit.

The transition of our main tank house from a holding facility for harvested fish from ponds to permanent housing of endangered species began in December. Recirculation plumbing and raceways for Devil's River Minnow and Texas wild rice are nearly complete.



**Rene Guerra making adjustments to the new Devil's River Minnow tank system.**

Our salamander holding area is in the process of being expanded and upgraded. The initial system consisted of two insulated tanks with individual pumps and chillers. The new set-up will consist of four individual systems each with a separate chiller as before, but this time the tank will be subdivided into as many as four compartments. Additionally, a rack that fits on top of the main tank will be installed to allow placement of several individual aquaria of various sizes in multiple configurations in a modular fashion. This will better facilitate breeding and research. These systems will house the San Marcos salamanders and potentially the Texas blind salamander and the Barton Springs salamander in the future.



**Volunteers Patricia Schenk and Thomas Jetzer make some finishing touches to a new salamander breeding tank system.**

Assistance with design and construction of the salamander systems was provided by Valentin Cantu and Justin Crow of the San Marcos Aquatic Resource Center. Among the donated items were a number of aquatic plants and native snails that will be placed in raceways to aid in ammonia break down and to give the fish a more natural environment. The donation of time, effort, materials, and equipment is greatly appreciated.



**Aquatic plants for fish habitat.**

We began spawning fountain darters this month from the Comal River strain. The goal is to provide the San Marcos Aquatic Resource Center with as many as 700 three to four month old fountain darters by spring. Fountain darters are continual spawners in tank conditions, so small numbers of eggs are collected over a long period of time instead of single large clutches.

The process is ongoing, but we have produced roughly one third of our goal.

## **Facility Maintenance**

Grant Webber, the station's computer administrator and elevated account holder, completed the upgrade of all of the station's Active Directory computers from Windows XP to Windows 7. This fulfills the Service's Information and Technology System requirement.

## **Recycling Efforts**

Staff recycled 30 pounds of cardboard, 20 pounds of paper, 5 pounds of glass, 3 pounds of tin, and 15 pounds of plastic this month.

## **Facility Visitors**

The hatchery was visited by 18 individuals this month. The annual bird count was conducted by several volunteers from the National Audubon Society.

## **Weather**

December's air temperatures ranged from a low of 29°F to a high of 85°F. Overall, high temperatures were below normal, with low temperatures in the normal range. Measurable rainfall occurred on 6 days in December with precipitation totaling 0.58 inches. According to The Weather Channel, the monthly precipitation average for Uvalde in December is 1.34 inches.