

# FY 2016

## TXFWCO Activity Report: March/April



### Invertebrate Sampling in Ciénega Creek

Texas Fish and Wildlife Conservation Office  
U.S. Fish & Wildlife Service

# Texas Fish and Wildlife Conservation Office (TXFWCO)

## Monthly Report

### Fish and Wildlife Conservation Office Activities

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## ***Rio Grande Ecological Monitoring***

On April 19-25 April 2016, the Texas Fish and Wildlife Conservation Office (TXFWCO), Texas Parks and Wildlife Department (TPWD), The National Park Service, and Sul Ross State University, conducted the Martin Canyon Ecological and Hydrogeologic Survey through Martin Canyon (Dryden to Langtry, 59 river miles). The surveys highlight was the capture of over 300 Rio Grande silvery minnows (*Hybognathus amarus*, (RGSM)). RGSM were collected throughout the canyon, and a large number were captured in Foster's Spring. This section of river is the canyon directly downstream of the main 2015 RGSM stocking site.



**Figure 1**Two RGSM captured in one sein haul in Martin Canyon.

On 24 March 2016, during the bi-annual Pecos pupfish monitoring (see below), the crew stopped and seined at Terlingua Abajo, where 2,000 RGSM were stocked in 2015. Unfortunately, no RGSM were captured in the area. The creek had flashed several times since the stocking in October 2015, and the potential exists that they were flushed out into the Rio Grande.

## ***Camp Maxie Community Survey***

On 2-4 Mar 2016, Diego Araujo and Chris Chapa partnered with TPWD's Tyler North Office to assess the fish community on two lakes at Camp Maxey in Powderley, TX. The team used an electrofishing boat to collect samples from the lakes. Results from this effort will go into lake management recommendations to better manage the fisheries on base, as well as to recover native mussel populations.



Figure 2 Fish Community Survey at Camp Maxey.

## ***Cape's Dam Removal Meeting and Site Visit***

The TXFWCO is partnering with the City of San Marcos to remove the failing Cape's Dam on the San Marcos River. On 30 March 2016, Wayne Stancill, USFWS Fish Passage Engineer, the TXFWCO, TPWD, Austin Ecological Services (USFWS), and the City of San Marcos conducted a site visit to the dam to begin to develop a removal plan.

By reducing habitat fragmentation, the project will benefit two endangered species, Texas wild rice (*Zizania texana*) and the fountain darter (*Etheostoma fonticola*), one candidate species, the Golden orb mussel (*Quadrula aurea*), as well as other native aquatic species.

Since the initial site visit, Wayne has provided plans for the removal and the TXFWCO has been preparing all of the paperwork and permitting that is required to remove the dam. The dam is scheduled to be removed in the fall of 2016.



Figure 3 Capes dam is failing and presents a safety hazard. The removal of the dam will reduce habitat fragmentation for all aquatic species in the area, including two endangered species, and one candidate species.

## ***Baseline Assessment of Dolan Creek and the Devils River***

The TXFWCO continued surveying at Dolan Springs for Invertebrates, mussels, salamanders, and fish in March and April 2016. Riffle beetle lures were collected and counts of the invertebrate communities present on the rag were recorded. The March survey was abbreviated due to rain. The April trip was very successful, finding the second largest density of Texas Hornshell (*Popenaias popeii*) on the Devils River. Aquatic invertebrate samples taken from previous trips are being sorted and identified in the lab.



Figure 4 Riffle beetle lures placed in the spring openings attract invertebrates over the course of 30 days.

## *Salado Salamander Monitoring*

Monitoring of the habitat and salamander presence was conducted at Robertson springs again in March. Habitat measurements were collected in early March, while quadrat sampling was done in late March at the site using randomly generated locations. No salamanders were captured during the random search, however, this provides valuable data in order to curtail the larger searches and focus on optimal habitat within the spring runs of all sites sampled for this study in the future.



Figure 5 Crew conducting salamander surveys in Salado.

## ***Pecos Pupfish and West Texas Spring Monitoring***

On 22-25 March 2016, the TXFWCO and TPWD conducted bi-annual Pecos pupfish (*Cyprinodon pecosensis*) monitoring of the Salt Creek population. The crew observed habitat changes in the creek and collected few pupfish for the time of year. An additional trip will be scheduled to assess population/stream health.

Additionally, the team visited Alamito and Ciénege Creeks for monitoring and fish collections. The fish collected in Alamito Creek will be analyzed for an on-going distribution study. Ciénege Creek was surveyed for the fish community.



**Figure 6 Seining in Ciénege Creek.**

## ***Paddlefish Implantation at Tishomingo NFH***

On 25-26 April 2016, Mike Montagne traveled to Tishomingo National Fish Hatchery to implant radio transmitters into 27 American paddlefish (*Polyodon spathula*) for the

second phase of the Paddlefish Reintroduction Project in the Big Cypress Bayou. The Tishomingo crew was extremely knowledgeable and helpful, making made the procedure go extremely well. Thanks to Kerry Graves and his crew for the continued support on this project. The implanted fish are scheduled to be released into Caddo Lake on 18 May 2016, during the City of Jefferson’s Paddlefish Festival.



**Figure 7 Kerry Graves surgically implants a radio transmitter in a one year old paddlefish.**

## ***Outreach***

On 9 March 2016, Diego Araujo and members of the San Marcos Aquatic Resources Center hosted 45 8<sup>th</sup> grade students from the San Marcos Consolidated Independent School District Gifted & Talented program. The students were learning about native, non-native, threatened, and endangered species in the classroom and were invited out learn hands on what efforts are being conducted to manage for these. In addition to a traditional tour of the facility, the students were given small presentations about local T/E species, non-native species, conservation efforts, and a Q/A session.

## ***May Schedule of Activities:***

2-6 May 2016: 2016: Baseline Assessment of Dolan Creek and the Devils River

15-24 May 2016: Rio Grande Monitoring Trip (Lower Canyon)

16-20 May 2016: Paddlefish Stocking/tracking and Paddlefish Festival

31 May -2 June 2016: Pinto Creek/San Filipe Devils River Minnow Monitoring