

# FY 2016

## TXFWCO Activity Report: November



## Salado Salamander Monitoring

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

# Texas Fish and Wildlife Conservation Office

## Monthly Report

### Fish and Wildlife Conservation Office Activities

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## *Emphasis Areas*

### *Rio Grande Silvery Minnow Stocking and Monitoring*

On 18 November 2015, staff from the Southwestern Native Aquatic Resources and Recovery Center (SNARC), the Texas FWCO, and Texas Parks and Wildlife Department, stocked 83,000 Rio Grande silvery minnows (RGSM) into the Rio Grande at Dryden Crossing. A total of 310,600 RGSM have been stocked at this location in 2015. Due to heavy rains and flash flooding, the other sites were inaccessible, and the decision was made to stock them all at Dryden.

The TXFWCO and the rest of the Lower Rio Grande Team will look for these fish in the spring of 2016 in the Lower Canyons and the Martin Canyon reaches (upstream and downstream of the stocking location). The 53 mile Martin Canyon reach will be sampled in late April (7 days + 2 travel days), and the 56 mile Lower Canyons reach will be sampled in May (7 days + 2 travel days).

On 17 November 2015, while traveling to Dryden, Mike Montagne (TXFWCO) and Kenny Saunders (TPWD) stopped to talk with a cooperating landowner 30 miles downstream of Dryden. The landowner allowed us access to the Rio Grande through his property and allowed us to sample the river and his spring run that contributes to the Rio Grande. We captured three RGSM in the first seine haul in the eddy below the spring run mouth. We then took two more seine hauls, catching multiple RGSM in each one. We kept 13, and returned the rest to the spring and did not sample the rest of the spring run, as we could see many RGSM and did not want to disturb them further.

The 13 were positively identified as RGSM in the lab, and are being sent to the SNARC for gut content analysis and to age them by looking at their otoliths. They were of differing sizes and may be from different year classes. If these were fish released in 2015, they traveled approximately 30 miles in about 30 days.



Figure 1 Manuel Uliberri tempers the RGSM prior to stocking into the Rio Grande.

### *Rio Grande Report*

The TXFWCO is preparing a Rio Grande Comprehensive report that will detail all activities conducted in the past 3 years. The report will include analysis of the RGSM reintroduction efforts, the invertebrate community, and eco-hydrology information.

The TXFWCO is responsible for the invertebrate section and has partnered with TPWD on the fish section. Other contributors are the National Park Service and Sul Ross University. All invertebrate samples have been sorted and identified and metrics on the data are complete.

### *Camp Maxey Community Structure Project*

On 2-6 November 2015, Diego Araujo and Chris Chapa conducted fish population and community structure studies at Camp Maxey's Lamar and Neff Lakes for the Texas Military Forces (TMF). Results will aid in developing future management and recreational plans to protect and recover native mollusk populations endemic to Camp Maxey.



Cat Cued (TMF) and Chris Chapa collect data on the fish community at Camp Maxey

## ***The Stream Ecology at Texas State University***

Pete Diaz was invited to lead the laboratory section of the Stream Ecology Class at Texas State University twice in November 2015. Pete provided an overview of the aquatic invertebrates within the San Marcos River. Pete is considered one of the top aquatic invertebrate experts in Texas.

## ***TPWD and TXFWCO Aquatic Invertebrate Collaboration***

Pete Diaz and Ben Hutchinson (TPWD) are collaborating on identification of aquatic invertebrates for the *Geographic and Physicochemical Effects on the Distribution of Rare, Groundwater Invertebrates in the Hyporheic Zone of Texas Streams* Project. The project is designed to provide a better understanding of 1) the distribution of SGCN stygobionts, 2) the occurrence of species assumed to be karst obligate species in non-

karst habitat, and 3) geographic and physicochemical characteristics that influence the distribution and abundance of stygobionts in hyporheic habitats”.

## *Salado Salamander Sampling*

On 19 November 2015, Pete Diaz attended the Bell County Water Symposium. Pete presented the methods and preliminary results from the current monitoring within the Salado spring complex and the Robertson Estate. Results included; a probability of detection matrix for Big Bubbly Spring, a new locality for the salamander within the spring complex at Anderson Spring, and a new predatory diving beetle from the aquifer. Future directions for the monitoring include more detailed habitat associations, measures of surface recruitment, and habitat restoration at the Robertson Estate.



**Looking for Salamanders in Salado Creek**

The TXFWCO and the Partners for Fish and Wildlife Program (PFWP) propose to remove the logjam at the end of the Robertson spring run to create more suitable habitat for salamanders. The logjam currently slows the flow of water causing silt and debris to build up at the site. The removal of this logjam would increase the flow of water through

the system removing sediment buildup and exposing the rock and gravel substrate, creating more suitable habitat for salamanders. The project will commence in December or January 2016.

### ***December Schedule of Activities:***

1-4 December 2015: FAC Project Leaders Meeting in Albuquerque

7-11 December 2015: Camp Maxey Community Structure Project

14 December 2015: Tombigbee Lake Site Visit (Alabama Coushatta Tribe)

16-18 December 2015: Emphasis Areas Meeting in Albuquerque

17 December 2015: Salado Salamander Sampling