

FY 2015

TXFWCO Activity Report: February



Radio Tracking Paddlefish in the Big Cypress Bayou

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

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Monthly Report

Fish and Wildlife Conservation Office Activities

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Clear Creek Gambusia Collection for Inks Dam NFH

On 5 February 2015, The USFWS conducted field collections of Clear Creek gambusia (CCG), (*Gambusia heterochir*), to replenish the stocks held in refugia at Inks Dam National Fish Hatchery. Wilkinson Spring is the only known location that *Gambusia heterochir* continue to exist, although they are in great peril from hybridization with invasive mosquitofish (*Gambusia affinis*), due to the failure of the dam on the property.

Using minnow traps and dip nets, the crew was able to collect 125 female CCR and 85 male CCR (10 over the target of for each to account for potential mortality). The fish were transferred to the hatchery that afternoon and all but one survived the trip. The crew used seines to sample a few other areas (near the cabin) but were unable to locate additional CCG.

Sorting the gambusia to collect only CCG is a difficult task. Individual fish must be looked at separately to determine if they are CCG, mosquitofish, or a hybrid of the two. While we were able to collect the fish that we needed for the hatchery, it is clear that the fish continue to hybridize and more and more of the mosquito fish can be captured upstream of the dam. In fact, when we set the traps near the dam, we captured almost solely mosquitofish and hybrids. The longer repairs are delayed on the dam, the more likely that this last remaining population will be genetically swamped by the mosquitofish. It is our hope that if the repairs are made soon, we will be able to go back in with minnow traps and remove as many of the mosquitofish as possible, thus minimizing the hybridization rate and reduce the competition with CCG.



Sorting of gambusia at Clear Creek. Photo by Clayton Napier (USFWS)

Paddlefish Reintroduction Project

On 9-13 February 2015, Mike Montagne and Diego Araujo conducted American paddlefish (*Polyodon spathula*) radio telemetry monitoring at Caddo Lake and the Big Cypress Bayou. The towers continue to collect data at each of the three locations. Approximately 50 miles of Big Cypress Bayou and Caddo Lake were searched by boat and 39 of the 47 paddlefish were contacted. Of the 39, 19 were contacted from the parking lot of the spillway at Lake ‘O the Pines spillway, just below the lake. Eight more were contacted upstream of the Sanders Tower. All 39 of the paddlefish contacted were found upstream of Caddo Lake State Park.

On 24 February 2015, one of the three test tags that we kept to test the equipment went silent. This means that the battery has finally drained and the transmitter is no longer emitting a signal. The tags are nearing the end of their lifecycle and all will likely go silent in the near future.



The spillway at Lake 'O the Pines is the upstream most point that the paddlefish have access to. We find most of the paddlefish within 1 mile of this barrier.

Fish collection at Camp Maxie

18-20 February 2015, P. Cole Webster and D. Araujo revisited two National Guard bases to conclude sampling for a fish consumption project and initiate data collection for a fish community structure project. Fish were collected at Camp Bowie in Brownwood, TX from four ponds, which will be included in a human consumption/fish tissue toxicity analysis. The results of the study will determine if the fish in the ponds pose any health risks to human consumption. Should there be no human health risk the ponds will be opened for recreational fishing in hopes of removing larger sport fish that out-compete native fish. The native fish are of conservation importance as they are hosts to native mussels, which have been declining in numbers.

A second study was initiated at Camp Maxey in Powderly, TX where the fish community structure will be evaluated and a population estimate will be assessed for

each of two lakes surveyed. The initial trip consisted of mapping out the boundaries of each lake, as well as habitats within each lake. The mapping of the boundaries is the first step in delineating habitats that will be sampled to determine the population estimates of the fish species in each lake.



A native mussel shell found at Camp Maxey.

March Schedule of Activities:

2-10 March 2015: Rio Grande Lower Canyons monitoring trip

4-5 March 2015: Great Plains LCC rivers and streams meeting

9-13 March 2015: Paddlefish tracking in the Big Cypress Bayou

16-20 March 2015: Salado salamander monitoring continues

24 March 2015: Rio Grande silvery minnow propagation meeting

25-26 March 2015: Emphasis Areas training in the Regional Office