Georgetown Salamander Site Visit Notes by Joshua Booker

Trip Date: 10-4-2011

Trip Purpose: For the salamander listing team to see examples of Georgetown salamander habitat

USFWS staff Joshua Booker, Angie Reisch, and Erik Orsak accompanied Ben Pierce of Southwestern University and Gary Boyd of Williamson County Conservation Foundation to three Georgetown salamander sites. We first visited Twin Spring at 1pm. There was still flow at the spring head, and salamanders were present (see Photos 1 and 2). Ben said that the flow doesn't fluctuate much throughout the year, and Gary has heard anecdotally that Twin Spring did not go dry during the drought of record in the 1950s. Gary said feral hogs were not yet on the property, and there was no evidence of feral hog damage. The primary threats to this site are sediments, runoff, and invasive plants. Gary has plans to install a gabion wall at the top of the ravine which feeds into the spring run. He hopes this will slow down runoff water into the ravine and lead to less cobble and gravel displacement. Williamson County has just begun a water quality monitoring program that will take samples here quarterly, as well as after storm water events. He also mentioned management of the invasive plants near the stream, such as tree of heaven. During monthly surveys here since October 2008, Ben Pierce has seen clipped salamander tails (probably from crayfish) and has not found salamanders farther than 30 meters from the spring outlet. Water temperature fluctuates a lot downstream of 30 meters. Ben has also not seen gravid females this spring or summer, suggesting the salamanders may not be reproducing during the drought.

The second site we visited was Cobb Spring, the northern most site of the Georgetown salamander. This site had no spring flow, but there was a little bit of standing water from recent rain (Photo 3). Gary said that this spring has been dry before. No salamanders were present, but Ben has seen salamanders here in the past. A portion of the spring outlet was enclosed in a brick structure (Photo 4), perhaps to water cattle in the past. Gary says that the landowner is phasing out the remaining cattle on the property. There was evidence of feral pig activity on the ranch, and traps were seen around the property. Williamson County is currently attempting to acquire a conservation easement on this spring. They are also looking at getting easements for Shadow Canyon and Cowen springs in the future.

The third and last site visited was San Gabriel Springs at a public city park. The three spring outlets were not running, and nearby wells were actively pumping water. The substrate of the springs was mostly comprised of leaf litter and aquarium gravel—not suitable habitat for the salamander.

Photo 1

Photo 2

Photo 3

Photo 4