

## Site Visit Report for Salado Salamander

### **FINAL**

Salado, Texas (Bell County)

9/15/2011 9Am – 12 PM

**Tour Guides:** Andy Gluesenskamp (TPWD Herpetologist) and Stirling Robertson

**In attendance:** Angie Reisch, Joshua Booker, Alisa Shull, Erik Orsak

**Salado Spring (aka Big Boiling) – located on a public park just east of I-35, on south side of Salado Creek (approximately 1 mile downstream of the I-35 bridge)**

The ongoing drought has reduced spring flows but water can still be seen emanating from underground – outflows go to Salado Creek. Normal flow levels for Salado Spring are unknown, but during a period of elevated flow in March 2010 spring flow was measured at 22 cfs by TPWD (pers. Comm.. Andy G). Area of spring is within floodplain for Salado Creek and a large flood in 2009 scoured the area and removed several large Cypress trees in the vicinity of the spring. Despite fairly intensive surveys by TPWD, few salamanders have been collected (approx. 10 specimens in last 10 years). Salado salamanders are difficult to find even during wet years, and they rely heavily on subterranean habitat during times of drought. Little is known about the size of these underground spring systems. Water quality looks good at the surface. City officials have expressed an interest in maintaining recreational opportunities at the Spring with a “public park” approach to managing the area, which has degraded the habitat. City officials are leery of federal oversight and have been resistant to conservation recommendations from TPWD, although they are tolerant of site visits and surveys. Small minnow-like fish are visible in Salado Spring. Members of the public have a habit of damming the spring source to retain flows and create a deeper pool for recreational purposes. A concrete platform that was placed historically covers portions of the spring source and the City has been known to dump gravel in the Spring to maintain recreational appeal.

**Little Bubbly Spring – public park – located adjacent and immediately upstream of Big Boiling (approx. 10 meters)**

The outflow for Little Bubbly appears to be smaller than Big Boiling. Outflows from Little Bubbly connect to Big Boiling. Andy collected 1 salamander from this location.

**Lazy Days Fish Farm Spring – on private property located approx. 200 meters to the southeast of Big Boiling Spring.**

The Fish Farm Spring consists of an impounded area about the size of a large round swimming pool. The Spring basin has been altered around the perimeter by placement of flat rocks to create walls. The basin was completely dry due to the drought, but a small pool immediately down gradient had standing water and trickle-flow. A small channel connects Fish Farm Spring to Salado Creek. Fish were visible in the small pool. The Spring is called Lazy Days Fish Farm because it was once used to breed and sell baitfish (*Astyanax mexicana*). The homeowner is thought to be supportive of conservation. Only 1 specimen has been collected at this locale.

**Robertson Spring – private property - located approximately 1.5 miles upstream of Salado Spring on the west side of I-35 and south side of Salado Creek.**

Robertson Spring and its outflow channel were completely dry, although areas of moist soil and wetland dependent vegetation were apparent. Stirling indicated that Robertson family is very supportive of conservation efforts and federal listing with critical habitat would be viewed favorably. Only a handful of salamanders have been collected (3 specimens in 2010). The Robertson Spring system is believed to be largely unaltered from historic conditions, with cattle grazing being the only apparent anthropogenic activity in the area.

Generally, the spring systems and associated salamander habitat upstream of I-35 are more pristine, protected, and less modified than those downstream of I-35.

Surveys for Salado Salamanders at these three spring systems is ongoing by TPWD staff. There are other springs in the area that have not been surveyed and that may have Salado salamanders. The only other site where Salado salamanders are known to occur are the Solana Ranch Springs, which were not part of the tour.