July 2013



Reptiles in the Blanco

A wide array of snakes, lizards, frogs, toads, and turtles can be found in the Blanco River Basin, including the threatened Texas horned lizard and Cagle's map turtle.

A Threatened Legends

Commonly known as the "Horny Toad" the Texas horned lizard was once common throughout the state. In recent years its numbers have been drastically reduced by environmental contamination, habitat loss due to land use conversion, spread of the red fire ant and even collection for the pet industry¹

Historically found throughout the entire Guadalupe River Basin, Cagle's Map Turtle has been all but extirpated, with the few remaining populations forced southward by increasing habitat loss. This has been due to reservoir construction, water diversion, decreased water quality, and increased urbanization². The turtles' once abundant habitat consists of moderately flowing limestone bottomed channels with available pools of varying depths. This threatened turtle also has been found in slower flows, 1 to 3 meters in depth³.

In 2005, two Texas State University scientists, in cooperation with the Texas nature Conservancy, surveyed The Blanco River and found a small population of Cagle's Map Turtles. Although the population observed was very low in dendity, this discovery was first grouping of Cagle's Map Turtles found upstream of the confluence of the San Marcos and Guadalupe rivers in several decades². It is assumed that the population size of the turtle is limited by alternating flooding of the river, coupled with periodic drought and reduced flows in summer months.

Managing Remaining Habitat

As human activity and a potentially changing climate continue to limit reptilian habitat range, increased management and protection of suitable habitat areas within the basin will become important.

¹ Texas Parks and Wildlife. No Date. Texas Horned Lizard (Phrynosoma cornutum) http://www.tpwd.state.tx.us/huntwild/wild/species/leasttern/ (Accessed December 02, 2010). Texas Parks and Wildlife Department. 2007. An analysis of Texas Waterways.

http://www.tpwd.state.tx.us/publications/pwdpubs/pwd_rp_t3200_1047/13_c_tx_blanco_bosque.phtml (Accessed June17, 2009).

² Simpson, T. R. and F. L. Rose. 2007. Distribution of Cagle's Map Turtle (Graptemys caglei) in the Blanco and San Marcos rivers. Texas Journal of Science Vol: 59, No 3:201-208.

³ Vermersch, T. G. 1992. "Lizards and Turtles of South-Central Texas," Eakin Press, Austin, TX.

The Blanco Water Atlas

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Table 11 Threatened, Endangered and Rare Reptiles (TPWD).

Common Name	Habitat Description	Location within Basin
Texas homed	open, arid and semi-arid regions with sparse vegetation, including grass, cactus, scattered brush or scrubby trees; soil may vary in texture from sandy to rocky; burrows into soil, enters rodent burrows, or hides under rock when inactive; breeds March-September	Blanco, Comal, Hays, Kendall
Cagle's map	endemic; Guadalupe River System; short stretches of shallow water with swift to moderate flow and gravel or cobble bottom, connected by deeper pools with a slower flow rate and a silt or mud bottom; gravel bar riffles and transition areas between riffles and pools especially important in providing insect prey items; nest on gently sloping sand banks within ca. 30 feet of water's edge	Comal, Hays, Kendall