

Guzzlers at Laguna Atascosa National Wildlife Refuge

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A guzzler is a rainwater collection, storage and distribution system designed to provide supplemental freshwater for endangered ocelots and their prey. There are fifteen guzzlers placed throughout Laguna Atascosa National Wildlife Refuge. They are maintained by the Ocelot Research, Monitoring and Recovery Program. Refuge volunteers, Bob and Mary Ann Severson, and Ocelot Program Intern, Molly Picillo, clean and maintain the guzzlers about every 10-14 days. While many species of wildlife are attracted to these dependable sources of freshwater, the remote cameras that are placed at the guzzlers provide photos that are particularly important for ocelot identification, monitoring, and research.

Guzzlers have three parts: a rainwater collection surface, a storage tank and a drinking basin. One inch of rain yields about 275 gallons of water. Rain goes from the pitched roof panels through the rain gutter and into an 1800-gallon tank. Water is then gravity fed from the tank to the drinking basin. Flow from the tank to drinking basin is maintained by a float valve. To minimize evaporation, the surface area of the drinking basin is only a little over two square feet.

Land use practices such as widespread irrigation from the Rio Grande River and human-made canals for storm water drainage have altered natural freshwater storage and drainage processes. Overall, freshwater is limited due to soil salinity, limited rain, high temperatures and extended drought. Therefore, guzzlers were constructed to counteract those effects and provide reliable, supplemental fresh water for endangered ocelots. The guzzlers also support numerous other species such as white-tailed deer, bobcats, raccoons, bees, armadillos, coyotes, javelina, and several species of birds and reptiles. Guzzlers were originally placed in female ocelot home ranges that were in or adjacent to high quality thorn scrub habitat.

The first three guzzlers were constructed in the late 1990's. Beginning in April 2008 and overseen by former ocelot biologist, Jody Mays, twelve additional guzzlers were installed. Bob Severson, dedicated refuge volunteer and current Vice President of the Friends of Laguna Atascosa National Wildlife Refuge, refined the design of the guzzlers and installed them with help of refuge volunteers and interns. The design of guzzlers changed over time as lessons were learned through observations of the already installed guzzlers. For example, later models of guzzlers had the drinking basin placed in the shadiest location possible to reduce evaporation and hog fencing, which does not prohibit ocelot entry, was added to all the guzzlers in 2012 as it became clear that feral hogs were consuming large amounts of fresh water and occasionally destroying the hardware that kept the basins filled but not overflowing. Overall, guzzlers are very important for ocelots and other wildlife at Laguna Atascosa National Wildlife Refuge.