

Amphibians and Reptiles

Importance

Amphibians and reptiles (herps) represent an important part of aquatic and terrestrial ecosystems. They eat a wide variety of invertebrate species, and, in turn, they are prey for many fish, bird, and mammal species. The American Southwest is well known for its abundance and diversity of reptiles. Although this region is less known for its amphibian populations, they too can be quite abundant in some habitats and are good indicators of environmental change due to their sensitivity to a variety of factors such as pollution, introduced species, drought, habitat destruction, and disease. Herp populations may be affected by these factors and exhibit measurable changes in site occupancy, distribution, abundance, and species richness.

Status and Trends

Pecos National Historical Park (PECO), 6,800 acres in size, lies in the Upper Pecos River Valley. The park's predominant vegetation is pinyon-juniper woodland. Other habitats include grassland areas, riparian habitat along the Pecos River and Glorieta Creek, a riparian restoration area, and marsh habitats. Information available on herp species at PECO includes surveys conducted in the mid-1990's by Robert Parmenter and David Lightfoot of the University of New Mexico (report dated 1996), and in 2002 by Natural Heritage New Mexico (Johnson et al. 2003). Results from these studies provide baseline information for future inventory and monitoring.



PHOTO: ROBERT SHANTZ

Short-horned lizard



RESOURCE BRIEF



COURTESY OF COLORADO DIVISION OF WILDLIFE

Tiger salamander

A current target list of herpetofauna contains 35 species— 11 amphibians and 25 reptiles. A total of five amphibian species have been recorded in the surveys: the tiger salamander (*Ambystoma tigrinum*), New Mexico spadefoot toad (*Spea multiplicata*), Woodhouse toad (*Bufo woodhousii*), Plains leopard frog (*Rana blairi*), and canyon tree frog (*Hyla arenicolor*). The toads were observed in both surveys. Eight reptile species have been documented. Six species were observed during both surveys—the collard lizard (*Crotaphytus collaris*), Eastern fence lizard (*Sceloporus undulatus*), Plateau striped whiptail lizard (*Cnemidophorus velox*), gopher snake or bull-snake (*Pituophis catenifer*), wandering garter snake (*Thamnophis elegans*), and prairie rattlesnake (*Crotalus viridis*)— and the New Mexico milksnake (*Lampropeltis triangulum celsae*) and short-horned lizard (*Phrynosoma douglasii*) were observed during the first survey. Although turtle trapping was conducted in 2002, no species were documented.

Discussion

One of the few reptiles noted as abundant was the Eastern fence lizard, which was particularly abundant on rocky outcrops and gravelly soils. The short-horned lizard was found regularly in pinon-juniper habitats and grasslands. The Woodhouse toad was noted as the most common amphibian observed in 1996. Additional species may have been observed in 2002 if more rain had fallen in the months preceding the inventory.