

## Amphibians & Reptiles

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## RESOURCE BRIEF

### 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

Lake Meredith National Recreation Area (LAMR) and Alibates Flint Quarries National Monument (ALFL) are located in the north-central Texas Panhandle. Their habitats include rocky slopes and uplands, sandy areas, riparian areas, and marsh. Until recently, the parks had not been thoroughly surveyed for amphibians and reptiles. A 2002-2003 study of herpetofauna in LAMR and ALFL was undertaken by the National Park Service and The Nature Conservancy and provides information on the current status. The study documented nine species of amphibians and 28 species of reptiles.

The most conspicuous, widespread, and common amphibian in LAMR and ALFL was the Woodhouse's toad (*Bufo*



Couch's spadefoot

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*woodhousii woodhousii*). Other common and/or widespread species include the Couch's spadefoot (*Scaphiopus couchii*), Western green toad (*Bufo debilis insidiosus*), and red-spotted toad (*Bufo punctatus*). Of the 28 reptile species, four were turtles, six were lizards, and 18 were snakes. The most frequently encountered turtle in both parks was the ornate box turtle (*Terrapene ornata ornata*). The Texas horned lizard (*Phrynosoma cornutum*), listed as a species of concern in the state, was common and wide-spread in the study area. Other common and/or widespread lizard species included the prairie lizard (*Sceloporus consobrinus*) and the prairie racerunner (*Cnemidophorus sexlineatus viridis*). The most common and/or widespread snakes were the Western coachwhip (*Masticophis flagellum testaceus*) and the Western diamondback rattlesnake (*Crotalus atrox*).

### Discussion

The 2002-2003 study recorded most of the amphibian and reptile species expected to occur in the north-central Texas Panhandle. The absence of some species recorded in the area in the past might be explained by drought conditions in 2000-03 (Figure 1) or inadequate sampling efforts; however, it is also possible that some species are locally extirpated. The use of drift fences and funnel traps would ensure more thorough sampling in the future.



Western diamondback rattlesnake

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