Great Plains Toad - Anaxyrus cognatus

Abundance: Unknown

Status: NSSU NatureServe: G5 S3

Population Status: Restricted distribution, population numbers and threats are unknown

Limiting Factor: Habitat: requires water for breeding and plains habitat.

Comment: Formerly Bufo cognatus.

Introduction

Great Plains Toads may be found in northeastern Wyoming, but have not been found west of the Continental Divide (Baxter and Stone 1985). This species probably inhabits most of the northeastern counties. Relatively little is known concerning abundance and distribution of this species within the state, though recent surveys greatly increased known populations in Wyoming. Great Plains Toads typically become active following heavy spring rains. After emergence, this species typically travels to breeding locales. Breeding may occur from May to July, depending on local precipitation events. Great Plains Toads are considered explosive breeders. Breeding activity is often triggered by heavy spring or summer rain events. Female Great Plains Toads will lay approximately 2000 eggs in a breeding. Females may produce multiple clutches in a given active season. Eggs typically hatch within 2-7 days, and larvae will metamorphose in 17-45 days. Adult Great Plains Toads forage nocturnally for moths, caterpillars, cutworms, flies, beetles, and other small invertebrates.

Habitat

The Great Plains Toad lives in the grasslands, sand hills and agricultural areas below 6,000 feet in elevation. Flooded ephemeral wetlands are the preferred breeding habitat, but permanent and slow moving waters may be utilized (Graves and Krupa 2005).

Problems

- Alteration of aquatic habitats needed for breeding may adversely affect populations.
- Habitat changes and other factors may be adversely affecting this species, but lack of data precludes identification of specific problems and development of management recommendations.
- Population status, distribution, habitat data, and disease status are lacking for this species.

Conservation Actions

- A systematic study of this species should be conducted with respect to distribution, abundance, habitat associations, and disease status within Wyoming.
- Continue efforts to educate landowners and the public about the importance of amphibians.
- Develop management recommendations based on survey data.

Monitoring/Research

Conduct baseline surveys to gain better understanding of species distribution within the state.

Recent Developments

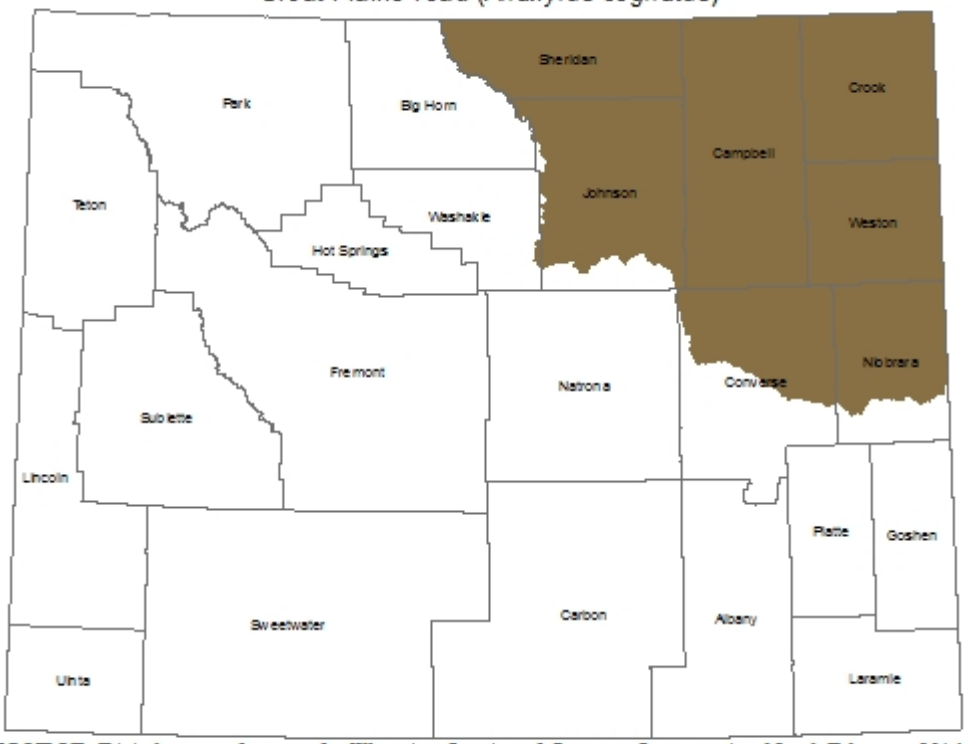
Amphibian surveys were conducted in northern Wyoming in 2013 and 2014. During these surveys, many new populations of Great Plains Toads (>30) were documented via nocturnal auditory surveys. Of all the chytrid fungus samples tested from Wyoming since 2002, only one Great Plains Toad has tested positive for chytrid fungus (out of only four samples).
Amphibians have received increased attention within Wyoming. Incidental observations are encouraged to be reported to the herpetology program.

References

Baxter, G.T. and M.D. Stone. 1985. Amphibians and Reptiles of Wyoming. Second Edition. Wyoming Game and Fish Department, Cheyenne. 137pp.

Graves B. M. and J. J. Kruppa. 2005. Bufo cognatus Say, 1823 Great Plains Toad. Pages 401-404 in M.J. Lannoo (ed), Amphibian Declines: The Conservation Status of United States Species. University of California Press, Berkeley, CA.

Great Plains Toad (*Anaxyrus cognatus*)



SOURCE: Digital maps of ranges for Wyoming Species of Greatest Conservation Need: February 2016. Wyoming Game and Fish Department. Note that brown indicates the current known range of the species.