
Wyoming Toad 98 Fact Sheet (7/1/98)

Wyoming Toad

Description: Wyoming toads are short stocky animals with dry skin covered with prominent warts. The toads are brown, gray or greenish in color with small dark blotches. Adult Wyoming toads average 55mm (2.2 inches) in length, with the females being slightly larger than the males. Females weigh approximately 35g and males are 25g. The toads are believed to be a relict population of the Manitoba or Canadian Toad (*B. hemiophrys*). The Wyoming toad has been isolated from the Manitoba toad since the end of the Pleistocene era 10,000 years ago. The two species are also geographically separated by approximately 500 miles.

Range: The Wyoming toad is restricted to the Laramie Basin in Albany County, in south eastern Wyoming.

Habitat: The Wyoming toad frequents floodplains and the short grass edges of ponds and lakes. They frequently use abandoned pocket gopher and ground squirrel burrows as hibernacula.

Diet: Includes ants, beetles and other arthropods.

Social Organization: This temperate-zone amphibian is adapted to a short period of activity. Adults emerge from hibernation in May when the daytime temperatures go above 70F. Males attract females with their calls and breeding occurs from mid-May to mid-June. Strings of 2,000 to 5,000 heavily pigmented eggs are laid in the water. The eggs hatch in less than a week and the tadpoles feed on algae in the water. The tadpoles metamorph into toads in 4-6 weeks. The toads then move back into hibernation in mid-September.

Conservation Status: The population of Wyoming toads was described as abundant in the mid 1950s. In the mid 1970s the population declined rapidly and the species was rare in the 80's. The Wyoming toad was federally listed as an endangered species in 1984.

Threats to Survival: Amphibian populations are declining world wide for a variety of reasons including habitat loss or degradation, predation, natural population cycles, genetic defects, drifts, or homogeneity, changes in weather patterns, acid rain, heavy metal or other pollution. Pesticides are believed to be one of the primary factors contributing to the decline of the Wyoming toad. Widespread aerial spraying of fenthion (trade name

Baytex) for mosquito control occurred around the time the toad numbers started to fall.

Zoo Program - SSP: In 1991 a recovery plan for the toad was drafted by the United States Fish & Wildlife Service (USF&WS) and the Wyoming Game and Fish Department (WG&FD). A captive breeding component was included in this plan. 1993 representatives from the Metro Toronto and Toledo zoos were invited to Wyoming to make recommendations for the captive program. In 1994 the toad was declared extinct in the wild and a formal request for assistance was submitted to AZA. In 1996 the SSP was approved. Currently 12 facilities manage a population of approximately 250 adult animals.

Funded by Conservation Endowment Fund (CEF) and USF&WS grants the SSP is sponsoring a radio telemetry project to study microhabitat use by the toad. This information will be used to identify other potential habitat for the toad.

Another research project is looking at the nutritional composition of the diets fed to captive toads and tadpoles and comparing them to what the toad would be eating in the wild.

Education: The plight of amphibians is becoming more newsworthy, and frogs and toads are popular images in the public eye. The Wyoming Toad is taking full advantage of this trend. The Wyoming toad was featured on the U.S Postal Service set of endangered species stamps, included in the book *Witness on endangered species*, is now a vinyl toy in the K&M Co. endangered species collection, and is currently being used in advertisements by the Nature Conservancy.

The SSP is now looking to identify an education coordinator to help with this aspect of the program.

Reintroduction: As a result of the captive breeding program over 7,000 tadpoles and toadlets have been released in the Laramie Basin in the past two years. Most of the release efforts have been focused at Mortenson Lake. Last year toads were heard calling in the wild for the first time since being declared extinct in 1994. This year four egg masses were found in the wild. These eggs were produced by the wild breeding of captive hatched and released toads. The program is proving to be successful.

SSP Coordinator: Brint Spencer

John Ball Zoo

1300 W. Fulton St.

Grand Rapids, MI 49504

(616) 336-4301

(616) 336-3907 FAX

gspencer@zoo.co.kent.mi.us

Studbook Keeper: Diane Callaway

Omaha's Henry Doorly Zoo

3701 South 10th Street

Omaha, NE 68107-2200

(402) 733-8401

(402) 733-7868 FAX

dianec@omahazoo.com

rev. 7/98