

**ARIZONA GAME AND FISH DEPARTMENT
HERITAGE DATA MANAGEMENT SYSTEM**

Animal Abstract

Element Code: AAABB01112

Data Sensitivity: No

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Bufo microscaphus microscaphus*

COMMON NAME: Arizona Toad

SYNONYMS:

FAMILY: Anura: Bufonidae

AUTHOR, PLACE OF PUBLICATION: Cope. 1867. Proc. Acad. Nat. Sci. Phila. [1866]
(18):300-314.

TYPE LOCALITY: "Territory of Arizona, Upper Colorado River" Mohave County, Arizona.

TYPE SPECIMEN: USNM 4106 and 4184

TAXONOMIC UNIQUENESS: Seventeen bufonids in the United States, divided into several species-groups. *B. microscaphus* placed within *B. americanus* species-group. Of the six species within the *B. americanus* group, two are in the southwest, *B. microscaphus* and *B. woodhousei*. Two subspecies of *B. microscaphus* exist in the United States: *B.m. microscaphus* and *B.m. californicus* and one in Mexico, *B.m. mexicanus*.

DESCRIPTION: (For *B. microscaphus*) - rather stocky toad 5.08-8.25 mm (2.0-3.25 in.) long, uniformly warty with a light-colored stripe across the head and eyelids. Oval-shaped widely separated parotoid glands, pale toward front. Dorsum varies in color from greenish gray, buff, brown, or salmon, with the color blending with the surrounding soil and rocks. Usually having a light area in the middle of the back and on each sacral hump. Buff coloring below, often lacking spots. Cranial crests absent or very weak (Stebbins 1985).

AIDS TO IDENTIFICATION: *B.m. microscaphus* usually has little or no dorsal dark spotting. The skin tends to be relatively smooth. Parotoids elongate and nearly parallel. Male throat not dark.

ILLUSTRATIONS: B&W drawing (Stebbins 1985: plate 12)
Color photo (Behler and King 1979: plates 223 & 235)
Color photo (Wildherps web site)
Color photo (Livingunderworld web site)

TOTAL RANGE: South central Utah at Arizona border (Sullivan 1991), southwestern Utah and southern Nevada southward into Mexican highlands of Durango and Chihuahua (Webb 1972).

RANGE WITHIN ARIZONA: East to west central Arizona, canyons and flood plains south of the Mogollon Rim, but also found in East Clear Creek (see Sullivan 1993, fig. 1 for map). Occurs in Apache, Coconino, Gila, Graham, Greenlee, La Paz, Maricopa, Mohave, Navajo, and Yavapai counties.

SPECIES BIOLOGY AND POPULATION TRENDS

BIOLOGY: Adults nocturnal except during the breeding season. Paratoid glands secrete a viscous white poison that when in contact with the mouth of a predator causes inflaming of the throat and causes nausea, irregular heart beat, and in extreme cases, death. Vocal is a pleasing musical trill raising in pitch at first and then ending abruptly after 10 seconds.

REPRODUCTION: Breeds February-July (earlier at lower elevations) but may be abroad until September. Breeding not dependant on rainfall as with many other species. Egg strands are laid on bottom of pools.

FOOD HABITS: Arthropods, some snails.

HABITAT: Rocky streams and canyons in the pine-oak belt. Also occurs in lower deserts e.g. Agua Fria River area. (See Sullivan 1993 for map, Fig. 1).

ELEVATION: Near sea level to around 8,000 feet (2,440 m). Based on records from the Heritage Data Management System, elevation ranges from 480-8400 ft (146-2560 m) (AGFD, unpublished data accessed 2002).

PLANT COMMUNITY: Upland desert and evergreen woodland.

POPULATION TRENDS: Hybridization with Woodhouse toad has been thought to be a threat in dammed aquatic systems. Apparently stable at other localities, but no good documentation anywhere.

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: None (USDI, FWS 1996)
[C2 USDI, FWS 1994]
[C2 USDI, FWS 1991]
[C2 USDI, FWS 1989]

STATE STATUS: None

OTHER STATUS: Forest Service Sensitive (USDA, FS Region 3 1999)

MANAGEMENT FACTORS: Water diversions and manipulations (e.g. dams), heavy grazing in riparian areas.

PROTECTIVE MEASURES TAKEN: Arizona fishing license required to take open season amphibians.

SUGGESTED PROJECTS: Periodic surveys at historical localities.

LAND MANAGEMENT/OWNERSHIP: BIA – Fort Apache, Hualapai, San Carlos, and Yavapai-Apache Reservations; BLM – Arizona Strip, Kingman, Phoenix, and Safford Field Offices; FWS – Havasu and Bill Williams National Wildlife Refuges; USFS – Apache-Sitgreaves, Coconino, Prescott, and Tonto National Forests; State Land Department; AGFD - Alamo Wildlife Area and Page Springs Fish Hatchery; Alamo Lake State Park; Lake Pleasant County Park; TNC – Hassayampa River Preserve; Private.

SOURCES OF FURTHER INFORMATION

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MAJOR KNOWLEDGEABLE INDIVIDUALS:

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ADDITIONAL INFORMATION:

Hybridizes with *Bufo woodhousei* along Virgin River and in central Arizona.

Revised: 1992-12-17 (SSS)
 1995-03-28 (MJS)
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