

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

Animal Abstract

Element Code: ARAAE01041

Data Sensitivity: No

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Kinosternon sonoriense longifemorale*

COMMON NAME: Sonoyta Mud Turtle

SYNONYMS:

FAMILY: Testudines: Kinosternidae

AUTHOR, PUBLICATION: J.B. Iverson, Tulane Stud. Zool. And Bot. 23(1): 43-44.
1981.

TYPE LOCALITY:

TYPE SPECIMEN:

TAXONOMIC UNIQUENESS: Two subspecies in Arizona, *K. s. longifemorale* and *K. s. sonoriense*; *K. s. longifemorale* (Sonoyta Mud Turtle) restricted to Quitobaquito Spring and nearby stream habitat, in Organ Pipe Cactus National Monument.

DESCRIPTION: This dark, medium sized aquatic turtle, is 7 in (18 cm) long (shell), with a mottled pattern on the head, neck, and limbs. Its head and neck are brown or olive on top, contrasting with plain yellow or cream color below. The throat has nipple like projections. The upper shell (carapace) is olive brown to dark brown with dark seams; the lower shell (plastron) is hinged, front and rear, and is yellow to brown. The shell contains 23 marginal shields. Long barbells are typically present on the chin, and all four feet are webbed.

AIDS TO IDENTIFICATION: Location is a determining factor in the identification of this species. The species resembles the Yellow Mud Turtle (*Kinosternon flavescens*), but lacks supraorbital ridges (Stebbins 2003).

ILLUSTRATIONS: Color photo (Rorabaugh in <http://www.arts.arizona.edu/herps/KISO.html>).
Color photo of species (In http://www.wildherps.com/images/herps/big/sonoran_turtle_on_log.jpg).
Color photo of species (Behler 1979).
Color drawing (Stebbins 2003).

TOTAL RANGE: Known from a pond and limited stream habitat at Quitobaquito Springs in Organ Pipe Cactus National Monument, Arizona, and from a few locations in the nearby Rio

Sonoyta, Sonora, Mexico, to include the Sonoyta sewage ponds adjacent to the Rio Sonoyta. It likely occurs or occurred in other perennial reaches in addition to those from which are currently known. In 2002, a population was discovered at Quitovac, a spring complex south of the town of Sonoyta. Also Quitobaquito Springs and the Rio Sonoyta may have been joined by perennial flows in the past but now are separated by about 1.5 km of desert and a highway. (NatureServe 2004).

RANGE WITHIN ARIZONA: Known from a pond and limited stream habitat at Quitobaquito Springs in Organ Pipe Cactus National Monument.

SPECIES BIOLOGY AND POPULATION TRENDS

BIOLOGY: When handled, this turtle gives off a musky odor, hence they are sometimes called stinkpots or stinking jims. The odor glands are located on each side of the body where the skin meets the underside of the shell.

REPRODUCTION: Lays 2-9 eggs from May - September. Eggs buried in soil on land.

FOOD HABITS: Their diet consists of insects, crustaceans, snails, fish, frogs and some plant material.

HABITAT: Occurs in pond and stream habitats.

ELEVATION: For the species, elevation ranges from sea level to about 6,700 ft (2044 m).

PLANT COMMUNITY:

POPULATION TRENDS: At Quitobaquito, this species declined from probably several hundred in the 1950's to fewer than 100 in the late 1980's. Juvenile survivorship has increased in recent years, and the 1995 population was estimated at 130 individuals. Surveys in 2002 yielded an estimate of 134 individuals. (NatureServe 2004).

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: C* (USDI, FWS 2007)
[C USDI, FWS 1997]
[C USDI, FWS 1999]
[C USDI, FWS 2002, 2004-2011]

STATE STATUS: 1A (AGFD SWAP 2012)

OTHER STATUS: P, Determined Endangered in Mexico
(NORMA Oficial Mexicana NOM-059-SEMARNAT-2010)

Not Forest Service Sensitive (USDA, FS
Region 3 2007)

[Forest Service Sensitive (USDA, FS
Region 3 1999)]

MANAGEMENT FACTORS: Extremely limited distribution. Species is negatively affected by agricultural contaminants and dewatering. Human disturbance, overgrazing, groundwater pumping, collecting, and exotic aquatic frogs and fishes are potential threats. The pond at Quitobaquito is man made and could silt in over time, and the dam could also fail.

PROTECTIVE MEASURES TAKEN: Quitobaquito Springs protected by Park Service.

SUGGESTED PROJECTS: Distribution, habitat, population and life history studies are needed. Determine current distribution and abundance in the Rio Sonoyta, especially upstream of Sonoyta.

LAND MANAGEMENT/OWNERSHIP: NPS - Organ Pipe Cactus National Monument.

SOURCES OF FURTHER INFORMATION

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MAJOR KNOWLEDGEABLE INDIVIDUALS:

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ADDITIONAL INFORMATION:

Revised: 1991-03-27 ()
 1997-12-26 (SMS)
 1999-12-20 (DJG)
 2005-01-28 (AMS)

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