

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

Animal Abstract

Element Code: AMAFF07023

Data Sensitivity: No

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Sigmodon arizonae arizonae* Zimmerman

COMMON NAME: Camp Verde Cotton Rat

SYNONYMS: *Sigmodon hispidus arizonae* Mearns

FAMILY: Muridae

AUTHOR, PLACE OF PUBLICATION: Mearns, Bull. Amer. Mus. Nat. Hist., 2: 287, 2-21-1890.
Sigmodon arizonae arizonae Zimmerman, Mich. State Mus. Publ., Biol. Ser., 4: 446.

TYPE LOCALITY: Camp (Fort) Verde, Yavapai County Arizona.

TYPE SPECIMEN:

TAXONOMIC UNIQUENESS: One of seven North American species in genus; one of four Arizona species in genus; one of five North American subspecies; one of four Arizona subspecies.

DESCRIPTION: For the species the dorsal pelage is a hispid blackish-brown and the ventral pelage is silvery or whitish with a base of hairs blackish. The underside of the tail is nearly the same color as venter, the tops of the feet are silvery gray and the skull is large. They are thick bodied, with a medium length tail slightly shorter than head and body and the ears barely project above the fur. For the species, the length is 8-12 ½ in. (202-317 mm), tail 3 3/8-5 7/8 in. (86-150 mm), and hindfoot is 1 1/8-1 ½ in. (29-38 mm).

AIDS TO IDENTIFICATION: *Sigmodon arizonae arizonae* differs from the other subspecies in a larger body, long tail, long hind feet, long and broad skull, broad rostrum and long squamosal crests.

ILLUSTRATIONS: B&W photo of species (Hoffmeister, 1986: p. 391).
Color photo of species (Wilson 1999)

TOTAL RANGE: Camp (Fort) Verde, Yavapai County, Arizona.

RANGE WITHIN ARIZONA: See "Total Range."

SPECIES BIOLOGY AND POPULATION TRENDS

BIOLOGY: Circadian: active throughout the year. Predators include coyotes, foxes, weasels, hawks and owls. (NatureServe 2001).

REPRODUCTION: For the species it is assumed that young are born almost every month of the year; the embryo count is high, for example 10 and 12. Gestation is about 27 days and weaning probably occurs after 15-25 days. The young are precocial and they run around looking and acting like miniature adults within a few hours after birth.

FOOD HABITS: Herbivore. *Sigmodon arizonae* is probably similar to other species within the genus which feed chiefly on green vegetation, but also consume some insects (NatureServe 2001). Cotton rats do not store food.

HABITAT: For the species of *Sigmodon arizonae* it is known that they live in desert areas, usually characterized by mesquite and tumbleweeds with a small amount of grass. Or they live in less arid areas along canals and banks of small streams with weeds and brush. The distribution of these rats corresponds rather closely to the waterways and drainages of southern Arizona. These rivers and an area 10 miles on each side of them would probably include 90 to 95 percent of all the places that they are known to occur.

ELEVATION: 3,200 ft. (975 m).

PLANT COMMUNITY: Interior chaparral to Great Basin conifer woodland.

POPULATION TRENDS: Thought to be extirpated.

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: None
STATE STATUS: State Extinct (AGFD, WSCA in prep)
[State Extinct AGFD, TNW 1988]
OTHER STATUS: None

MANAGEMENT FACTORS: A threat to this species is chemical animal damage control, and above ground grain baits set for other species.

PROTECTIVE MEASURES TAKEN:

SUGGESTED PROJECTS: Initiate a survey to document whether *Sigmodon arizonae arizonae* is extinct at Camp Verde and vicinity.

LAND MANAGEMENT/OWNERSHIP:

SOURCES OF FURTHER INFORMATION

REFERENCES:

Arizona Game and Fish Department. 1988. Threatened Native Wildlife in Arizona. Arizona Game and Fish Department Publication, Phoenix, Arizona. P. 21.

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MAJOR KNOWLEDGEABLE INDIVIDUALS:**ADDITIONAL INFORMATION:**

The species *Sigmodon arizonae* was originally considered a subspecies of the Hispid Cotton Rat (*S. hispidus*), but was established as a separate species when genetic examination revealed it to have markedly reduced number of chromosomes. In appearance, however, the two species are nearly identical, and presumably have similar habitat. (Whitaker 1997).

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