



ARIZONA SHREW

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SCIENTIFIC NAME: *Sorex arizonae*. From the Latin *soricis*, for shrew-mouse; the specific epithet refers to Arizona, where scientists first collected this species.

DESCRIPTION: The smallest terrestrial mammals known. Compared to other shrews, this one is medium-sized, weighing 0.1 to 0.2 ounces, with a total length of about 4 inches (including a 1.6-inch tail). The short, dense fur is brownish gray above and slightly lighter below. The eyes are small, the snout pointed, and ears inconspicuous.

HABITAT: Rocky, narrow-walled canyons with riparian corridors associated with mature evergreen oak-pine forest. Dense leaf litter and forest debris, such as downed logs, provide cover for foraging shrews.

DISTRIBUTION: Known only from the Chiricahua, Huachuca, and Santa Rita mountains of southeastern Arizona, the Animas Mountains of southwestern New Mexico, and the Sierra Madre Occidental of Chihuahua, Mexico.

BIOLOGY: Because of their small size, shrews are often mistaken for mice, which are rodents. They are actually insectivores, like moles and hedgehogs. Unlike rodents, shrews have teeth that do not grow continuously as they are worn away. Their pointed incisors are used like forceps to pick up prey, and their sharp, pointed cheek-teeth pierce and mince food, rather than grind it, before it is swallowed.

As "insectivore" indicates, shrews feed mainly on insects. However, anything that can be subdued, regardless of size, is fair game, including earthworms, insect larvae, spiders, beetles, centipedes, slugs, snails, mice, and, sometimes, other shrews. Like bats, shrews use echolocation to help find prey. High clicks are also used to confuse prey, allowing for easier capture. Larger prey, such as mice, may be subdued by the shrew's mildly ven-

omous saliva. Except for owls, most predators find shrews undesirable as prey because their musk glands produce an offensive odor.

A shrew's metabolic rate is so high that, to avoid starvation, daily food intake must be one-to-two times its own body weight. This is why shrews are active year-round. The fast and nonstop pace is telling, as shrews seldom live more than a year.

Females can breed within three months of birth. After a 20- to 25-day gestation, five to seven young are born, naked and helpless. Within 22 to 25 days of birth, the young are weaned and taught to hunt. A peculiar behavior at this stage of development is caravanning, in which the young grab the base of the tail of the preceding individual, forming a train behind the mother. Presumably this encourages them to explore their surroundings and familiarize themselves with the area outside the nest.

STATUS: The Arizona shrew was included on the Department's draft list of *Wildlife of Special Concern in Arizona* (AGFD in prep.), but has not been listed or proposed for listing by the U.S. Fish and Wildlife Service as endangered or threatened. Preliminary surveys conducted by the Department documented continued existence of this species in just two of the three reportedly occupied mountain ranges.

MANAGEMENT NEEDS: A thorough survey of southeastern Arizona's mountain ranges would provide essential baseline information on distribution and abundance. Meanwhile, mature vegetation in canyons within these mountain ranges should be maintained. Areas where suitable habitat has been lost or degraded should be restored by modern forestry and range management techniques. Educational efforts are needed to inform the public about the beneficial role the Arizona shrew plays in the evergreen oak-pine forest ecosystem. ♣



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