

Blind Snakes

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SCIENTIFIC NAME: *Leptotyphlops humilis* and *L. dulcis*. From the Greek *leptos* meaning slender, *typhos* meaning blind, and *ops* meaning eye. The Latin *humilis* means small or ground-dwelling, and *dulcis* means sweet.

DESCRIPTION: Slim, no neck constriction, blunt head and tail. Length: western 7 to 16 inches, Texas 5 to 11 inches. Eyes vestigial, appearing as dark spots. Tiny spine (spur) at tail tip. Scales uniform, smooth, shiny, and not enlarged on belly. Purplish, brown, gray, or pink above; lighter below. Two to seven eggs laid June to August. Juveniles resemble adults and are one-third adult size when they hatch.

HABITAT: Western found in a variety of desert and brush-covered habitats between sea level and 5,000 feet elevation. Frequents rocky hillsides with patches of loose soil suitable for burrowing, and canyon bottoms or washes near streams. May prefer moist soils; common in urban areas. Texas uses similar habitats; also frequents grassland and juniper-oak communities from sea level to 5,800 feet.

DISTRIBUTION: Western occurs from west Texas to southwestern Utah, southern Nevada, and southern California, and south to Colima and Baja California. In Arizona, found throughout low deserts below Mogollon Rim. Texas blind snake ranges from south-central Kansas to northern Veracruz, and westward to extreme southeastern Arizona.

BIOLOGY: Blind snakes burrow underground among roots, beneath rocks, and in ant nests. They burrow quickly into loose soil and sand, and eat soft-bodied insects such as termites and ants, and their eggs and larvae. People often encounter blind snakes while excavating foundations, digging ditches or post-holes, or gardening—or sometimes as a gift from the family cat. They are commonly mistaken for earthworms.

Blind snakes are well-suited to life underground. Both species are truly blind; their vestigial eyes are covered by scales called oculars. They cannot see images but can detect light. Blunt heads, slender bodies, and smooth, tightly overlapping scales help blind snakes move underground. Tight scales also provide protection from bites and stings of insect prey. Blind snakes dig their tail spur into tunnel walls for leverage while moving through soil. When the snake is active on the surface, as on a warm rainy night, the tail is used to propel the body forward. When captured, the snake jabs with the spur and emits a strong-smelling cloacal discharge. Though harmless, the spur and odor may startle the predator and allow the snake to escape.

Eastern screech owls bring live Texas blind snakes to their nests. The snakes live in nest debris, eating insect larvae from fecal matter, pellets, and uneaten prey. This may reduce parasitism on owl nestlings. Nestlings with live-in blind snakes grow faster and experience lower mortality than broods lacking snakes.

STATUS: Blind snakes were not included on the Department's draft list of *Wildlife of Special Concern in Arizona* (AGFD in prep.), nor have they been listed or proposed for listing by the U.S. Fish and Wildlife Service as endangered or threatened. There is no population information available for these species in Arizona.

MANAGEMENT NEEDS: Little is known about blind snakes in Arizona. Research is much needed, but subterranean and nocturnal habits make these snakes difficult to study. Absent the technology to generate substantial information on distribution, population dynamics, and behavior, blind snakes will likely continue to be managed by default, on the basis of anecdotal information generated through chance encounters. ♣

