

# Mountain Skink

By Jeffrey M. Howland  
Nongame Biologist

**SCIENTIFIC NAME:** *Eumeces callicephalus*. From the Greek *eu*, meaning good, and *meco*, meaning long, possibly referring to the elongate body form of many species in the genus; and *calli*, meaning beautiful, and *cephalus*, head, referring to pattern and coloration of the head.

**DESCRIPTION:** Adults usually about five inches total length. Dorsal coloration olive to light brown, bordered laterally by narrow, light stripes. Broad, dark brown stripe running length of body on each side. Yellow or orange Y-shaped mark on neck and head, distinct from all other Arizona lizards. Limbs relatively small. Tail bright blue in juveniles, fading to gray-blue in adults. Scales smooth and shiny, characteristic of most skinks.

**HABITAT:** In Arizona, strongly associated with mid-elevation mountain canyons that typically have well-developed riparian vegetation, including sycamores, maples, and walnuts. Usually found in leaf litter, rock outcrops, or other abundant ground cover. Occasionally occurs on hillsides bordering canyon bottoms. In Mexico, also extends into Pacific coastal plain.

**DISTRIBUTION:** Sierra Madre Occidental and northern extensions in southern Arizona and extreme southwestern New Mexico, south through Sonora, Sinaloa, and Nayarit to northern Jalisco. Elevational range from sea level to 6,500 feet.

**BIOLOGY:** With more than 1,000 species, mostly found in the Old World tropics, skinks are the most diverse lizard family. *Eumeces*, the largest skink genus in the New World,

has more than 20 species, 11 to 13 in the United States. As with many animal groups, taxonomists disagree concerning the validity of some species. One expert thinks the mountain skink and its close relatives, the four-lined and short-lined skinks of Texas and Mexico, are different races of a single species. Others believe they represent two or three distinct species because they are geographically isolated, and are evolving independently.

Skinks in the western United States are secretive. They spend most of their time in burrows, cracks and crevices, eating small invertebrates and remaining protected from the elements. We know little about the life history and ecology of mountain skinks, but their reproductive mode is interesting. Females may retain their eggs until a few days before hatching; those from at least one locality actually give live birth. In other North American skinks, incubation can take several weeks. Egg retention is an intermediate step in the evolution of viviparity (live birth) from oviparity (egg-laying). Egg retention and live birth provide benefits: the female can regulate incubation temperature (by basking or seeking shade), the

eggs will not desiccate, and the eggs are protected from predators and infectious fungi and bacteria. But there are also costs. The female must carry the eggs wherever she goes, making her slower and more vulnerable to predation. When these benefits outweigh the costs (as in environments that are cool, dry, or have high potential for predation or disease to eggs), we expect a shift toward egg retention and live-bearing. Viviparity has evolved independently at least 55 times in lizards; about 20 percent of the world's 3,300 species of lizards are live-bearers.

**STATUS:** The mountain skink is not a listed or candidate species at a federal or state level in Arizona. Its population status is unknown. This species is secretive and not dependably encountered even where it is known to occur, thus it is relatively free of the collecting pressure associated with some species that are easier to find and capture. However, mountain skink habitat is easily degraded by collectors who destroy rotting logs and piles of leaf litter in search of other reptiles. Livestock grazing and development of recreation sites in canyons are also potential threats.

**MANAGEMENT NEEDS:** Arizona's mountain skinks apparently depend on riparian vegetation in mountain canyons. Their Sierra Madrean sky island habitat is shared by some of the most diverse as-

semblages of wildlife in the United States.

Recognition of the value of biodiversity has led to preservation efforts there, and should stimulate further protective management in the future. But

even now, the mountain skink's future in Arizona seems unthreatened. ♣

