

Canyon Treefrog

BY TERRY B. JOHNSON • ILLUSTRATION BY ZACKERY ZDINAK

SCIENTIFIC NAME: *Hyla arenicolor*. Genus derived from the Greek *Hylas*, companion of Hercules and one of Jason's original Argonauts. Specific epithet formed from the Latin *arena* and *color*, meaning sandy colored, a reference to the overall body color.

DESCRIPTION: About 1.25 to 2.25 inches in length, from snout to vent. Relatively long, slender legs, and a typically frog/toad-like wide but shallow body. Toes with the distinctively large treefrog-toepads, but not fully webbed like those of ranid (leopard and bull) frogs—fifth toe free of webbing. Body color highly variable, depending partly on temperature and background: above, pale sandy-whitish to brownish-gray with dark splotches; below, whitish. Male's throat dark gray to blackish. Thighs pale yellow to orange.

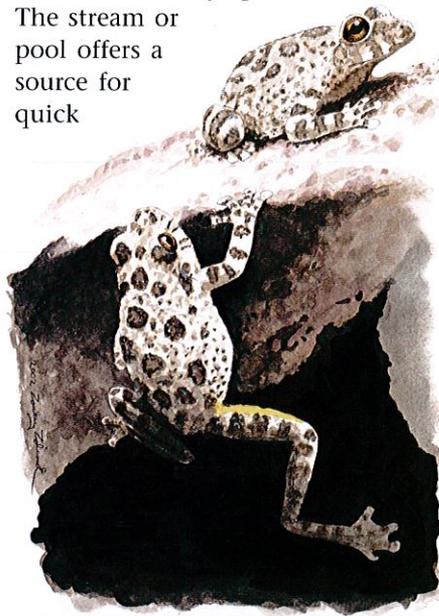
HABITAT: Found along streams in rocky washes and canyons, from desertscrub to forested mountains. Contrary to the common name "treefrog," the key habitat feature is rocks (boulders and cliff faces) on which to perch. Crevices and overhangs that furnish shade are important habitat components. The stream provides breeding pools, and may be permanent or ephemeral, with continuous or intermittent surface flow.

DISTRIBUTION: A southwestern species, occurring in southern Utah, west-central Colorado, western New Mexico, extreme western Texas, Arizona, and into Mexico. In Arizona, statewide except the Yuma Desert.

BIOLOGY: The canyon treefrog is primarily nocturnal. It perches plastered against a rock face all day, most often in a shady spot but sometimes

exposed for hours to the southwestern sun. As ambient temperatures rise, the throat pulsates at an increasing rate, in an impressive gular flutter. The thickened skin helps control evaporative water loss, as does movement into cooler shady spots.

The stream or pool offers a source for quick



rehydration. The perch itself may be an inch or so from water, or many feet up and away, but typically never more than a Calaveras-County leap away.

As is true of most all frogs and toads, the canyon treefrog is probably food for more species than it preys upon. Garter and other snakes, raccoons, ringtails, etc., are among its many persecutors. In turn, it consumes any and all invertebrates, from tiny bugs and flies to larger caterpillars, that can fit in its gaping mouth. The stream attracts and usually produces an ample supply of food. Given that this species tends to perch in exposed positions, with little to no movement all day long, the risk of predation would seem high. However, the chameleon-like changes of

body color, blending in so perfectly with virtually any rock surface color, provide camouflage that serves it well. Many a hiker has walked within inches of canyon treefrogs without suspecting their presence.

Breeding occurs in spring to early summer, when canyon treefrogs lay their eggs in stream pools. Drought and decreased stream-flow can delay egg laying, or severely impact post-egg survival. The tadpole stage is brief. The emergent froglets move quickly to rocky refuges. From thousands of eggs come thousands of tadpoles, hundreds of froglets, and a few adult treefrogs. The mortality along the way is enormous.

STATUS: The canyon treefrog is locally common throughout its expected range, although diligent search may be required to reveal its presence. The species is not on the Department's list of *Wildlife of Special Concern in Arizona*, nor is it being considered for Federal listing. No population declines have been noted, although worldwide declines in frog populations over the past 20-30 years give cause for concern about all amphibians. Through Commission Order 43, the Department allows limited take and possession of canyon treefrogs, although such take is not extensive.

MANAGEMENT NEEDS: None, other than ensuring that the streams flowing through canyon treefrog habitat continue to flow, and do not wither away as populations of another species strive to quench a seemingly inexhaustible thirst. ♣

As chief of the Department's Nongame Branch, Terry B. Johnson has strived to conserve, enhance, and restore Arizona's wildlife and habitats for many years.