

# Southern Spadefoot

*Spea multiplicatus*  
Family Pelobatidae



**Global Rank:** G5

**State Rank:** S2 (UT); S4 (CO); S5 (AZ, NM)

**Distribution:** Also known as the New Mexico spadefoot, this species was formerly known by the genus *Scaphiopus*. It ranges from south-eastern Utah and southern Colorado south to Guerrero and Oaxaca, Mexico, and from western Arizona to western Oklahoma and western Texas. It can be found from near sea level to around 8,100 ft. (2,470 m.) in elevation.

**Description:** Adults reach about 2 1/2 in. (6.4 cm.) in snout-vent length. They closely resemble the western spadefoot and differ in having a more elongated spade, usually more brown on the back, and having copper-colored irises. They lack a boss between the eyes, the eyelids are wider than the space between them, and the dorsal color is uniformly brown or dark gray with small dark spots or blotches and red-tipped tubercles scattered over the dorsum. The call is a vibrant, metallic trill, like run-



*Current range of the southern spadefoot*

ning a fingernail along the teeth of a large comb.

**Reproduction:** Breeds during periods of summer rains that fill playa lakes and cause the rapid formation of pools in low-lying areas. A delay in the desert July monsoons during dry years may cause the toad to not breed until late in the season. Males usually call while floating on the water surface. Females average about 1,070 eggs, which are deposited in cylindrical masses attached to submerged aquatic vegetation or debris. Eggs hatch in about 42 to 48 hours and tadpoles undergo metamorphosis in about three weeks. Toadlets emerge from the drying ponds and disperse.

**Food:** A study of the stomach contents of 293 spadefoot toads found that 93.8 percent of the diet consisted of beetles, orthopterans, ants, spiders, and termites. No difference in diet was found due to sex or time of year. Another study found that the diet was 72 percent termites and 22 percent beetles, with an occasional centipede and scorpion. Arthropods with well-known chemical defenses, such as blister beetles, velvet ants, stink bugs, and millipedes, are usually avoided. Tadpoles are known to eat tadpole shrimp, fairy shrimp, and other tadpoles.

**Habits:** Frequents desert grassland, shortgrass plains, creosote bush and sagebrush deserts, mixed grassland and chaparral, pinon-juniper and pine-oak woodlands, and open pine forests. Soils are often sandy or gravelly. The spadefoot is largely nocturnal and secretive. They occupy underground burrows that are dug with their specialized hind feet. During the summer rainy season, they can be found hidden under surface objects. During nocturnal wanderings in search of prey or breeding sites, the spadefoot can often be seen on roadways.

**Management Implications:** No known management concerns. When molested, these toads may secrete a musty skin toxin that smells somewhat like raw peanuts which can irritate sensitive membranes of the eyes and nose.

**Important References:** Stebbins, R.C. 1985. A field guide to western reptiles and amphibians. The Peterson Field Guide Series. Houghton Mifflin Company, New York, NY; Degenhardt, W.G., C.W. Painter, and A.H. Price. 1996. Amphibians and reptiles of New Mexico. University of New Mexico Press, Albuquerque, NM.