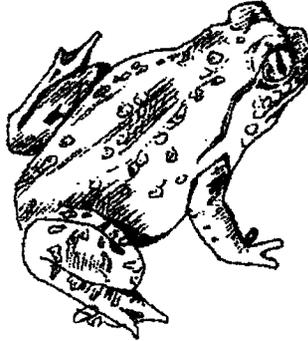


Plains Spadefoot

Spea bombifrons
Family Pelobatidae



Global Rank: G5

State Rank: S2 (UT); S3 (AZ, MT);
S4 (WY); S5 (CO, NM)

Distribution: Found along the eastern and southern outwash of the Rocky Mountains from southern Alberta, Saskatchewan, and Manitoba in Canada south to northwestern Texas and Chihuahua, Mexico, east to Missouri and eastern Oklahoma. Skirts the Rockies to south and enters eastern Arizona, with isolated populations in southern Texas and Mexico. Reaches to about 8,000 ft. (2,440 m.) in elevation.

Description: Adults reach about 2 1/2 in. (6.2 cm.) in snout-vent length. They have a prominent boss between the eyes (often supported by thickened bone) and a pug-dog profile. There are usually four light stripes of irregular outline with the middle pair setting off a hour-glass shape in the middle of the back. Coloration above is generally dusky, purplish brown, dark brown, or greenish, flecked with orange to yellow-tipped tubercles. Color below is white. A single glossy, black, wedge-shaped spade is on each hind foot. The width of the



Current range of the plains spadefoot

eyelids usually are greater than the distance between them.

Reproduction: They have opportunistic, relatively short, and high-density mating patterns, and are dependant upon heavy rainfall to stimulate reproductive activity. Usually breeds in flooded areas and temporary pools. The breeding period extends from May to August with peaks in July in most of its range. Numbers of eggs laid per female average about 1,600 (range 1,572-3,844) and they are attached to submerged vegetation or other objects in the water. Females may lay several egg masses during a single breeding event. Eggs hatch in two to three days. Larvae develop rapidly and commonly complete metamorphosis in 36 to 40 days. Young spadefoot toads breed the first time when about two years old.

Food: Adults feed mainly on various invertebrates, including adult moths, caterpillars, carabid beetles, and other small arthropods. There is one report of a spadefoot eating a small mouse. Larvae eat minute organic material, but sometimes prey on fairly large invertebrates such as fairy shrimp and insect larvae and other tadpoles. Such predatory larvae are larger and often metamorphose earlier than non-predatory larvae.

Habits: The plains spadefoot inhabits plains, hills, and river bottoms in mixed-grass prairie, sagebrush habitats, desert grassland, and farmland in areas of low rainfall. Prefers loose, sandy or gravelly soil that is suitable for burrowing. Frequents both permanent and temporary water sources. It digs its own burrow or uses rodent burrows. Rodents may attack the spadefoot or seal them off with soil plugs. Juveniles may hide in moist cracks or under plates of drying mud.

Management Implications: The genus was formerly known as *Scaphiopus*. Widespread and locally abundant within preferred habitat. Some populations have been lost to intensive agriculture and urban expansion, and many are killed by vehicles on roads near breeding ponds. It is known to interbreed with other spadefoot toads within its range.

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; Hammerson, G.A. 1999. Amphibians and reptiles in Colorado. University of New Mexico Press, Albuquerque, NM.