

ECOLOGY OF THE AQUATIC BOX TURTLE, *TERRAPENE*  
*COAHUILA* (CHELONIA, EMYDIDAE), IN  
NORTHERN MÉXICO

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**SYNOPSIS:** An ecological study of the Coahuilan Box Turtle, *Terrapene coahuila*, was undertaken between December 1964 and November 1967 in its natural habitat on the northern Mexican Plateau. The species is endemic to an intermontane basin of the Chihuahuan Desert near Cuatro Ciénegas, Coahuila. Its geographic range consists of disjunct populations in an area that does not exceed 800 km<sup>2</sup>.

Preferred habitats of *T. coahuila* in the area studied are small, north-south trending, spring-fed marshes, characterized by mud bottoms, shallow water, and dense aquatic vegetation, principally *Chara* spp., *Eleocharis rostellata*, and *Scirpus olneyi*. Marshes are distinct aquatic communities surrounded by desert grassland and shrub communities.

Ecological adaptations of this species more closely resemble those of other North American aquatic turtles than of terrestrial members of its own genus. Population densities, foraging behavior, food habits, and thermal relationships best exemplify the aquatic mode of life of *T. coahuila*.

*T. coahuila* remains active throughout the year except for short periods of environmental extremes. Mating occurs from September to June and appears concentrated in spring. Copulating pairs of box turtles were found in October, November, December, and April, frequently in shallow water. The ovarian cycle appears to be intermediate between the lengthy cycle of tropical emydid species and the compressed cycle of northern species caused by cold weather. Follicle enlargement occurs between late August and early April when ovulation begins. Egg laying begins in May and continues to September. Complements of 2 or 3 eggs are produced most frequently. An estimated half of the females can produce second clutches, and about one-third may deposit three sets annually. These females produce a mean of 6.8 eggs/female per season, a higher reproductive potential than in certain northern populations of *Terrapene*.

Coahuilan box turtles forage in shallow water, with the carapace usually above the surface and dry, and the head extended underwater. *T. coahuila* is opportunistic

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