

# *Herpetological Review*

*ACTINEMYS* (= *EMYS*) *MARMORATA* (Western Pond Turtle).  
**PREDATION**

**JEFFERY T. WILCOX**, University of California,  
Berkeley, Blue Oak Ranch Reserve, 23100 Alum Rock Falls Rd.,  
San Jose, California 95127, USA; e-mail: [jtwilcox@berkeley.edu](mailto:jtwilcox@berkeley.edu).

that held the eggs was an elliptical depression about 5 cm across and 3 cm wide. The exact dimensions were difficult to judge due to the rooted conditions.

A number of morphological and behavioral traits make wild pigs ideal predators of turtle nests and eggs. Nest sites of Western Pond Turtles typically are within close proximity of streams and ponds; riparian areas are likewise favored resting and foraging places for wild pigs. Turtle nests typically are no more than 8 cm in depth (Rathbun et al 1992. *Southwest. Nat.* 37[3]:319–324); wild pigs often root to depths much greater than 8 cm, depending on the soil depth and moisture. Wild pigs' excellent sense of smell may help them detect turtle nests (though they also may encounter turtle eggs in the course of routine rooting). Pigs also have remarkable oral dexterity, which allows them, for example, to detect and swallow earthworms without ingesting soil and may allow them to do the same with small eggs.

In the incident described above, wild pigs were interrupted in the act of predating on turtle eggs—but wild pigs normally swallow their prey whole, leaving no evidence on the ground. The behavior observed serendipitously on the Blue Oak Ranch may therefore happen more often than is witnessed. The spread of wild pigs throughout California could be exacerbating the decline of Western Pond Turtles where these species occur together.

Submitted by **JEFFERY T. WILCOX**, University of California, Berkeley, Blue Oak Ranch Reserve, 23100 Alum Rock Falls Rd., San Jose, California 95127, USA; e-mail: jtwilcox@berkeley.edu.

## TESTUDINES – TURTLES

**ACTINEMYS (= EMYS) MARMORATA** (Western Pond Turtle).

**PREDATION.** The Western Pond Turtle is in decline over 80% of its historical range in California, primarily due to habitat loss and competition from introduced species (Stebbins 2003. *A Field Guide to Western Reptiles and Amphibians*, 3<sup>rd</sup> ed., Houghton Mifflin, Boston, Massachusetts). Wild pigs (*Sus scrofa*), hybrids of feral domestic pigs and European wild boars, are a purposely introduced species rapidly increasing in range and population throughout the state (Waithman et al. 1999. *J. Wild. Manag.* 63[1]: 298–308). Wild pigs are omnivores, and forage for and consume a wide variety of vertebrate prey (Wilcox and Van Vuren 2009. *J. Mammal.* 90[1]:114–118). Worldwide, feral pigs have been documented to consume eggs and young of four chelonian species, including Green Sea Turtles (*Chelonia mydas*), giant tortoises (*Chelonoidis nigra* [= *Geochelone elephantopus*]) in the Galapagos (Coblentz and Baber 1987. *J. Appl. Ecol.* 24:103–118), Spur-thighed Tortoises (*Testudo* spp.) in Sardinia (Corbett [ed.], 1989. *The Conservation of European Reptiles and Amphibians*. C. Helms, London), and Texas Tortoises (*Gopherus berlandieri*) (Taylor and Hellgren 1997. *Southwest. Nat.* 42[1]:33–39). I report below on the first documented case of wild pig predation on the eggs of Western Pond Turtles.

Early on the morning of 21 October 2003, I went to check the progress of a pond-draining project at Cabin Pond (37.37953°N, 121.73146°W) on the Blue Oak Ranch in Santa Clara County, California, USA. In the heat and aridity of the California autumn, the moist basin of the receding pond had attracted wild pigs. Overnight, they had wallowed in the deep mud and thoroughly rooted for earthworms in the moist soil around the shallow end of the pond basin. Three pigs were in the basin when I arrived. Two were rooting beyond where the soil moisture ended in the grass-covered uplands on the slope, ca. 20 m above and beyond the pond. The pigs bolted for cover as soon as they saw me. Moments later, while inspecting the area, I discovered remnants of three turtle eggs in the mounds of soil and dried plant matter where the pigs had rooted. There was a moist, viscous fluid still clinging to the inside of the shells. In the hard earth just below the mound of soil