

PEER EDITED

NOTES

**PREDATION OF A WESTERN POND TURTLE (*ACTINEMYS MARMORATA*)  
BY A GREAT EGRET (*ARDEA ALBA*)**

**DAVID J. GERMANO<sup>1,3</sup> AND BILL BUCHROEDER<sup>2</sup>**

<sup>1</sup>Department of Biology, California State University, Bakersfield, California 93311-1022

<sup>2</sup>2213 Birchwood Way, Pine Mountain Club, California 93243

<sup>3</sup>Corresponding author, e-mail: dgermano@csub.edu

**Abstract.**—The Western Pond Turtle (*Actinemys marmorata*) is an endemic turtle of the Pacific coast of North America and understanding which species are predators can be useful to the conservation of the species. We photographed a Great Egret (*Ardea alba*) catching and consuming a small Western Pond Turtle at a pond near Gorman, California. We estimated that the turtle was about 30 mm carapace length, the size of a hatchling turtle.

**Key Words.**—California; turtles; predators; birds

---

Western Pond Turtles (*Actinemys marmorata*) are eaten by a variety of predators including carnivorous mammals, such as the Northern River Otter (*Lontra canadensis*), American Mink (*Mustela vison*), Northern Raccoon (*Procyon lotor*), Gray Fox (*Urocyon cinereoargenteus*), Coyote (*Canis latrans*), and Black Bear (*Ursus americanus*; Bury 1972; Manning 1990; Bury and Germano 2008). Several bird species, including the Bald Eagle (*Haliaeetus leucocephalus*), Osprey (*Pandion haliaetus*), Great Blue Heron (*Ardea herodias*), and gulls (*Larus* sp.), are also suspected of eating Western Pond Turtles (Bury and Germano 2008). Like other turtle species, Western Pond Turtles are most vulnerable as eggs and small turtles because of the greater number of predators that can eat turtles when they are small. Both introduced America Bullfrogs (*Rana catesbeiana*) and fishes such as Largemouth Bass (*Micropterus salmoides*) are known to eat young Western Pond Turtles (Moyle, 1973; Nussbaum et al., 1983) but the effect of these predators on turtle populations is unknown (Germano and Riedel 2015).

On 23 May 2018, the junior author photographed a small Western Pond Turtle being eaten by a Great Egret (*Ardea alba*) at a pond near Gorman, California (Fig. 1). To estimate the size of the turtle eaten, we determined the mean length of the bill of Great Egrets from two specimens in the collection of the Department of Biology at California State University, Bakersfield (CSUB). The bill length from its tip to the anterior of the eye was 120 mm in CSUB #A-47 and 130 mm in CSUB #A200. Based on the mean length of the bill from these two egret specimens (125.0 mm), the turtle appeared to be a hatchling about 30 mm carapace length (Fig. 2).

The senior author has studied turtles at this site since 2007, and when the pond is full, the turtle population is robust (Germano and Riedel 2015). The pond has not

filled since 2011, has had limited water only in the late winter/early spring, and has dried completely by summer (David Germano, pers. obs.). The senior author trapped turtles in spring 2017 and caught 36 individuals when the pond was only about 20% full and drying of the pond meant trapping could no longer occur by the beginning of June (unpubl. data). It is not known how predation affects populations of Western Pond Turtles. The pond does not fill in all years and the periodicity of filling may influence the persistence of the population more than predation events, like the one documented. If and when the pond fills again will likely determine the outcome of this once thriving population of Western Pond Turtles.

LITERATURE CITED

- Bury, R.B. 1972. Habits and home range of the Pacific Pond Turtle, *Clemmys marmorata*, in a stream community. Ph.D. Dissertation, University of California, Berkeley, California. 205 p.
- Bury, R.B., and D.J. Germano. 2008. *Actinemys marmorata* (Baird and Girard, 1852) – Western Pond Turtle, Pacific Pond Turtle. In A.G.J. Rhodin, P.C.H. Pritchard, P.P. van Dijk, R.A. Saumure, K.A. Buhlmann, and J.B. Iverson, Eds. Conservation Biology of Freshwater Turtles and Tortoises: A Compilation Project of the IUCN/SSC Tortoise and Freshwater Turtle Specialist Group. Chelonian Research Monographs No. 5, pp 001.1-001.9, doi:10.3854/crm.5.001.marmorata.v1.2008.
- Germano, D.J., and J.D. Riedle. 2015. Population structure, growth, survivorship, and reproduction of *Actinemys marmorata* from a high elevation site in the Tehachapi Mountains of Southern California. *Herpetologica* 71:102–109.

Manning, T. 1990. Summer feeding habits of River Otter (*Lutra canadensis*) on the Mendocino National Forest, California. *Northwestern Naturalist* 71:38–42.

Moyle, P.B. 1973. Effect of introduced Bullfrogs, *Rana catesbeiana*, on the native frogs of the San Joaquin Valley, California. *Copeia* 1973:18–22.

Nussbaum, R.A., E.D. Brodie, Jr. and R.C. Storm. 1983. *Amphibians and Reptiles of the Pacific Northwest*. University Press of Idaho, Moscow, Idaho.



**FIGURE 1.** Great Egret (*Ardea alba*) eating a small Western Pond Turtle (*Actinemys marmorata*) at a pond near Gorman, Los Angeles County, California. (Photographed by Bill Buchroeder).



**FIGURE 2.** Great Egret (*Ardea alba*) with a small Western Pond Turtle (*Actinemys marmorata*) in its bill at a pond near Gorman, Los Angeles County, California. (Photographed by Bill Buchroeder).