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*Pseudemys Peninsularis* (Peninsula Cooter). Estuarine Observation and Interaction with Giant Land Crabs

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Rev. 31:103). Here we report on the consumption of pelagic red crabs (*Pleuroncodes planipes*) by a *C. m. agassizii* along the Pacific Coast of the Baja California peninsula, Mexico.

Between October 2000 and March 2002, we examined digestive tract contents of 23 turtles that were incidentally drowned in fishing nets near Bahía Magdalena, Baja California Sur, México (24°15′–25°20′N and 111°20′–112°15′W). On 12 February 2002, we recovered a stomach from an immature *C. mydas agassizii* (straight carapace length = 54.4 cm) containing more than 82% by volume of red crabs (*Pleuroncodes planipes*). *P. planipes* has been shown to be a primary food of Loggerhead Sea turtles (*Caretta caretta*) in the Pacific Ocean (Ramírez-Cruz et al. 1991. Archelon 1[2]:1–4), but to our knowledge this is the first report of red crab consumption by a *C. m. agassizii*, and the first documentation of a Green Sea turtle feeding predominantly on crustaceans.

The highest densities of *P. planipes* in the eastern Pacific Ocean occur off Bahía Magdalena; the crabs migrate inshore during cold season (winter–spring) upwelling conditions (Aurioles-Gamboa 1992. Crustaceana 62:71–84). This finding is consistent with reports by Bjorndal (1997. In Lutz and Musick [eds.], The Biology of Sea Turtles, pp. 199–232, CRC Press, Boca Raton, Florida) that East Pacific Green Sea turtles may have a more carnivorous diet than *Chelonia* of other regions.

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### PSEUDEMYS PENINSULARIS (Peninsula Cooter)

**ESTUARINE OBSERVATION AND INTERACTION WITH GIANT LAND CRABS.** At 0710 h, 11 June 2002, a *Pseudemys pennsularis* was found in a Giant Land Crab (*Cardisoma guanhumi*) colony on an isolated isthmus of sandy spoil in a large bulkheaded estuarine canal (Intracoastal Waterway) near Woolbright Road in Boynton Beach, Florida. The spoil site was adjacent to the concrete seawall of the canal and rose < 0.5 m above the mean high tide level. The turtle was found on its back, partially covered by a fallen palm frond, and was surrounded by 20–25 easily visible crabs within 10 m, and three were within 15 cm at the initial sight. The turtle was deeply retracted into its shell, and its right rear foot exhibited soft tissue damage apparently inflicted by crabs. It was released at ca. 0713 h into 0.25 m deep water adjacent to the island, where it remained submerged and deeply retracted into its shell when observations ended at 0720 h.

The crab colony is an isolated, triangular 255 m² area containing 494 burrows > 5 cm diameter, for an average density of 1.94 burrows/m². The crab colony has existed at this site since at least 1993 (HS, pers. obs.). The dominant vegetative cover is Sea Ox-eye (*Borrichia frutescens*). The cooter was an immature female based on toenail length and tail morphology with a carapace length of 14 cm (Jackson 1988. Bull. Florida State Mus. Biol. Sci. 33[3]:113–158; D.R. Jackson, pers. comm.). Rain had fallen for at least 0.5 h ending 10–15 min prior to finding the turtle. The air temperature was estimated to be 26–29°C.

The turtle’s presence in this habitat was unusual, as this species is not normally found in coastal salt waters. The salinity of the water in this canal is 26.9–30.8 parts per thousand (G.H. Powell, Palm Beach County Dept. Eviron. Resources Mgmt.). In 9 years of observation, no other freshwater turtles have been observed at, or near, this site. Its presence on the spoil pile was likely not related to nesting since the turtle was below minimum size for reproduction (Jackson, op. cit.; D. R. Jackson, pers. comm.). We speculate that the turtle was either washed or released into the estuary, attempted to seek refuge from the salinity or bask on the area with the crab colony, and was unable to escape when attacked by the crabs.

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### CROCODYLIA


Observations were made on the Nhuminrism Ranch (18°59′S, 56°40′W), Mato Grosso do Sul, Brazil over the period 1989–1999. During night surveys, caiman were counted and soap densities were estimated. One alkaline lake (pH of 9.0–9.9) generally had relatively few (10–34) caiman during each of 20 times it was surveyed. Only two surveys recorded high densities of caiman (>500), but each coincided with high densities of *P. paradoxus*. In each case, I estimated soap densities on the edge of the lake to be >100 adults and large tadpoles/m². On 10 April 1999, we marked 20 caiman of the several hundred present in the lake during the soap eruption. After 150 days, one marked female was recaptured in a river area 5 km away and the total number of caiman we detected in the lake was reduced to 20. These observations suggest that caiman move in response to changes in prey density.

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