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## GOPHERUS POLYPHEMUS (Gopher Tortoise) COYOTE **PREDATION**

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GOPHERUS POLYPHEMUS (Gopher Tortoise). COYOTE **PREDATION**. Gopherus polyphemus is listed as a species of special concern by the state of Florida (Florida Wildlife Code Chap. 39 F.A.C.), and as a threatened species by the Florida Committee on Rare and Endangered Plants and Animals (Moler 1992. Rare and Endangered Biota of Florida: Volume III, Reptiles and Amphibians. University Press of Florida, Gainesville, Florida. 291 pp.). Coyotes (Canis latrans) are invasive to Florida with ranges that are expanding within the state (Schmitz and Brown 1994. An Assessment of Invasive Non-Indigenous Species in Florida's Public Lands. Florida Dept. Environmental Protection. Tallahassee, Florida. 283 pp.; Wooding and Hardinsky 1990. Florida Field Nat. 18:12-14), including the southeastern coast (Cunningham and Dunford 1970. Ouart. J. Florida Acad. Sci. 33:279–280; Brady 1983. Florida Field Nat. 11:40-41; Hill et al. 1987. Wildl. Soc. Bull. 15:521-524; Wooding and Hardinsky, op. cit.). We report here evidence of Coyote predation on Gopher Tortoise hatchlings in southeastern coastal Florida.

Passive tracking index data used to monitor both exotic and native species on public lands (Engeman et al. 2001. Environ. Cons. 28:235-240) indicated an increasing presence of Coyotes on state and county public lands in the Palm Beach to Port St. Lucie areas (Engeman, unpubl. data), prompting us to opportunistically examine Coyote scats for evidence of Gopher Tortoise predation. On 3 April 2004, one of us (JAM) collected a Covote scat with Gopher Tortoise remains from a path in a pine flatwoods greenway in the Abacoa development of Jupiter, Florida. The dried scat was 9 cm long and the gular projection of the plastron of a 2-3 yr old Gopher Tortoise was clearly visible, along with mammal fur, rodent bones, and grasshopper fragments. Hatchlings might be more vulnerable to predation than juveniles, but less noticeable in casual observation of scats. Efforts at the time to conduct larger surveys for evidence of Gopher Tortoises in coyote scats were made impossible by hurricanes Frances and Jeanne. Coyote predation on Gopher Tortoises is of concern because predation is a critical threat to endangered or locally rare species (Hecht and Nickerson 1999. Endangered Species Update 16:114-118), and predation losses can further stress populations already impacted by habitat loss and altered predator communities (Reynolds and Tapper 1996. Mammal Rev. 26:127–156), both of which apply to Gopher Tortoises in Florida.

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