

An adult female Cuban Iguana (Cyclura nubila nubila) on Isla Magueyes, Puerto Rico, chased, caught, and ate a hatchling.

## Cannibalism in an Introduced Population of *Cyclura nubila nubila* on Isla Magueyes, Puerto Rico

Néstor F. Pérez-Buitrago<sup>1</sup>, Alberto O. Álvarez<sup>2</sup>, and Miguel A. García<sup>1,2</sup>

<sup>1</sup>Biology Department, University of Puerto Rico–Río Piedras, San Juan 00931-3360, Puerto Rico (yaui@yahoo.com). <sup>2</sup>Department of Natural and Environmental Resources, Wildlife Division, San Juan, 00906-6600, Puerto Rico.

All photographs by the senior author.

In the mid-1960s, Cuban Iguanas (*Cyclura nubila nubila*) were introduced to Isla Magueyes, a 7.2-ha islet in southwestern Puerto Rico (Rivero 1978). Anecdotal information affirms that this population originated from a single pair of individuals (A.R. Lewis, pers. comm.). Christian et al. (1986) estimated the size of the population at 167 animals (157 adults and 10 juveniles) and density at 23.2 iguanas/ha. Since 1986, those numbers have increased considerably. Surveys by Ortiz and Lewis in 2004 estimated a population density of 62.5 iguanas/ha (unpublished data). Recent informal surveys (2005–2006) provided population size estimates of 400–500 individuals, numbers consistent with the 2004 estimates of Ortiz and Lewis. Although these



Other adult lizards gathered around the female while she was holding the hatchling in her mouth.



The incidence of cannibalism in Rock Iguanas (*Cyclura* spp.) may be aggravated by high population densities.

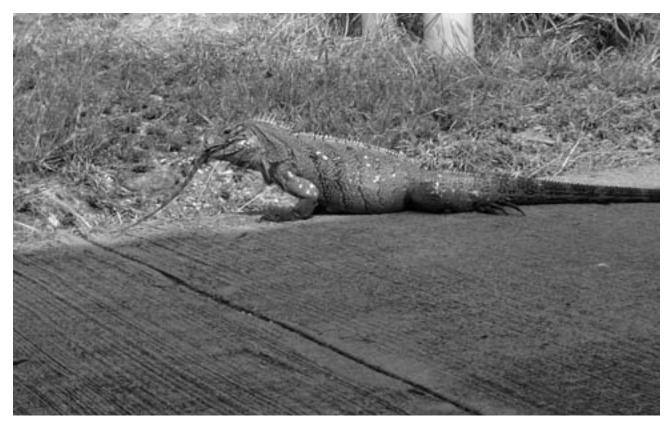
population density estimates are for all of Isla Magueyes, iguana distribution on the island is distinctly heterogeneous. The highest densities are associated with the facilities of the Department of Marine Sciences–University of Puerto Rico.

Herein, we report an episode of cannibalism observed on 17 March 2006 at 1430 h, when an adult female chased, caught, and ate a conspecific hatchling. The event lasted around 12 minutes. Other mid-sized and adult animals appeared to take note of the female while she was holding the hatchling in her mouth. Eventually, she managed to bend the hatchling's head parallel to its body axis in order to swallow it.

Cannibalism had not previously been reported for either this introduced population or for this species. Cannibalism in *Cyclura* has not been commonly documented, although it has been reported for Bahamian *C. carinata* (Iverson 1979; Auffenberg 1982). Adult iguanas have been considered predominantly herbivorous, but observations of scavenging or opportunistic consumption of animal protein are not uncommon. Iverson (1979) suggested that high *Cyclura* population densities could be a factor inducing cannibalism in *C. carinata*. The population of *C. n. nubila* on Isla Magueyes is indeed dense, possibly increasing the likelihood and frequency of cannibalism.

## References

- Auffenberg, W. 1982. Feeding strategy of the Caicos Ground Iguana, Cyclura carinata, pp. 84–116. In: G.M. Burghardt and A.S. Rand (eds.), Iguanas of the World: Behavior, Ecology, and Conservation. Noyes, Park Ridge, New Jersey.
- Christian K.A., I.E. Clavijo, N. Cordero-López, E.E. Elias-Maldonado, M.A. Franco, M.V. Lugo-Ramirez, and, M. Marengo. 1986. Thermoregulation and energetics of a population of Cuban Iguanas (*Cyclura nubila*) on Isla Magueyes, Puerto Rico. *Copeia* 1986:65–69.
- Iverson, J.B. 1979. Behavior and ecology of the rock iguana, Cyclura carinata. Bulletin of the Florida State Museum, Biological Science 24:175–358.
- Rivero, J.A. 1978. Los Anfibios y Reptiles de Puerto Rico. The Amphibians and Reptiles of Puerto Rico. Editorial Universitaria, Universidad de Puerto Rico, Río Piedras.



Eventually, after bending the hatchling's head parallel to its body axis, she swallowed it.