

Observations on Habitat, Activity, Foraging, and Diet in the Amazon Treeboa, *Corallus hortulanus*, on Batatas Island, Parnaíba Delta, Piauí, Brazil

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Photographs by the senior author except where indicated.

Batatas Island represents a small portion of Parnaíba Delta, measuring 15 km², bordered to the west by the Rio Parnaíba and to the east by Lontras and Mirim creeks. Most of the land is devoted to agriculture, rice in the region that comprises gallery forest, and sugarcane and banana plantations in the interior.

Between June 2009 and September 2010, 80 encounters with Amazon Treeboas (*Corallus hortulanus*) resulted in a total of 144 hours of observations of individuals in size classes ranging from juveniles to large adults. Forty percent of observations were of adults, 50% subadults, and 10% juveniles.

Habitat. During the day, 22 individuals of *Corallus hortulanus* (coiled with head hidden) were observed on branches of various tree species (e.g., *Rhizophora mangle*, *Inga* sp., *Avicennia germinans*, and *Montrichardia linifera*) along creeks (igarapés). They were usually in shade, possibly rendering it difficult for potential predators to see them, but also minimizing diurnal heat load (Henderson 2002). Minimum and maximum nocturnal perch heights varied according to high and low tides; some individuals were observed at 1.2–1.9 m on moonless nights, but during the full moon, perch heights were 2.3–4.1 m. During the full moon, only few individu-



Corallus hortulanus habitat on Batatas Island.



One of several creeks meandering through mangrove habitat on Batatas Island.

als were observed, and birds, rodents, and other reptiles seemed to prefer spending those nights in deep shade in the interior of the island. Likewise, Henderson (2002) found *C. grenadensis* activity depressed on bright moonlit nights in Grenada, and W.W. Lamar (in Henderson 2002) observed *C. hortulanus* foraging in deep shadows on moonlit nights in Amazonian Peru.

Activity, Foraging, and Diet. Most foraging activity occurred between 1800 h and 2330 h. Between 2400 h and 0545 h, activity decreased and only ten active boas were observed while 15 were partially coiled with the head facing down. These observations of nocturnal activity are remarkably similar to those for *C. grenadensis* on Grenada: Peak nocturnal activity between 1800 h and 2400 h, and a decline from 2400 h to 0535 h (Henderson and Winstel 1997, Henderson 2002, and references therein).

On 29 July 2009 at 1945 h in the Igarapé das Lontras, Ilha do Camaço, an adult *C. hortulanus* (about 1.90 m total length) was observed after capturing a Great Ani, *Crotophaga major* (Cuculidae). The elapsed time from capture to completion of deglutition was 30 min. The boa then spent the next seven days coiled in a tree along the creek. *Crotophaga major* is an abundant bird in the area and frequently uses trees along the banks of creeks for nesting. This is the first record of *C. hortulanus* preying on *C. major* (Henderson 2002, Pizzatto et al. 2009, and references therein).

On 4 September 2010, at 2030 h at Morros da Mariana creek, a juvenile *C. hortulanus* (~40–45 cm total length) was observed hanging by its tail, with a portion of its head submerged. During 15 min of observation, it submerged its head three or four times. Although a prehensile-tailed snake suspending its body to the surface of a body of water in order to drink

would not be unusual, for one to submerge a substantial portion of its head below the water's surface — and especially for a prolonged span of time — is highly unusual. Chippaux (1986) listed fish as occasional prey of *C. hortulanus* in French Guiana, and we suspect that the young boa might have been foraging for small fish. Although other Neotropical boids are known to prey on fish, they are largely aquatic snakes (i.e., Anacondas; *Eunectes* spp.). Hetherington (2006) observed *Oxybelis aeneus*, an arboreal vine snake, after it had captured a fish, and, like the small *C. hortulanus*, it was suspended from a branch above the water. *Oxybelis aeneus* is largely a lizard predator, and fishes are not typical prey. *Corallus hortulanus* is euryphagic, exploiting frogs, lizards, birds, and mammals (including bats) (Pizzatto et al. 2009). A young (i.e., inexperienced) snake might be especially opportunistic in prey choice. A *C. hortulanus* in the 40–45 cm size range is likely an active forager, searching for sleeping lizards and small birds. Submergence of its head below the water's surface might have been triggered by movement in the water while foraging above it or by observing activity below the water's surface while drinking. Alternatively, this might have been a foraging behavior used successfully on prior occasions.

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Corallus hortulanus in the process of shedding. Although the tree in which this snake is shedding is *Montrichardia linifera*, the senior author often observed shedding *C. hortulanus* in thorn-equipped *Machaerium lunatum*.



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Corallus hortulanus swallowing a Great Ani (*Crotophaga major*).

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Like many male anoles, Grenada Bush Anoles (*Anolis aeneus*) from Union Island erect nuchal and dorsal crests when reacting to another male or a perceived threat, which in this instance was the photographer.