Observations on Foraging Behavior in the Amazon Treeboa
(Corallus hortulanus)

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Despite their relative abundance in many Neotropical lowland snake faunas and the frequency with which they are often encountered, observations on foraging and predation in species of the boid genus Corallus are extremely rare. Henderson (2002) witnessed only one C. grenadensis feeding during 700–800 encounters with the species, and he missed the actual prey capture. More recently, Yorks et al. (2003), Henderson et al. (2007), and da Costa Silva (2012) have witnessed prey capture by C. grenadensis, C. cookii, and C. hortulanus, respectively. In each case the prey species was a lizard. Here we present detailed observations on foraging and an unsuccessful attempt at capturing a mammal by the geographically and ecologically widespread Amazon Treeboa, Corallus hortulanus (Linnaeus).

Observations were made along Igarapé do Galego, a creek that flows through rice plantations and that is inundated during high tides. It is located on Ilha das Canárias, situated at the extreme east of Maranhão state, Brazil, and represents a large portion of the Parnaíba Delta (with an area of 115 km²).

On 4 October 2012 at 1943 h during a survey for Corallus hortulanus we observed a juvenile Makalata sp. (Rodentia: Echimyidae) with a body length of about 10 cm sitting on a branch at 1.5 m above water level in a thorn-laden Machaerium lunatum tree. In the same tree, about 2.6 m from the rodent, was an adult C. hortulanus (~1.0 m total length). At 1950 h the boa angled its head upward and flicked its tongue three times in the general direction of the rat. By 1955 h it appeared to have made visual contact with the rodent and slowly moved above and to the side opposite of the rat from where it had been previously. Between 1955 h and 1959 h it reached a branch adjacent to that on which the rodent was sitting. Between 2000 h and 2005 h the boa attempted to reach the rat by extending its body until they were approximately 40 cm apart, but the branchless space between them precluded further progress and a possible strike. Then, at 2017 h, the boa backtracked and finally reached the branch on which the rat was sitting. It then began prolonged and stealthy movements toward the rodent until 2029 h. When it apparently became aware that the boa was on the same branch, the rat tried several times to escape by moving forward and backward along the branch. By 2034 h the boa was within 15 cm and at 2038 h they were virtually face to face and within 10 cm of each other. At 2040 h the rodent moved about 5 cm farther from the snake and at 2141 the boa moved several centimeters toward the rat. Finally, at 2142 the boa delivered a strike to the rat’s flank and upon impact the rodent fell from the branch into the water. Although snakes are capable of consuming prodigious meals, based on the size of the rodent we believe the boa would have had a difficult time consuming it if it had made a successful strike and been able to kill the rat.

This unsuccessful attempt at predation by an adult Corallus hortulanus on a juvenile Makalata sp. is of interest for several reasons. It is the first visual documentation we have of locating, stalking, and attempting to capture a non-volant mammal by any species of Corallus, and no species of Makalata has previously been identified as potential prey for C. hortulanus (Henderson and Pauers, 2012). Recently, da Costa Silva et al. (2012) described locating and stalking an Iguana iguana by C. hortulanus. They suggested that the boa might initially have become aware of the lizard’s presence by means of airborne cues (but ultimately locating it by means of substrate-based scent cues on the vegetation). A similar situation might have occurred with the Makalata. Also, rather than making what might have been a direct, straight-line approach to the rodent, the boa appeared to have taken a less direct route, making obvious direction changes in order to

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best approach the potential prey. Finally, as in previous observations of stalking and prey capture in species of *Corallus* (Yorks et al., 2003; Henderson et al., 2007; da Costa Silva, 2012), progress towards the prey was incredibly slow and stealthy with the passage of nearly one hour from what we believe was the boa’s initial awareness of the rat until the unsuccessful strike.

**Acknowledgements**

The senior author dedicates this paper to Prof. José Roberto S.A. Leite (Universidade Federal do Piauí, Parnaíba) who permitted the use of field equipment in his research. He also thanks people from BIOTEC-UFPI, Campus Ministro Reis Velloso, including Leiz Veras, Yuri Dias Macedo, Patrick Quelemes, Rafael Guimaraes Macedo, Dr. Antônio Alves Tavares, Dr. Anderson Guzzi and personnel from Instituto Butantan in São Paulo. He also thanks Dra. Maria de Fatima Furtado, Dr. Carlos Jared, Dr. Francisco Luis Franco, Valdir José Germano, Circe Cavalcante, Silvia Cardoso and Mr. Thomas Bourrier who kindly permitted the use of some of his photographs.

**References**


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**Figure 1.** *Corallus hortulanus* just prior to striking at a spiny rat (*Makalata* sp.). Photograph by Pedro da Costa Silva.