

Mastigodryas boddaerti (Neotropical Racer)

Family: Colubridae (Typical Snakes)

Order: Squamata (Lizards and Snakes)

Class: Reptilia (Reptiles)



Fig. 1. Neotropical racer, *Mastigodryas boddaerti*.

[<http://www.trinidad-tobagoherps.org/Mastigodryasboddaerti.htm>, downloaded 21 October 2016]

TRAITS. The neotropical racer *Mastigodryas boddaerti* is also known as Boddaert's tropical racer or more simply Boddaert's racer. The young tend to have grey or tan bands, a brown back and tan belly, white spots to the front and sides and dark brown spots around the throat (Fig. 1). Adults tend to have tan bands near the head, a brown back and light grey belly, a light stripe behind the head and dark grey spots around the throat (Boos, 1975). These snakes have heads which are very distinct from the neck, large eyes and rounded snouts, elongate bodies and long tails. On average, the neotropical racer is 1.05m in length but they have been recorded up to 1.8m long. These snakes are terrestrial and diurnal (Wehekind, 1955). Bites from *Mastigodryas* species are non-venomous (Malhotra and Thorpe, 1999).

DISTRIBUTION. Boddaert's racer is found in South America and Trinidad (Fig. 2) and the Bocas islands (Temple, 1996). The racer in Tobago, formerly the subspecies *M. boddaerti dunni*, is now a separate species, the Tobago Racer *Mastigodryas dunni*.

HABITAT AND ECOLOGY. The neotropical racer is terrestrial and typically found where there is a variety of vegetation, tall trees, lots of shady areas and a climate which is relatively hot and humid (Siqueira et al., 2013). They may climb vegetation during the night (Temple, 1996).

This species feeds on lizards, mice, frogs and young birds (Wehekind, 1955) (Fig. 3). Females tend to feed on wider prey, and are longer at sexual maturity (Siqueira et al., 2012).

REPRODUCTION. This species has a non-seasonal reproductive cycle. Once mature, the females will breed at any time of the year. The tails of males are larger to accommodate the retractor muscles and hemipenes which are inserted into the cloaca of females during copulation (Siqueira et al., 2013). Females lay around 6 eggs per clutch. The number of offspring tends to vary according to rainfall and prey availability (Siqueira et al., 2013). The leathery eggs give rise to hatchlings which can begin to feed immediately.

BEHAVIOUR. This diurnal species is solitary except during mating. Hatchlings are independent. These snakes evade predators by being able to move very fast. When outmatched, they may coil up into a ball and vibrate the tail vigorously (Malhotra and Thorpe, 1999). These snakes only communicate for the purpose of sexual reproduction. A scent would be released from the females which would attract males. A series of tongue flicks follows (Fig. 4) and the male chases the female. Copulation follows when the chase is successful (Siqueira et al., 2013).

APPLIED BIOLOGY. It is uncommon to find this species being kept as pets. These snakes are now under predation by introduced mongooses (Williams, 1918) (Fig. 5). There is no documentation published by the IUCN on the conservation of *Mastigodryas boddaerti* (IUCN, 2016).

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Fig. 2. *Mastigodryas boddaerti* geographic distribution.

[<http://reptile-database.reptarium.cz/species?genus=Mastigodryas&species=boddaerti>, downloaded 23 October 2016]



Fig. 3. Boddaert's racer feeding on a gecko (which has lost its tail).

[<http://www.asclegg.co.uk/notes/Images/big5/Snake2.jpg>, downloaded 23 October 2016]



Fig. 4. Tongue flicking to capture scent in a neotropical racer.

[<https://www.flickr.com/photos/adrian-afonso/3648125562>, downloaded 23 October 2016]



Fig. 5. Mongoose vs Boddaert's racer.

[<http://cdn0.wideopenspaces.com/wp-content/uploads/2014/06/ftd-snakemon-620x330.jpg>, downloaded 23 October 2016]

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