

NATURAL HISTORY NOTES

PHILODRYAS NATTERERI (Paraguay Green Racer): OPHIOPHAGY. The Colubrid snake *Philodryas nattereri* is a medium sized snake widely distributed in the Brazilian semi-arid habitats (Rodrigues, 2003). *P. nattereri* is diurnal and mainly terrestrial and can also be found foraging in residential roofs (pers. obs.). Its diet consists of mainly lizards but also anurans, birds and small rodents (Vitt & Vangilder, 1983). The species is considered to be a general specialist. The ingestion of other snakes is relatively well reported for the genus *Philodryas* but it is apparently restricted to a single species. *Philodryas patagoniensis* is known to feed on a range of Colubrids such as *Philodryas olfersii*, *Thamnodynastes strigatus*, *Clelia occipitolutea*, *Liophis poecilogyrus*, *Liophis jaegeri*, *Helicops carinicaudus*, *Lystrophis dorbignyi* (Lema et al., 1983), *Lygophis dilepis* (López & Giraudó, 2008), *Pseudablables agassizi* and conspecifics (Hartmann & Marques, 2005). There is also a record of one individual that fed on a Viperid snake of the genus *Bothrops* (Perroni & Travaglia-Cardoso, 2007). Here we report a case of an unexpected prey—a Vine Snake *Oxybelis aeneus* found in the digestive tract of a *Philodryas nattereri*. We analysed the digestive tract content from an adult female collected in Pentecoste, State of Ceará, Brazil (03° 44'25.4" S. 39° 18'26.0" W; GPS Datum: WGS84), on 26 January 2009 at 10:20 hrs. The snake measured 1034 mm snout-vent length (SVL), 336 mm tail length (TL), 25.5 mm head length and weighed 268 g. After examining the digestive tract content of the snake we found two prey items: a lizard *Cnemidophorus ocellifer*, partially digested, and an arboreal snake *Oxybelis aeneus* (Fig. 1). The snake had ingested the prey head first and it was almost intact with an SVL of 497 mm, TL 306 mm and mass of 19 g. The prey/predator mass and SVL length rates were 0.07 and 0.48 respectively. Both snakes were deposited in the Collection of Herpetology of Universidade Federal do Ceará with the codes CHUFC 3144 for the *P. nattereri* and CHUFC 3155 for the *O. aeneus*. *Oxybelis aeneus* is an agile and irascible arboreal snake that readily presents defensive display if disturbed (Greene, 1979; Martins et al., 2008) and strikes when touched (pers. obs.). Despite *O. aeneus*' known defensive behaviour,

the difference in size between predator and prey presented here must have allowed the *Philodryas nattereri* to prey on the *O. aeneus* without no harm. Ophiophagy seems to be merely incidental to individuals of *Philodryas nattereri*. In spite of the existence of vast data for this species' dietary habit (Vitt, 1980), to our knowledge this is the first report of snake ingestion by *Philodryas nattereri*.

We thank the Fundação Cearense de Amparo a Pesquisa (FUNCAP) for financial support, the Instituto Brasileiro do Meio Ambiente e Recursos Naturais (IBAMA) for the license (License number: 18596-1) to collect snake samples in the studied area during December 2008.

REFERENCES

- Greene, H.W. (1979). Behavioral convergence in defensive display of snakes. *Experientia*. **35**, 747-748.
- Hartmann, P.A. & Marques, O.A.V. (2005). Diet and habitat use of two sympatric species of *Philodryas* (Colubridae), in South Brazil. *Amphibia-Reptilia* **26**, 25-31.
- Lema, T., Araújo M.L. & Azevedo, A.C.P. (1983). Contribuição ao conhecimento da alimentação e do modo alimentar de serpentes do Brasil. *Com. Mus. Ci. Tecnol. PUC-RS. Zool. Série*. **26**, 64-65.
- López, M.S. and Giraudó, A.R. (2008). Ecology of the Snake *Philodryas patagoniensis* (Serpentes, Colubridae) from Northeast Argentina. *J. Herpetol.* **42** (3), 474-480.
- Martins, M., Marques, O.A.V. & Sazima, I. (2008). How to be arboreal and diurnal and still stay alive: microhabitat use, time of activity, and defense in Neotropical forest snakes. *S. Amer. J. Herpetol.* **3** (1), 60-69.
- Perroni, L.P.G. & Travaglia-Cardoso, S.R. (2007). *Philodryas patagoniensis* (Parelheira) venomous snake (a Crotalid) as prey. *Herpetol. Bull.* **101**, 37-39.
- Rodrigues, M.T. (2003). Herpetofauna da Caatinga. In: *Ecologia e Conservação da Caatinga*. pp.181-236. Leal, I.R., Tabarelli, M., Silva, J.M.C. (Eds). Recife, Pernambuco: Universidade Federal de Pernambuco, PE.

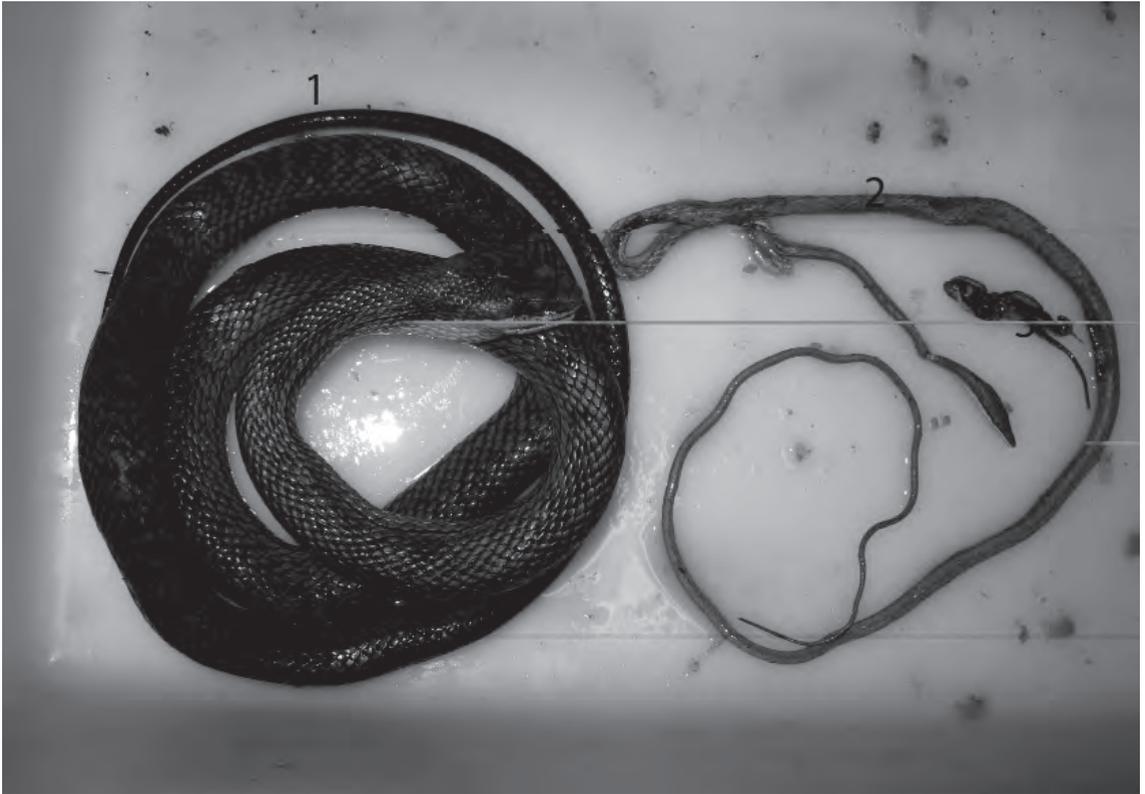


Figure 1. (1) *Philodryas nattereri* - CHUFC 3144 and the ingested items: (2) *Oxybelis aeneus* - CHUFC 3155 and (3) *Cnemidophorus ocellifer*.

Vitt, L.J. (1980). Ecological observations on sympatric *Philodryas* (Colubridae) in northeastern Brazil. *Pap. Avul. Zool.* **34**, 87-98.
 Vitt, L.J. & Vangilder, L.D. (1983). Ecology of a snake community in northeastern Brazil. *Amphibia-Reptilia* **4**, 273-296.

Submitted by PAULO CESAR MATTOS DOURADO DE MESQUITA¹, DIVA MARIA BORGES-NOJOSA²

¹ *Plínio Monteiro St. 123, Luciano Cavalcante, CEP 60811-285, Fortaleza, CE, Brazil. paulocmdm@gmail.com.*

² *Universidade Federal do Ceará, Núcleo Regional de Ofiologia da Univ. Fed. Ceará (NUROF-UFC), Depto. Biologia, Campus do Pici, Bl. 905, CEP 60.455-760, Fortaleza-Ceará, Brazil. dmbnojosa@yahoo.com.br.*

SIPHLOPHIS LONGICAUDATUS (Brazilian Spotted Night Snake): HABITAT. The genus *Siphlophis* Fitzinger, 1843 belongs to the Pseudoboini tribe and comprises six species which occur mostly in south America in tropical rain forests (Peters & Orejas-Miranda, 1970; Duellman, 1978; Sazima & Argôlo, 1994; Martins & Oliveira, 1998; Starace, 1998; Bernarde & Abe, 2006; Uetz, 2007). These snakes are known as mainly nocturnal with semi-arboreal habits. Their diets include mostly lizards, occasionally snakes, mammals, anurans and lizard eggs (Sazima & Argôlo, 1994; Martins & Oliveira, 1998; Prudente et al., 1998; Marques et al., 2001). *Siphlophis longicaudatus* Andersson 1901 is known from the Atlantic forest of southern and southeastern Brazil, occurring from Espírito Santo to Rio Grande do Sul States (Peters & Orejas-Miranda, 1970; Prudente & Feio, 2001). Despite some information about its diet (Prudente et al., 1998), there is little data on the ecology of

this snake. Here we provide a new habitat record based on one individual collected in Minas Gerais State, southeastern Brazil. On 16 April 2005 around mid-day, we found an adult female specimen *Siphlophis longicaudatus* (788 mm in snout-vent length) resting in a rock crevice which was about 1 m above the ground at the municipality of Diamantina (18° 13' 57.2" S, 43° 35' 14.9" W, 1250 m above sea level), Minas Gerais State, Brazil. This locality is in the Cerrado domain, in the meridional segment of Serra do Espinhaço Mountain Range. The highest average temperature is 20°C and the lowest 18°C, with higher temperatures occurring from October to March and the lowest from April to September. Most of the rainfall occurs from November to March (223.19 mm) and the drier periods occur from June to August (8.25 mm). The relative humidity ranges from 72.33 % to 89.75 % (Silva et al., 2005). The area where the snake was captured can be classified as a "campo rupestre" which is characterized by the domain of grasslands and shrubs that occur in the middle of rock formations in open areas (Fig. 1). The vegetation is composed of Asteraceae, Melastomataceae, Gramineae, Cyperaceae, Cactaceae, Ericaceae, Leguminosaceae, Velloziaceae, Eriocaulaceae and Xyridaceae (Silva et al., 2005). The adaptations to arboreality of *S. longicaudatus* (i.e., a slim body and a long tail, Lillywhite & Henderson, 1993) could be useful in this environment by improving locomotion around the rock complexes. Lizard species that occur in rocky habitats are known for this locality and include: *Phyllopezus* cf. *pollicaris*, *Gymnodactylus guttulatus*, *Ameiva ameiva*, *Kentropyx* cf. *paulensis*, *Polychrus acutirostris*, *Tropidurus montanus*, *T. torquatus*, *Eurolophosaurus nanuzae*, *Cercosaura* sp. and *Ophiodes* sp. (A. Righi & S.A.A. Morato, pers. comm.). All of these lizards are potential prey for snake species inhabiting the area. No gut contents were observed in the collected specimen. *S. longicaudatus* was only recently recorded in Minas Gerais State at the Parque Estadual do Rio Doce, municipality of Marliéria (Prudente & Feio, 2001). This locality comprises an Atlantic Forest fragment. As far as we know, this is the second record for this species in Minas Gerais State. The Cerrado biome represents the second largest

neotropical ecosystem and a unique savanna hotspot. However, there are few ecological studies covering the herpetofauna in this diverse biome (Valdujo & Nogueira, 2001; Nogueira et al., 2008). The observation of a snake that is considered to be arboreal and inhabit forested habitats, in such a vast open area in the Cerrado biome, emphasises the need of focus more attention on this poorly known Brazilian ecosystem. The specimen (MCNR1807) was collected by A. Righi, L. Alencar, R. Filogônio and F. Zaidan and is deposited in the herpetological collection of the Natural Science Museum of PUC Minas, Belo Horizonte, Minas Gerais State, Brazil.

We thank Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) for granting support to Alexandre Righi (PROBIC/PUC Minas 2005/02); Fundo de Incentivo a Pesquisa (FIP/PUC Minas) and Fundação de Amparo à Pesquisa do Estado de Minas Gerais (FAPEMIG) for financial support to Luciana Barreto Nascimento.

REFERENCES

- Bernarde, P.S. & Abe, A.S. (2006). A snake community at Espigão do Oeste, Rondônia, Southwestern Amazon, Brazil. *S. Amer. J. Herp.* **1**, 102-113.
- Duellman, W.E. (1978). The Biology of an equatorial herpetofauna in Amazonian Ecuador. *Misc. Publ. Kansas Mus. Nat. Hist.* **65**, 1-352.
- Lillywhite, H.B. & Henderson, R.W. (1993). Behavioral and functional ecology of arboreal snakes. In *Snakes: Ecology and Behavior*, pp. 1-48. Seigel, R.A. & Collins, J.L. (Eds.). New York: McGraw-Hill.
- Martins, M. & Oliveira, E. (1998). Natural history of snakes in forests of the Manaus Region, central Amazonia, Brazil. *Herp. Nat. Hist.* **6**, 78-150.
- Marques, O.A.V., Eterovic, A. & Sazima, I. (2001). *Serpentes da Mata Atlântica: Guia Ilustrado para a Serra do Mar*. Riberião Preto: Holos Editora. 184 pp.
- Nogueira, C., Colli, G. & Martins, M. (2008). Local richness and distribution of the lizard fauna in natural habitat mosaics of the Brazilian Cerrado. *Austral Ecol.* **34**, 83-96.