

EUROLOPHOSAURUS NANUZAE

(calango): **COURTSHIP AND COPULATION.**

Courtship and copulation are important characteristics of animal behaviour since both displays and morphology are involved in these processes and might be used as cues for reproducing individuals to select their mates. Understanding behaviour during sexual interactions should illuminate the understanding of morphology and/or behaviour from an evolutionary perspective. The lizard *Eurolophosaurus nanuzae* is a saxicolous small bodied species with an adult average body size of 50 mm (Galdino et al., 2003). The species is endemic to the rocky fields of the Espinhaço Mountain Range in Brazil (Rodrigues, 1981), and is assessed as “Near Threatened” (IUCN, 2012). Despite aspects of its ecology being relatively well known there are few studies regarding its behaviour.

Behaviours were observed by ad libitum sampling (Altmann, 1974). Courting lizards were observed between late August and early September 2010. We observed a total of six *E. nanuzae* pairs. Courting males were first seen performing push-up displays in the presence of females. Males then approached females and climbed upon the females’ dorsum while biting and holding the female’s neck (Fig. 1), this interaction lasts c.a. 3 min. During this interaction females carried the biting male, attached to her dorsum, a short distance (c.a. 10 cm). Afterwards, the males passed one of their hind-limbs up towards the female’s tail base while hugging the female’s trunk while still biting her neck (Fig. 1). Females were seen carrying the attached males for short distances in this position. Receptive females were passive and lifted their tails enabling the courting male to introduce his hemipenis in female’s cloaca. In two of the observations males seemed to ‘force’ copulation as females seemed not to be receptive and resistant to males. Females were seen attempting to resist biting males that eventually forced the hemipenis in the females’ cloaca. Two females were able to expulse the males.

REFERENCES

Altmann, J. (1974). Observational study of behavior: Sampling methods. *Behavior* 49: 227-267.
 Galdino, C.A.B., Assis, V.B., Kiefer, M.C. &

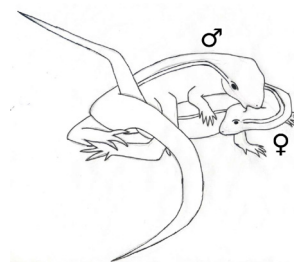


Figure 1. Illustration of copulation in *Eurolophosaurus nanuzae*.

Van Sluys, M. (2003). Reproduction and fat body cycle of *Eurolophosaurus nanuzae* (Sauria; Tropiduridae) from a seasonal montane habitat of southeastern *Brazilian Journal of Herpetology* 37: 687-694.
 IUCN. (2012). IUCN *Red List of Threatened Species*. Version 2012.2. Available at: www.iucnredlist.org. Accessed 12 March 2013.
 Rodrigues, M.T. (1981). Uma nova especie de *Tropidurus* do sudeste do Brasil (Sauria, Iguanidae). *Papeis Avulsos de Zoologia* 34: 145-149.

Submitted by: STEFANIA P. R. VENTURA, Programa de Pós-Graduação em Zoologia da PUC Minas Av. Dom José Gaspar, 500, Coração Eucarístico, 30535-610, Belo Horizonte-MG, Brazil. stefania.ventura2@gmail.com.
 CONRADO A. B. GALDINO, Programa de Pós-Graduação em Zoologia da PUC Minas Av. Dom José Gaspar, 500, Coração Eucarístico, 30535-610, Belo Horizonte-MG, Brazil. galdinoc@pucminas.br.
 ROBERT J. YOUNG, Programa de Pós-Graduação em Zoologia da PUC Minas Av. Dom José Gaspar, 500, Coração Eucarístico, 30535-610, Belo Horizonte-MG, Brazil. r.j.young@salford.ac.uk

ACKNOWLEDGEMENTS

We thank G.W. Fernandes for the permission to work in his property in Serra do Cipó; L.B. Nascimento for the kind logistical support; M. B. Galdino for their efforts to help during the fieldwork; C. Menta for her nice work on illustrations; Instituto Chico Mendes de Conservação da Biodiversidade - ICMBio for the permit (nº 26761-1). For this work CABG received a fellowship from CAPES proc. 151663/2010-6. CABG and RJY also thank Fundação de Amparo à Pesquisa do Estado de Minas Gerais (FAPEMIG) for their support.