

## Predation of *Oscaecilia bassleri* (Gymnophiona: Caecilidae) by *Anilius scytale* (Serpentes: Aniliidae) in southeast Peru

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### ABSTRACT

We report an event of predation between two fossorial species; the snake *Anilius scytale* on the caecilian *Oscaecilia bassleri*, from the Manu Biosphere Reserve, southeast Peru. This is the first ever report of predation on *O. bassleri* and complements information known about the feeding ecology of *A. scytale*.

Tropical fossorial herpetofauna species are rarely found due to their secretive lifestyles and therefore, there is a paucity of information about their ecology (Maritz and Alexander, 2009; Böhm *et al.*, 2013), including feeding habits (Maschio *et al.*, 2010). Here we report upon a predation event involving two fossorial species; the caecilian, *Oscaecilia bassleri* (Dunn, 1942), predated by the coral pipe snake, *Anilius scytale* (Linnaeus, 1758).

The distribution of *Anilius scytale* ranges through the western Amazonian basin lowlands and foothills, into the tropical rainforests of the Guyana Shield (Duellman, 2005; Uetz and Hošek, 2014) and the eastern Amazon region, in Brazil (Maschio *et al.*, 2007). It is known to feed mainly on amphisbaenians, but also on other vertebrates with elongated bodies, such as caecilians, snakes and fish (Maschio *et al.*, 2010).

The caecilian *O. bassleri* is a poorly known species that occurs through the foothills and lowlands of eastern Ecuador and Peru (IUCN, 2014), yet both species are known to occur in Manu National Park and its buffer zone in southeast Peru (Catenazzi *et al.*, 2013).

On 21st August 2014 at 9:00 am, an individual of *A. scytale* was found on the Mascoitania reserve (12°47'21.84"S; 71°23'28.06"W, 460 m a.s.l.), Amazonian southeast Peru. The locality holds a research station and lodge; the Manu Learning Centre, which is situated along the Alto Madre de Dios River, in the buffer area of Manu National Park. It is a 643 ha private reserve owned and operated by The Crees Foundation, hosting a base for research, tourism and

volunteer activities. The specimen was crossing one of the pathways within the station, and was caught and temporarily withheld in the project work area to be measured and photographed. At 21:30, during the measurements, the individual started to open and close its mouth and began to regurgitate an individual of *O. bassleri* (Fig. 1).

The individual of *A. scytale* was 68.5 cm in length and weighed 160.9 g, after regurgitation. The individual of *O. bassleri* was 88 cm long and weighed 29.1 g. The caecilian was ingested head first and therefore the head and anterior end of the body was in the initial process of digestion, while the rest of the body was intact.

*Anilius scytale* has been known to prey upon other caecilian species, such as *Siphonops annulatus* (Greene, 1983) and *Caecilia cf. gracilis* (Taylor, 1968; Maschio *et al.*, 2010), but this is the first record ever made upon *O. bassleri*. In fact, no other predation events have ever been documented for *O. bassleri*.

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**Figure 1.** A) Specimen of *Anilius scytale* regurgitating an *Oscaecilia bassleri*. B) Complete regurgitation.

species identification and comments on a previous version of the manuscript.

#### Literature cited

- Böhm, M.; Collen, B.; Baillie, J.E.M.; Chanson, J.; Cox, N.; Hammerson, G.; Hoffmann, M.; Livingstone, S.R.; Ram, M. et al. 2013. The Conservation Status of the World's Reptiles. *Biological Conservation* 157: 372-385.
- Catenazzi, A., Lehr, E. & von May, R. 2013. The amphibians and reptiles of Manu National Park and its buffer zone, Amazon basin and eastern slopes of the Andes, Peru. *Biota Neotropica* 13: 1-15.
- Duellman, W.E. 2005. Cusco Amazónico: the lives of amphibians and reptiles in an Amazonian rainforest. Ithaca, Cornell University Press.
- Greene, H.W. 1983. Dietary correlates of the origin and radiation of snakes. *American Zoologist* 23: 431-441.
- IUCN SSC Amphibian Specialist Group. 2014. *Oscaecilia bassleri*. The IUCN Red List of Threatened Species. Version 2014.3. Available at: <[www.iucnredlist.org](http://www.iucnredlist.org)> Last accessed on 7 April 2015.
- Maritz, B., & Alexander, G.J. 2009. Breaking ground: quantitative fossorial herpetofaunal ecology in South Africa: original article. *African Journal of Herpetology* 58: 1-14.
- Maschio, G.F., da Costa Prudente, A.L., de Lima, A.C., & Feitosa, D. T. 2007. Reproductive biology of *Anilius scytale* (Linnaeus, 1758)(Serpentes, Aniliidae) from eastern Amazonia, Brazil. *South American Journal of Herpetology* 2: 179-183.
- Maschio, G.F., Prudente, A.L.D.C., Rodrigues, F.D.S., & Hoogmoed, M.S. 2010. Food habits of *Anilius scytale* (Serpentes: Aniliidae) in the Brazilian Amazonia. *Zoologia (Curitiba)* 27: 184-190.
- Uetz, P. & Hošek, J. 2014. *Anilius scytale*, The Reptile Database. Available at: <<http://www.reptile-database.org>>. Last accessed on 8 April 2015.

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