

First record of thanatosis behaviour in *Malpolon monspessulanus* (Squamata: Colubridae)

Marco Sannolo and Francesca Gatti and Stefano Scali*

Thanatosis is a behaviour observed in several animal species that consists of feigning death in order to avoid undesired attention and subsequently preyed on. This behaviour is well known in many snakes belonging to various genera (e.g., *Coelognathus*, *Coluber*, *Diadophis*, *Farancia*, *Hemachatus*, *Heterodon*, *Lampropeltis*, *Leptomicrurus*, *Lystrophis*, *Macrocalamus*, *Masticophis*, *Micrurus*, *Naja*, *Natrix*, *Rhabdophis*, *Storeria*, *Xenocrophis*) that, when threatened, defecate, open the mouth, letting hang their tongue and then relax by feigning death (Carpenter and Ferguson, 1977; Gerald, 2008). To our knowledge, we report here the first case of thanatosis behaviour ever observed in the Montpellier snake, *Malpolon monspessulanus* (Santos, X. and Pleguezuelos, J.M., pers. comm.).

On 20th August 2009, 3:30 p.m., during an excursion in Spotorno, Liguria, Italy (44°13'61"N, 8°24'60"E) we found a small *Malpolon monspessulanus* motionless near a suburban street. We thought it was dead since it remained immobile and limp even after picking it up. The snake showed no apparent wounds. We recorded some measurements after bringing the snake home. It was a male of 52 cm SVL and 72 cm total length. Considering the body length and colour pattern, we estimated its age at 4-5 years (Ottonello et al., 2007). During half an hour of handling the snake remained completely motionless and flaccid. Then we transferred it into a bucket and returned about three hours later, when it appeared alive, alert and aggressive. The snake was coiled and followed our movement by moving its head. When approached, he tried to flee and we subsequently restrained its head in order to avoid getting bitten. With that action, the snake

became flaccid again and remained motionless, but this thanatosis was different from those know in *Natrix natrix*, since it did not defecate, nor open its mouth to show its tongue. The thanatosis of this Montpellier snake resembled that described by Mirza et al. (2011), but without the exposure of the ventral surface. We then proceeded to release the snake in a dried-up canal near the site of capture. During all this time, we hold the snake in the hand, where it remained flaccid and in an apparent death condition. But few seconds before we actually put him on the ground to release, the snake tightened up and became alert again. As soon as he was put down, he fled away in the shrubs of the canal.

References

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