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Bat as a prey of *Elaphe longissima* (LAURENTI, 1768)

The Aesculapian Snake *Elaphe longissima* (LAURENTI, 1768) is considered to be a generalist as regards the exploitation of available food in its habitat. The literature concerning the foraging ecology of this snake refers to a wide dietary spectrum (also thanks to varying snake body size). Aesculapian Snakes can forage on trees or on the ground. Primarily they feed on small terrestrial mammals (rodents, insectivores), small birds (especially juveniles), bird eggs and amphibians; juveniles take lizards. However, occasionally also fishes or large insects are eaten (BARUŠ & OLIVA 1992; BÖHME 1993; LUISELLI & RUGIERO 1993). Here we report on the predation of a bat by an Aesculapian Snake.

Fig. 1: Male Serotine Bat (*Eptesicus serotinus*) constricted by *Elaphe longissima* (LAURENTI, 1768), Horná Ždaňa (Slovakia). Photo: P. BALÁŽ.

Abb. 1: Männchen der Breitflügelfledermaus (*Eptesicus serotinus*) von *Elaphe longissima* (LAURENTI, 1768) umschlungen. Horná Ždaňa (Slowakei). Photo: P. BALÁŽ.

An adult Aesculapian Snake (body length ca 100 cm) was observed strangling its prey at 11:30 a.m. (CEST) on May 2, 2004 (fig. 1). The prey was an adult male of the Serotine Bat *Eptesicus serotinus* (SCHREBER, 1774). This interesting incident took place on a mown lawn close to a family house in Horná Ždaňa village (48°34' 20"N, 18°44'40"E; 310 m a.s.l.; Žiarska kotlina Basin, Central Slovakia). The strangling was followed from a small distance for a few minutes. After a short time, the snake released the prey and moved away without swallowing the suffocated bat (probably because of disturbance by taking a picture). On May 16, 2004 we visited the locality in the evening. One individual of the Serotine Bat was visually observed (detected by ultrasound bat-detector) during emerging (08:47 p.m. CEST) from the day roost, located in a small wooden roof attic at just three meters directly above the mentioned turf. Based on this finding, we suppose that the bat was caught and taken off from this roost.

Up to present, no specific study dealing with snake predation on bats was performed. Data were often collected in accidental observations. SCHÄTTI (1984) reported in a detailed literature review that chiropterophagy is not uncommon in some snake species. Most of the observations concern giant snakes and larger climbing species (with different hunting strategies) from American, African and Asian continents. Snakes catch bats mainly in caves but also in other types of roosting places where the bats are concentrated in roosting assemblages. Sometimes, bats can present a large portion in a snake's diet. For instance, the Cave-dwelling Nectar Eating Bats *Eonycteris spelaea* (DOBSON, 1871) were an easy accessible prey for giant snakes *Python reticulatus* (SCHNEIDER, 1801) in a cave on the island of Bali (HAENSEL et al. 2001). Similar to our observation, Black Rat Snakes *Elaphe obsoleta* (SAY, 1823) were reported to prey on emerging bats in buildings (SPARKS et al. 2000).

Data about chiropterophagy in snakes from the European region are generally missing. Only a few notes mention bats in

the diet of the Aesculapian Snake (see in GRILLITSCH et al. 1983 and VEITH 1991). LUISELLI & RUGIERO (1993) studied the food habits of 32 specimens of arboreal Aesculapian Snake in Italy, and did not find either birds or eggs in the diet. They could not answer the question whether this arboreal snake eats more birds than do terrestrial ones. Such "flying" food can only be an occasional source for this opportunistic species (cf. BARUŠ & OLIVA et al. 1992; BÖHME 1993). However, one can suppose that sometimes it can forage also non-typical prey (e.g., bats roosting in roof attics or tree-hollows during summer days can provide well concentrated amounts of food). This hypothesis has also been corroborated by the observation of an Aesculapian Snake occurring under a nursery colony of Lesser Horseshoe Bats *Rhinolophus hipposideros* (BECHSTEIN, 1800) in a roof attic. Chiropterologists caught the snake just creeping along the wood frame to the bats (KOSELJ & ZAGMAJSTER 2001). Certainly, European snakes do not have a significant influence on bat populations. However, locally, they may be specialized for eating bats, similar to some cases observed in tropical regions (cf. SCHÄTTI 1984).

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Predation upon *Amphisbaena fuliginosa* LINNAEUS, 1758 by *Micrurus ancoralis* (JAN, 1872)

Micrurus ancoralis (JAN, 1872), is distributed through the Pacific lowlands from southeastern Panama to southwestern Ecuador and extreme northwestern Peru, between 0 and 1500 m elevation (CAMPBELL & LAMAR 2004). The latter authors are the only reference regarding the diet of *M. ancoralis* in mentioning "small snakes, including *Ninia atrata*" as prey of the Regal Coral Snake. Here I report predation upon *Amphisbaena fuliginosa* LINNAEUS, 1758 by *M. ancoralis*.

A specimen of *M. ancoralis* (deposited at D. F. CISNEROS-HEREDIA's collection at Universidad San Francisco de Quito; Quito, Ecuador: DFCH-USFQ 1111) was collected on the floor of a gap in primary Lowland Evergreen forest at 09:00 at Hacienda El Cielo, a farm on the margins of the Bogotá River (78°44'W, 01°06'S, ca. 300 m a.s.l.), Province of Esmeraldas, Ecuador, by Vlastimil ZAK et al. in October 2000. The snake, an adult female [277 ventrals, 32 subcaudals, 123 cm total length (TL), 114 cm snout-vent length (SVL)], was assigned to the subspecies *M. a. ancoralis* (sensu CAMPBELL & LAMAR 2004). Examination of its stomach contents revealed that the snake had swallowed an adult Speckled Worm Lizard, *Amphisbaena fuliginosa* (DFCH-USFQ 1112) (fig. 1). The worm lizard [8 preanal pores, 200 body annuli, 25 tail annuli, autotomy level of the tail at annulus 5, 46 segments to a midbody annulus, 39 cm TL, 33.5 cm SVL] was assigned to the subspecies *A. f. varia* LAURENTI, 1768 (sensu VANZOLINI 2002). The worm lizard was ingested head first. The prey/predator body length ratio is 0.29, the prey/predator body mass ratio is 0.33, the maximal diameter of