## An attempted predation on a Four-lined snake *Elaphe quatuorlineata* (Lacépède, 1789) by a Common Buzzard *Buteo buteo* (Linnaeus, 1758)

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Submitted on: 2009, 11th December; revised: 2010, 18 January; accepted on 2010, 26th February.

**Abstract.** The authors report on a case of attempted predation on a sub-adult Fourlined snake by a Common Buzzard observed in Calabria region (Southern Italy).

Keywords. Elaphe quatuorlineata, Buteo buteo, predation, Calabria, Italy.

The Four-lined snak e *Elaphe quatuorlineata* (Lacépède, 1789) is the largest European snake, with a maximum length recorded as 250 cm, but adults are usually 100-150 cm long. In the Calabria region, nevertheless, specimens of over 190 cm size had been observed (maximum size: male, may 1999, Falconara Albanese, C.da Vassallo, Cosenza, 665 m a.s.l. 195 cm. G. Aloise, unpublished data). Its distribution area covers large part of Italy, the coastal lines of the Balkan Peninsula and related islands, Albania, Bulgaria, Greece and several Greek islands. The species is usually preyed by wild boar *Sus scrofa*, badger *Meles meles*, fox *Vulpes vulpes*, dog and some Falconiforms (especially, Short-toed eagles *Circateus gallicus* and Common Buzzards *Buteo buteo*, Cattaneo and Carpaneto, 2000).

This note reports an attempted predation on a sub-adult Four-lined snake by a Common Buzzard. The Common Buzzard feeds on a wide range of preys, mainly rodents, but also on other vertebrates and invertebrates of appropriate size. Its diet reflects underlying differences in prey-availability (Cramp and Simmons, 1980). The diet shows seasonal and geographical variations, with a greater consumption of reptiles and insects in the southern part of its area. (Glutz von Blotzeim et al., 1971; Cramp and Simmons, 1980). In Central and Southern Italy, during the favourable seasons, the Common Buzzard preys mainly reptiles (> 50%) and, among them, snakes are usually prevalent (see Moltoni, 1937; Lovari, 1975; Massa, 1981; Manzi and Pellegrini, 1989). However, the Common Buzzard generally prefers the small sized snakes (about 50 g average weight, especially *Hierophis*, *Elaphe, Natrix* and *Vipera*) that are avoided by Short toed Eagles. This last species, in fact, is specialised in capturing Ophidia and weigh twice the Common Buzzard, preferring preys weighing more than 100g (Petretti, 2008).

On 13th June 2009, at about 06:00 p.m., in Cerenzia (province of Crotone, Calabria region, Southern Italy), on a 450 m a.s.l. unlevelled road crossing a pasture on clay soils, an attempted predation on a Four-lined snake by a Common Buzzard was observed and documented. When I found the Common Buzzard, it was immobilized on its back by the coils of the snake (Fig. 1). For some minutes, the fighting animals seemed not to notice the presence of the human observers within a walking distance. Only when the animals were disturbed by the means of a stick , the snake distracted its attention from the buzzard towards the new "danger" (Fig. 2 A). During the fighting, which lasted about 15 minutes, the snake continued to subdue the raptor, striking it with several bites to its wings and its head (Fig. 2 B-D), before releasing its hold, because of a second human interference.

The observation seems to confirm the substantial protection that a large size offer the Four lined snake, when preyed by the Common Buzzard, that, obviously, can prey only young smaller-size specimens of this species.



Fig. 1. A Common Buzzard immobilized by a Four-lined snake. Dates and location in the text (Photo: A. Mazzei).



**Fig. 2.** The sequence of the attempted predation on a subadult Four-lined snake by a Common Buzzard. See text (Photo: A. Mazzei).

## ACKNOWLEDGMENTS

Mariella Vercillo has improved the English of the manuscript.

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