

Predation of a grass snake *Natrix natrix* by a Peloponnesian freshwater crab *Potamon pelops*

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The grass snake *Natrix natrix* (L., 1758) has a broad Palearctic distribution that extends from central Germany in the west to southern central Russia in the east, and from central Scandinavia in the north to the Balkans and Middle East in the south (Speybroeck et al., 2016; Kindler et al., 2017; Schultze et al., 2020). It is known to be predated by a wide range of vertebrates, including various species of birds, mammals, fish, amphibians and reptiles (e.g. Kabisch, 1999; 2020; Cugnasse, 2001; Strugariu et al., 2014). It should however be noted that many reports mentioning predation refer to observations of snakes that are currently considered to be the barred grass snake *Natrix helvetica* (Lacépède, 1798), which has only recently been elevated to full species status (Kindler et al., 2017). In addition, some recent reports don't take this taxonomic split into account. Records of *N. natrix* sensu lato being predated by invertebrates are rare but do include the predation of juveniles by *Carabus* ground beetles (Kabisch, 2020).

In this report we share an observation of a juvenile *N. natrix* being predated by a Peloponnesian freshwater crab *Potamon pelops*, Jesse, Schubart & Klaus, 2010, on the south of the Peloponnesian peninsula, Greece. On 10 July 2020, at 12:16 h, about 750 m south of Charavgi (36.98473° N, 21.85503° E, WGS 84) we were undertaking a herpetological survey from a trail adjacent to the stream that includes the Polylimnio waterfalls when we spotted a juvenile *N. natrix* (i.e. likely born in the previous season) in shallow water of the riparian zone of the stream. Upon further inspection, it turned out that the snake was being predated by a specimen of *P. pelops* (BHS video, 2023), which was partially hidden under a piece of dead wood. The crab was holding the snake with its pincers and eating it tail first (Fig. 1). The snake was fully conscious and trying to escape, but wasn't capable of releasing itself from the crab's grip. At the moment the observation took place, the crab had completely devoured the snake's tail, the cloaca and part of the lower abdomen, indicating that it had been feeding for a while and that the snake had no chance of survival. We observed and documented the situation for twenty minutes, decided not to intervene and then left the scene.

To the best of our knowledge, this is the first documented case of predation of a European snake by a crustacean. To understand the role of a snake species in an ecological



Figure 1. Predation of a juvenile grass snake *Natrix natrix* by a Peloponnesian freshwater crab *Potamon pelops*

system, it's important to know the factors that play a role in its survival rate. With this contribution, we add to the knowledge regarding Greek herpetofauna and particularly to the ecology of *N. natrix*. Since *N. natrix* and other species of *Natrix* share their range with several other species of *Potamon*, it is likely that more interactions between members of these two genera are yet to be recorded.

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