



# Predation on a Eurasian Blue Tit (*Cyanistes caeruleus*) by a Barred Grass Snake (*Natrix helvetica*) in Great Britain

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The Barred Grass Snake (*Natrix helvetica*) has been recorded as having a diet consisting mainly of amphibians and fish (Gregory and Isaac 2004). In Great Britain, European Common Frogs (*Rana temporaria*) undoubtedly are the principal prey, followed by newts, fish, and tadpoles (Gregory and Isaac 2004), but terrestrial vertebrates also are taken (Luiselli and Rugiero 1991). However, different populations of *Natrix helvetica* are known to consume different prey. For example, the population found in Chilworth feeds exclusively on European Common Toads, *Bufo bufo* (Brown 1991).

Regionally, the diets of Barred Grass Snake populations depend on factors that include prey availability and climatic conditions (Luiselli et al. 2005). One notable example of a regional diet was in Fordwich, where the main anuran prey was the alien Marsh Frog, *Pelophylax ridibundus* (Gregory and Isaac 2004). In southern England, Barred Grass Snakes feed almost exclusively on European Common Toads, with larger snakes taking larger toads (Reading and Davies 1996). In central Italy, Barred Grass Snakes prey on a number of small vertebrates, with larger females more likely than males to feed on adult *B. bufo* (Filippi et al. 1996). Prey other than anurans may be taken in accordance with specific climate and

habitat characteristics; for example, Barred Grass Snakes in mountainous regions with cooler climates in Italy prey on salamanders and newts (Luiselli et al. 2005). Alternatively, in agricultural zones, Barred Grass Snakes tend to eat voles (Luiselli et al. 2005). In addition to piscine and anuran prey, Barred Grass Snakes also are known to occasionally take birds (Gregory and Isaac 2004).

On the morning of 14 June 2013, LGR was alerted to the distress call of a Eurasian Blue Tit (*Cyanistes caeruleus*) in a patch of Common Gorse (*Ulex europaeus*) in Leziate (52.74555, 0.49765), northwest of Norfolk, UK. The calling bird was approximately 60 cm high in the gorse, while on the ground, a Barred Grass Snake approximately 1 m in length was in the process of swallowing a fledgling Blue Tit (Fig. 1), likely the young of the distressed adult. This observation may well be the first recorded case of a Barred Grass Snake preying on a Eurasian Blue Tit in Great Britain.

The rarity of catching a snake in the act of predation is likely a major factor why so few birds have been recorded as prey (Sorace et al. 2000). However, in central Italy, snakes are known to eat both nestlings and eggs of Eurasian Blue Tits (Sorace et al. 2000), and a case of two male European Adders



**Figure 1.** A Barred Grass Snake (*Natrix helvetica*) preying on a fledgling Blue Tit (*Cyanistes caeruleus*) in Norfolk, UK. Photographs by Lloyd G. Rose.

(*Vipera berus*) raiding a Blue Tit nest was documented by Groen et al. (2020). Specific instances of Barred Grass Snakes taking birds include an unidentified passerine species and a Eurasian Blackbird (*Turdus merula*) (Luiselli and Rugiero 1991), Brown (1991) recorded another unidentified bird as prey in either Whiteparish in Hampshire or in the New Forest, and Bruni and Di Nicola (2020) documented predation on a European Starling (*Sturnus vulgaris*).

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