

## SHORT COMMUNICATION

# Diet of Eurasian Sparrowhawks in a Northwest Iberian hedgerow habitat throughout the year

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## ORNITHOLOGICAL SCIENCE

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**Abstract** Little is known about Eurasian Sparrowhawk *Accipiter nisus* feeding habits outside the breeding season in its wide geographical range. The present study concerns the autumn-winter and spring-summer diet of this raptor species in Northwest Spain in a hedgerow habitat. A total of 23 avian prey species were recorded, only six of which occurred in both periods of the year. However, Eurasian Sparrowhawks fed mainly on medium-sized birds that often forage on the ground at some distance from shrubs and trees, mostly the Song Thrush *Turdus philomelos* and the Common Blackbird *Turdus merula*, both species together accounting for approximately half of the prey in any season of the year. The contribution of larger birds, i.e., pigeons, was considerable in terms of ingested biomass. In spring-summer, the mean body weight of avian prey was over 15 g less than in autumn-winter.

**Key words** *Accipiter nisus*, Avian prey, Prey size, Seasonal variation, Spain

The Eurasian Sparrowhawk *Accipiter nisus* (L.) is a relatively small forest raptor that hunts mainly birds by surprise from hidden perches or while flying low above the ground following the edges of woody vegetation (Cramp & Simmons 1980; Newton 1986; Orta 1994). In Europe, numerous studies have been carried out on its diet during the breeding season (Selås 1993; Götmark & Post 1996; Rytkönen et al. 1998; Zawadzka & Zawadzki 2001; Eldegard et al. 2003; Götmark & Andersson 2005; Bujoczek & Ciach 2009) but few provide information on diet during the rest of the year (Opdam 1975, 1979; Newton 1986). It is important to unravel its feeding habits throughout the year because the availability of prey species changes from one month to the next and a major natural cause of mortality in this species is progressive food shortage during the winter months, especially during severe weather (Newton 1986).

Eurasian Sparrowhawks are capable of feeding on practically any bird weighing up to 500 g; females usually capture bigger prey than males due to their larger size; however, their preferred prey are

of intermediate size between the smallest prey that provide little biomass and the largest prey that are more difficult to capture, and they often hunt ground-foraging birds (Cramp & Simmons 1980; Selås 1993; Rytkönen et al. 1998; Solonen 2000; Post & Götmark 2006a, b). Males have a more important role in hunting birds during the breeding season as females are responsible for egg incubation and usually participate less in feeding nestlings and fledglings (Götmark & Post 1996; Eldegard et al. 2003; Bujoczek & Ciach 2009).

In Spain, with the exception of a few imprecise data on the diet of Eurasian Sparrowhawks in general studies on raptor communities (Elósegui et al. 1974; Garzón 1974), the feeding ecology of this species is only known in some detail in three areas during the breeding season, in the Canary Islands (Delgado et al. 1988), in Catalonia (Mañosa & Oro 1991), and in the Basque Country (Zuberogoitia 2016). The present study shows the spectrum of avian prey taken by Eurasian Sparrowhawks throughout the year in a Northwest Iberian area. Sparrowhawks usually visit specific plucking sites at which they prepare their prey, and fresh to fairly fresh pluckings of avian prey from such sites give the most accessible and reliable

(Received 27 February 2017; Accepted 21 June 2017)

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