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First Record of Rabbit Carrion Consumption by Eurasian Eagle-Owl (Bubo bubo) on the Iberian Peninsula

KEY WORDS: Eurasian Eagle-Owl, Bubo bubo; carrion consumption; European rabbit, feeding behavior.

The Eurasian Eagle-Owl (*Bubo bubo*) is a sit-and-wait predator (Cramp 1985) that captures a wide range of prey, from beetles (Order Coleoptera) to roe deer (*Capreolus capreolus*) fawns (Mikkola 1983). The diet of the eagle-owl has been well documented in Europe (Foerstel 1977, Leditznig et al. 2001, Wassink 2003), and in Mediterranean ecosystems of the Iberian peninsula, the species seems to specialize on rabbits (*Oryctolagus cuniculus*; Hiraldo et al. 1975, Serrano 1998, Martínez and Calvo 2001, Martínez and Zuberogoitia 2001).

The diet of this species is usually assessed by analysis of pellets and/or food remains (Marchesi et al. 2002), and this makes it difficult to determine if prey were captured alive or taken as carrion. Wassink (2003) suggested the possible occurrence of scavenging by eagle-owls after finding roe deer remains in eagle-owl nests in the Netherlands. Although other raptors on the Iberian peninsula use carrion, including that of the European rabbit (Hiraldo et al. 1991, Ferrer 2001), consumption of rabbit carrion has not been reported for eagle-owls.

During May 2008 we conducted an investigation of red fox (*Vulpes vulpes*) den sites in the natural park of Lagunas de Ruidera, central Spain (38°56′N, 2°52′W). We distributed 26 carcasses of dead domestic rabbits evenly across an area of 1500 ha. A radiotransmitter (TW3-single celled, 10 g, Biotrack, Dorset, U.K.) was attached to each rabbit carcass and this allowed us to locate the carcasses with the help of a radio-receiver. Baits were hidden under trees and

shrubs, to minimize the likelihood they would be detected and displaced by wild boars (Sus scrofa) or raptors.

Several days after placing the carcasses, we found one of the carcasses displaced about 150 m from its initial location. Upon investigation, we found the radiotransmitter inside a pellet near an eagle-owl nest occupied by a nestling that we estimated to be 30–35 d old based on Penteriani et al. (2005).

Although some researchers have reported the consumption by eagle-owls of carrion from ungulates and farm chickens (*Gallus domesticus*) on the Iberian peninsula (Hiraldo et al. 1975, Real et al. 1985, Serrano 2000), the consumption of rabbit carrion had not been reported for this species (Donázar 1989, Serrano 1998, Martínez and Calvo 2001, Martínez and Zuberogoitia 2001, Lourenço 2006).

Our observation occurred in spring, during the eagle-owl breeding season, when the availability of prey is greater than in other seasons. In contrast, raptors such as the Golden Eagle (Aquila chrysaetos) and Spanish Imperial Eagle (A. adalberti) mainly consume carrion outside the breeding season (Watson 1997, Ferrer 2001), when food resources are likely comparatively scarce. We think it is likely the eagle-owl found the rabbit carcass in a "familiar" location near its nest and, taking advantage of low-cost food, fed the carcass to its young. This would explain why rabbit carrion was consumed during a period in which other prey was abundant. The consumption of carrion by the eagle-owl may be related to a behavior known in this (V. Penteriani pers. comm.) and other owl species (Vander

Wall 1990), in which prey is sometimes cached and consumed at a later time. Our observation suggests that scavenging is an uncommon behavior in the eagle-owl.

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