

# A preliminary study of the diet of the Egyptian Vulture *Neophron percnopterus* on Minorca (Balearic Islands)

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*The remains of prey were examined at two Egyptian Vulture nests in Minorca, Balearic Islands, and 132 items were identified. The Rabbit *Oryctolagus cuniculus* was the main prey (51.5 %). There were some dietary differences between the two pairs, which may be linked to their differing proximity to rubbish dumps.*

**Key words:** Egyptian Vulture, *Neophron percnopterus*, diet, Minorca, Balearic Islands.

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## INTRODUCTION

On the island of Minorca (Balearic Islands) occurs one of the few sedentary populations of the Egyptian Vulture *Neophron percnopterus* in the Western Palearctic (Congost & Muntaner 1974). Little is known about the biology of this population, although censuses show a high number of breeding pairs (Perea et al., 1991). The aim of this note is to provide some data on the diet of the species during the breeding season.

## STUDY AREA AND METHODS

On 15 May 1991 we picked up the remains of prey below two Egyptian Vulture nests, which were in different areas. One was on a cliff on the north coast (nest A), while the other was on a rock face 7 m

high, in a ravine 6 km from the coast (nest B). The distance between the two nests was roughly 19 km. We identified the prey items by comparison with our own collection of bones and feathers. To calculate the number of prey items, we used the method of the minimum number, as is usual in feeding studies of raptors. The presence of old prey remains, perhaps from previous breeding seasons, was noted especially large bones of livestock. We did not calculate the prey biomass intake because of the difficulty of assigning a weight to the livestock remains, which could be over-represented.

## RESULTS

We found 132 prey items, 84 corresponding to nest A and 48 to nest B (Table 1). The Rabbit *Oryctolagus cuniculus* was

	Nest A (%)	Nest B (%)	TOTAL
<b>MAMMALIA</b>			
<i>Erinaceus algirus</i>	—	2 (4.1)	1.5
<i>Oryctolagus cuniculus</i>	52 (61.9)	16 (33.3)	51.5
<i>Rattus sp.</i>	1 (1.1)	2 (4.1)	2.2
<i>Canis familiaris</i>	1 (1.1)	1 (2.0)	1.5
<i>Ovis aries</i>	1 (1.1)	3 (6.2)	3.0
<i>Capra hircus</i>	1 (1.1)	2 (4.1)	2.2
<i>Bos taurus</i>	1 (1.1)	1 (2.0)	1.5
<i>Sus scrofa dom. var.</i>	2 (2.3)	1 (2.0)	2.2
Livestock not id.	1 (1.1)	2 (4.1)	2.2
<b>AVES</b>			
<i>Gallus (dom.)</i>	4 (4.7)	7 (14.5)	8.3
<i>Falco tinnunculus</i>	—	1 (2.0)	0.7
<i>Alectoris rufa</i>	1 (1.1)	2 (4.1)	2.2
<i>Burhinus oedicephalus</i>	2 (2.3)	1 (2.0)	2.2
<i>Larus argentatus</i>	5 (5.9)	—	3.7
<i>Columba sp.</i>	4 (4.7)	2 (4.1)	4.5
<i>Streptopelia turtur</i>	2 (2.3)	1 (2.0)	2.2
<i>Sturnus sp.</i>	2 (2.3)	1 (2.0)	2.2
Unidentified bird spp.	1 (1.1)	3 (6.2)	3.0
<b>PISCES</b>			
<i>Dicentrarchus labrax</i>	3 (3.5)	—	2.2
<b>TOTAL</b>	<b>84</b>	<b>48</b>	

Table 1. Prey items recorded for *Neophron percnopterus* on Minorca.

Taula 1. Relació de les preses de *Neophron percnopterus* identificades a Menorca.

the main prey (51.5 %). Livestock (such as cows, pigs, lambs and hens) and wild birds also reached a high frequency (19.7 % and 20.7 %). Only 7 different species of wild birds were identified.

There were some differences between the prey items from the two nests. Thus, the number of rabbits consumed by pair A was significantly higher than those eaten by pair B ( $X^2=8.87$ , d.f.=1,  $p<0.003$ ), whereas the percentage of livestock remains was signifi-

cantly higher for pair B than for pair A ( $X^2=7.56$ , d.f.=1,  $p<0.006$ ).

## DISCUSSION

The prey items corresponding to the small and light remains (feathers or small bones) may have been underestimated in the results, since samples were collected only from immediately below the nests, and others could

have been carried away by rain or wind, especially at the coastal cliff nest. However, similar studies probably suffer from the same inaccuracies, and the results may thus be comparable.

The rabbit is the base of the diet in Minorca as occurs in other Mediterranean areas (Bergier & Cheylan 1980, Donazar & Ceballos 1988; see review in Tello 1991). Congost and Muntaner (1974) described the foraging behaviour of the species in a cattle farming area in the island, but only livestock prey was recorded. The differences in the diet of the two pairs could be due to the different human activities in their ranges. Thus, pair B, nesting in the inland ravine, may often visit the rubbish dumps by the nearby villages, whereas pair A, nesting on the coastal cliff far from the inhabited areas, may exploit wild prey types, such as rabbits, seabirds and fish. It seems that the species feeds on dungheaps when these occur inside the birds' territories (Ceballos Donazar 1988). It is remarkable that almost all the livestock bones found in our study showed deep cuts, so they probably came from butcher's shops or abattoirs, and the vultures took them from the rubbish dumps. •

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#### RESUM

*Estudi preliminar de la dieta de l'Aufrany Neophron percnopterus a Menorca (Illes Balears).*

*S'analitza la dieta de dues parelles d'aufrany de Menorca. D'un total de 132 mos-*

*tres identificades, el conill Oryctolagus cuniculus va ser la presa més abundant (51.5 %). Les diferències trobades entre la dieta d'ambdues parelles semblen dependre de la proximitat als abocadors.*

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