

Possible predation by Little Owl *Athene noctua* on nestling Red-billed Choughs *Pyrrhocorax pyrrhocorax*.

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Seventy three nests of Red-billed Choughs *Pyrrhocorax pyrrhocorax*, located inside old farmhouses (mases), were monitored in 1992 in Los Monegros (NE Spain). On one occasion, Red-billed Chough feathers with signs of raptor predation were found close to Little Owl *Athene noctua* feathers, and on another, the osseous remains of one nestling Red-billed Chough were found in a Little Owl nest. This suggests that the Red-billed Chough may suffer some predation by Little Owls.

Key words: Little Owl, *Athene noctua*, Red-billed Chough, *Pyrrhocorax pyrrhocorax*, nest predation, Los Monegros.

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Rebut: 02.02.93; Accepted: 11.05.93

The impact of predation on Red-billed Chough *Pyrrhocorax pyrrhocorax* populations is poorly known (Coombs 1978). In the British Isles, the Peregrine *Falco peregrinus* is considered its main enemy, although Ravens *Corvus corax*, Carrion Crows *Corvus corone*, Great Black-backed Gulls *Larus marinus* and some mammals, may prey on nests and recently fledged nestlings (Rolfe 1966, Bullock et al. 1983). The possibility of predation by the Little Owl *Athene noctua* in nests located on sea cliffs, has been pointed out (Rolfe 1966).

Iberian populations of Red-billed Choughs are exposed to a wide variety of potential predators, although data on this

are scanty (Delibes et al. 1975, Soler et al. 1983, Heredia et al. 1988, Nevados et al. 1988, Donazar 1989, Tella 1991, pers. obs.). Red-billed Choughs and Little Owls frequently coincide in their nesting areas. However, studies on the diet of Little Owls carried out in Spain (Móñez 1983, Delibes et al. 1983) have not detected the capture of Red-billed Choughs.

In this note, we report two possible cases of predation on nestling Red-billed Choughs by Little Owls.

The reproduction of 80 pairs of Red-billed Choughs nesting in abandoned mases (farm houses) of Los Monegros (NE Spain) was monitored in 1992. In this area, at least

100 pairs of Little Owls breed in the *mases* (Tella et al. in press).

On 12 April, a Chough nest, situated on a roof beam 3 m high inside a *mas*, contained three eggs. Twenty-six days later the nest was empty and beneath it we found several remiges (with signs of raptor predation) belonging to one or more medium-sized nestling Red-billed Choughs. Beside these, several Little Owl belly feathers were found, which together with the presence of a pair of Little Owls breeding in the same *mas*, led us to think that this species was the most likely predator.

On 13 April a visit was made to another *mas* where there was an unoccupied Red-billed Chough nest. In this same *mas* there was also a Little Owl nest from the previous year, inside which were found the osseous remains of one fledgling Red-billed Chough. The difficult access to the nest hole had caused the Red-billed Chough nestling to become entangled. Although the predator could have been one of the mammal species that sometimes use *mases* (e.g. Rat, Garden Dormouse), and which could have used the nest later, we think the owl was the more probable predator because we did not find any remains or tracks indicating the presence of mammals in this *mas*.

Avian nest predation by Little Owls does not seem to be frequent. In the instances reported here, the Chough chicks were near the limit of the range size of prey captured by Little Owls (normally up to Blackbird *Turdus merula* size, Mikkola 1984, Ille 1991), and the cases of predation coincide with the owl's breeding period, when the owls have fledglings, and so the consumption of birds increases (Glue 1972). Several studies on the diet of the Little Owl have detected consumption of large birds (e.g. *Columba palumbus*, *Vanellus vanellus*, *Garrulus glandarius*, *Pica pica*, *Sterna hirundo*; Glue 1972, Máñez 1983, Pailley et al. 1987), but have failed to confirm active predation by the Little Owls; these studies did not indicate the age of the birds eaten. In the two cases reported here,

it is also possible that the Red-billed Choughs were found dead beneath the nest by an owl and not actively hunted, as occurred with a Buzzard *Buteo buteo* which was torn into pieces and carried off from its nest by Little Owls (Juillard 1984). •

ACKNOWLEDGEMENTS

We are very grateful to Dr. K.M. Exo and three anonymous reviewers for comments and criticisms. R. López and J. Guerrero assisted us in the field work, and Dr. J. Potti helped with the English translation.

RESUMEN

Posible predación del Mochuelo común Athene noctua sobre pollos de Chova piquirroja Pyrrhocorax pyrrhocorax.

Durante 1992, el control de 73 nidos de Chova piquirroja Pyrrhocorax pyrrhocorax localizados en casas abandonadas (mases) de Los Monegros (NE de España), ha revelado por primera vez la posible depredación de pollos de Chova piquirroja por parte del Mochuelo Athene noctua. La presencia de plumas de chova con signos de depredación por una rapaz, encontradas junto a plumas de mochuelo, y el hallazgo del esqueleto de un pollo de chova en el interior de un nido de mochuelo, junto a otras evidencias, señalan al mochuelo como depredador más probable.

REFERENCES

BULLOCK, I.D., DREWETT, D.R. & MICKLEBURGH, S.P. 1983. The Chough in Britain and Ireland. *Brit. Birds* 76: 377-401.

COOMBS, F. 1978. *The Crows. A Study of the Corvids of Europe*. London: Batsford.

DELIBES, M., CALDERON, J. & AMORES, F. 1975. Selección de presa y alimentación en España del Aguila Real (*Aquila chrysaetos*). *Ardeola* 21: 285-302.

DELIBES, M., BRUNET-LECOMTE, P. & MAÑEZ, M. 1983. Datos sobre la alimentación de la Lechuza común (*Tyto alba*), el Búho chico (*Asio otus*) y el Mochuelo (*Athene noctua*) en una misma localidad de Castilla la Vieja (España). *Ardeola* 10: 57-64.

DONAZAR, J.A. 1989. Variaciones geográficas y estacionales en la dieta del Búho real (*Bubo bubo*) en Navarra. *Ardeola* 36: 25-39.

GLUE, D.E. 1972. Bird prey taken by British owls. *Bird Study* 19: 91-95.

HEREDIA, B., HIRALDO, F., GONZALEZ, I.M. & GONZALEZ, J.L. 1988. Status, ecology and conservation of the Peregrine Falcon in Spain. In Cade, T.J. et al. (Eds.): *Peregrine Falcon Populations. Their Management and Recovery*. p.219-226. Peregrine Fund. INC.

JUILLARD, M. 1984. *La Chouette chevêche*. Prangins: Nos Oiseaux.

MAÑEZ, M. 1983. Espectro alimenticio del Mochuelo común (*Athene noctua*) en España. *Alytes* 1: 275-290.

MIKKOLA, H. 1983. *Owls of Europe*. Calton: Poyser.

NEVADO, J.C., GARCIA, L. & OÑA, J.A. 1988. Sobre la alimentación del Aguila calzada (*Hieraaetus pennatus*) en las sierras del Norte de Almería en la época de reproducción. *Ardeola* 35: 147-150.

ROLFE, R. 1966. The status of the Chough in the British Isles. *Bird Study* 13: 221-236.

SCHÖNN, S., SCHERZINGER, W., EXO, K.-M. & ILLE, R. 1991. *Der Steinkauz*. Wittenberg-Lutherstadt: Die Neue Brehm-Bücherei.

SOLER, M., ZÚÑIGA, J.M. & CAMACHO, I. 1983. Alimentación y reproducción de algunas aves de la Hoya del Guadix (Sur de España). *Trab. Monogr. Dep. Zool. Univ. Granada (N.S.)* 6: 27-100.

TELLA, J.L. 1991. Estudio preliminar de la alimentación del Alimoche (*Neophron percnopterus*) en el Valle Medio del Ebro. I Congr. Inter. sobre Aves Carroñeras (Ed. ICONA): 53-68.

TELLA, J.L., POMAROL, M., MUÑOZ, E. & LOPEZ, R. (in press). Uso de los mases por las aves y su conservación en Los Monegras. *Actas XI Jornadas Ornitológicas Españolas*. Mérida.