

Ricard Gutierrez pelas observações cedidas e a C.C. Moore pelos seus comentários e sugestões à versão preliminar desta nota.

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## *Population size and breeding data of the Osprey Pandion haliaetus on Tenerife, Canary Islands*

*Dimensão da população e dados da nidificação da Águia-pesqueira Pandion haliaetus em Tenerife, Ilhas Canárias*

The first reference concerning the Osprey (*Pandion haliaetus*) on Tenerife refers to the end of the last century when its presence (Godman 1872) and breeding – though without specific data (Meade-Waldo 1889, Koenig 1890) – were reported from the north coast. Later, Bannerman (1963) mentioned that the species bred in the south of the island although without giving precise data. However, it was not until the 1980's that the species population status on Tenerife and on the other islands of the Archipelago was evaluated (Díaz *et al.* 1986, Hernández *et al.* 1987, Delgado *et al.* 1988, González *et al.* 1992). Martín *et al.* (1990) assigned the IUCN Conservation Category of "Endangered" to all the local island populations.

This note refers to the status of the Osprey on Tenerife between 1986 and 1996. Observations (undertaken both from land and from the

sea) have basically been limited to the cliffs of the Teno Massif (western extreme of the island), the only breeding area known to date. The onset of egg-laying was estimated according to the approximate age of the chicks observed in the nest and the incubation time (after Cramp & Simmons 1980, Poole 1989). Over the course of several years, various birds could be identified individually on the basis of the colouring and state of their plumage (lack of certain feathers and presence of whitish spots in the back of some birds).

According to literature, nesting of the Osprey on the Teno cliffs was not verified until 1983 (Díaz *et al.* 1986). Previously, Hald-Mortensen (1970) located two nests near Punta de Teno and Martín (1987) observed a single bird in the same area in 1982. However, we observed a chick in the nest close to Playa de Juan López in 1979, a sighting which thus represents the first

confirmed breeding record from Tenerife.

During the study period, a maximum of two breeding pairs and one solitary individual have been observed on the Teno Cliffs (Table 1). One pair bred successfully every year in the same nest from 1988 until 1991 (González *et al.* 1992, pers. obs.), but from 1992 to 1996 all breeding attempts have failed. The other pair which was located in 1991 (González *et al.* 1992, pers. obs.) has been breeding since 1992 to 1996 (with the exception of 1993). During the first year, this pair occupied a nest situated 3 km. from the site where the first pair breeds and in subsequent years, another nest only 900 m. away.

In the Canary Islands, courtship and nest-building activities usually commence at the end of February or the beginning of March (Hernández *et al.* 1987). However, in 1988, a pair was observed in courtship on 31 January, two months prior to egg-laying in that year. Similarly, nest-building activities have been observed at least one month (22 February 1992) before the onset of egg-laying. However, on all occasions, the birds have continued to bring material throughout the breeding cycle. Estimated egg-laying dates for 8 clutches are presented in Figure 1.

A full clutch of two eggs has only been observed on one occasion, 12 March 1989, although at a later date (7 May), only one fully fledged chick was observed next to leave the nest. A similar situation was recorded two years later on 5 May 1991, when one chick and an adled egg were observed on the nest platform. The mean number of fully fledged chicks registered during the study period was 1.75 (n = 8) (Table 1).

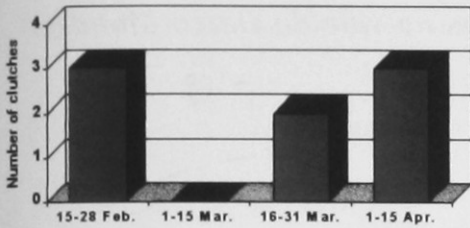
Several authors have observed birds outside the current breeding area, generally at artificial ponds and reservoirs (Ash 1969, Delgado *et al.* 1988, Oñate 1990). It seems likely that these sightings refer to the birds holding territories on the Teno Cliffs that travel up to 40 km. in order to capture freshwater fishes, mainly *Cyprinidae* (pers. obs.), especially during the post-breeding period. Thus, in this context, a

**Table 1.** *Pandion haliaetus* on the Teno cliffs, Tenerife. BP: breeding pairs; NBP: non breeding pairs; I: solitary individuals; RFC: recently fledged chicks. \*Published by González *et al.* (1992). / *A Águia-pesqueira Pandion haliaetus nas falésias de Teno, Tenerife. BP: casais nidificantes, NBP: casais não reprodutores, I: indivíduos solitários, RFC: juvenis. \*publicado por González et al. (1992).*

Year	BP	NBP	I	RFC
1986		1		
1987		1*		
1988	1*		1	2
1989	1*			1
1990	1*			2
1991	1*	1*	1	1*
1992	1	1	1	1
1993		2	1	
1994	1	1	1	2
1995	1	1	1	2
1996	1	1	1	3

female which on 13 November 1993 was observed at Guía de Isora (W, 28RCS2517) (pers. obs.), the next day was sighted at Los Silos (NW, 28RCS2139) (J.J. Ramos, pers. comm.), and a male which on 5 October 1996 was recorded at Arona (S, 28RCS3499), was seen on the Teno Cliffs on the 26th of the same month. Díaz *et al.* (1986) have recorded similar movement patterns for the birds that inhabit the islets off the north coast of Lanzarote.

On 6 March 1993, an adult bird was seen flying east along the coast of Los Realejos, north of the island (pers. obs.), and on the same day, two adults, one of which was carrying a branch, flew over the town in the same direction (P.F. Acosta, pers. comm.). These sightings tend to indicate the presence of a third pair of Ospreys in 1993, which probably attempted to occupy one of the former historical nesting sites (Díaz *et al.* 1986). The human activity (sport fishing, urbanizations on the cliff tops, etc.) could preclude the re-setting up of the species in these places.



**Figure 1.** Estimated egg-laying dates of *Pandion haliaetus* on Tenerife (1988-1996). / Estimativas das datas de postura de Águia-pesqueira em Tenerife (1988-1996).

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## Resumo

São apresentados dados relativos à dimensão da população e diversos aspectos da biologia de reprodução da Águia-pesqueira *Pandion haliaetus* na ilha de Tenerife, Canárias, durante o período de 1986 a 1996. Dois casais e um indivíduo solitário constituem a dimensão máxima registada nas falésias de Teno (costa ocidental), o único local de nidificação conhecido até à data. Os registos mais precoces de posturas ( $n=3$ ) reportam-se à segunda quinzena de Fevereiro e a mais tardia ( $n=3$ ) à primeira quinzena de Abril. O sucesso de reprodução médio cifrou-se em  $1.75 \pm 0.75$  juvenis SD (amplitude 1-3;  $n=8$ ). Observações realizadas em 1993 na costa Norte indicaram a possibilidade de um terceiro casal na ilha.

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