BOCAGIANA

Museu Municipal do Funchal (História Natural)

Madeira 30.VIII.2003 No. 211

FIRST RECORDS OF BREEDING MOORHEN GALLINULA CHLOROPUS (AVES: RALLIDAE) ON THE ISLANDS OF MADEIRA AND PORTO SANTO

By ISABEL FAGUNDES ¹ & JOÃO NUNES ²

With 2 tables

ABSTRACT. Breeding confirmation of moorhen Gallinula chloropus at the Madeira Archipelago (Islands of Madeira & Porto Santo) was obtained. Breeding was confirmed at "Lagoa do Lugar de Baixo" in Madeira Island and at three reservoirs in Porto Santo Island.

RESUMO. No presente trabalho, os autores confirmam a nidificação de *Gallinula chloropus* nas ilhas da Madeira e do Porto Santo.

¹ Rua da Pena, 10 J, 9050-099 Funchal, Madeira, Portugal. E-mail: isabel_fagundes@yahoo.com

² Rua das Maravilhas, 13 A, 9000-177 Funchal, Madeira, Portugal.

The Madeira Archipelago, located in the Atlantic Ocean in the latitude of 33° north, consists of a group of two inhabited islands, Madeira and Porto Santo and two smaller islands, Desertas and Selvagens.

The great versatility of the moorhen *Gallinula chloropus* (Linnaeus, 1758) makes it one of the most abundant and wide distributed species of aquatic birds on the European continent, occupying almost the totality of Europe, including Portugal (CRAMP & SIMMONS, 1980).

Moorhen is an aquatic species that requires ready access to open fresh water with adequate plant cover. It also prefers waters sheltered by woodland or tall emergent plants, avoiding those wide open, especially where exposed to wind (SNOW & PERRINS, 1998).

SARMENTO (1948) and BANNERMAN & BANNERMAN (1965) considered this bird a frequent passage migrant both in Madeira and in Porto Santo, since some individuals could be found there between March and May and sometimes during the winter. However, the moorhen status on the Madeira Archipelago is not clear. Its presence was defined as "accidental" (SNOW & PERRINS, 1998), as "rare passage migrant" (FARINHA & COSTA, 1999; MOORE *et al.*, 1997) or as "occasional bird" (ZINO *et al.*, 1995; BISCOITO & ZINO, 2002).

During April 1999, the breeding in "Lagoa do Lugar de Baixo" was confirmed by the observation of a couple followed by 4 chicks still with downy feathers. Since then, breeding has been confirmed as well as the all year presence for at least one pair.

TABLE 1 - Observation of adults, immatures and chicks in "Lagoa do Lugar de Baixo" for 2001 and 2002.

Date	Adults	Immatures	Chicks
20/05/2001	2	0	4
12/06/2001	2	0	3
25/06/2001	2	0	4
09/09/2001	2	0	4
28/04/2002	2	0	4
06/07/2002	2	2	1

Breeding on Porto Santo Island was suspected since 2001 when many individuals were seen at different times of the year.

TABLE 2 - Observation of adults in Porto Santo for 2001 e 2002.

Date	Local	Number of birds
5 May 2001	"Serra de Dentro" reservoir	1
20 May 2001	"Lapeira" reservoir	1
14 December 2001	"Lapeira" reservoir	1
24 February 2002	"Sítio do Lombo" reservoir	1
21 March 2002	"Sítio do Lombo" reservoir	2

On May 14th 2002, at the "Sítio do Lombo" reservoir, two birds carrying nesting material and attempting to mate were observed. Breeding was then confirmed for this location.

Once the ecological suitability of the "Sítio do Lombo" reservoir was studied, it was decided to carry out a further study of all similar reservoirs on Porto Santo Island. As a result, four other reservoirs were surveyed; one at "Lapeira", two at "Serra de Fora" and another one at "Sítio do Tanque".

Breeding was confirmed in only two of these reservoirs: at "Lapeira" and "Tanque" where respecting 3 adults and 4 chicks and 3 adults and 3 chicks were observed.

On June 26th 2002 a further visit to all identified areas tried to estimate the breeding success for this species on Porto Santo. This survey revealed the following data:

- "Lapeira", 6 immatures
- "Sítio do Tanque", 2 adults and 5 immatures
- "Sítio do Lombo", 1 adult, 3 chicks and a nest

The vegetation found near these reservoirs was mainly tamarisk, *Tamarix gallica* (ROBERTO JARDIM, pers. com.).

The fact that moorhen has not been found in the other two reservoirs, could be associated to the non-existence of vegetation around these, what leaves birds more vulnerable to predators.

ACKNOWLEDGEMENTS

We thank Cristina Gonçalves and Pedro Geraldes for giving us some data of their observations.

REFERENCES

BANNERMAN, D. & W. BANNERMAN:

1965. Birds of the Atlantic Islands. Vol. 2. Oliver and Boyd, Edinburgh. 207 pp.

BISCOITO, M. & F. ZINO:

2002. Aves do Arquipélago da Madeira. Biodiversidade Madeirense: Avaliação e Conservação, Vol. 3, Funchal. 112 pp.

CRAMP, S. & K. E. L. SIMMONS (Eds.):

1980. The Birds of the Western Paleartic, Vol II. Oxford University Press, Oxford. 695 pp.

FARINHA, J. & H. COSTA:

1999. *Guia de Campo das Aves Aquáticas de Portugal*. Instituto de Conservação da natureza. Lisboa. 268 pp.

MOORE, C., G. ELIAS & H. COSTA:

1997. A Birwatchers' Guide to Portugal and Madeira. Prion Ltd. Great Britain. 144 pp.

SARMENTO, A.:

1948. *Vertebrados da Madeira*. Vol. I. 2ª Edição. Junta Geral do Distrito Autónomo do Funchal, Madeira. 317 pp.

SNOW, D. & C. PERRINS:

1998. The Birds of the Western Paleartic. Vol I. Oxford University Press, Oxford. 1008 pp.

ZINO, F., M. J. BISCOITO & P. A. ZINO:

1995. Birds of the archipelago of Madeira and the Selvagens new records and Checklist. *Boletim do Museu Municipal do Funchal*, **47** (262): 63-100.

Date received: 28-10-2002.