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On the distribution of regular winter visitor bird species to the south of Tenerife (Canary Islands)

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GARCIA-DEL-REY, E. (2006). Datos sobre la distribución de especies de aves invernantes regulares al sur de Tenerife (islas Canarias). *VIERAEA* 34: 25-32.

RESUMEN: Se estudia la distribución de las aves invernantes del sur de Tenerife sobre un reticulado UTM de 1x1 km. Se detectaron 18 especies de aves (i.e. 14 no passeriformes y 4 passeriformes), pertenecientes a 7 familias: 5 no passeriformes (Anatidae, Rallidae, Charadriidae, Scolopacidae, Sternidae) y 2 passeriformes (Alaudidae y Motacillidae). Anatidae, Rallidae, Sternidae y Alaudidae están representadas por una sola especie, mientras que Charadriidae por 2 y Motacillidae por 3 especies. Al menos 9 especies de correlimos (Scolopacidae) fueron contabilizados, pero algunos limitan su distribución a un importante embalse artificial (Charca del Fraile): Correlimos Menudo (*Calidris minuta*), Aguja Colinegra (*Limosa limosa*) y Archibebe Claro (*Tringa nebularia*). Se sugiere que las medidas de conservación deberían incorporar los cuarteles de invernada de las especies detectadas en este estudio, con atención especial a las aves limícolas cerca de El Médano.

Palabras clave: Atlas, distribución, aves, sur de Tenerife, islas Canarias.

ABSTRACT: The distribution of regular winter bird species to the south of Tenerife is studied on a UTM grid of 1x1 km. Eighteen bird species (i.e. 14 non-passerines & 4 passerines), belonging to 7 families were detected: 5 non-passerines (Anatidae, Rallidae, Charadriidae, Scolopacidae, Sternidae) and 2 passerines (Alaudidae and Motacillidae). Anatidae, Rallidae, Sternidae, Alaudidae were all represented by a single species, whereas Charadriidae by 2 and Motacillidae by 3 species. At least 9 members of the Sandpipers (Scolopacidae) were detected, but some limited their distribution to an important man-made reservoir (Charca del Fraile): Little Stint (*Calidris minuta*), Black-tailed Godwit (*Limosa limosa*) and Common Greenshank (*Tringa nebularia*). It is concluded that conservation measures should try to protect the wintering grounds of the species recorded by this study with particular attention to the waders near El Médano.

Key words: Atlas, distribution, birds, southern Tenerife, Canary Islands.

INTRODUCTION

Since the first major European atlas of breeding birds undertaken by Sharrock (1976) for the United Kingdom, many countries have produced their own, including Spain (Purroy, 1997). Atlas studies have long been a basic aspect of ornithology because knowing the distribution of a species is important for baseline information in order to assess future changes. Distribution studies have been used to identify international, national, regional and local ranges of birds. However atlases, organised on a grid basis, are conducted at a number of different scales (i.e. a grid of lines separated by 10 km or 5 km are common), the smaller implies more detail (Bibby *et al.*, 1992).

In the Canary Islands the first breeding birds atlas was produced by Martín (1987) for the island of Tenerife (5x5 km UTM). Purroy (1997) covered all the seven islands at a very large scale (i.e. Lambert 1:50.000) and Delgado *et al.* (2002) presented new data on the distribution of steppe breeding birds on Tenerife and Gran Canaria, and *Dendrocopos major* on Tenerife, at a much finer scale (2,5x2,5 km & 1x1 km UTM). The present study is justified because no data has been published so far on the distribution of regular winter visitors to the south of Tenerife, a region changing at a very quick rate.

STUDY AREA AND METHODS

This investigation was carried out on the island of Tenerife (28°20'N-16°20'E). Field work was conducted, by two observers walking at the same time, from the 16 November 2002 – 1 February 2003 & 16 November 2003 – 1 February 2004. The units of distribution are the 1 km squares of the National Grids of Spain (Mapa Topográfico Nacional de España, 1:25.000 from Ministerio de Fomento, Instituto Geográfico Nacional, UTM WGS84). A total of 120 squares were sampled in the south of Tenerife (see maps, the dashed line on the maps represents the northern limit of this study which corresponds to the main motorway TF-1). Birds seen and/or heard were recorded in each square during the afternoon between 4:00 and 6:00 p.m. local time. No casual records were added (those which observers knew to be present but not recorded during field work for this survey). On the maps, all dots are placed centrally in the squares. For some coastal squares with very little land the dot may appear, therefore, to be in the sea. The total number of 1 km squares in which each species was recorded represents the winter distribution map of that species. All maps were prepared with Arcview Gis 3.2. The common, scientific names and order of species follow García-del-Rey (2001).

RESULTS

A total of 7 families were detected: 5 non-passerines (Anatidae, Rallidae, Charadriidae, Scolopacidae, Sternidae) and 2 passerines (Alaudidae and Motacillidae). From these a total of 18 bird species (i.e. 14 non-passerines & 4 passerines), were recorded in southern Tenerife during this study. All these species are regular winter visitors according to García-del-Rey (2001). The most significant maps are presented (those with more than one cell occupied), in taxonomical order and by family, below:

Charadriidae

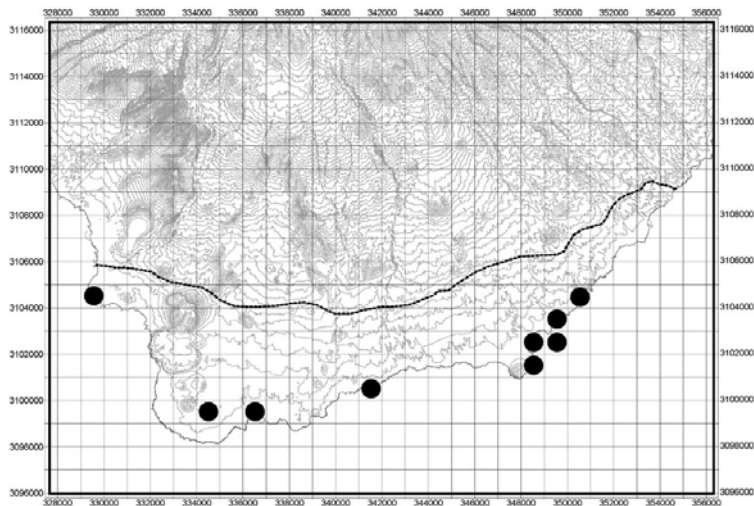
Charadrius hiaticula

Figure 1. Distribution of Ringed Plover (*Charadrius hiaticula*) on the south of Tenerife.

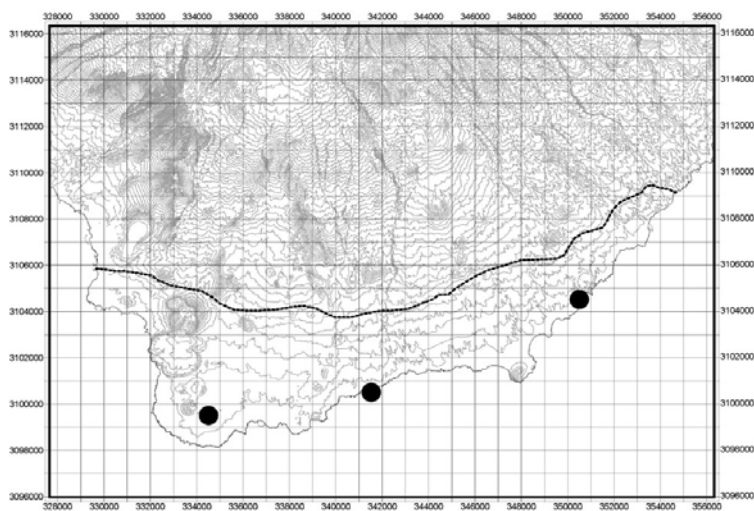
Pluvialis apricaria

Figure 2. Distribution of Grey Plover (*Pluvialis squatarola*) on the south of Tenerife.

Scolopacidae

Calidris alba

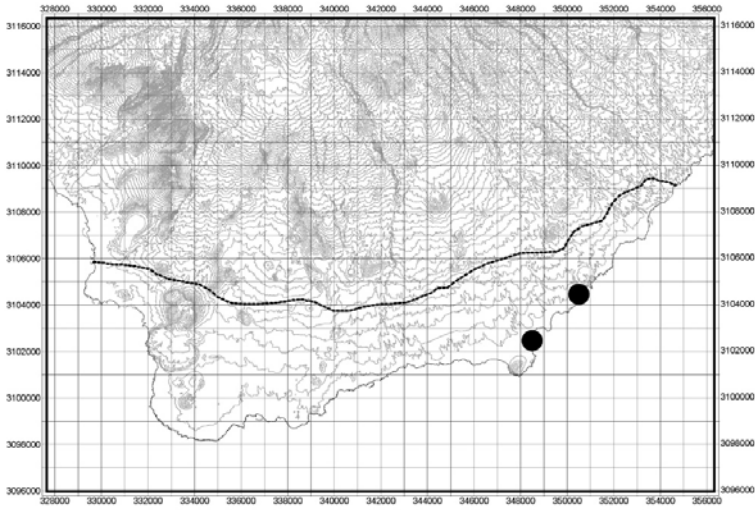


Figure 3. Distribution of Sanderling (*Calidris alba*) on the south of Tenerife.

Calidris alpina

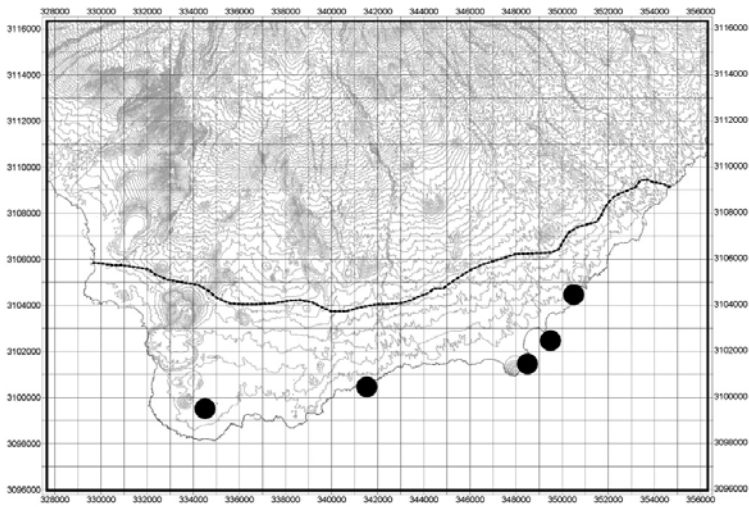


Figure 4. Distribution of Dunlin (*Calidris alpina*) on the south of Tenerife.

Numenius phaeopus

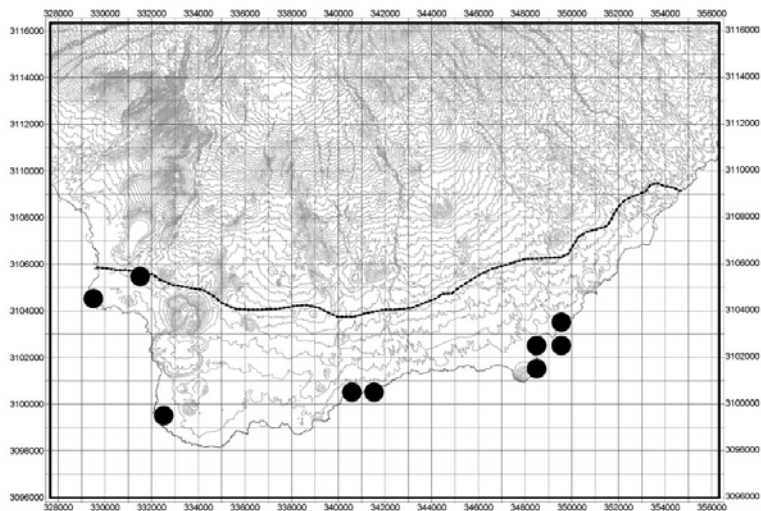


Figure 5. Distribution of Whimbrel (*Numenius phaeopus*) on the south of Tenerife.

Actitis hypoleucos

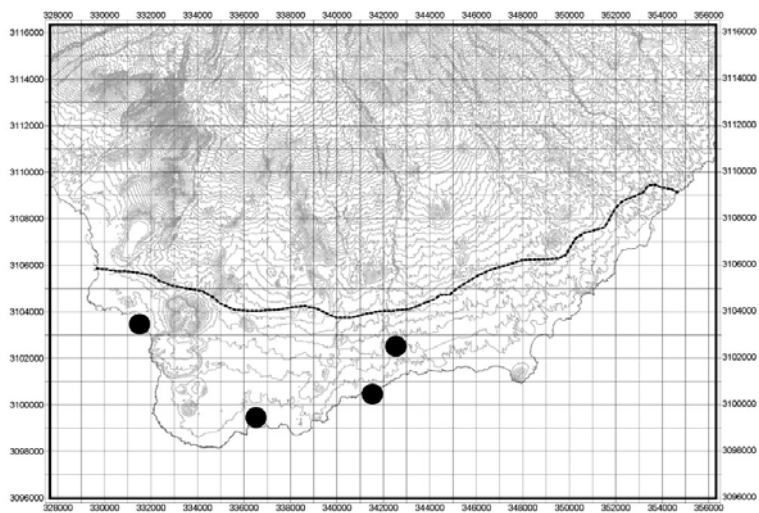


Figure 6. Distribution of Common Sandpiper (*Actitis hypoleucos*) on the south of Tenerife.

Arenaria interpres

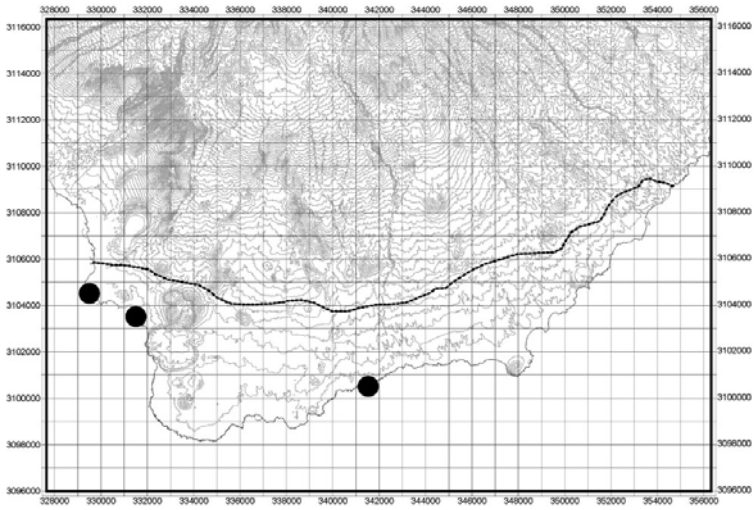


Figure 7. Distribution of Ruddy Turnstone (*Arenaria interpres*) on the south of Tenerife.

Sternidae

Sterna sandvicensis

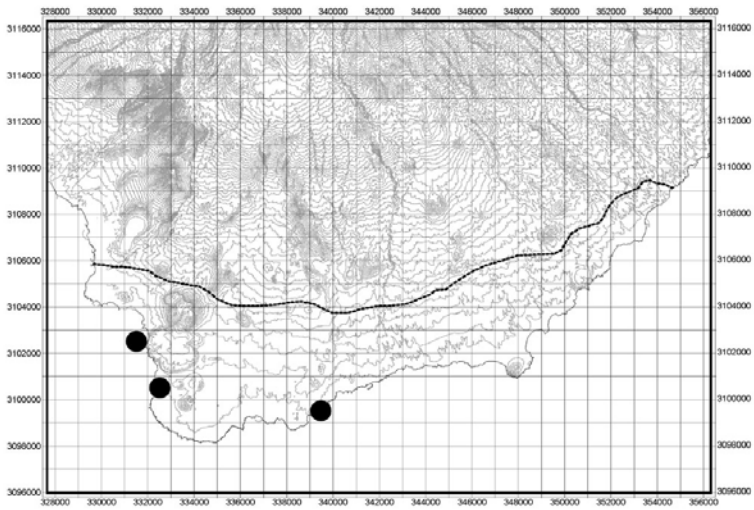


Figure 8. Distribution of Sandwich Tern (*Sterna sandvicensis*) on the south of Tenerife.

Common Teal (*Anas crecca*) was the only duck recorded (Anatidae) and was found at a man-made reservoir (i.e. Charca del Fraile). Common Coot (*Fulica atra*) belongs to the family Rallidae and was only observed at the same site. From the two plovers detected (Charadriidae) (Ringed Plover *Charadrius hiaticula* and Grey Plover *Pluvialis squatarola*), the former showed a wider distribution around the south of Tenerife (see Fig.1 & 2 respectively).

The Scolopacidae family was represented by 9 species. From these, Little Stint (*Calidris minuta*), Black-tailed Godwit (*Limosa limosa*) and Common Greenshank (*Tringa nebularia*) were found only on one cell (i.e. Charca del Fraile), as Common Snipe (*Gallinago gallinago*) which was only observed at a man-made reservoir near El Médano (i.e. Charca de Bernardino). From the two *Calidris* species, Sanderling (*Calidris alba*) was found on 2 cells (Fig. 3) and Dunlin (*Calidris alpina*) on 5 cells (Fig. 4). Whimbrel (*Numenius phaeopus*) was observed on 9 cells (Fig. 5) and Common Sandpiper (*Actitis hypoleucos*) and Ruddy Turnstone (*Arenaria interpres*) on 4 and 3 cells respectively (see Fig. 6 & 7).

Only one member of the Sternidae family was present on the coast of the south of Tenerife during the course of this study (that is, Sandwich Tern *Sterna sandvicensis*) (see Fig. 8).

Songbirds (Passerines) were poorly distributed during the winter on the south of Tenerife. Only 4 species, belonging to 2 different families, were present [Alaudidae: Skylark (*Alauda arvensis*) and Motacillidae: Meadow Pipit (*Anthus pratensis*), Red-throated Pipit (*Anthus cervinus*), White Wagtail (*Motacilla alba*)]. All were found on one cell at the Amarilla Golf Course (Garcia-del-Rey, 2000).

DISCUSSION

Non passerine regular winter visitors in the south of Tenerife were generally poorly distributed, with the exceptions of Ringed Plover (*Charadrius hiaticula*) and Whimbrel (*Numenius phaeopus*), both present in nine cells (see maps). The importance of the coastline near El Médano has been stressed in the past (Lorenzo, 1993; Lorenzo & González, 1993a y b). This study confirms those observations, especially for species like Sanderling (*Calidris alba*), Dunlin (*Calidris alpina*), Ringed Plover and Whimbrel. Of these, the last two are also found in other areas of Tenerife (Ramos *et al.*, 1996).

Common Teal (*Anas crecca*) and Common Coot (*Fulica atra*) were found only on the biggest artificial reservoir in southern Tenerife (that is, Charca del Fraile) along with some other Scolopacidae species showing very limited distribution [Little Stint (*Calidris minuta*), Black-tailed Godwit (*Limosa limosa*) and Common Greenshank (*Tringa nebularia*)]. This suggests, for the first time, that Charca del Fraile should be conserve and monitored if scarce regular winter visitors to the south of Tenerife are to be preserved.

Unfortunately, the main site for wintering songbirds detected on the present study (small patch of vegetation at Amarilla Golf) has disappeared in April 2006 due to development. Therefore, new areas should be prepared by the Excmo. Cabildo Insular de Tenerife for species such as Skylark (*Alauda arvensis*), Meadow Pipit (*Anthus pratensis*), Red-throated Pipit (*Anthus cervinus*) and White Wagtail (*Motacilla alba*). This initiative might also benefit the Lesser Short-toed Lark (*Calandrella rufescens*) in the brink of extinction on Tenerife.

Future research in the south of Tenerife should try to determine the birds' winter distribution by some measure of abundance. The distribution can then also be related to land-use (with the aid of GRAFCAN digitalized maps) and habitat preferences could also be investigated. Clearly, the results of this survey together with those of others, highlights the importance of the study area for birds during the winter. It is recommended that conservation measures be put in place to prevent further deterioration of the habitats around the south of the island. Therefore, it is concluded, that conservation measures should try to protect the wintering grounds of the species recorded by this study with particular attention to the waders near El Médano.

REFERENCES

- BIBBY, C. J., N. D. BURGESS & D.A. HILL (1992). *Bird Census Techniques*, Academic Press. London. 257 pp.
- DELGADO, G., J. J. NARANJO, R. BARONE, D. TRUJILLO & F. RODRIGUEZ (2002). Datos sobre la distribución de aves esteparias en Tenerife y Gran Canaria, islas Canarias. *Vieraea* 30: 177-194.
- GARCIA-DEL-REY, E. (2000) eds. *Where to Watch Birds on Tenerife*. Publicaciones Turquesa. Santa Cruz de Tenerife. 148 pp.
- GARCIA-DEL-REY, E. (2001). *Checklist of the Birds of the Canary Islands*. Publicaciones Turquesa. Santa Cruz de Tenerife. 29 pp.
- LORENZO, J. A. (1993). Descripción de la comunidad de aves limícolas de El Médano (Tenerife, Islas Canarias) durante un ciclo anual. *Ardeola* 40(1): 13-19.
- LORENZO, J. A. & J. GONZALEZ (1993a). Datos sobre la biología del Chorlitejo Patinegro (*Charadrius alexandrinus*) en la última población nidificante en la isla de Tenerife, con vistas a su futura protección y conservación. *Alytes* 6: 199-219.
- LORENZO, J. A. & J. GONZALEZ (1993b). *Las Aves de El Médano (Tenerife-Islas Canarias)*. ATAN. Santa Cruz de Tenerife. 102 pp.
- MARTIN, A. (1987). *Atlas de las Aves Nidificantes en la Isla de Tenerife*. Instituto de Estudios Canarios. Monografía XXXII. 275 pp.
- PURROY, F. J. (1997). *Atlas de las Aves de España (1975-1995)*. Lynx Edicions. Barcelona. 583 pp.
- RAMOS, J. J., R. BARONE & M. SIVERIO (1996). Evolucion anual de los efectivos de aves limícolas en una localidad costera del noroeste de Tenerife (Islas Canarias). *Rev. Acad. Canar. Cienc.* VIII (Nums. 2, 3 y 4), 183-193.
- SHARROCK, J. T. R. (1976). *The Atlas of Breeding Birds in Britain and Ireland*. T & AD Poyser. Calton. 648 pp.