

BREEDING WADERS IN EUROPE

T.Piersma

Breeding Waders in Europe is a comprehensive review of population size estimates of all the Palearctic wader (Charadrii) species breeding in the greater part of Europe (Iceland, Faroes, Norway, Sweden, Finland, Denmark, Poland, Czechoslovakia, Hungary, Austria, Switzerland, East and West Germany, The Netherlands, Belgium, Luxembourg, Great Britain, Ireland, France, north-east Spain and Portugal), together with Svalbard, north and east Greenland and Ellesmere Island. The areas given detailed coverage are shown in Figure 1.

In view of the many threats to breeding populations of waders in Europe (see Pienkowski *et al.* this volume), it would be valuable to place the breeding populations of waders in any area in context in a similar way to that now possible for wintering waders. Although there are a large number of studies on breeding waders, this material is spread through an immense number of published (and unpublished) sources in many languages. In late 1982 the Wader Study Group decided that, with its spread of members throughout Europe (as well as elsewhere), it could draw together available information and identify gaps where further work is needed.

Breeding Waders in Europe has been compiled by Theunis Piersma, on behalf of the Wader Study Group. The review is based on published sources and on the results of the most recent surveys, supplied as unpublished material by national correspondents. A total of 37 wader species are

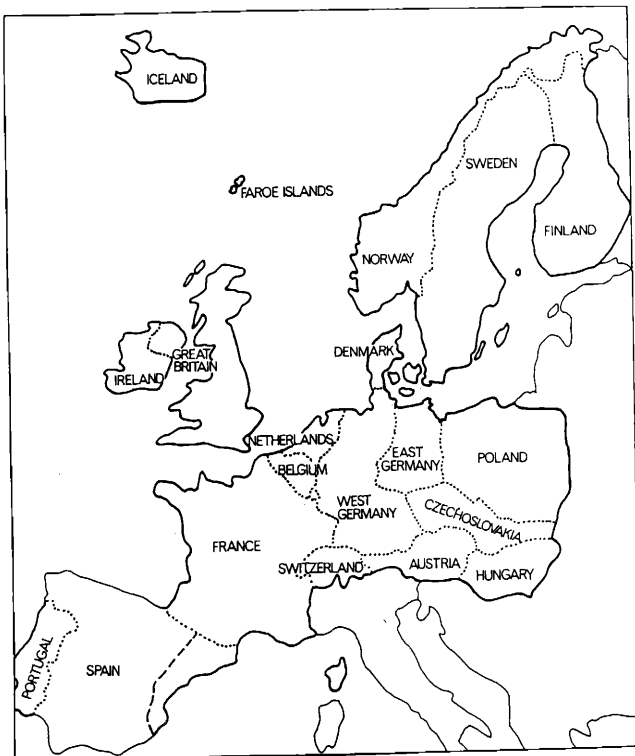


Figure 1. The parts of Europe (within the thick border-lines) given detailed coverage in *Breeding Waders in Europe*.

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Breeding Waders in Europe

A Review of Population Size Estimates
and a Bibliography of Information Sources



included. Together they give a total of 6.5 million breeding wader pairs in Europe and a further 100 000 pairs in Svalbard, Greenland and Ellesmere Island. Species' totals range from 30 pairs (Terek Sandpiper *Tringa terek*) to 869 000 pairs (Lapwing *Vanellus vanellus*). Population sizes are summarised in Table 1. The completeness and accuracy of the surveys in the different countries varies greatly. For each species an annotated map, summarising the numerical distribution of breeding pairs over Europe, is given.

In addition to the population size estimates, *Breeding Waders in Europe* lists all published sources on which the estimates are based, and aims also to list all the recent (from 1950 onwards) publications on the breeding biology of waders in Europe. The bibliography consists of 3356 entries: 326 for breeding biology studies of general interest, 887 for species-specific studies and 2143 for publications on breeding wader surveys, listed by country.

Breeding Waders in Europe has highlighted the gaps in the current knowledge of the distribution and size of European breeding wader populations. This is intended to stimulate and focus future work on breeding waders both in the areas covered by this review, and elsewhere in Europe.

Breeding Waders in Europe was published as a Supplement to *Wader Study Group Bulletin* 48, in December 1986, and is 116 pages long. Copies are available from Wader Study Group, c/o Dr. S.R. Baillie, 8 Little London, Whitechurch, nr. Aylesbury, Bucks. HP22 4LE, U.K., price £5 including postage and packing.

Table 1. Estimated total numbers of pairs of breeding waders in Europe, and north and east Greenland and Ellesmere Island. Ranges of total numbers are given for each subspecies; the mid-points of ranges in numbers are given for each species.

| | range of total numbers | midpoint of range | |
|--------------------------------|---------------------------|-----------------------------------|-------------|
| | | Greenland and Ellesmere Island | Europe |
| Oystercatcher | 211 000-224 000 | - | 218 000 |
| Black-winged Stilt | 1 900- 4 700 | - | 3 300 |
| Avocet | 19 000- 19 700 | - | 19 300 |
| Stone Curlew | 6 500- 20 500 | - | 13 500 |
| Collared Pratincole | 550- 1 350 | - | 950 |
| Little Ringed Plover | 16 900- 28 000 | - | 22 500 |
| Ringed Plover | | 25 000 | 90 000 |
| <i>high arctic hiaticula</i> | 25 000- 26 000 | | |
| <i>subarctic hiaticula</i> | 30 000- 50 000 | | |
| <i>temperate hiaticula</i> | 12 500- 13 800 | | |
| <i>tundrae</i> | 36 500- 36 500 | | |
| Kentish Plover | 6 400- 9 600 | - | 8 000 |
| Dotterel | 36 400- 36 500 | - | 36 500 |
| Golden Plover | - | 100 | 609 000 |
| Lapwing | 847 000-891 000 | - | 869 000 |
| Knot | - | 20 000 | - |
| Sanderling | - | 17 000 | - |
| Little Stint | 200- 210 | - | 205 |
| Temminck's Stint | - | - | 25 400 |
| Purple Sandpiper | | >100 | 66 100 |
| " <i>littoralis</i> " | 52 000- 56 000 | | |
| <i>maritima</i> | 12 500- 12 500 | | |
| Dunlin | | 5 000 | 366 000 |
| <i>arctica</i> | 5 000- 5 000 | | |
| <i>subarctic schinzii</i> | 300 000-300 000 | | |
| <i>temperate schinzii</i> | 11 100- 11 100 | | |
| <i>alpina</i> | 55 000- 55 000 | | |
| Broad-billed Sandpiper | 10 200- 11 200 | - | 10 700 |
| Ruff | - | - | 247 000 |
| Jack Snipe | - | - | 28 100 |
| Snipe | | - | 841 000 |
| <i>faeroeensis</i> | 301 000-301 000 | | |
| <i>gallinago</i> | 530 000-539 000 | | |
| Great Snipe | 2 900- 4 000 | - | 3 500 |
| Woodcock | 328 000-366 000 | - | 347 000 |
| Black-tailed Godwit | | - | 133 000 |
| <i>islandica</i> | 10 000- 30 000 | | |
| <i>limosa</i> | 102 000-123 000 | | |
| Bar-tailed Godwit | - | - | 1 500 |
| Whimbrel | | - | 248 000 |
| " <i>islandicus</i> " | 203 000-203 000 | | |
| <i>phaeopus</i> | 45 000- 45 000 | | |
| Curlew | 122 000-128 000 | - | 125 000 |
| Spotted Redshank | - | - | 45 000 |
| Redshank | | - | 268 000 |
| <i>robusta</i> | 100 000-100 000 | | |
| <i>totanus</i> | 164 000-172 000 | | |
| Greenshank | - | - | 109 000 |
| Green Sandpiper | - | - | 133 000 |
| Wood Sandpiper | - | - | 577 000 |
| Common Sandpiper | - | - | 882 000 |
| Terek Sandpiper | - | - | 30 |
| Turnstone | | 25 000 | 18 500 |
| <i>high arctic interpres</i> | 25 000- 25 000 | | |
| <i>Fennoscandian interpres</i> | 18 500- 18 500 | | |
| Red-necked Phalarope | 125 000-175 000 | >100 | 150 000 |
| Grey Phalarope | 350- 500 | >100 | 330 |
| TOTAL | | c.93 000 | c.6 500 000 |