SCOTTISH BIRDS



THE JOURNAL OF THE SCOTTISH ORNITHOLOGISTS' CLUB

Vol. 13 No. 4

Winter 1984

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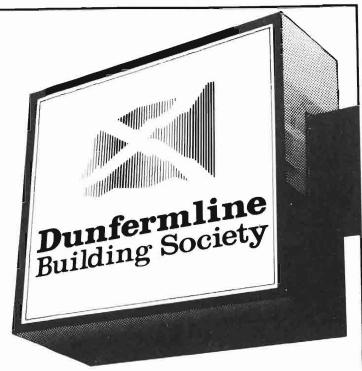
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Volume 13 No. 4

Winter 1984

Edited by V. M. Thom, assisted by S. R. D. da Prato, R. W. Furness and I. R. Taylor

Editorial

1984 Photographic Competition results

The Editorial Committee was encouraged by the much larger number of entries—more than eighty—for the competition this year and found the final selection of the top three a difficult task. From a short list of about ten, the following were finally chosen:

First - Kestrel, by John Clarke, Tewkesbury Second - Reed Bunting, by P. J. Newman, Kilmacolm Third - Rock Pipit, by D. Hassell, Enfield

We congratulate the winners and thank all who submitted entries. We are especially grateful to Edmund Fellowes for the black and white prints he donated for use in *Scottish Birds*. We have an on-going need for photographs and would welcome more offers of material from the very able photographers we know to be among our members.

Another editorial plea!

It would greatly assist the Editor if contributors of reviews and short notes, as well as authors of papers, could please ensure that the material they submit follows the standard layouts used in SB. Reference to any recent number should be sufficient to indicate what is required, but copies of the 'Advice to Contributors' which appeared in SB 12(6) are available from the Secretary.

Welcome

We welcome the two 'new' members of staff now in charge of the Bird Bookshop (see page 135) and hope they will be happy working for the SOC.

Sir Arthur Duncan

We record with regret that Sir Arthur, the Club's first Chairman, died suddenly on Friday 2 November 1984. An obituary will appear in the spring number.

Habitats and distribution of waders breeding on Scottish agricultural land

H. GALBRAITH, R. W. FURNESS and R. J. FULLER

Much concern has recently been expressed regarding the potential threat to breeding wader populations from agricultural development. The surveys reported here covered a large area of farmland of different types and the results consequently provide the most realistic assessment yet made of the seriousness of the situation for some species.

Large numbers of waders nest on Scottish farmland yet only a few local studies of their numbers and habitat preferences have been published. Galbraith and Furness (1983) showed that poorly drained rough grazing held much higher densities of most wader species than improved grazing or cereal fields and presented some tentative evidence for regional density differences. Barrett and Barrett (1984) showed that in east Sutherland unimproved pasture with extensive Bracken Pteridium aquilinum growth held higher densities of breeding waders than other available habitats. Outer Hebridean machair and related habitats have been shown to hold particularly large numbers of breeding waders (Fuller 1981; Fuller et al 1979) but the importance of these island populations in relation to other parts of Scotland has not been established.

This paper presents results from recent surveys of the breeding wader populations of Scottish farmland and Outer Hebridean machair and compares the overall breeding densities and numbers in different broad classes of habitats and geographical areas. These data provide an indication of the relative importance and conservation significance of these habitats and areas for breeding wader populations, and are intended to give a baseline against which effects of future agricultural changes may be assessed.

Methods

Information was available from two separate surveys. Firstly, the Scottish Ornithologists' Club/Wader Study Group "Survey of the Breeding Waders of Scottish Agricultural Land" took place in 1982 and 1983 throughout the country. Secondly, between April and July 1983 the Wader Study Group and Nature Conservancy Council conducted a survey of waders breeding on the Outer Hebridean machair. For con-

venience, the two surveys are hereafter referred to as the "mainland survey" (although the Northern Isles and Inner Hebrides were also included) and the "Hebridean survey", respectively.

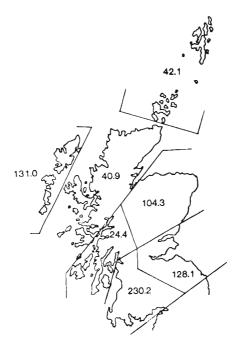


Figure 1. Area surveyed (km²). The figures represent the coverage within each of seven arbitrarily defined regions.

In the mainland survey standard recording cards were completed by a large body of volunteers covering areas of suitable habitats throughout Scotland. Sites, generally of about 1-3 km², were chosen by observers and visited 1-3 times between mid-April and early June during fine weather. Habitat composition (dry pasture, damp pasture, rough grazing, arable, riverbanks and shingle banks) and the numbers of pairs and individuals of each species were recorded, together with information on the stage of breeding. Wherever possible, observers walked through each field as well as counting from a distance since our preliminary observations indicated that only Oystercatchers Haematopus ostralegus and Lapwings Vanellus vanellus could be counted accurately without attempting to flush hidden birds. Counts undoubtedly tended to underestimate numbers of Snipe Gallinago gallinago and per-

haps Redshank Tringa totanus and Dunlin Calidris alpina because of their unobtrusive behaviour. The methodology of the mainland survey was described in full in Galbraith and Furness (1981).

For parts of the analysis the results of the mainland survey were subdivided into those sites surveyed because they were known to hold wader concentrations and those for which no prior knowledge existed. The latter will be referred to as "random sites".

In the Hebridean survey, 131 km² of machair and related habitats (mainly on North Uist, South Uist and Benbecula), were surveyed using rather different techniques to those employed in the mainland survey. The exact methods employed in the Outer Hebrides were described in Reed and Fuller (1983). The main difference from the mainland survey was that the Hebridean work was carried out by pairs of observers who walked parallel transect lines 100 or 150m apart. The majority of the Hebridean data were collected in June when most species were particularly conspicuous (Reed et al. 1983). This transect method has been shown to give a realistic estimate of the numbers of most species of breeding waders (Jackson & Percival 1983).

Despite the differences in the techniques we are confident that the two surveys were sufficiently comparable to assess the relative importance of machair for breeding waders in a Scottish context. It is important to appreciate that the term "machair", as used in this paper, refers to the complex of habitats which Fuller (1981) has described. Technically machair is the coastal plain of wind blown sand but here it is used to define the whole complex of dune systems, dune slacks, cultivated machair, marshes and damp grassland associated with this plain. Fuller (1981) showed that variations in wader density occurred between these different habitats but it is beyond the scope of this paper to consider these habitat preferences of machair waders in detail.

Results

Altogether 701 km² were censused. Coverage was not uniform: the Outer Hebrides, south west and south eastern areas (which include the central lowlands) were better represented than the Highlands, Inner Hebrides, north east, Orkney and Shetland (Figure 1). Table 1 shows the total number of pairs of each species counted and their overall nesting densities in each habitat. The Snipe data from the mainland survey include only those sites censused during suitable conditions, i.e. in late evening in fine, windless weather (Smith 1981). The machair Snipe density is certainly a considerable underesti-

mate since the data include areas censused under non-optimal conditions for this species. Table II shows the percentage of sites occupied by each species and the wide variation in breeding densities between sites. This variation is likely to be due to differences in habitat quality e.g. food availability, predation levels, cover etc.

Table I. Overall densities, in pairs/km² surveyed, (where overall density=total number of pairs in each habitat/total area of each habitat) of waders on Scottish agricultural land, riverside shingle and Hebridean machair. The figures in parentheses below the species names and habitats refer to the total number of pairs counted and the area of each habitat surveyed (km²) respectively.

| | Lapwing | Oyster- catcher | Redshank | Curlew | Snipe | Dunlin | Ringed Plover |
|---------------------------|---------|--------------------|----------|--------|-------|---------|------------------|
| | (6919) | (3524) | (2539) | (728) | (857) | (2059) | (2176) |
| Dry | , , , , | | .==== | | | (=3.5C) | (|
| Pasture (160.4) | 3.6 | 2.1 | 0.2 | 0.6 | 0.0 | 0.0 | 0.1 |
| Damp Pasture (45.7) | 9.0 | 1.9 | 2.0 | 1.4 | 2.6 | 0.1 | 0.0 |
| Rough Grazing | 3.0 | 1.0 | 2.0 | 4.4 | 2.0 | 0.1 | 0.0 |
| >300m (17.8) | 2.5 | 0.5 | 0.1 | 2.9 | 0.8 | 0.0 | 0.0 |
| Rough Grazing <300m | 2.0 | 0.5 | 0.1 | 2.0 | 0.0 | 0.0 | 0.0 |
| (198.1) | 4.7 | 1.6 | 0.7 | 2.4 | 2.6 | 0.1 | 0.2 |
| Arable (134.7) | 6.0 | 2.0 | 0.1 | 0.3 | 0.0 | 0.0 | 0.0 |
| Shingle (13.3) | 2.5 | 4.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| Machair (131.0) | 26.3 | 15.8 | 15.1 | 0.0 | 3.9 | 15.6 | 16.2 |

Note: the mainland habitat areas given in the table refer only to species other than Snipe. The mainland Snipe densities were calculated using only those sites censused during optimal conditions; the relevant areas (km²) were: dry pasture - 65.3; damp pasture - 15.2; rough grazing >300m - 2.5; rough grazing <300m - 57.5; arable - 46.4; shingle - 2.4.

Overall breeding densities (all species and habitats combined) varied widely between regions (Outer Hebrides - 92.8 prs/km²; Northern Isles - 13.5; north east - 5.4; northern highlands - 5.1; south east - 4.9; south west - 4.6; south west highlands - 2.1) and breeding densities in particular habitats differed between regions (Table III). These differences were investigated using Chi square tests where the actual number of pairs counted in each habitat in each region was compared with the expected number (obtained by multiplying the area

Table II. The percentage of sites at which each species was recorded. Figures in parentheses below habitats show the number of sites surveyed; those in the species columns denote the range of densities recorded on sites of 50ha or more. Dashes indicate that too few sites (<10) were available for analysis.

| | Lapwing | Oyster- catcher | Redshank | Curlew | Snipe | Dunlin | Ringed Ployer |
|------------------|---------------|--------------------|------------------|-----------------|------------------|-----------------|------------------|
| Dry | | | | | | | |
| Pasture | 47.4 | 32.3 | 9.0 | 13.7 | 1.2 | 0.0 | 1.2 |
| (232) (Damp | 0.2-43.6) (0 | 0.2-43.6) | (0.1-5.0) (| 0.1-6.2) | (—) | (—) | (—) |
| Pasture | 51.0 | 25.2 | 29.6 | 27.1 | 17.4 | 1.2 | 0.0 |
| | | | (0.6-10.0) ((| | (_) | () | () |
| Rough Grazing | 21.7 | 17.4 | 4.3 | 69.0 | 8.6 | 0.0 | 0.0 |
| >300m | () | (_) | () | () | () | () | (—) |
| (23) | () | (—) | (—) | () | () | () | (—) |
| Rough | | | | | | | |
| Grazing | 54.9 | 26.1 | 23.8 | 49.1 | 28.7 | 2.2 | 6.6 |
| <300m (226) | (0.4-98.6) | (0.1-61.8 |) (0.2-37.8) | (0.2-56 | .7) (0.2-27.0) | (—) | (—) |
| Arable | 69.2 | 55.8 | 5.1 | 11.2 | 0.0 | 0.0 | 1.5 |
| (195) | (0.2-47.7) (| | (-) | (—) | (—) | (—) | (—) |
| Shingle (75) | 11.0 ((—) | 44.3 (—) | 31.5 | 5.8 | 0.0 | 0.0 | 8.4 (—) |
| Machair | 100.0 | 100.0 | 100.0 | 0.0 | 96.0 | 100.0 | 100.0 |
| | 6.5-66.6) (| | | () | (0.6-38.1) (1 | | |

Notes: (a) the site totals given in the table refer only to species other than Snipe. The Snipe data were calculated using only those sites censused under optimal conditions and the resulting site totals are: dry pasture - 76; damp pasture - 42; rough grazing >300 m - 5; rough grazing <300m - 76; arable - 51; shingle - 21.

(b) much of the machair area surveyed did not fall into clearly defined sites. The 24 machair sites were arbitrarily selected and represented approximately 70% of the entire area surveyed. These machair sites varied substantially in habitat composition (see text for definition of "machair" as used in this paper) and densities of waders in these different machair habitats varied substantially (e.g. Fuller 1981).

of each habitat surveyed in each region by the overall density for that habitat). Significantly more pairs of Lapwings and Oystercatchers were counted in dry pasture in the Northern Isles than in the same habitat further south ($x^2=12.08$, P<0.001; 418.1, P<0.001 respectively, 1df). Numbers of Oystercatchers in rough grazing were significantly higher on the Northern Isles than in the south east and south west combined but the converse was true for Lapwings ($x^2=399.9$, P<0.001; 7.66, P<0.01 respectively, 1df). Oystercatcher numbers on arable land were higher in the north east than the south east and south west combined ($x^2=27.6$, P<0.001, 1 df) but Lapwing numbers did not differ significantly. Only "random sites" were used in this part of the analysis to ensure

that any density differences obtained were not merely due to differences in selectivity on the part of the observers. Sample sizes were not adequate to allow comparison between all species, habitats and regions.

Table III. Regional differences in overall breeding densities of Lapwings (a), and Oystercatchers (b). Sample sites (area surveyed in km 2) in parentheses. Dashes indicate that area surveyed was not large enough for comparisons i.e. $<10~km^{2}$.

| (a) Lapwing | dry pasture | rough grazing | arable |
|--|---|--|-------------------------------------|
| south west south east north east n. highlands N. Isles | 2.0(39.5) 2.2(22.6) 1.3(13.6) | (<300m) 2.8(72.8) 2.4(12.2) ——————————————————————————————————— | 4.3(26.9) 3.1(43.2) 3.0(18.4) |
| (b) Oystercatcher | | | |
| south west south east north east n. highlands N. Isles | 0.2(39.5) 0.3(22.6) 1.1(13.6) | 0.1(72.8) 0.1(12.2) — 0.1(18.4) 5.4(12.5) | 0.5(26.9) 0.9(43.6) 2.2(18.4) |

Using the breeding densities established by the mainland survey and land use statistics supplied by the Department of Agriculture and Fisheries for Scotland (DAFS 1982) we have produced estimates of the total populations of Lapwings, Oystercatchers and Redshanks breeding on typical Scottish farmland (i.e. excluding machair). Curlew *Numenius arquata* and Snipe are excluded from the calculation because substanital numbers breed outwith farmland. These estimates must be tentative since the DAFS land classification system is not identical to that used in the survey. Furthermore, the calculation assumes that there are no regional differences in breeding densities within habitat types but this survey has shown that this is not the case for, at least, Lapwings and Oystercatchers.

Of the 59,720 km² of farmland in Scotland (DAFS 1982) only one third i.e. 19,906 km² lies below 300 metres (Glentworth in Coppock 1978). Above this altitude breeding densities of the three species are comparatively low (Table I). Below 300 metres approximately 7100 km² is pasture, 8600 arable and 3100 rough grazing (DAFS 1982). The remainder is root crops or horticultural produce and is excluded from the calculation. Multiplication of the habitat areas by the breeding densities gives estimates of the total populations nesting in typical Scottish farmland (Table IV). The Hebridean survey established that minima of 3500, 2100 and 2000 pairs of Lapwings,

Oystercatchers and Redshanks, respectively, bred on the Outer Hebrides machair and related habitats. These totals are also included in Table IV.

Table IV. Population estimates for three species on machair and typical Scottish farmland. Figures in parentheses are breeding densities obtained from "random sites" (see text), so as to reduce any bias resulting from observers concentrating on better areas. Damp and dry pasture densities are combined to conform to the DAFS land classification scheme. All totals have been rounded to the nearest one hundred,

| | Lapwing | Oystercatcher | Redshank |
|---------------|-------------|---------------|-----------|
| rough grazing | 9600(3.1) | 1900(0.6) | 600(0.2) |
| pasture | 20,600(2.9) | 9200(1.3) | 2100(0.3) |
| arable | 30,100(3.5) | 9500(1.1) | 300(0.04) |
| machair | 3500 | 2100 | 2000 |
| total pairs | 63,800 | 22,700 | 5000 |

Discussion

The results presented in this paper confirm both the importance of marginal farmland (damp pasture/rough grazing) and of the Outer Hebridean machair as breeding areas for waders in Scotland.

The importance of marginal farmland: The mainland survey has shown that marginal farmland is particularly important for Snipe, Curlew and Redshank. Current trends towards drainage and subsequent improvement of marginal land are likely to have most effect on the status of these three species. Redshank are likely to be affected most severely since the total Scottish population is comparatively small, relatively small numbers nest on non-agricultural land, and the species has not colonised improved farmland to any extent. Since approximately 40% of Scottish Redshanks nest on Outer Hebridean machair and a further 40% on rough grazing/damp pasture, any extensive improvement or drainage of these habitats may adversely affect a large proportion of the total Scottish breeding population.

Although Oystercatchers and Lapwings nest at comparatively high densities on improved land, the consequences of continued improvement are difficult to predict since there is little information on their breeding success in different habitats. Matter (1982) has shown that the fledging success of Lapwings in arable areas in Switzerland is less than half that on marginal land and substantially less than that required to maintain the arable population. Therefore, the existence of populations on intensively farmed land might depend on recruitment from marginal areas. Heppleston (1972) and Briggs (1984) have shown that Oystercatchers breeding in agricul-

tural land are more successful than those on riverine shingle or on the coast. Like Lapwings, however, Oystercatchers lead their chicks to pasture soon after hatching. The finer details of habitat structure (e.g. heterogeneity, the proximity of pasture and the timing of farming operations) may be important determinants of breeding success in both species on improved agricultural land. Further studies of chick production and habitat utilisation throughout the breeding cycle in different agricultural habitats are needed before the effects of a continuing shift toward land improvement and cereal production can be predicted. It would be unrealistic to make such predictions on the basis of breeding densities alone.

The importance of Outer Hebridean machair: With the exception of Curlew, breeding densities on machair and related habitats are many times those of the best habitats in more typical farmland. The machair habitats hold approximately 5% of Scotland's breeding Lapwings, 40% of its Redshanks and 9% of its Oystercatchers (Table IV). These figures are very approximate because unknown numbers of birds nest in non-agricultural habitats; this is likely to be so particularly for Oystercatcher which nests commonly on riverine shingle and on the coast.

These tentative estimates emphasise the importance of the Outer Hebrides, particularly for Redshank. It is likely that the 2038 pairs of Dunlin and 2116 pairs of Ringed Plovers Charadrius hiaticula found on the machair by the Hebridean survey also represent substantial proportions of the total Scottish populations. However, for these species it was not possible to compare the Outer Hebrides with the rest of Scotland on the basis of the results of the mainland survey because both Dunlin and Ringed Plover commonly breed outwith farmland on the Scottish mainland.

In addition to demonstrating the importance of the Outer Hebridean wader populations in a Scottish context, this paper has also indicated the likely importance of farmland in the Northern Isles for breeding waders (particularly for Oystercatchers). There is a need for further studies in Orkney and Shetland since these islands are likely to be affected by changes similar to those occurring elsewhere in Scotland (Okill 1982).

Acknowledgments

The SOC/WSB ("mainland") survey would not have been possible without the support and financial assistance of the SOC and Craignish Conservation Trust and the cooperation of the WSG. Fieldwork was carried out by a long-suffering band of volunteers including J. M. Anderson, J. B. Angus, B. Bailley, K. Banks, S.

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The WSG/NCC survey of the Outer Hebridean machair would not have been possible without the cooperation and help of many people. We are indebted to the landowners and crofters who gave us access to their land, particularly the North Uist Estate and South Uist Estate. Financial support for the survey came from the Nature Conservancy Council, the World Wildlife Fund, the Scottish Ornithologists' Club, The British Ornithologists' Union, The British Ecological Society, the British Trust for Ornithology and the Royal Society for the Protection of Birds. The following ornithologists carried out the fieldwork: R. J. Burkmar, Dr N. E. Buxton, T. Davis, Dr P. N. Ferns, I. Forsyth, R. J. Fuller, D. M. Green, G. H. Green, D. B. Jackson, G. Johnson, B. Kaleyta, C. Morris, M. E. Moser, S. M. Percival, C. Pickup, Dr M. W. Pienkowski, Dr K. W. Smith, F. L. Symonds, S. W. Walker, A. Webb and T. D. Williams. Additional information on Snipe was supplied by A. Henderson of the RSPB. Much help in developing the methods and organising the survey was given by Dr D. R. Langslow and Dr T. M. Reed of the Nature Conservancy Council's Chief Scientist's Team. Interpretation of the raw field data was carried out by A. Webb and T. D. Williams of the Nature Conservancy Council.

Summary

Results from the two separate breeding wader surveys on Outer Hebridean machair and more typical Scottish agricultural habitats are presented. Marginal farmland (i.e. rough grazing/damp pasture) is shown to be particularly important for Redshank, Curlew and Snipe. The status of all three, but particularly Redshank, could be affected by large-scale reclamation of marginal land. Lapwings and Oystercatchers breed in comparable densities on both improved and unimproved farmland but, in the absence of information on breeding success in different habitats, the effects of land use changes cannot be realistically predicted. The Scottish population estimates resulting from this study confirm the national importance of the Outer Hebridean machair as a wader breeding area.

References

BARRETT, C. F. and BARRETT, J. 1984. Breeding lowland waders in east Sutherland. Scot. Birds 13: 2-7 BRIGGS, K. 1984. The breeding ecology of coastal and inland Oystercatchers in north Lancashire. Bird Study 31: 141-147. ■ Coppock, J. T. 1976. An agricultural atlas of Scotland. John Donald, Edinburgh

DEPARTMENT OF AGRICULTURE AND FISHERIES FOR Scotland 1982. Economic report on Scottish agriculture 1981. | Fuller. R. J. 1981. The breeding habitats of waders on North Uist machair. Scot. Birds 11; 142-152 ■ Fuller, R. J., Wilson, J. R. and Coxon, P. 1979. Birds of the Outer Hebrides: the waders. Proc. R. Soc. Edinb., 77B; 419-430. GALBRAITH, H. and FURNESS, R. W. 1981. Censusing breeding waders on agricultulal land ir Sotland Waler Study Group Bull. 33: 12-13. GALBRAITH, H. and FORNESS, R. W. 1903. Breeding waders on agricultural land. Scot Birds 12: 148-153. HEPPLESTON, P. B. 1972. The comparative breeding ecology of Oystercatchers Haematopus ostralegus in inland and coastal habitats. J. Anim. Ecol. 41: 23-53. ■ Jacksofi, D. B. and Percival, S. M. 1983. The breeding waders of the Hebridean machair: a validation check of the census method. Wader Study Group Bull. 39: 20-24. MAT-TER, H. 1982. Einfluss intensiver feldbewirtschaftung auf den bruterfolg des Kiebitzes Vanellus vanellus in mitteleuropa. Der Ornithologische Beobachter 79: 1-24 ■ OKILL, J. D. 1982. 10 year agricultural plan for Shetland. Wader Study Group Bull. 36: 6. REED, T. M. and FULLER, R. J. 1983. Methods used to assess populations of breeding waders on machair in the Outer Hebrides. Wader Study Group Bull. 39: 14-16. REED, T. M., WIL-LIAMS, T. D. and WEBB, A. 1983. The Wader Study Group survey of Hebridean waders; was the timing right? Wader Study Group Bull. 39: 17-19. ■ SMITH, K. W. 1981. Snipe censusing methods. Bird Study 28: 246-248.

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The status of the Corn Bunting in the Lothians

A. W. BROWN, M. R. LEVEN and S. R. D. da PRATO

Within the last ten years the Corn Bunting has virtually vanished from many areas where it was formerly quite common. This short paper summarises the decline in the Lothians. It is hoped that it will stimulate comparable reports from other areas.

The Corn Bunting is a rather drab and easily overlooked species except when male birds are in song. It has been relatively little studied by ornithologists but all observers seem to agree on one point: the species has declined over much of its British range. This decline has been particularly marked in northern and western Britain and seems to have started before the end of the 19th century (Parslow, 1973). Evidence that this species is still on the retreat came from the breeding season Atlas project, when many observers reported that areas holding Corn Buntings in 1968 had lost them by 1972 (Sharrock, 1976).

In Scotland the decline appears to have been most pronounced, and best recorded, in the Northern Isles and the Hebrides (Baxter & Rintoul, 1953), whereas on the mainland the good ladies could only refer to "...a general but poorly documented decrease...". In this note we attempt to document the continuing decline of the Corn Bunting by summarising recent observations in the Lothians, an area where local observers were unanimous that the species had declined since 1968-72 when Atlas fieldwork took place.

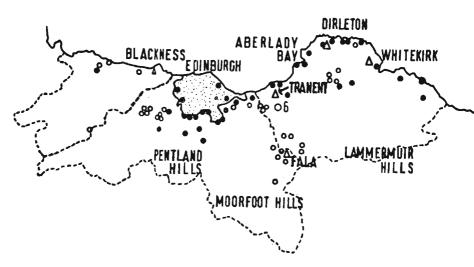


Figure 1. Locations of Corn Buntings in the Lothians in 1982 (open circles) and as recorded by G. L. Sandeman in 1933-68 (closed circles). Note that GLS did not cover many inland or western areas. The larger circle at Tranent refers to an area with 6 singing males.

An indication of the former distribution of the Corn Bunting in the Lothians is given in Figure 1 which shows the location of Corn Buntings (mostly singing males) observed by G. L. Sandeman during the period 1933-68. Though subject to bias

since the observer was concentrating his activities in particular areas, general occurrence of the species along the East Lothian coast and around Edinburgh is suggested. Further evidence of decline is available from counts made at winter roosts at Duddingston Bird Sanctuary within the City of Edinburgh and at Aberlady Bay Local Nature Reserve in East Lothian (Table 1).

Table 1. Maximum winter counts of Corn Buntings roosting at two sites in the Lothians 1950-1983

| Winter | Duddingston | Aberlady | |
|-------------------|-------------|----------|--|
| 1950/51 - 1957/58 | 300+ | n.c. | |
| 1970/71 - 1974/75 | 70 | 26 | |
| 1975/76 - 1978/79 | 30 | 95 | |
| 1979/80 - 1982/83 | 15 | 0 | |

Notes: n.c.=no count available.

Few counts of winter flocks have been made other than at these two roosts. It is unusual to see more than five birds together in the Tranent area where one of us (SDP) lives beside Corn Bunting habitat and sees Corn Buntings throughout the year, yet in February 1982, after a period of very hard weather, a flock of 20 appeared. At Dirleton a flock of 25 was recorded during the same cold spell (January 1982), and a flock of 78 at Whitekirk in February 1979—also during cold weather. Such records suggest influxes into the area, a supposition supported by many references in the literature to movements of Corn Bunting flocks but not yet confirmed by ringing recoveries.

In 1982 a breeding season survey was mounted in the Lothians and covered 27 of the 29 ten kilometre squares in the Region (the exceptions being two upland squares in the Moorfoot Hills). During the April-July survey period 46 records were received, of which 37 related to singing males (an average of less than 1 Corn Bunting per observer!). Corn Buntings were found in only 10 ten kilometre squares as against 25 in the breeding Atlas. Their distribution is shown in Figure 1 and represents a density of one territory per 27.6 square kilometres of suitable habitat—assuming that observers located all the singing males.

More detailed information on density was obtained from two areas. In the southern half of the ten kilometre square NT46 (Fala) G. Smith recorded eight singing males over twelve weekends between 1st May and early July, equivalent to a density of one bird to 6.25 square kilometres. In the course of daily visits to a study area south of Tranent SDP recorded Corn Buntings at an overall density of one bird to

2.73 square kilometres. The higher density near Tranent seems to be genuine rather than an artefact of more frequent visits, since the birds were all located within one part of the study area—the Tranent-Elphinstone ridge. Other parts of the 16.35 square kilometre study area had no Corn Buntings, but on farmland immediately to the north observers also found Corn Buntings. These records, together with those from SDP, show up as a group on Figure 1. These aggregations are typical of Corn Buntings on the continent and reflect the species' unusual breeding system (Moller 1983).

However in several areas with apparently suitable habitat no Corn Buntings were recorded. It is difficult to assess census efficiency over the large areas of farmland involved but at least 100 square kilometres were covered thoroughly enough for us to be certain that the negative results obtained were genuine. Taken together with the results for Tranent and Fala this gives a density of one per 11.9 square kilometres and, by extrapolation, a maximum figure of 86 males for the region. This may still be too high since there is historical evidence that the Corn Bunting has always had a rather patchy distribution in the Lothians (Nash 1935) and Fala and Tranent seem to be particularly favoured sites. It seems that the birds are now confined to a few favoured areas and we suspect the true population is nearer the minimum figure of 37 singing males.

Finally, what reasons are behind this decline? It has continued throughout a period when the area of cereals in the Lothians has actually increased. Although cultivation might destroy nests in crops, there are many remaining areas of rough grass and low scrub adjacent to cornfields which do not hold Corn Buntings. Modern agriculture may, however, have affected the birds' food supply. Nowadays, arable land contains many fewer weed seeds and invertebrates—a situation which has been shown to affect Grey Partridges, especially when feeding chicks (Potts, 1979). However the decline started before recent agricultural changes and it may be that the Corn Bunting—a species with a predominantly continental distribution—has been affected by other factors whose effects have been most marked at the edge of the birds' range.

Acknowledgments Over 50 observers in the Lothians contributed to this survey: the fact that space precludes a full listing of their names in no way detracts from their contributions.

References

BAXTER, E. V. & RINTOUL, L. J. 1953: The birds of Scotland. Edinburgh.
MOLLER, A. P. 1983: Song activity and territory quality in the Corn Bunting. Ornis Scand. 14: 81-89 Nash, J. K. 1935: The birds of Midlothian

London Parslow, J. L. F. 1973: Breeding birds of Britain and Ireland. Berkhamstead Potts, G. R. in Cramp, S. & Simmons, K. E. L. (eds.) 1979: The birds of the Western Palearctic. 11: 486-490. Oxford Sharrock, J. T. R. (compiler) 1976: The atlas of breeding birds in Britain and Ireland. Tring.



SKYLARK Keith Brockie

The Year of an Orcadian Field

PAUL HEPPLESTON

18 August I decide to trace the annual cycle of the Field; it lies beside a road on which I travel every fortnight or so. The sea is nearby, less than a quarter of a mile away—as it often is in Orkney—so the birds using the field include many shore birds and gulls as well as the more usual farmland inhabitants.

This is a lowlying agricultural area in the east of the county. There are hardly any trees or hedges; stone dykes abound and the crofts and farm buildings stand out clearly and are visible for miles around. The coastline is indented with bays forming peninsulas or 'ness' points—and the Field is on the edge of one of these. To the north lie other islands—Shapinsay and Stronsay—and in the south-east one can just glimpse the Copinsay lighthouse seven miles away. It is typical rural Orkney, friendly, peaceful and unspoilt.

To bring some objectivity into the story, I plan to restrict my observations to the time around high water as often as possible. The farmer has, in the past, tended to divide the 38acre field into two, but there is no fence and in the late winter months the two parts merge with one another and appear unified, albeit only for a short while.

28 August A day of drizzle; half the field has oat stooks standing in stubble—the other half is rather poor grass, a little marshy in places; there are no birds here. The stooks,

on the other hand, bear 100 Starlings, a Herring Gull, 13 Common Gulls and 5 Rooks—all busy stripping the oat seedheads. In the surrounding stubble there wander 20 Curlews, 5 Lapwings, another 50 Starlings and half-a-dozen Rock Doves. It is a busy place.

- 4 September The stooks are still there, shining gold in the morning light; small numbers of Curlew, Starlings, Rock Doves and gulls are still present. The grass portion is a refuge and feeding place for 34 Golden Plover—maintaining, as so often, a discrete group-identity, ever alert and separate from neighbouring species.
- 19 September A strong ESE wind edges the bright sunlight with chill. The stooks have gone—merged with hundreds of others in the oat-stacks which spring up beside almost every farm in Orkney around this time, a sudden change in the skyline only slowly to be removed as the winter demands more and more fodder for the cattle in the byres. The only birds in the field on this bitter day are 48 Curlew and some Starlings—both groups part of what turn out to be resident flocks.
- 1 October The breeze is still from the east—in fact there will now be few windless days until springtime. The stubble is sporting a green tinge of undersown grass making the most of what remains of the growing season. The Curlew (20) are still there on this stubble-grass together with three young Herring Gulls and 12 Black-headed; a trio of Rock Doves are obviously wintering in nearby steadings. The grass half-field now seems more popular—it's strange to see how preference swings to and fro over the months—with a few Lapwing and Redshank and 130 Golden Plover.
- 16 October A cold day, frequent showers. The fields are beginning to turn a green-brown; they look inhospitable. Some doves and Lapwing are all that can be seen.
- 6 November Again cold and windy. Ten Redwing are feeding on the undersown grass, which has itself now ceased growing. On the wetter grass a large flock of Golden Plover and some Lapwings are joined by a Raven, two Fieldfares and a Song Thrush. The beach shore below the farm now has the familiar winter masses of pulverised tangles and other brown and red seaweed cast up on the high water mark.
- 27 November The strong wind is now in the west, but bright sun entices the keen birdwatcher. Rain over the past days has left pools amongst the grass; here rest the usual 100+ Golden Plover and 25 Lapwing. These are the resident winter waders it seems, though Curlew flocks remain elsewhere in the parish all winter, showing more fidelity to their feeding grounds than the Curlew visiting our field. Four Redshank call high

above twenty Starlings which are probing rapidly amongst the stubble remains.

- 12 December I saw no birds on the fields today, but it was a marvellous day for walking: no wind, the fields completely covered with snow and all puddles, pools, ditches and lochs completely frozen over. The stillness in the cold, crisp air brings an expectancy of the New Year, but the hint of new weather proved to be far too early.
- **30** December The wind is back—a strong easterly from Scandinavia and western Russia. The undersown stubble is now not an inviting place; there is little food in such fields at the best of times let alone at the cold turn of the year. But the wet grass provides plenty of fare for Curlews, Golden Plovers and Starlings. A lone Fieldfare and Blackbird bring the whole field species total so far to fifteen.
- 23 January A fine, still day. The score of resident Doves are resting grey on the edge of the stubble-grass. The Starlings seem to have moved over to the other half where their preferred food of earthworms and leatherjacks will abound. Numbers are high today: 39 Starling and a large mixed flock of almost 200 Lapwing, Redshank and Plovers.
- 28 February The winter breeze is back—from the west, so the air is damp. Again no birds on the oats half-field, but the same mixed wader flock of last month is augmented by 25 Dunlin, the whole lot now having an air of anxiety evident in their feeding actions. Could this be the start of the spring passage northwards...?
- 12 March Not the best of days, but quite pleasant for walking. The wader flock on the wet grass is down to 28, mainly Golden Plovers—their faithful winter's stay must surely be drawing to a close with the rapidly increasing day-length stirring their inward gaze north once more.
- 25 March Winter is not yet over, for today is bitterly cold. It must be a real drop in air temperature for, although the white horses dance out in the tides-stream beyond, the wind is not stronger than usual. But today is special, for spring has returned—in the form of an undoubted pair of Curlew on the stubble-grass. The other half-field has more Starlings than waders (!) and the Golden Plovers have gone.
- 6 April The Curlew pair is still on station despite the galeforce northerly wind from the Arctic. A new species for the field this winter is an Oystercatcher feeding alone amongst the grassy rushes. The dozen or so Lapwings are still in a group (although on mainland Scotland many will have paired—and even laid—by now).
- 24 April It is definitely no longer winter. The Curlew are

feeding in the grass half and fly to the stubble-grass to rest; it will be interesting to see where they nest. The rain is driving hard westwards and in these conditions it seems incongruous to find not only five pairs of Lapwings, but that two of them have laid eggs. The Oystercatcher has remained—solitary—but 19 Rock Doves resting on the field margin provide a tangible link with winter.

- 21 May The last month has seen a major change with the ploughing of the stubble-grass, which now holds no birds. The day is fine and sunny (the first such observation day since I began 9 months ago), the Oystercatcher is paired and there is a third Lapwing nest in the grass half.
- 18 June My visits have, perforce, been less frequent, so the changes this time are more noticeable. The ploughed field has passed through all the stages of cultivation and now has the green sheen of young oats barely inches tall. The Curlews are now outside the field, calling anxiously above a peat-heather moss nearby, but there is an Oystercatcher nest in the newly-sprouted corn. The grass field, now much drier than before, has 7 pairs of Lapwings (all with eggs or young) and a pair of Redshank nesting amongst the rushes at the edge of the field. Despite being the time of the summer solstice the day is dull, though with a gentle warming breeze, which ruffles the surface of the sea over towards the neighbouring islands, whose farmsteads are visible far in the distance.
- 27 July Five weeks have gone by and the oats are now at full stretch, green waving corn providing marvellous refuge for skulking birds that dare to venture within the thick stalkforest. Already, in what seems so short a time, the avian breeding season is ended; 43 Curlew feed quietly on the grass and 110 Golden Plover have returned—harbingers of another autumn. Even the Starlings have reached their peak flock size this year.
- 28 August The anniversary of my first visit to the Field. It's a dull, drizzly day in which I see the clock at full circle again; the oats have been cut and stooked and seem to provide interest for birds—almost exactly the same species spectrum as a year ago—Curlews, Lapwings, Common Gulls and Starlings. The grass-half is already taken over by part of the Golden Plover flock and a single Rock Dove flies from one end of the Field to the other. Nature's cycle is all set to begin again as the hints of autumn appear with the wind from the east and Redshank calls shrill through the descending mist.

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Short Notes

Unusual roost-site of Pied Wagtails

Introduction The Pied Wagtail is known to use a variety of habitats, both natural and man-made, for communal roosting and such sites have been occupied in both rural and urban environments. Galbraith (1977), Fuller (1982) and Spencer (1984) describe reed-bed sites and Boswall (1966) discusses the famous tree roost in Dublin city centre. Murton (1971) mentions the use of man-made structures such as the insides of greenhouses and power stations and the outsides of factories; and the species is also known to use sewage works for roosting purposes.

The Site A previously unrecorded roost habitat was discovered by accident at 1600 G.M.T. on 20 November 1983 when I was walking past a busy brewery site beside a main road in central Edinburgh. At least 100 Pied Wagtails were seen converging on an area of stacked plastic crates containing empty beer bottles awaiting destruction. Thinking the birds might be using the area as a pre-roost before heading off elsewhere, I remained to observe them and was surprised to find them using the site as a roost proper. Four counts were subsequently made of the birds using the roost (Table I) and three catches, using high-level mist-nets, were made by members of Edinburgh Ringing Group.

The roost-site was very sheltered, being bounded to the south and west by a high retaining wall, to the north by buildings, and to the east by other stacks of crates. The stack actually used by the birds measured c.5 m. in height by 18 m. north-south by 13-18 m. east-west; only a very little of it was exposed to the south and west above the top of the wall; there were regular gaps (less than 75 cm.) between the columns of crates. Observations suggested that the main area utilised by the birds was the south-west corner—the part most sheltered from all winds.

Observations Before entering the roost around dusk the birds gathered on the roofs of surrounding buildings (one in particular), but latecomers flew directly into the roost and could be seen to drop in from a considerable height if the sky was clear; most birds entered the roost horizontally by flying from the pre-roosts and over the top of the wall. The numbers recorded (Table 1) must be regarded as minima since on overcast days not all the birds could be seen arriving at the pre-roost nor entering the roost. However the figures indicate a roost holding up to 260 birds on occasion, from an unknown catchment area.

Table 1 Numbers and timing* (G.M.T.) of Pied Wagtails arriving at pre-roosts and entering roost

| Date | 25.11.83 | 17.12.83 | 07.01.84 | 11.02.84 |
|---------------------------------|----------|----------|----------|----------|
| Nos. arriving at pre-roost | 182 | 77 | 155 | 198 |
| Nos. entering roost | 231 | 162 | 181 | 260 |
| | hrs. | hrs. | hrs. | hrs. |
| "Official" sunset time | 1555 | 1543 | 1601 | 1710 |
| Time of first bird at pre-roost | 1545 | 1510 | 1545 | 1600 |
| Time of last bird at pre-roost | 1630 | 1605 | 1635 | 1720 |
| Time of first bird into roost | 1605 | 1545 | 1620 | 1715 |
| Time of last bird into roost | 1630 | 1615 | 1640 | 1725 |

^{*}measured in five-minute periods

In relation to sunset, birds assembled at their pre-roosts between 70 and 10 minutes before "official" sunset time (Royal Observatory, Edinburgh, pers. comm.) and continued to arrive until between 10 and 35 mins. after sunset. It would appear that in mid-winter (November-January inclusive) the earlier the time of sunset, then the earlier the birds began to assemble at the pre-roosts and the earlier they entered the roost proper (Table 1).

Ringing results, although based on small sample sizes, suggest a preponderance of first-winter birds at the roost; their mean weights were consistently lower than those of adults (this will be reported in more detail elsewhere). Adult and first-year Pied Wagtails in Scotland are almost completely migratory, many wintering outside the country (Galbraith op. cit.) and so the presence of a mid-winter roost of up to 260 birds is noteworthy in itself, irrespective of the unusual site in which it occurred.

Acknowledgments I wish to acknowledge the interest and co-operation of the brewery concerned and to thank them for permission to observe and net on their property. I thank P. W. Dundas and J. Hunt for commenting on an earlier draft of this note, and fellow members of the Edinburgh Ringing Group for helping to catch the birds.

Ringing Boswall, J., 1966. The roosting of the Pied Wagtail in Dublin. Bull. Brit. Orn. Cl. 86: 131-140 ■ Fuller, R. J., 1982. Bird Habitats in Britain. Poyser, Calton ■ Galeratth, H., 1977. The post-nuptial moult of a migratory population of Pied Wagtails. Ringing & Migration 1: 184-186 ■ Murton, R. K., 1971. Man and Birds. Collins, London ■ Spencer, R., 1984. The Ringer's Manual. B.T.O., Tring.

T. W. DOUGALL

Unusual Wren roost

While trapping birds for ringing at a malting in Haddington, East Lothian, on 28 December 1983, four Wrens were seen to fly from rat burrows in a heap of discarded barley. Further observation showed that the Wrens entered the burrows in spite of the fact that rats were coming and going quite frequently. Grain in the centre of the heap was quite warm, which may have been the attraction.

K. E. HART

Unusual behaviour of Long-tailed Tits

On 23 February 1984 I disturbed a flock of Long-tailed Tits feeding on bread lying on the ground. They returned to the bread, ate for fully a minute and then flew off when a domestic cat appeared. I understand that it is unusual for these birds to feed on bread and to be on the ground.

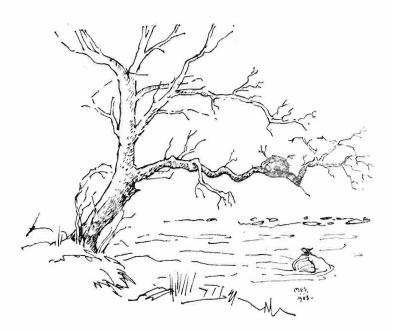
SANDRA R. HACKER

Perrins (1979) in *British Tits*, states that the Long-tailed Tit practically never comes down to the ground in search of food (p. 71) and rarely comes to bird tables, though if one or more of a party break with this tradition the whole party may visit the table regularly for much of the winter and even succeeding winters.—Eds.

Unusual Dipper nest site

On 26 March 1983 when doing the first of my British Trust for Ornithology Waterways Bird Surveys on the River Almond (Perthshire) I was intrigued to see a Dipper's nest, the size of a football, on the horizontal branch of an alder tree some $2\frac{1}{2}$ m. above the water and about 3 m. along the branch from the trunk of the tree, and effectively overhanging the water. A pair of Dippers were there still taking material up to it and, in due course, adults were seen feeding juveniles in the vicinity of the nest. Bannerman says that "occasionally the branch of a tree is used (as Seton Gordon relates)" and also quotes a report by Mr R. J. Younger of a nest which he found in a fork 11 ft. from the ground. I have inspected the photograph of the nest, which was published in Scot. Nat. 1932, and it is in the fork made by a branch with the trunk so is not really overhanging the river to any marked extent. In an article on Dipper breeding biology (Bird Study, 25: 149-160, 1978) Geoffrey Shaw summarises details of 1159 dipper nest sites, but does not include that of a tree branch.

M SHIMELD



Successive use of same site by two female Merlins

As part of a long-term study of the status and breeding ecology of the Merlin in Grampian routine visits are made to a number of sites. In the spring of 1983 Merlins were found to be breeding in low numbers, due to the cold wet weather in April and early May, and many long-established sites were without breeding birds. The site in question has a history of continuous occupation over a number of years and breeding had been successful there in 1980, 1981 and 1982. In 1983 when this site was visited on 8th May with Sandy Payne, a male Merlin was seen in the company of two females. One female, thought to be the occupant, flew low over the area calling loudly, while the second female circled high over the hill.

A second visit on 15th May, made to confirm breeding, revealed a female Merlin lying dead 10m from a nest containing egg-shell fragments. The bird had been recently killed, probably by a mammalian predator, and was ringed; she had bred in 1982 at a site 2.8km distant. During the visit the male Merlin was seen flying over the site and a second female was seen for a brief period.

On 19th June, when Logan Steele and I visited the site all the usual signs of occupation were seen. As the heather bank previously utilised for nesting was approached a female Merlin flushed off a nest containing three eggs. This nest was 25m from the first one. Breeding was successful and three young were seen on 7th August.

We assume that the same male mated with both females as on two occasions a second female was seen in his presence. The presence of this extra female in a year of low breeding density suggests that there was a surplus of non-site-holding females ready to take over any sites which became available, as happened in this case. Seebohm (A History of British Birds Vol. 1, 1883 London) records two females breeding at the same traditional site in one year (1870) and a similar occurrence has been noted in Cumbria, but in that case the second nest also failed Newton et al in press). It would be interesting to hear of any further occurrences.

BRIAN L. COSNETTE

Common Buzzards feeding on fish carrion at Loch Lomond

With reference to a recent short note on an Aberdeenshire buzzard eating a dead salmon at the water's edge (Scot. Birds 13: 88), in the past buzzards have been seen feeding on beached salmon at Loch Lomond. Powan Coregonus lavaretus, a species of whitefish almost unique to Loch Lomond, are also scavenged. Thousands of these herring-like fish were washed onto the shore following an outbreak of a fatal disease in June 1968. Along with other carrion eaters, the local buzzards were not slow in seizing the feeding opportunity presented, and on this occasion several powan were found at a nest on one of the islands.

JOHN MITCHELL





PLATE 17a. Reed Bunting, Second in the 1984 Photographic Competition.

P. J. Newman

17b. Nightjar with chick; one of the black & white entries.

E. C. Fellowes





PLATE 18a. Rock Pipit. Third in the 1984 Photographic Competition.

D. Hassell

18b. Meadow Pipit feeding Cuckoo; one of the black & white entries.

E. C. Fellowes





Reviews

The Bee-eaters by C. H. Fry; T. & A. D. Poyser, Calton, 1984; 304 pp., 8 colour plates; £19.60.

The bee-eaters' diet, composed largely of venomous Hymenoptera, seems to have imposed a remarkable uniformity of appearance on the entire family (most of the 24 species are united in the one genus Merops), yet at the same time has permitted evolutionary divergence to occur to varying degrees in foraging ecology, breeding and social behaviour, migratory patterns and plumage colouration. This book is the most authoritative account of the bee-eaters yet written and serves also as a guide to many aspects of modern biological theory that the bee-eaters illustrate so well. However, I wonder how many British readers will require the detailed species by species accounts which comprise the greater part of this book? Most people will see the European Bee-eater only on their Mediterranean holiday (though a pair nested in Musselburgh in 1920!) and the majority of the remaining species are Afrotropical. Of much more general interest are the later chapters on speciation and patterns of morphological variation, feeding ecology, bee-eaters and apiculture, and on the complex social relationships that develop within the breeding colonies of some species. Bee-eater 'goodneighbourliness' deserved more discussion than it received, to help the non-expert appreciate the unusual evolutionary significance of altruistic behaviour. But these chapters were enjoyable to read and well conveyed the author's enthusiasm for his birds. I wished this part of the book were longer.

This is an attractive book, enhanced by Hilary Fry's own colour paintings and especially by John Busby's engaging drawings that bring the birds alive throughout the book. I hope that the high price (Poyser's most expensive to date) and the fact that the birds are unfamiliar to many, will not deter people from buying it.

P. J. JONES

Newman's Birds of Southern Africa by Kenneth Newman; Macmillan 1983; 461 pp, 2000 + col. pl., 885 maps; £9.95.

This is the best African field guide so far. The area covered—the seven countries south of the Zambezi—is the same as in Robert's "Birds of South Africa" but more species are dealt with due to the inclusion of recent vagrants and southern seabirds. Since Newman painted many of the plates for the fourth edition of Roberts it is interesting to compare them.

The newer book scores as an identification guide but the older has more information and they are best seen as complementary to each other.

S. R. D. da PRATO

A Pictorial Guide to the Birds of the Indian Subcontinent by Salim Ali and S. Dillon Ripley. Bombay Nat. Hist. Soc./O.U.P., 1983, £22.50.

This slim volume depicts all the bird species found in the subcontinent of India arranged family-wise on 106 plates, mostly in colour. It does not include descriptions of the birds, but the plates are generally very well drawn and appear to be accurate. Concise information concerning

status, size, habitat and distribution is provided. The double-cross referenced index is tiresome to use especially when one is trying rapidly to identify a new bird. Having already used this book in India I found it to be invaluable and by far the best available field guide to date and an absolute must for those intending to visit this region.

DAVID L. CLUGSTON

- Handbook of the Birds of India and Pakistan 2nd edn., Vol 4: Frogmouths to Pittas, by Salim Ali and S. Dillon Ripley; OUP. Delhi, 1983; 267 pp., 11 colour plates and many maps & drwgs; £19.50.
- Handbook of the Birds of India and Pakistan Compact Edition by Salim Ali and S. Dillon Ripley; OUP, Delhi, 1983; 737 pp. plus 113 colour plates & many maps & drwgs; £45.00.

The Compact Edition contains the descriptive text of the ten volume Handbook—the complete texts of the second editions of volumes 1-3 and the first editions of volumes 4-10. It contains 113 colour plates, 24 of which are new.

Originally announced at £75, the price has been reduced to £45 because, according to the publishers, "the quality of this book has been affected by difficulties during the manufacturing process. The quality is very much better than many other Indian books I have seen and the book is a bargain for anyone interested in Indian birds.

JOHN C. DAVIES

A Field Guide to the Birds of the USSR by V. E. Flint, R. L. Boehme, Y. V. Kostin and A. A. Kuznetsov; Princetown University Press 1984; 353 pp; 48 colour plates, 71 line drawings and 303 maps; £46.30.

This book—a translation of the Soviet Handbook published in 1968—is the first field guide to the birds of the USSR in English (American?). The information on each species is inevitably limited as some 728 species are described and illustrated in one handy sized volume. Most species have about 200 words of text giving the Russian name, field marks, habitats, range, distribution and comparison with similar species. Rare visitors are more sketchily described.

The 48 colour plates, grouped in the centre of the book, are well reproduced: although rather old fashioned in style they will be a boon to those lucky enough to go birdwatching in the Soviet Union. The distribution maps are most useful and the introduction includes interesting chapters on birdwatching in the USSR, the ecological zones and avifaunas of different regions of the USSR and the five best areas for birds.

I found this book most exciting and wish it had been available in 1980 when we visited Siberia, as it would have helped us considerably. I can wholeheartedly recommend it, though it is a little overpriced in comparison to other guides.

ROY DENNIS

The Shore-birds of the Orkney Islands written and published by the Tay and Orkney Ringing Groups, 1984; pp. 78; £2.50 (limpback).

This booklet outlines the geology, coastal morphology and intertidal ecology of Orkney, describes methods used to count and catch waders,

and gives results of detailed fieldwork around the entire 793 km of Orcadian shoreline during winters 1982-83 and 1983-84. The status and numbers of each species are dealt with in turn (with full distribution maps) and biometrics of birds are tabulated. The total number of waders counted (over 51,000) indicates that Orkney ranks as one of the most important wader wintering sites in Britain. The Tay and Orkney Ringing Groups are to be congratulated not only on bringing this to our attention, but also for pioneering studies of waders in rocky shore regions. Their report of the Orkney study is detailed, thorough and clearly presented. Although not cheap, this booklet is excellent value for money and an important contribution to our knowledge of waders in Scotland.

R. W. FURNESS

One Man's Island: Paintings and sketches from the Isle of May by Keith Brockie; J. M. Dent & Sons, 1984; 150 pp, many illustrations; £12.95.

"One Man's Island" is the product of a year or more spent among the birds and animals of the Isle of May. Keith Brockie's studies of seabird and seal colonies are complemented by details of rare migrants and of flowers and shells. They are drawn with cool searching clarity; the artist finds interest and beauty in the shape of a nostril or a crushed egg-shell, as equally he does in the play of shadows over Guillemots and the delicate forms of Henbane and Silverweed. I particularly enjoyed the subtle composition of the Long-eared Owl roosting among echoing patterns of rock. Minutely scrutinised eyes are quite a feature of Keith Brockie's birds and animals, full of mirror reflections, but I wonder whether the "life" of a creature expressed by its eye is not really an outward energy? Nonetheless, Keith Brockie's work shines with the authority of first-hand experience. This book will stimulate both naturalists and artists, and it will delight "islanders" everywhere.

JOHN BUSBY

Short Reviews

The Starling by Christopher Feare; OUP 1984; 315 pp; 16 plates; £15

Perhaps because Starlings are so common many birdwatchers hardly give them a second glance—which is a pity, since any bird as successful as the European Starling must have some interesting features. Dr Feare is well qualified to write this book, having spent the last decade studying what he refers to as "the second hand car salesman of the bird world". After an introductory chapter on starlings in general, the book concentrates on European Starlings, though not just in Europe, providing an account that should satisfy both the general reader and anyone setting out to study the bird. The price is a little high but the book does contain a lot of information and is recommended.

Shorelines by Michael Warren; Hodder & Stoughton, 1984; 128 pp, many paintings and drawings; £14.95.

A large format book in diary form, composed of paintings which "record two years birding in Britain, the USA, Holland, France and Portugal".

The Birds of China by Rodolphe Meyer de Schaunsee; OUP 1984; 602 pp; 38 colour plates & 39 drawings; £35

This book is the first single volume work to describe the 1195 species recorded in China. Since so little is available on Chinese birds in English the book provides a checklist, field guide type descriptions, information on distribution, illustrations of over half the species, and useful background material on ornithology in China. As a result it is too large for the pocket, but anyone visiting China should not be without it—its cost is, after all, only a fraction of the air fare!

Cranes of the World by Paul Johnsgard; Croom Helm, London, 1984; 258 pp; 23 colour & 24 b & w plates; maps; £25

The Grouse of the World by Paul Johnsgard; Croom Helm, London, 1984; 413 pp; 51 colour & 72 b & w plates; figs. & maps; £25

The cost of these books will limit their appeal, especially as the European Grouse have recently been dealt with in BWP, but they are nicely produced and not really over-priced. There is a commendable attempt to use photographs of birds in action, supplemented by good line drawings, many of them by the author. The books are produced in the USA and American spelling is used throughout.

Birds of Somalia by J. S. Ash & J. E. Miskell; East African Nat. Hist. Soc., Nairobi, 1983; 97 pp; map; softback; £6

A useful little book summarising the status and distribution of 639 species in what the authors rightly describe as one of the least known African countries.

Finding birds in Japan: the Tokyo area by Mark Brazil, 1984; 35 pp; maps; £2.

This booklet gives advice on birding in Japan as a whole as well as more detailed information on what can be seen in and around the capital.

S. R. D. da PRATO

ITEMS OF SCOTTISH INTEREST Articles and reports on birds in Scotland, mainly on status and distribution, are listed here. Some biological studies are excluded, as are references from the widely available journals British Birds, Bird Study, and Ringing and Migration. Most of these items are available for reference in the Waterston Library. The librarian would be glad to receive reprints or copies of papers on any aspect of ornithology.

Weights, breeding, and survival in European Sparrowhawks. I. Newton, M. Marquiss & A. Village 1983. Auk 100: 344-354. Based on studies in Dumfriesshire 1971-80.

Turnover and dispersal in a Peregrine population, R. Mearns & I. Newton 1984. Ibis 126: 347-355.

Peregrines and Man in Dunbartonshire. J. Mitchell in West Dunbartonshire Naturalist Report no. 6, 5-10, 1984.

Sex ratio, survival and territorial behaviour in polygynous Hen Harriers in Orkney, N. Picozzi 1984. *Ibis* 126: 356-365.

Diets and feeding of Fulmars during the breeding season: a comparison between St Kilda and Shetland colonies. R. W. Furness & C. M. Todd 1984. *Ibis* 126: 379-387.

The value of single counts of waders on rocky shores. R. W. Summers, C. V. Corse, E. R. Meek, P. Moore & M. Nicoll 1984. Wader Study Group Bull. 41: 7-9.

St Abb's Head seabird sample counts in 1983. S. R. Warman, C. E. Warman, C. O. Badenoch & A. J. Panter (21 pp). Report to Nature Conservancy Council, SE Scotland Region, 12 Hope Terrace, Edinburgh.

The quinquennial Berwickshire seabird colony survey 1982. (41 pp). C. E. Warman 1983. Report to Nature Conservancy Council, SE Scotland Region.

12 Hope Terrace, Edinburgh.

Observations of birds and mammals on the Isle of Islay 1981-83. (52 pp). S. F. Newton (ed) 1984. Available from Brathay Exploration Group, Brathay Hall, Ambleside, Cumbria LA22 0HP, £2.00 post free.

Arran Bird Report for 1983. (10 pp). M. H. Dunn (ed) 1984. 65p plus postage from M. H. Dunn, Tigh an Droma, Kings Cross, Isle of Arran KA27 8RG.

Bird Report for Ross-shire and Inverness-shire for 1983. (20 pp). R. Dennis

(ed) 1984.

West Dunbartonshire Bird Report for 1979-82. C. M. Waltho (ed) in West Dunbartonshire Naturalist Report no. 6, 60-94, 1984.

W. G. HARPER

Notices

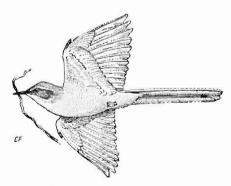
Colour-marked Whoopers In summer 1984 Whooper Swans moulting on Colour-marked Whoopers In summer 1984 Whooper Swans moulting on the east coast of Iceland were marked with plastic (PVC) neck rings. The birds are expected to be resighted mainly in the British Isles but some may reach the continent of Europe. The neck rings are yellow and carry a code of only two black letters (e.g. AA, AB etc.) read vertically and repeated four times around the ring. The same code is repeated on a yellow PVC-ring on the left leg, but the right leg carries an official steel ring issued by the Icelandic Museum of Natural History (P.O. Box 5320, Reykjavik, Iceland). Anyone who finds swans with yellow neck rings is asked to read the code if possible and to inform Arnthor Gardarsson, University Institute of Biology, Grensavegur 12, 108 Reykjavik, Iceland, stating locality, date and other relevant observations. Those who submit records will receive annual interim reports on resignitines. on resightings.

Coloured ringed Barnacle and Pinkfooted Geese As part of a long term study of the population dynamics of Greenland Barnacle Geese, 644 moulting and non-breeding geese were ringed in July 1984 at Orsted Dal, Jameson Land, East Greenland (71°50'N 23°30'W). Eight Pinkfooted Geese were also ringed. Each bird has on the left tarsus a tall white plastic (darvic) ring carrying a three letter code in black to be read from the base upwards, e.g. ABA, ABB, ABC, etc. and a metal ring on the right tarsus. Adult males were given a single orange spiral ring above the darvic while females were given a single yellow. Thirty-five yearling Barnacles (born 1983) have a thin red vertical stripe on their darvic rings and coloured spiral rings above the metal ring on the right tarsus. In addition to the above birds a further 469 Barnacles have been individually marked with darvics and colour rings on the Inishkea Islands, County Mayo (54°8'N 10°11'W) in the period 1968-1984. Any observations of these ringed geese with details of date, location, flock size, number of geese critically examined, rings observed with data on distance from geese, visibility and estimated accuracy of ring reading (1-100%) and size of any accompanying broods and should be sent to: Dr David Cabot, An Foras Forbartha, St Martin's House, Waterloo Road, Dublin 4. All records will be acknowledged in publications.

Threave Wildfowl Refuge This National Trust for Scotland Refuge is open to the public between 1 November and 31 March and has four free observation posts giving excellent viewing of many species on the River Dee and surrounding fields. A new hide is planned for letting to bird clubs at a small fee. A leaflet on the Refuge and information regarding escorted visits by a volunteer warden can be obtained from Threave Visitor Centre, Castle Douglas, which is open all year.

Seabird: a new Journal The Seabird Group is pleased to announce the publication in October 1984 of its new journal Seabird, edited by P. G. H. Evans and T. R. Birkhead. As the successor to the Group's former series of reports (1-6), this first issue is entitled Seabird 7. The new title, however, marks a significant change in policy to broaden our scope and embrace an international field of contributors. Thus, while we continue to encourage papers from the UK, we aim with Seabird to extend the platform for discussion and appeal to a wider readership. We plan to produce Seabird on a regular basis, and Seabird 8 will thus appear in the New Year to coincide with The Seabird Group's Conference on Population Studies & Population Monitoring at Denstone College, Uttoxeter, UK, on 15-18th February, 1985. Seabird aims to cater for a wide range of current interests in seabird biology, and Seabird 7 contains 11 papers on breeding biology, status, migration, diet, moult, and parasites. Apart from UK studies by several eminent researchers, there are contributions from Gibraltar, Norway, and a world-wide review of tick-borne viruses. Seabird 7, as will its successors, also includes a number of major book reviews. Copies of Seabird are available to non-members of The Seabird Group, c/o RSPB, The Lodge, Sandy, Beds. SG19 2DL, England, UK.) The Editor of Seabird welcomes contributions of original papers, at the same address. 25 offprints (40 if more than one author) will be supplied free to authors of published contributions.

Tawny Owls in Edinburgh A study is being made of the ecology of Tawny Owls in the City of Edinburgh. If anyone has any information that could help to locate territories would they please contact Andrew Summers, BSc, Department of Forestry & Natural Resources, University of Edinburgh, The Kings Buildings, Mayfield Road, Edinburgh EH9 3JU, or telephone 031-661 0829 after 6.00 p.m.



GREY WAGTAIL C. Fisher

May Irene Waterston 1914 - 1984

A tribute read by Ian Pennie at the funeral service in Humbie Parish Church

We have come here today to pay tribute to a great friend and outstanding personality, the greater part of whose life was devoted to the service of others—her family, especially her mother, the various organisations for which she worked or was associated in a voluntary capacity—The National Trust for Scotland, the Scottish Ornithologists' Club, the Fair Isle Trust and indeed Fair Isle itself.

We in the S.O.C. will always remember Irene at Regent Terrace; her efficiency and dedication to the work of the Club, tremendous hospitality, her humour, and her understanding of other people's problems. There were hilarious occasions too and only very recently Irene reminded me of the time when we plucked a goose, shot by the Director of the Nature Conservancy Scotland, on the pavement outside the Scottish office of the R.S.P.B. (which at that time was at 21 Regent Terrace). After that of course we cooked and ate the goose.

Her devotion to George, her husband, was of a different nature, a wonderful partnership which stemmed from their common interests. I think it was their love of wild places which brought George and Irene closest together, as on their camping trips to Sutherland where I joined them on many occasions. As I left Badcall this morning I thought of Irene as I had seen her on Foinavon ridge, clad in gym shoes and cotton slacks on a hot summer's day. Following George's retirement from the R.S.P.B. came the famous expeditions to Greenland and the Canadian arctic, but life changed when George's health finally broke down. A kidney machine is a marvellous servant but a cruel master, but together they fought to make the most of what George had left of life; the West Highland visits were resumed and, incredibly, even Fair Isle!

After George's death Irene gradually picked up the threads and made a happy life for herself at Keith Bridge, enjoying her garden and continuing her Fair Isle work. She was an enthusiastic and competent gardener, working immensely hard and sharing her skill and experience with others. It is remarkable that the last year of her life should have been one of such achievement and fulfilment—in that year she saw the Fair Isle book through the publishers, visited Greenland once more, also Fair Isle and Sutherland. Finally on 17th December 1983 she was elected President of the Arctic Club of Great Britain, the first woman ever to receive the honour.

Irene died on 5th August 1984 of an inoperable brain tumour, the day after her 70th birthday. I am proud to have known her and to have become one of her closest friends.

I.D.P.



The Scottish Ornithologists' Club

REPORT OF COUNCIL

For Year to 30 June 1984

General The past year was again one of change, in particular with regard to the staff of the Club. Details of this and other matters dealt with by Council and its committees are reported below.

Membership On 30 June 1984 the Club had 2,793 members, a net increase of 28(1%) from last year.

| Year to 30 June | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 |
|--|-----------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| Honorary Life Ordinary Junior Children | 1 51 2357 211 82 | 5 58 2387 208 74 | 6 62 2555 211 80 | 6 84 2570 195 82 | 7 91 2420 181 66 | 7 90 2439 183 74 |
| | 2702 278 | $\frac{2732}{+30}$ | $\frac{2914}{+182}$ | $\frac{2936}{+22}$ | $\frac{2765}{-171}$ | $\frac{2793}{+28}$ |

Honorary Membership The Council were pleased to acknowledge the many years of unstinting service given to the Club by Charles Palmar and, in recognition of this, created him an honorary member.

Covenants The number of covenants increased significantly with a consequent benefit to Club income. We are very grateful to members who helped the Club in this way at no extra cost to themselves. Still well over half the members have not taken advantage of this easy way of increasing the value of their subscription to the Club.

Finance The Revenue Account shows a deficit of just over £2,000 for the year. Income for the Bookshop was significantly down (£5,000) from last year's, admittedly exceptional, figures and office expenses were well above budget. The state of the Club's general funds is cause for concern in view of the urgent requirements of replacing essential office equipment and the necessity for immediate repairs and maintenance on 21 Regent Terrace.

George Waterston Memorial Fund No grants from this fund were awarded during the year. At the end of the year the balance in the fund was £2,180.

Branches The usual programme of lectures was held at the 13 branches during the winter and most branches organised field trips during the year. Council wishes to thank the lecturers and those members who led the field trips. The time they spend helping the Club and its members is greatly appreciated.

Annual Conference The 36th annual conference and 47th annual meeting were again held in the Marine Hotel, North Berwick, East Lothian. An account of the conference was published in Scottish Birds 13 (1), Spring 1984.

Scottish Birds Four issues of the journal and the index to volume 12 were published during the year. Valerie Thom continued as editor with Maureen Williams (née Doran) as business editor. Council thanks them and the editorial committee, in particular Stan da Prato, for their work during the year.

Scottish Bird Report The SBR 1982 was eventually published in June 1984, production difficulties having contributed significantly to this delay. This is the last SBR to be edited by Roy Dennis and the Council express their warm appreciation to him and the assistant editors Alan Brown, Pete Ellis and Angus Hogg for their work on the SBR. Angus Hogg has taken over as editor and Roy Dennis will continue to compile the rare breeding bird records.

Research and fieldwork Various ornithological projects have been supported by the club and its members during the year. This was the third and final year of the BTO's Winter Atlas fieldwork. Members also contributed to the BTO's ringing scheme, Common Bird Census and Nest Record Scheme. The RSPB's beached bird survey and the Wildfowl Trust's goose and winter wildfowl counts continued to be supported by members. Lists of Scottish local organisers for the surveys and counts and the SOC Local Recorders for the SBR were published in Scottish Birds. Council appreciates the hard work and dedication of all those members taking part.

Conservation The Club has been indirectly involved in four issues during the year.

(1) Correspondence continued with the Department of the Environment and the Secretary of State for Scotland concerning the appointment of a Chief Inspector and Registration Scheme under the Wildlife and effective once established.

Countryside Act 1981. Whilst the replies to our questions have not been reassuring, we can only hope that the inspection scheme will become

- (2) The Club supported the Greenland White-fronted Goose Study's objection to the proposed workings at Duich Moss, Islay. The Secretary of State subsequently granted planning permission. The Club will continue to support the G.W.F.G.S. in its formal complaint to the European Commission.
- (3) The Club supported the Shetland Islands Council's decision to refuse planning permission for a mink farm on Trondra, Shetland.
- (4) The Club objected strongly to the Forestry Commission granting permission to Seafield Estates to fell 70 acres of Abernethy Forest.
- (5) The Club wrote opposing the development of sports activities on Loch Ken. The plans were rejected by the local authority and the Club was invited to make submissions to an overall management plan for the area.

Endowment Fund On the recommendation of the research committee Council awarded grants totalling £1,450 to 10 applicants during the year.

- (1) Eric Meek on behalf of the Orkney Ringing Group received £250 to help purchase cannon-netting gear for their studies of waders and gulls in Orkney.
- (2) Graham Rebecca received £100 to assist with transport for his study on the status and breeding ecology of the Merlin in the Grampian Region.
- (3) Mike Martin on behalf of the Tay Ringing Group received £250 to assist with travel expenses for their study of wintering shore-birds of Orkney and Shetland.
- (4) Ian Poxton on behalf of the Edinburgh Ringing Group received £50 for rings and transport for their studies of seabirds in the Firth of Forth.
- (5) Alan Heavisides received £50 for transport for his study of Merlins in the Pentlands, Moorfoots and Lammermuirs.
- (6) Brian Etheridge received £100 for transport for his study of raptor breeding performance in Morayshire.
- (7) Andy Dowell received £150 for transport and maps for his study of Barn Owls in the Cree Valley.
- (8) Iain Gibson received £100 for transport for his work on the status and breeding biology of Yellow Wagtails in the Clyde area.
- (9) Bob Swann received £100 for rings, transport and boat hire for his long term seabird studies on Canna.
- (10) The Scottish Wildlife Trust received £300 towards the cost of construction of their new hide at the Loch of Lowes.

Brief reports submitted by recipients of Endowment Fund grants in 1983 were published in Scottish Birds 13 (2), Summer 1984.

Waterston Library Valuable opportunities arose during the year to add to the Library by exchange and purchase. More than a hundred back volumes of important journals were acquired and 92 books were added. A bequest of books was received from the late Dr Helen Crawford Scott. Council wishes to thank the Librarian. Bill Harper, and his wife, Hetty, for their work in the Library during the year.

Bird Bookshop Sales were down by around 15% on last year's, admittedly exceptional, figures whereas costs inevitably rose. The Bookshop is now facing increasing competition from other suppliers, but we hope our reputation for the number of titles in stock and service to customers

will help. Council appreciates the contribution to the Club made during the year by Maureen Williams and the Bookshop Staff.

Scottish Centre Council and committee meetings were held at 21 Regent Terrace during the year. The Edinburgh Branch Discussion Group meetings and Library Evenings were also held in the building during the winter.

The Edinburgh New Town Conservation Committee carried out an external survey of the building in April 1984. Their comprehensive report indicated a number of urgent repairs and recommended a phased maintenance programme. An architect has been appointed to supervise this work. Replumbing the interior, at the building, mainly to remove lead pipes and tanks, is under way.

Club representation Frank Hamilton and Dr Derek Langslow represent the Club on the British Section of the International Council for Bird Preservation. Bede Pounder is a member of the Duck Working Group of the International Wildfowl Research Bureau.

Staff Major Alastair Peirse-Duncombe retired as Secretary and Treasurer on 31 December 1983 after 15 years with the SOC. An appreciation of the magnificent contribution he and his wife, Daphne, made to the Club appeared in Scottish Birds 12 (8), Winter 1983. John Davies took over as Secretary and Treasurer on 1 January 1984.

In the Bookshop, Mrs Maureen Williams (née Doran), the Bookshop Manager, left in June to have a baby. The post has since been filled by Mrs Jacquie Clark. Peter Bell (Bookshop Assistant) left in August 1983 and was replaced by Miss Ruth Maclennan. Mrs Betty Bellamy (partime Bookshop Assistant) left in November and was replaced by Mrs Annette Murchie.

Acknowledgments Council thanks the many members who give so much of their time to serve on Club and Branch committees, arrange meetings, lead field trips, compile records, organise surveys and help in many other ways. We also thank all the members of staff who work so willingly for the Club. Council sends its best wishes to those who have left the staff this year and offers a warm welcome to those who have joined.

IVAN T. DRAPER, President, for and on behalf of the Council

THE SCOTTISH ORNITHOLOGISTS' CLUB

Revenue Account for year ended 30 June 1984

| | Year to | Year to |
|---|-------------------|-------------|
| INCOME | 30/6/84 | 30/6/83 |
| Cubanintions including to the form | | |
| Subscriptions, including transfer from Life Membership Fund | £18003 | £18096 |
| Income Tax on Covenanted Subscriptions | 3424 | 2234 |
| Dividends and Interest (Gross) | 744 | 785 |
| Gross surplus on Bookshop (sales £108,065) Advertising Revenue—"Scottish Birds" | 25428 | 30416 |
| Advertising Revenue—"Scottish Birds" | 1714 | 1341 |
| Sale of "Scottish Birds" | 971 | 768 |
| Sundry Sales | 1 2 297 | 8 262 |
| | 761 | 802 |
| Raffle Gain on redemption of investment | 98 | 302 |
| | | |
| | £51452 | £54712 |
| | | |
| EXPENDITURE | | |
| Branch Expenses including lectures Travel Expenses for council members | £1946 | £1878 |
| and delegates to conferences | 306 | 579 |
| Secretarial and editorial Expenses | 33751 | 29436 |
| Office Expenses | 7701 | 3329 |
| Scottish Centre for Ornithology & Bird Protection | n 2328 | 3435 |
| Library books and binding | 450 | 200 |
| Publishing "Scottish Birds" Publishing "Scottish Bird Report 1982" | 6078 633 | 5782 737 |
| Editor's honorarium £115 | 055 | 131 |
| Less contribution from "Scottish | | |
| Birds" Appeal Fund 115 | | |
| | | |
| Loss on conference | 2 39 | 110 |
| Subscriptions to other Societies V.A.T. not reclaimable | 94 | 100 84 |
| V.A.T. not reclaimable | | |
| | 53526 | 45670 |
| Excess of Expenditure over Income | 2074 | (9042) |
| - - | 051.453 | 05.45.0 |
| | £51452 | £54712 |
| | | |

Balance Sheet as at 30 June 1984

| ### FUNDS OF THE CLUB Accumulated surplus from previous year £16209 £7167 Less deficit for year | | | | Year to 30/6/84 | Year to 30/6/83 |
|--|--|--------|------------------------------|-------------------------------------|--|
| Less deficit for year | FUNDS OF THE CLUB | | | | |
| Life Membership Fund | Accumulated surplus from previous year Less deficit for year | | | | |
| Cash in hand and at Bank 6590 1879 Dunfermline Building Society shares 5952 4429 Bookshop Stock 22939 23368 Sundries Stock 355 466 Club debtors 5537 7228 Investment at cost as below 508 2506 Less 41881 39876 Subscriptions paid in advance £67 50 Club creditors 17203 13153 Due to Endowment Funds 1479 370 Grants allocated from George Waterston Memorial Fund not yet taken up 500 18749 14073 TOTAL NET ASSETS £23132 £25803 Investments as at 30 June 1984 Market At value cost cost cost cost start st | "Scottish Birds" Appeal Fund | | ••• | 5483 1019 315 2180 | 6093 1134 450 1917 |
| Dunfermline Building Society shares 5952 4429 Bookshop Stock 22939 23368 Sundries Stock 355 466 Club debtors 5537 7228 Investment at cost as below 5537 7228 Investment at cost as below 41881 39876 Less 508 2506 Subscriptions paid in advance £67 50 Club creditors 17203 13153 Due to Endowment Funds 1479 370 Grants allocated from George Waterston Memorial Fund not yet taken up 500 18749 14073 TOTAL NET ASSETS £23132 £25803 Investments as at 30 June 1984 Market At value cost cost cost cost cost starts and cost cost cost cost cost starts and cost cost cost cost cost cost cost cost | REPRESENTED BY | | | | |
| Memorial Fund not yet taken up | Dunfermline Building Society shares Bookshop Stock Sundries Stock Club debtors Investment at cost as below Less Subscriptions paid in advance Club creditors Due to Endowment Funds | | £67 17203 | 5952 22939 355 5537 508 | 4429 23368 466 7228 2506 39876 50 13153 |
| TOTAL NET ASSETS £23132 £25803 Investments as at 30 June 1984 Safeguard Industrial Investments: 875 shares of 25p each £1452 £508 £508 £2100 10% Exchequer Stock 1983 1998 | Grants allocated from George Watersto Memorial Fund not yet taken up | n - | | | |
| Investments as at 30 June 1984 Market value cost cost | | | | 18749 | 14073 |
| Market value cost cost Safeguard Industrial Investments : 875 shares of 25p each £1452 £508 £508 £2100 10% Exchequer Stock 1983 | TOTAL NET ASSETS | | ••• | £23132 | £25803 |
| 875 shares of 25p each £1452 £508 £508 £2100 10% Exchequer Stock 1983 | | | | | |
| £1452 £508 £2506 | 875 shares of 25p each | | £1452 | £508 | |
| | | | £1452 | £508 | £2506 |

Endowment Fund

(The free income of which is available for the advancement of ornithology)

Revenue Account for year ended 30 June 1984

| INCOME | | | | Year to 30/6/84 | Year to 30/6/83 |
|--|------------|---------|-----------------|-----------------|-----------------|
| Interest and Dividends received EXPENDITURE | (gros | s) | • • • | £1742 | £1647 |
| Grants as detailed in Report of | f Coun | cil | | 1450 | 1920 |
| Excess of income for year | | | | £292 | (£273) |
| Balance Sheet | as at | 30 J | June 19 | 84 | |
| Endowment Fund as at 30/6/83 | | | | £11811 | £11811 |
| Add Accumulated revenue as at | 30/6/8 | 3 | | 2291 | 2 564 |
| General No. 2 Account Gain on redemption of investm | | | • • • | 10397 | 9972 |
| Grant refunded | | | *** | 75 40 | _ |
| Excess of Income for year | | ••• | ••• | 292 | (273) |
| | | | | £24906 | £24074 |
| Made up of: | | | | | |
| Investments at cost as below Dunfermline Building Society: | | ••• | | £4368 | £3063 |
| Capital Account | | | ••• | 8557 | 6907 |
| General No. 1 Account General No. 2 Account | • • • | • • • | • • • • | 724 | 4504 |
| Due by Club's General Funds | ••• | • • • • | ••• | 10128 1479 | 9520 470 |
| | | | | 25256 | 24464 |
| Less Grants allocated but not yet | paid | ••• | ••• | 350 | 390 |
| | | | | £24906 | £24074 |
| Investments as at 30 June 1984 | | | | | |
| | | | Market value | At cost | At cost |
| £1220 9¼% Treasury Stock 1983 £352 British Printing & Communi | cation | 71% | | _ | £1140 |
| Non Cumulative Preference Sha | res £1 | - 2 /- | £292 | £353 | 353 |
| 500 St Andrew Trust Ordinary 25 | ip . | ::: | 1190 | 570 | 570 |
| 1952 M & G Equity Investment for £2500 10½% Treasury Stock 1989 | or Cha | rities | 4644 2375 | 1000 2445 | 1000 |
| | | | £8501 | £4368 | £3063 |
| | | | | | |

EDINBURGH, 18th October, 1984.—I have audited the foregoing Revenue Account for the year ended 30 June 1984 and the Balance Sheets at that date. I have accepted as correct subscriptions and other receipts shown as received in the books, the value placed on the bookshop stock and the amounts due by debtors and to creditors. Subject to the foregoing, I certify that in my opinion the accounts are correctly stated and sufficiently vouched.

(Signed) ROBERT CAVEN, Chartered Accountant.

COUNCIL AND OFFICIALS OF THE CLUB FOR SESSION 48

Hon. Presidents Sir Charles G. Connell, WS, LL.D, FRSE; Sir Arthur B. Duncan; W. J. Eggeling, CBE, PhD, BSc, FRSE; Professor V. C. Wynne-Edwards, CBE, LL.D, MA, DSc, D.Univ, FRS, FRSE, FIBiol.

President John M. S. Arnott.

Vice-President Dr Jeremy J. D. Greenwood.

Law Agent Dougal G. Andrew, WS.

Editors Miss Valerie M. Thom (Scottish Birds); Angus Hogg (Scottish Bird Report).

Hon. Treasurer and Librarian William G. Harper.

Council (elected at AGM) Roger A. Broad, Allan W. Brown, Dr David M. Bryant, David L. Clubston, Ronald W. Forrester, Frank D. Hamilton, Dr David C. Houston, Malcolm B. Ross, Dr Iain R. Taylor.

Young Members (elected by Council) Ian Macleod and Alan Wood.

Branch Representatives (elected by their Branch) Graham Rebecca (Aberdeen), Dr Rogert Hisset (Ayr), Malcolm B. Ross (Borders), Robert T. Smith (Dumfries), Dr Kathleen M. Watson (Dundee), William G. Prest (Edinburgh), Hector Galbraith (Glasgow), Roy H. Dennis (Inverness), Helen S. C. Halliday (New Galloway), Lt Cmdr E. Frank B. Spragge (St Andrews), C. Edgar Barth (StSirling), Ronald W. Forrester (Stranraer).

STAFF

Secretary and Treasurer John C. Davies

Membership Secretary Miss Pat J. Webster.

Bookshop Manager Mrs Jacquie Clark (from 21.8.84).

Bookshop Assistant Manager Peter T. Bell (from 15.10.84).

Bookshop Assistants Mrs Dorothy J. Ridley, Miss I. Ruth Maclennan (to 31.10.84), Mrs Annette Murchie (to 31.10.84), Mrs Helena Paterson (to 30.9.84), Mrs Isabelle Abu-lilish (from 1.11.84).

BRANCH OFFICE-BEARERS

Aberdeen Chairman, L. D. Steele; Vice-Chairman, W. G. D. Henricksen; Secretary, D. J. Bain; Committee, Miss R. M. R. Grant, I. Macleod, B. Pirie, B. J. Stewart.

Ayr Chairman, Dr R. Hissett; Vice-Chairman, Mrs J. Burton; Secretary, Dr I. M. Leach; Committee, Mrs M. Hogg, Major N. A. D. McCance, W. McKechnie, G. Riddle.

Borders Chairman & Secretary, M. B. Ross; Vice-Chairman, A. J. Smith; Committee, R. S. Craig, G. D. O. Grieve, H. McKerchar, R. J. Robertson.

Dumfries Chairman, Dr E. C. Fellowes; Vice-Chairman, Mrs B. Mearns; Secretary, T. Shannan; Committee, Mrs M. Johnson-Ferguson, G. McKean, R. T. Smith, M. Wright.

- Dundee Chairman, B. Pounder; Vice-Chairman, V. Ellmore; Secretary, Dr K. M. Watson; Committee, B. Boag, C. McLeod, Mrs A. Noltie.
- Edinburgh Chairman, W. G. Prest; Vice-Chairman, P. Gordon; Secretary, Miss J. A. Wilcox; Committee, I. Andrews, Mrs P. D. Black, Mrs L. Brown, Mrs E. Ferro, P. W. G. Marriott.
- Glasgow Chairman, H. Galbraith; Vice-Chairman, Dr I. T. Draper; Secretary, S. N. Denny; Committee, Dr R. W. Furness, I. Gibson, Prof. N. Grist, J. Sweeney.
- Inverness Chairman, R. L. Swann; Secretary, Mrs C. A. Munro; Committee, J. Carruthers, C. Crooke, R. H. Dennis, S. C. Dunnet, J. A. Love.
- New Galloway Chairman, Mrs M. S. C. Halliday; Vice-Chairman, Admiral Sir Nigel Henderson; Secretary, Miss J. E. Howie; Committee, Mrs A. Aitken, Miss M. Clymont, R. E. S. Wass, A. D. Watson.
- St Andrews Chairman, Lt. Cmdr. E. F. B. Spragge; Vice-Chairman, D. R. Stewart; Secretary, Miss D. E. Rowling.
- Stirling Chairman, C. E. Barth; Vice-Chairman, Dr C. J. Henty; Secretary, D. Thorogood; Committee, Rev. J. M. Crook, Miss M. H. Knox, Mrs M. Simpson, A. Wood, R. J. Young.
- Stranraer Chairman, D. Irvine; Vice-Chairman, R. W. Forrester; Secretary, G. Sheppard; Committee, J. Holland, D. J. Mould, G. Shaw.
- Thurso Chairman, Dr G. Crittenden; Vice-Chairman, A. F. C. M. Collett; Secretary, E. Maughan; Committee, Mrs R. James.

COMMITTEES

- Management J. M. S. Arnott (Chairman), D. G. Andrew, D. L. Clugston, Dr J. J. D. Greenwood, W. G. Harper.
- Editorial Miss V. M. Thom (Chairman), J. M. S. Arnott, Dr R. W. Furness, F. D. Hamilton, R. H. Hogg, S. R. D. da Prato, D. A. Smith, Dr I. R. Taylor.
- Research Dr I. R. Taylor (Chairman), A. W. Colling, R. H. Dennis, H. Galbraith, Dr J. J. D. Greenwood, Dr D. R. Langslow, J. A. Love, Dr M. Marquiss.
- Library D. L. Clugston (Chairman), Ritchie Seath, Dr J. J. D. Greenwood, P. W. G. Marriott, Dr I. D. Pennie, W. G. Harper (Librarian).
- Scottish Bird Records R. H. Dennis (Chairman), R. A. Broad, A. Brown, P. M. Ellis, R. H. Hogg, Dr B. Marshall, B. Zonfrillo.

CLUB REPRESENTATION

- British Section, International Council for Bird Preservation: F. D. Hamilton, Dr D. R. Langslow.
- Duck Working Group, International Wildfowl Research Bureau: B. Pounder.

HONORARY MEMBERS

Sandy Anderson, Dr John Berry, Maxwell Hamilton, Charles Palmar, Major Alastair Peirse-Duncombe, Mrs Daphne Peirse-Duncombe, Dr Ian Pennie, Mrs Ruby Smillie, Donald Watson.

THE SCOTTISH BIRD REPORT 1983

The 1983 SBR is available, price £2.50 (including postage & packing), from The Scottish Ornithologists' Club (SBR), 21 Regent Terrace, Edinburgh EH7 5BT.

THE SCOTTISH BIRD REPORT 1984

Observers are reminded that all records for 1984 should be sent to the local recorders by the end of January 1985. This will enable the recorders, compilers and the editor of the SBR to publish the SBR 1984 in October 1985. The editor invites the submission of black & white prints or colour transparencies of rare or uncommon birds taken in Scotland in 1984, together with any line drawings of Scottish birds. Remember, the SBR is your report; please give it your full support by being prompt with the submission of your records.—Angus Hogg, Editor SBR, Kirklea, Crosshill, Maybole, Ayrshire KA19 7RJ.

ENDOWMENT FUND GRANTS

The closing date for applications for 1985 grants is 31 December 1984. Application forms are obtainable from John C. Davies, Secretary, SOC, 21 Regent Terrace, Edinburgh EH7 5BT.

CHANGES IN BOOKSHOP STAFF

Jacquie Clark, a biology graduate and keen amateur ornithologist, is the new Manager of the Bird Bookshop. Wading birds are her particular interest and she is a joint secretary with Nigel, her husband, of the Wader Study Group. She is an "A" permit ringer and has been a member of three ornithological expeditions in recent years.

As a result of staff reorganisation in the Bookshop, Miss Ruth Maclennan, Mrs Annette Murchie and Mrs Helena Paterson have left. Mrs Dorothy Ridley (Bookshop Assistant) is still with us.

Peter Bell, an ecology graduate and keen birder, is the new Assistant Manager in the Bookshop. Peter has spent several periods during the last two years working as a temporary Bookshop Assistant and so is very familiar with the Club and the Bookshop.

REPLUMBING NO. 21

Visitors to the Club in Regent Terrace during the summer and autumn will have been aware of the disruption caused by the replumbing, primarily to remove lead pipes and tanks, and the associated rebuilding work. The Bookshop staff, and in particular the Club Secretary and his family, have had to live under very trying conditions. Things are gradually returning to normal although it will be a long while yet before the redecoration is complete. We are very grateful to Frank Hamilton and the RSPB for allowing us to use their offices for Club meetings whilst the work was being carried out.

SUBSCRIPTIONS AND COVENANTS

Members who pay Income Tax can greatly increase the value of their subscriptions to the Club by covenanting. Completing a Covenant Form is such a simple thing to do and on the present adult subscription of £7.50, the Club can reclaim an extra £3.22 from the Inland Revenue. Please, if you do not do so already, make your subscription worth more by covenanting. Miss Pat Webster, the Membership Secretary, will send you a form and a reply paid envelope upon request.

DUMFRIES GOOSE WEEKEND

A Goose Weekend is arranged for 8th-10th March based at the Nith Hotel, Glencaple, and organised by the Dumfries Branch. There will be led excursions by car to the Wildfowl Trust at Caerlaverock and to South-

erness/Carsethorn on Saturday and to the Castle Douglas/Loch Ken area on Sunday. On Saturday evening a slide show will be arranged by Dumfries Branch members at the Nith Hotel.

Club members wishing to take part in the weekend should book directly with The Manager, The Nith Hotel, Glencaple, Dumfries (Tel. No. Glencaple 213). The all inclusive cost which includes bed and breakfast on Friday and Saturday nights, dinner on Saturday evening and packed lunches on Saturday and Sunday will be £36 per person. Further information is available from the Dumfries Branch Chairman, Dr Edmund C. Fellowes, West Isle, Islesteps, Dumfries DG2 8ES (Tel. No. 0387-62094).

BRANCH SECRETARY

Please note that the Dumfries Branch Secretary is now Tom Shannan, 146 Golf Avenue, Dumfries (telephone number ex-directory).

BTO/SOC ONE DAY CONFERENCE

A joint BTO/SOC one day conference is to be held on Saturday, 30 March 1985 at the Department of Forestry and Natural Resources, University of Edinburgh. The theme of the conference is surveys and censuses with talks on the Common Bird Census, birds of prey, waders and seabirds. Details of the programme and booking forms are available from John Davies at the SOC.

CORRECTIONS

We apologise to Carol Munro, the Inverness Branch Secretary, for spelling her name incorrectly and getting her telephone number wrong on the back of the lecture programme booklet. Her correct telephone number is Inverness (0463) 241359.

We also apologise to Alan Brown (Longniddry), who might still be looking for a second-hand 4 drawer filing cabinet, for getting his home telephone number wrong. His correct home tel. no. is Longniddry 52413.

Local Recorders

Shetland (except Fair Isle) Dennis Coutts, "Da Knowe", Twageos Road, Lerwick, Shetland.

Fair Isle N. Riddiford, Bird Observatory, Fair Isle, Shetland.

Orkney C. J. Booth, "Ronas", 34 High Street, Kirkwall, Orkney.

Outer Hebrides, St Kilda W. A. J. Cunningham, Aros, 10 Barony Square, Stornoway, Isle of Lewis PA87 7TQ.

Calthness Mrs P. M. Collett, Sandyquoy, East Gills, Scrabster, Caithness, KW14 7UH.

Sutherland A. R. Mainwood, 13 Ben Bhraggie Drive, Golspie, Sutherland KW10 6SX.

Ross-shire (except Black Isle), Inverness-shire (mainland over 18 miles from Inverness) R. H. Dennis, Landberg, North Kessock, Inverness IV1 4XD.

Inverness-shire (within 18 miles of Inverness) and Black Isle, Ross-shire M. I. Harvey, Clachbhan, Loaneckheim, Kiltarlity, Inverness-shire.

Nairnshire, Morayshire, Banffshire M. J. H. Cook, Rowanbrae, Clochan, Banffshire.

Aberdeen, North Kincardineshire Dr M. V. Bell, 20 West Mount Street, Aberdeen AB2 4RJ.

South Kincardineshire, Angus N. K. Atkinson, 5 Tolmount Crescent, Montrose, Angus DD10 9DO.

Perthshire E. D. Cameron, Strathclyde, 14 Union Road, Scone, Perthshire PH2 6RZ.

Isle of May B. Zonfrillo, 28 Brodie Road, Balornock East, Glasgow G21

Fife (except Forth Islands), Kinross-shire I. G. Cumming, 11 Canongate, St Andrews, Fife.

Clackmannanshire, East Stirlingshire Dr C. J. Henty, 3 The Broich, Alva, Clackmannanshire.

West Lothian, Forth Islands (except May), Midlothian A. W. & L. Brown,

232 Rullion Road, Penicuik, Midlothian EH26 9JL.
East Lothian A. Brown, 23 King's Court, Longniddry, East Lothian EH32

Berwickshire, Peeblesshire, Roxburghshire, Selkirkshire R. D. Murray, 143 Eskhill, Penicuik, Midlothian.

Argyllshire, Inner Hebrides R. F. Coomber, 4 Staffa Cottages, Tobermory, Isle of Mull. PA75 6PL.

Dunbartonshire, West Stirlingshire, Renfrewshire, Arran and Bute I. P. Gibson, Arcadia, The Glen, Howwood, Renfrewshire.

Lanarkshire Dr E. S. Alexander, 3 Lilac Hill, Hamilton, Lanarkshire.

Ayrshire R. H. Hogg, Kirklea, 11 Kirkmichael Road, Crosshill, Maybole,

Avrshire.

Dumfriesshire Dr E. Fellowes, West Isle, Islesteps, Dumfries DG2 8ES. Kirkcudbrightshire, Wigtownshire A. D. Watson, Barone, 54 Main Street, Dalry, Castle Douglas, Kirkcudbrightshire DG8 3UW.

Recent Reports

These notes include unchecked reports and are not intended as a permanent record, nor will they be indexed. Please send reports to Pete Ellis. Houss, East Burra, Shetland, via local recorders, at the end of March, June, September and December. The period July to September is covered here.

Autumn migration was rather poor in many east coast areas though the Northern Isles received plenty of migrants, particularly in late September. Fair Isle fared best of all with arrivals of migrants on 15th-17th September, 20th, 22nd and 24th September which brought Dunnocks, Robins, Pied Flycatchers and Scandinavian Thrushes as well as a number of rarities. Sea passage was good in several areas during August and September, with Cory's Shearwaters off St Abbs, Orkney, Troon and Ardrossan, Great Shearwaters off Fair Isle and Fife Ness, and no fewer than 75 Sooty Shearwaters off St Abbs on 25th August. Birds of the distinctive west Mediterranean race of the Manx Shearwater (Balearic Shearwater) were seen off Barns Ness. St Abbs (5 in September), Orkney, Fife Ness and Peterhead. Leach's Petrels were more numerous than usual with singles off Fair Isle in July. 3 in the Pentland erous than usual with singles off Fair Isle in July, 3 in the Pentland Firth in August, 7 there on 25th September and 1 inland in Glen Affric the same month.

A Spoonbill was at Strathbeg in July. The Carron Valley Bean Geese arrived early with 18 on 16th September later reaching 160, whilst 2 Snow Geese arrived with Pinkfeet at Meikle, and another at Aberlady in September. A Brent Goose moulted in Shetland and 2 were off Ayrshire in September. The Blue-winged Teal at Sandhaven in September may have been the bird shot at Strathbeg later, when another was in Orkney. A female Red-crested Pochard visited Musselburgh in August and a female King Elder summered in Shetland. A male Common Scoter of the American race was in Orkney on 17th July. Three broods of Ruddy Ducks were raised at Strathbeg. Single Honey Buzzards reached Shetland and St Abbs, and a female Red-footed Falcon was in Unst in July, when a Hobby was at Peterhead with another on Fair Isle in September. A Spotted Crake was caught on Out Skerries and a Crane graced Hule Moss in September.

Little Stints were generally scarce, the only high count being 22 at Virkie. The only American waders were 2 Pectoral Sandpipers at Hillend Loch, whilst singles were seen in Orkney and Shetland. Curlew Sandpipers were also scarce, the maximum reported being 7 in Orkney. Fair Isle had an unprecedented 3 Great Snipe in September and an arrival of Black-tailed Godwits in August resulted in 47 at Virkie and 21 at Inverness. Unusual records of Spotted Redshank were singles in Orkney and on Fair Isle and 2 on Fetlar. A Wilson's Phalarope spent 5 days at Cotehill Loch, Aberdeenshire, a Red-necked Phalarope was off Colsay, Shetland and a Grey Phalarope was off Irvine in September.

23 Pomarine Skuas were reported off Peterhead, with 8 others between there and St Abbs. Single Long-tailed Skuas were off Peterhead and Barns Ness. A Franklin's Gull passed Peterhead on 24th July and single Sabine's Gulls were seen at Musselburgh, off Orkney, in the Pentland Firth, off Peterhead and off the Isle of May. There were Black Terns off Skateraw, Doonfoot, and Barns Ness (3). A Long-eared Owl was in Shetland in September and a Hoopoe at Stenness, Orkney in August. Fair Isle had 2 Wrynecks in August and 6 in September, when 3 were in Shetland and 1 in Orkney.

There were 2 Short-toed Larks on Fair Isle and one on Out Skerries, 2 Richard's Pipits (the only ones reported) in Shetland, and an Olivebacked Pipit on Fair Isle in September. Fair Isle had 4 Bluethroats and 2 others were in Shetland. The bird of the autumn on Fair Isle was a Red-flanked Bluetail present on 21st September. The only reports of Black Redstarts were from Shetland. Fair Isle had 2 Siberlan Stonechats, whilst Orkney's bird of the autumn, an Eye-browed Thrush present from 25th-26th September brought a number of Twitchers flying there—alas in vain.

One of the few Lanceolated Warblers to be seen off Fair Isle was on Out Skerries in September, but Fair Isle had 2 that month. In contrast to the spring only one Marsh Warbler was reported, from North Ronaldsay, 4 Icterine Warblers appeared on Fair Isle, the only other report being from Fife Ness. Fair Isle also had a Barred Warbler, whilst Shetland had 8 and the Isle of May one. Orkney and Shetland managed single Arctic Warblers, but Fair Isle had 3. Yellow-browed Warblers put in a good showing, with 8 on Out Skerries and 12 on Fair Isle on 22nd September, whilst the rest of Shetland had 9 and Orkney 10. A Bonelli's Warbler stayed for over a week on Fetlar.

In September Red-breasted Flycatchers were in good supply, with 15 in Shetland, 6 on Fair Isle, 4 in Orkney and 1 on the Isle of May. Most unusual was a report of a Nuthatch at Melrose on 11th August. 5 Red-backed Shrikes were in Shetland, 2 in Orkney and 1 at Barns Ness, and 3 Great Grey Shrikes were seen in Shetland. The Northern Isles had a monopoly of Scarlet Rosefinches, with 10 on Fair Isle, 16 in Shetland and 3 in Orkney, mainly in September. Fair Isle had a Hawfinch on 1st July. 20 Lapland Buntings were on Fair Isle on 22nd September and 10 in Orkney on 18th September. Ortolan Buntings were on Out Skerries and at Sumburgh as well as on Fair Isle, which had no less than 8 Little Buntings while Out Skerries produced 2 or 3. Shetland managed 1 Yellow-breasted Bunting and Orkney 3, but guess where beat them again, when 3 appeared on Fair Isle. I know where I'm going next September!

PETE ELLIS

WILDFOWL COUNTS IN SCOTLAND

THE National Wildfowl Counts, instigated in 1947 and organised by the Wildfowl Trust at Slimbridge, cover ducks, geese, swans, Great Crested Grebes and Coot. As many wetland localities—coastal or inland—as possible are visited by volunteer observers each month from September to March.

The counts in Scotland are organised through the SOC, formerly by a succession of dedicated individual members (Miss Rintoul and Miss Baxter, Miss Garden and Miss Valerie Thom) and latterly by a network of Regional Organisers who deal direct with David Salmon at the Wildfowl Trust. These are appointed by the SOC, who maintain a copy of all Scottish counts in the Club's Waterston Library in Edinburgh.

A current list of Regional Organisers is given below, and anyone who is interested in helping with the counts is asked to write to the Organiser for their area.

Shetland D. P. P. Eva, 6 Westerloch Brae, Lerwick.

Orkney P. Reynolds, Berrybank, Evie, Orkney.

Wester Ross and Skye A. Currie, Glaiseilean, Broadford, Isle of Skye, IV49 9AQ.

Outer Hebrides N. Buxton, 4 Sand Street, Coulregrein, Stornoway, Isle of Lewis, Western Isles.

Caithness S. Laybourne, Old Schoolhouse, Harpsdale, Halkirk, Caithness, KW12 6UN.

Inverness-shire, Easter Ross, Sutherland (East) C. G. Headlam, Dallachie, Fearn, Ross-shire IV20 1TN.

Banffshire, Morayshire, Nairnshire J. Edelsten, 12 Durn Avenue, Portsoy, Banffshire.

Aberdeenshire, Kincardineshire A. Duncan, 12 Cairnery Avenue, Aberdeen, AB2 5DS.

Angus B. Pounder, 64 Forfar Road, Dundee, Angus.

Perthshire (East) E. D. Cameron, Strathclyde, 14 Union Road, Scone, Perth, PH2 6RZ.

Argyllshire and Inner Hebrides (South) S. Newton, Benbhraggie, School Street, Bowmore, Isle of Islay, Argyll.

Fife, Kinross-shire Mrs J. A. R. Grant, Brackmont, Crail, Fife.

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