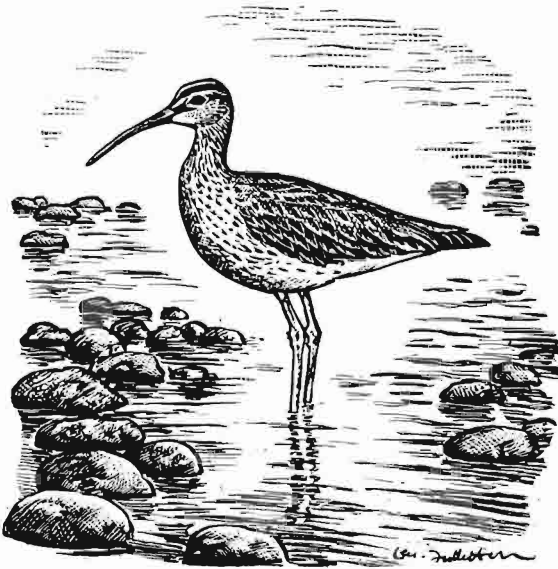


Scottish Birds



The Journal of The Scottish Ornithologists' Club

Vol. 4 No. 6

Summer 1967

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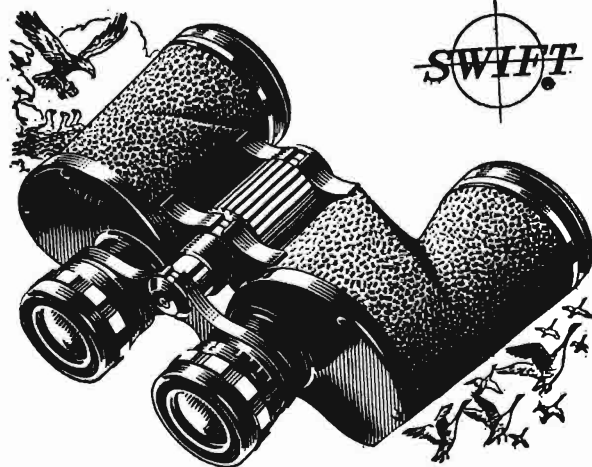


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THE JOURNAL OF THE SCOTTISH ORNITHOLOGISTS' CLUB

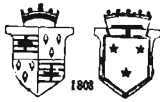
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Scottish Birds

THE JOURNAL OF THE SCOTTISH ORNITHOLOGISTS' CLUB



Vol. 4 No. 6

Summer 1967

Edited by A. T. MAOMILLAN with the assistance of D. G. ANDREW, T. C. SMOUT and P. J. B. SLATER. Business Editor, T. C. SMOUT.
Cover Design (Whimbrel) by LEN FULLERTON.

Editorial

Oil pollution. Slowly, in recent years, more and more countries have moved towards banning the discharge of oil at sea, especially where it may drift ashore and foul beaches. But no law will prevent accidents. If any good were to come from the wreck of the giant tanker *Torrey Canyon* off the Cornish coast, it could be in a greater determination to tackle the causes of oil pollution effectively, though one fears that it will be only the narrower question of how to prevent a repetition of this particular disaster that will receive close attention.

The mess is extensive and disgusting. The local people depend very much on holidaymakers for their living and are bound to suffer hardship. There is still plenty of oil washing about on the sea at the time of writing. For any seabirds that get into it—and there are probably tens of thousands that have—oil means death. It clogs their plumage so that they become wet and cold and seek refuge on the beaches. They cannot catch fish. If they preen their feathers to get rid of the oil they die from swallowing it. Auks—Guillemots, Razorbills and Puffins—are worst hit because they spend so much time in flocks on the surface of the sea, but Gannets, Manx Shearwaters, Cormorants, gulls and other species are also in trouble.

For most of the victims there is nothing that can be done. A small fraction may be saved by spending a great deal of time (and therefore money) on skilled cleaning and on keeping the birds in captivity for the many months needed to restore the waterproofing to their plumage, and finally hoping that they will take to life in the wild again when released. The R.S.P.B. and R.S.P.C.A. and other groups are doing what they can in this direction, and a fair number of birds will be saved that would otherwise have died. Anyone who has seen oiled birds will naturally want to do something for them, but it is probably only on humanitarian grounds that one can

justify the effort needed. Success will mean the difference between life and death for individual birds, but it is unlikely to have any noticeable effect on seabird populations in the southwest.

Seabird census. Supported by the B.T.O., the Seabird Group has taken on the formidable task of compiling a complete census of breeding seabirds in the British Isles in 1969. Meantime, 1967 and 1968 will be spent in finding the colonies and collecting preliminary information. In Scotland we have more seabirds, more inaccessible coast, and fewer bird-watchers than in the south, and a great effort will obviously be needed, especially in the north and west, if anything like complete cover is to be achieved. Further details may be had from R. J. O'Connor at the Department of Physics, Birkbeck College, Malet Street, London WC1 (see Requests for Information).

The Ornithological Atlas. A superb product of cooperative natural history was the publication of the *Atlas of the British Flora* in 1962 for the Botanical Society of the British Isles. For several years botanists gave almost complete priority to this; amateurs and professionals throughout the country visited and listed the plants in all but seven of the 3500 National Grid 10 km x 10 km squares in the British Isles. Sophisticated data-processing and mechanical map-making equipment then converted the huge number of individual records into a series of 1700 detailed distribution maps. Though selling at a mere five guineas, the atlas is supplied with a dozen transparent overlays for use with the distribution maps, and one may thus consider the distribution of any British plant in relation to a variety of factors such as altitude, geology, rivers, humidity, rainfall, summer heat and winter cold.

It would be extremely valuable to have such an atlas for the British breeding birds, giving accurate basic information about their distribution and, if possible, their numbers. Birds are affected by man in many ways, and never more than now. One need only think, for example, of agricultural pesticides and of oil pollution, to realise this. When some alarm is raised, the great difficulty is in getting accurate information about status, especially for common birds, to show how the situation is changing. The Common Bird Census is one excellent approach to this problem; an ornithological atlas would be another. The B.T.O. has been studying the idea, trying to work out the best ways in which to tackle it. Birds are in several respects more difficult than plants: they move about from place to place; formal proof of breeding can be had at only one time of year and requires time to get, to say

nothing of the difficulty of assessing numbers; and there are vast tracts in the wilder parts of the country that will be very difficult to cover. A further year is being given to trying out techniques, and helpers are not needed yet, but it is hoped that the scheme can go ahead in 1968.

"Scottish Birds." If you found a letter and questionnaire in your spring number of *Scottish Birds*, and have returned it to us, we are very grateful to you. Deliberately we did not enter into correspondence about any of the answers, but the ideas produced will be most useful in planning future numbers. We hope to discuss some of these ideas in a coming number and to give details of the relative popularity or otherwise of the various sections of the journal. Meantime, if you have any suggestions you would like to make about additional features or changes in *Scottish Birds* we would be happy to consider them with the rest.

Festival Cinematographique l'Homme et l'Oiseau 1967. The *Ligue Française pour la Protection des Oiseaux* offers a cup for the best documentary film on "L'Oiseau Libre d'Europe," and to receive Scottish candidates representing Scotland in this European competition would delight them. The editor has copies of the rules (in French) for anyone interested.

Current literature. Recent references of particular interest to Scottish ornithologists include:

Changes in status among breeding birds in Britain and Ireland. J. L. F. Parslow, 1967. *Brit. Birds* 60: 2-47, 97-123. First parts of highly important survey that includes much valuable Scottish information.

North Solway Bird Report No. 1—1965. A. D. Watson & J. G. Young, 1967. Duplicated typescript, privately circulated. 13 pages. Useful regional report in form of classified notes on species and appendix of statistics of active local ringing group (9423 birds of 95 species ringed 1963-65).

The Edinburgh Natural History Society News-Letter 1966. M. B. Usher (Editor), [1967]. Duplicated typescript. Pp. 31 + diagram. 2/6. Second year (see *Scot. Birds* 3: 386). Includes general bird notes and short papers on a woodland census (R. W. J. Smith), dovecots (Nora F. Henderson), and 1966 Forth Islands bird counts (R.W.J.S.).

Urban Starling roosts in the British Isles. G. R. Potts, 1967. *Bird Study* 14: 25-42. Includes maps of Glasgow urban roosts—the largest in Britain.

The birds of the Small Isles

P. R. EVANS and W. U. FLOWER

(Plates 44-47)

Introduction

The Small Isles—Muck, Eigg, Rhum and Canna—lie in the Inner Hebrides, south of Skye, in the county of Inverness-shire. Their location, and separate maps of each, are shown in figs. 1-5. Although many notes and short papers have appeared this century on the avifauna of individual islands, no attempt to collate in detail the data referring to all four islands has been made since publication of *A Vertebrate Fauna of Argyll and the Inner Hebrides* by Harvie-Brown and Buckley (1892). In this paper we document the changes in status of all bird species, particularly the breeding species, from the earliest references to the present day. The sources of information, much of it unpublished, are listed in the Appendix.

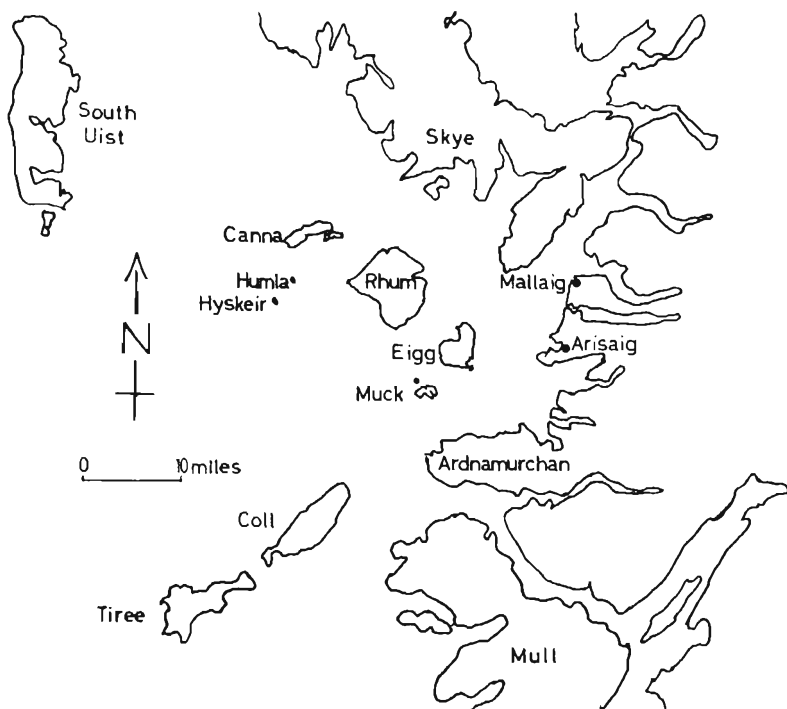


FIG. 1. Location of the Small Isles, Inner Hebrides, with respect to the mainland and other islands.

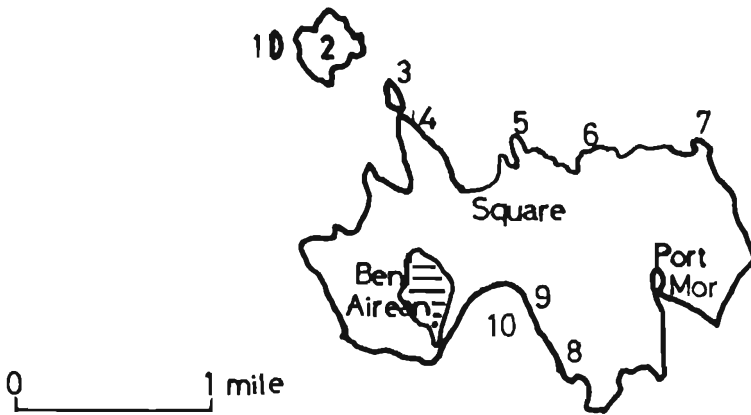


FIG. 2. Isle of Muck. Figures indicate the following places mentioned in the text: 1 Eagamol, 2 Horse Island, 3 Lamb Isle, 4 Gallanach, 5 Sgao-gaig, 6 Cairibh, 7 Am Moel, 8 Fionn-Ard, 9 An Liachdach, 10 Camas Mor.

Muck (fig. 2) is the smallest and most southerly of the four islands, with an area of just over 1500 acres (about $2\frac{1}{2}$ square miles). It lies 5 miles seawards from the mainland peninsula of Ardnamurchan. Most of the land lies below 200 ft, except for the hill of Ben Airean, which rises to 451 ft. The underlying rock is chiefly tertiary basalt, which breaks down to give excellent fertile soil, and in the north this is further improved by mixing with blown shell-sand.

Eigg (fig. 3) lies about 4 miles north and slightly to the east of Muck, and is separated from the mainland by at least 7 miles of open water. It also is composed chiefly of tertiary basalt, and it has an area of over 5000 acres (about 8 square miles). The island is formed of two plateaux rising to about 1000 ft, one in the northeast, the other in the south; from the latter rises the Sgurr, a columnar pitchstone outcrop of over 250 ft, resting on an ancient river-bed of conglomerate. It is part of the same pitchstone sheet which forms the islet of Hyskeir, about 20 miles WNW in the Minch. Low ground suitable for cultivation is found on Eigg at Cleadale in the northwest (on the 100 ft raised beach) and at Kildonan and Galmisdale in the southeast. These areas of low ground are joined by a col in the centre of the island, and separate the two plateaux.

Rhum (fig. 4) is geologically the most complex of the Small Isles, and by far the largest, with an area of 26,400 acres (over 40 square miles). It extends both north-south and east-west for about 8 miles, though there is one important inlet, the sea loch L. Scresort. The island is mountainous, with little low-lying land except near the mouths of the glens of Harris,

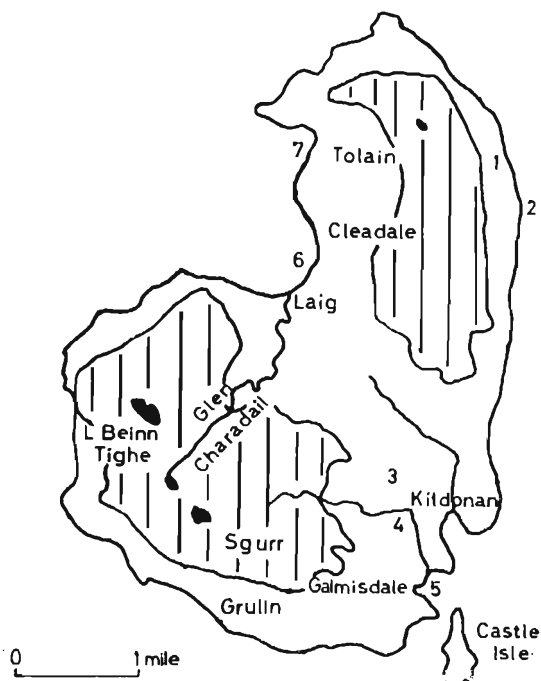


FIG. 3. Isle of Eigg. Figures indicate the following localities: 1 Sron na h'Iolaire, 2 Rudha nam tri Clach, 3 Kirk, 4 Manse, 5 Pier, 6 Laig Bay, 7 Camas Sgiotaig.

Kilmory and Kinloch. In the tertiary era it was a volcanic centre, and the surface rocks are of three main types: Torridonian sandstone in the north and northeast, mainly below 1200 ft; granite in the northwest, rising to 1800 ft on the scarp of Orval; and ultrabasic rocks, which form the southern peaks (including three about 2500 ft) from Ainshval to Barkeval. In contrast to the other three isles Rhum has not been cultivated extensively since the mid 19th century, when it was turned over to sheep and deer 'forest'.

Canna (fig. 5) is a long narrow island, shaped like an hour-glass, and formed chiefly of tertiary basalt lava flows. The surface of about 2500 acres (some 4 square miles) is dominated by two plateaux of over 500 ft, separated by a narrow area of low fertile ground at Tarbert. In the southeast of Canna is another area of good arable land on the raised beach, up to $\frac{1}{2}$ mile wide, and sheltered from the direct force of the SW winds by the islet of **Sanday**, to which Canna is connected by a footbridge. Sanday has an area of about 500 acres (less than one square mile) and only one important hill of nearly 200 ft in the southwest corner; it is a fertile

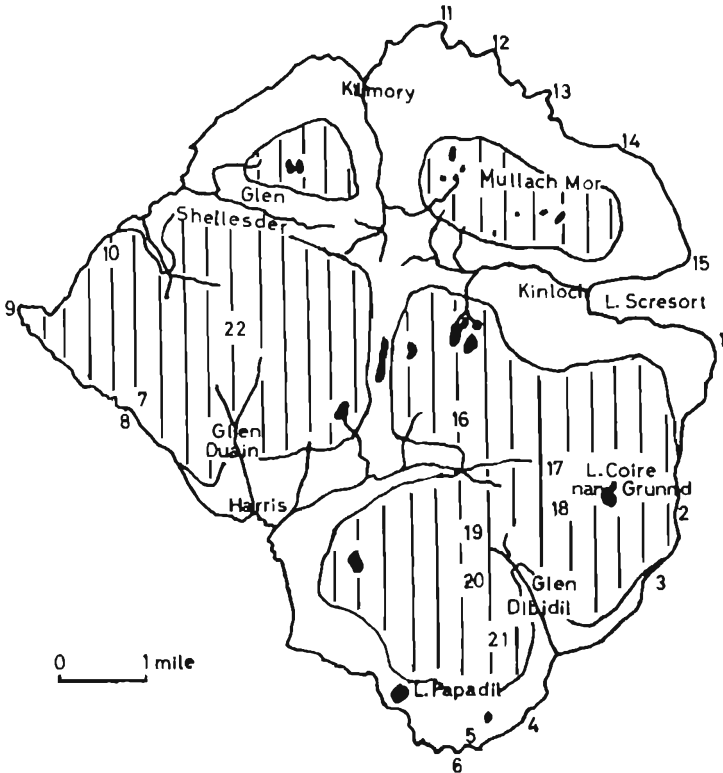


FIG. 4. Isle of Rhum. Figures indicate the following localities: 1 Rudha Port na Caranean, 2 Welshman's Rock, 3 Allt na Ba, 4 Sron na h'Iolaire, 5 Sgor Mor, 6 Rudha na Meirlach, 7 Sgor Reidh, 8 Cave Bay, 9 a'Bhrideanach, 10 Bloodstone Hill, 11 Rudha Shamhnan Insir, 12 Rudha na Moine, 13 Rudha Camas Pliasgaig, 14 Creag na h'Iolaire, 15 Rudha na Roinne, 16 Barkeval, 17 Hallival, 18 Askival, 19 Trallival, 20 Ainshval, 21 Sgurr nan Gillean, 22 Orval.

island. The natural harbour between Sanday and Canna provides a safe anchorage from most Atlantic storms.

The Small Isles, like Coll and Tiree (Boyd 1958), are dominated by a warm, moist SW airstream with associated high winds, though in recent years cold easterly and northerly winds have become more common, particularly in spring. Rainfall is high, especially on Rhum, where over 100 inches a year may fall on the peaks; the average on Canna is about 50 inches a year. Temperatures vary rather little over the year: on Canna, for example, the mean temperature in January is about 40°F, and in July only 15°F higher. As a result it is seldom very hot in summer, and winter snows seldom lie for more than a few hours except on the mountain peaks of Rhum.

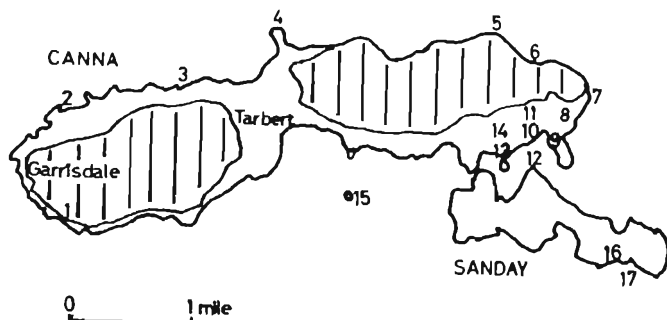


FIG. 5. Isles of Canna and Sanday. Figures indicate the following localities: 1 Bre Sgor, 2 Conageraidh, 3 Cumha Chalain, 4 Rudha Langanes, 5 Bod an Stoil, 6 Laum Sgor, 7 Compass Hill, 8 Coroghan, 9 Kirk, 10 Canna House, 11 Tighard, 12 Harbour, 13 Square, 14 A'Chill, 15 Haslam, 16 Easubric, 17 Dun Mor.

The habitats

1. **Sea cliffs.** All the cliffs on Muck are less than 200 ft high; the most important for breeding seabirds are those of Fionn-Ard and An Liachdach which lie on the east side of the bay of Camas Mor. Off the northwest coast of Muck stands Horse Island (Eilean nan Each) and the stack of Eagamol; both have cliffs of 100 ft or more, those on Horse Island facing west and north. The cliffs of Eigg which fall straight into the sea are restricted to the southwest and, more particularly, to the west coasts. Most are less than 200 ft high, though those due west of L. Beinn Tighe reach almost 500 ft. There are a few smaller cliffs near Kildonan and these have recently been colonised by Jackdaws. Off the southeast corner of Eigg lies Castle Isle, bounded on several sides by 50 ft cliffs.

Much of the coast of Rhum is cliff-bound. The highest cliffs are those of Bloodstone Hill (about 1000 ft) and a'Bhri-deanach in the west, the steep western screes of Sgor Reidh, and the southeastern cliffs between Papadil and Welshman's Rock, all well over 200 ft. Canna also has high cliffs, especially on the northern side of the eastern plateau, where they reach 500 ft, and on the southern side of the western plateau. The cliffs of Sanday are much lower but there are some of over 50 ft at Easubric near the stack of Dun Mor in the southeast of the islet.

It is noticeable that most of the large colonies of seabirds which nest on open cliffs are confined to those facing north, east or southeast. Presumably other directions receive much more of the impact of the Atlantic storms, particularly during early spring when nest sites are being prospected; this may explain in part why Eigg, with west-facing cliffs, has

such a poor seabird fauna, for no Kittiwakes, Guillemots, Razorbills or Puffins breed there, and Fulmars have only recently colonised. Open cliff nest sites are used by some of the Shags which breed in the Small Isles, but the largest colonies are in caves and under large boulders at the cliff bottoms. Other important sea-cliff nesters are the raptorial birds; it is notable that several of the eyries formerly occupied by White-tailed Eagles have now been taken over by Golden Eagles.

2. Sand and shingle beaches. These form the other major coastal habitat (apart from low rocky shores, which, though important, for example, to nesting Common Sandpipers, Herring Gulls and Rock Pipits, will not be detailed further). On Muck, sand is confined chiefly to the bays of the north coast, while on Eigg there are extensive sandy bays at Laig, Camas Sgiotaig (the famous 'singing' sands) and Kildonan; on the south shore of Laig Bay there is also some shingle. Rhum, in spite of its lengthy coastline, has only two moderate stretches of sand—at Shamhnan Insir and Kilmory; the latter beach is backed by pebbles, which also form the entire beach at Harris; at Kinloch there is some muddy sand and shingle. Canna has small sandy bays at Tarbert and Conageraidh, and there is a fine shell-sand beach, backed by a small area of machair, at the northwest corner of Sanday. The sand and shingle habitats are important chiefly for nesting Ringed Plover and Shelduck, and for waders on passage.

3. Inland cliffs. Those on Muck are low, and more aptly described as terraces. Eigg, however, has not only the outcrop of the Sgurr, but also a most impressive horseshoe of cliffs to the east of Cleadale; these form the western scarp of the northern plateau. This plateau also has an eastern scarp, but the sheer part of the cliffs there is less high than on the western side. On Rhum there are many low inland crags, but important inland cliffs are chiefly on Orval and the higher parts of the southern peaks. Canna has inland cliffs (and boulder scree slopes below them) along the southern edge of the eastern plateau, and at the east and west ends of the island. The eastern cliff, Compass Hill, contains enough magnetic rocks to affect a compass reading appreciably. The inland cliffs form important nesting habitats for raptors and corvids.

4. Fresh water. Muck holds no extensive areas of fresh water, but there are several small lochans largely covered by bogbean, and some small sluggishly-flowing burns bordered by yellow flag. Eigg, in contrast, has several small lochs on the high plateaux, and these contain some open water at all times of year, except when frozen; there is also a small pond at Laig, where Moorhen and Little Grebe have

bred. The burns on Eigg flow fast, often over waterfalls, but those flowing into Kildonan and Laig bays (especially Laig burn, from Glen Charadail) slow down as they cross the flat arable land; this allows a good growth of vegetation on the banks. On Rhum, however, almost all the burn-sides are bare, and most of the streams flow fast over rocky beds; it is alongside these that Dipper, Grey Wagtail and Common Sandpiper nest. Rhum supports many high-level lochans, particularly in the centre of the island and in the northeast between the sandstone outcrops of Mullach Mor. As on Eigg, these contain brown trout, and form the chief haunt of the Red-throated Divers. One Eigg lochan also contains introduced rainbow trout. Canna has no permanent standing water, and many of the streams which run off the two plateaux flow only after wet weather. On Sanday, however, a lochan which had been drained was recreated in the early 1950s, and this now holds a lush growth of *Phragmites* over much of its surface; Mallard and Reed Bunting breed there, as in similar areas on Eigg and Muck.

5. **Woodland.** There are three small plantations on Muck, planted in the years 1928-32; they lie in the centre of the island, near Port Mor, and near the Square respectively. All contain conifers and mixed deciduous trees of up to ten species. In addition to these plantations there are tall *Escalonia* hedges and a few scattered trees in the gardens; also some patches of willow bushes along the burns.

The woodland on Eigg is well established, and concentrated at the southeast corner of the island, where it receives most protection from the Atlantic storms. There is a small plantation round the ruined chapel of St Donan at Kildonan, but more extensive woodlands between Galmisdale and the Kirk. There are conifer, deciduous and mixed plantations of considerable height, with tall undergrowth in the more open parts; most were planted in the 1920s.

The natural tree cover of Rhum had been destroyed by the early 1800s, except in some of the deep gorges cut by the burns, but a small planting of sycamore, beech and ash was made at the head of L. Scresort in the 1830s, and much more extensive planting at the turn of the century. As a result of these plantings there is well-grown mixed woodland around Kinloch, and small plantations on the shores of L. Scresort, chiefly conifer on the north side but mixed on the south. There is also a small plantation at Papadil. There has been a marked growth of understorey and much natural regeneration in the Kinloch woodland since the repair of the deer fence surrounding the Castle grounds in 1958. Since 1959 the Nature Conservancy has undertaken a programme of tree

planting, so that marked changes in the distribution and abundance of certain bird species may be expected in the future. This is particularly true of the northeast of Rhum, where about 1400 acres were enclosed with a deer fence in 1962 and planting is in progress.

Canna also supports several plantations. Pines were planted on the side of a gully north of Coroghan in 1911, and sycamores, wych elms and ash at Canna House, and near the Kirk, at about this time. The larch plantation east of Tighard and the mixed deciduous trees round Tighard and on the slopes down to Canna House were also established in the early 1900s. More recently the present owner of Canna, Dr J. L. Campbell, has afforested the slope between the larch and pine plantations, and has planted other areas just north of the Square with a mixture of deciduous trees. Smaller areas near Coroghan have also been planted with a mixture of pines, larches and deciduous trees.

Relics of the oak-birch-willow-aspen scrub which covered part of these islands in past centuries may still be found on the cliffs of Rhum, Eigg and Canna. There is also natural hazel scrub in some of the steep-sided gullies on these islands.

The woodlands are particularly important as nesting habitats for the passerine species found on the Small Isles, and certain of them, such as Blackbird, Robin and Dunnoek, are much more closely confined to the woodlands than is usual elsewhere in Britain. Important non-passerines to take advantage of the plantations, particularly the conifers, have been the Woodpigeon and Long-eared Owl.

6. Ground vegetation. The areas of natural or semi-natural vegetation may be divided broadly into three categories: acid moorland, poorly drained; *Calluna* heath; and grassland with bracken. Muck is covered by grassland with some bracken, and there is no deep growth of heather. In contrast, Eigg has extensive tracts of boggy moorland on the two plateaux, but only small areas of *Calluna* heath, chiefly (as on Canna) on the steep and better-drained slopes. The grassland zone forms a buffer between the cultivated land and the moorland, especially to the south of Laig and north of Galmisdale and Kildonan; it also forms the chief vegetation type of the low-lying land which runs northwest-southeast across the centre of Eigg. Bracken is widespread, especially on the moorland edge, and small bushes, chiefly willow and hazel, are found in some areas. Much of Rhum is covered by boggy moorland, and the areas of *Calluna* were severely reduced, prior to the Conservancy's acquisition of the island, by burning and grazing; since this stopped, the stock of Red

Grouse has increased slightly. In many areas grasses (particularly *Molinia*) are dominant, but bracken is not abundant, except at Kilmory and on the southern shore of L. Scresort. On the mountain tops the plant communities are closely allied to the arctic-montane type. The two plateaux of Canna are covered principally by acid moorland; there is only a small depth of peat. The slopes between the terraces (presumably successive lava flows) are dominated chiefly by *Calluna*, but in no part of the island does this reach great height. The rest of the island—the lower terraces and the raised beaches—and most of Sanday, are covered by grassland. As on Eigg, bracken is restricted chiefly to the moorland edge. The floras of the islands were studied in detail by Heslop-Harrison (1939); and an up-to-date list of the plants of Rhum has been published recently by Eggeling (1965).

Ground-nesting species are relatively few. Of the passerines, Skylarks keep mainly to the grassland areas and Meadow Pipits to the heather and better-drained moorland. There is also segregation in habitat preference between the Lapwing and Snipe, the former preferring short grassland, the latter low-lying wet moorland.

7. Cultivated land. The extent of cultivated land on Muck has changed only slightly this century. The chief crops are oats, potatoes, cabbage and turnips; hay is cut as a crop, but none of the meadows has been ploughed and reseeded. Few vegetables are now grown on Eigg, and most cultivated areas are devoted to oats or hay. The number of crofting areas under cultivation has dropped considerably this century, especially at Tolain. Only a very small acreage is farmed on Rhum, at Kinloch. In contrast, over 200 acres are farmed on Canna and Sanday, most by the island farm but some by the croft owners, especially on Sanday. Potatoes, oats and hay are again the chief crops. There has not been much change this century in the area under cultivation on Canna, though before the evictions early in the 19th century it is recorded that about 450 acres were cultivated. While the total acreage of oats and hay on the Small Isles has been reduced somewhat over the last 50 years, the Corncrake and Corn Bunting populations have decreased much more drastically, the latter to extinction. Other factors such as mechanisation of cutting, and possibly higher rainfall, must have played their part.

8. Buildings. Little trace now remains of the crofts which were occupied when the island populations were at their highest in the early and mid 1800s, but there are many derelict buildings still standing as a reminder of more recent depopulation. The buildings on Muck are grouped round

Port Mor and on the north coast; there are also ruins of an old village occupied before the evictions. Most of the inhabitants of Eigg live at Cleadale, with smaller numbers at Galmisdale and Kildonan. The settlement at Grulin was abandoned in the last century, and little remains there now. Before the evictions in the 1820s the population of Eigg rose to more than 500, but it now numbers less than 70. On Rhum all the inhabited buildings are now at Kinloch, but there are still cottages in fair repair at Harris and Kilmory. At the time of Pennant's visit in 1772, over 300 people were living in nine hamlets on Rhum, but almost all were evicted in 1826 and emigrated to North America; the population is now between 35 and 40. The inhabitants of Canna and Sanday all live in cottages and houses grouped round the natural harbour, but the shepherd's house at Tarbert has been uninhabited for only about ten years. At the time of Pennant's visit the population was over 200, but most were evicted in 1851, and the present population numbers just under 30. Buildings, both inhabited and ruined, provide nesting sites for a small group of passerine species, but the only one of note is the Tree Sparrow on Canna (and Eigg, perhaps); there would seem to be many suitable sites for Swallows, but only on Eigg are they used regularly.

Mammals of the Small Isles

The mammals of the four islands are of interest in that they may either prey upon the bird populations, particularly while these are nesting, or they may provide a source of food for birds of prey, owls and (when dead) corvids. Of the smaller mammals, all four islands support populations of pygmy shrews *Sorex minutus* and long-tailed fieldmice (or wood mice) *Apodemus sylvaticus*. Short-tailed voles *Microtus agrestis* are present only on Muck and Eigg (which has the highest Kestrel population in the Small Isles); and house mice *Mus musculus* at least on Canna, but not on Rhum. Brown rats *Rattus norvegicus* occur on all four isles and do considerable damage to some of the breeding seabird colonies. Rabbits *Oryctolagus cuniculus* are present on Eigg and Canna (where most of the Buzzards breed), but not on Muck and Rhum, while brown hares *Lepus europaeus* are absent from all four islands; the last blue or mountain hare *Lepus timidus* was shot on Rhum in 1917. Red deer *Cervus elaphus* are still numerous there, with about 1500 head counted in spring. Otters *Lutra lutra*, formerly persecuted on Rhum, are now seen on all four islands, and grey seals *Halichoerus grypus* breed at the west end of Canna and a few also on Muck.

Among the domestic animals, Muck supports a herd of 60

cattle and 500 sheep; Eigg has few cattle but many sheep; Rhum had sheep until 1957, but now has only a few dairy cattle and (as on Canna) about 150 feral goats living on the cliffs. Canna, which had only cattle in the 18th century, now has two large flocks of sheep and a fine herd of Highland cattle. Rhum supports a small herd of Rhum ponies, an island stud of long standing.

Other mammals have occurred in the Small Isles, but only in small numbers; none is particularly relevant to the bird populations.

The bird populations

The systematic list which follows summarises all bird records which have come to our notice up to 31st December 1966. Authorities for records are rarely quoted in the text, but from their dates the observers may be traced through the list in the Appendix. Where dates do not coincide with any period of observation listed there, the records were made or collected by Mrs E. McEwen of Muck; D. Ferguson, Dr H. I. C. Maclean, Lord Runciman and Sir Steven Runciman of Eigg; Dr W. J. Eggeling and P. Wormell (Chief Warden for the Nature Conservancy) of Rhum; and Dr and Mrs J. L. Campbell of Canna. We are most grateful to these people for allowing us to make use of their researches and observations, as also to those listed in the Appendix who transcribed their unpublished observations for us in response to requests for information in *Bird Study*, *British Birds* and *Scottish Birds*.

The records in the systematic list are given first for the isle of Rhum, then for Eigg, Muck and Canna, since those from Rhum are the most comprehensive for the ten-year period to December 1966, and thus provide a baseline against which to evaluate the records available from the other islands. Until the Nature Conservancy took over the management of Rhum in 1957, most observations on all four islands were concentrated in the summer months, when visiting ornithologists spent short holidays in the area; winter records were much less numerous, and often concerned only with areas close to the main settlements and farms. Such limitations, particularly of pre-1957 records, should be kept in mind when assessing the information which follows. To save space in the systematic list, if no records of a species are available for a particular island the initial of the island is omitted.

SYSTEMATIC LIST

Black-throated Diver *Gavia arctica*. E Singles June 1913 and July 1939.

M Occasionally seen offshore in winter.

C One June 1930.

Great Northern Diver *Gavia immer*. Regular winter visitor to all isles, chiefly November-May.

R Some pass north in late April and May. Up to 4 stay in L. Scresort until early June most years; one late June 1950.

E Passage birds noted in May. One August 1960.

Red-throated Diver *Gavia stellata*. R No mention in late 19th century; persecuted and probably not breeding 1934. One nest 1950; thereafter at least 3 nests most years (6 in 1958), mainly on the hill lochs of Mullach Mor. Eggs sometimes taken by Hooded Crows.

E Pair present on lochs near the Sgurr in some summers, but no proof of breeding until 1964.

M Summer visitor offshore.

C Two seen offshore in June; one shot in winter.

[**Slavonian Grebe** *Podiceps auritus*. E Evans's record of remains found in 1884 was rejected by the Macphersons.]

Black-necked Grebe *Podiceps nigricollis*. R One at Kilmory 15th March 1960.

Little Grebe *Podiceps ruficollis*. R "Well known" in 1871 (Gray), but most unlikely to have nested. Three records September and October on L. Scresort, one on L. Papadil, all since 1960.

E One pair has bred regularly at Laig since first recorded 1947, but not seen July 1964.

C Occasional winter visitor in 1930s in the harbour. One in 1956 after SW gale.

Leach's Petrel *Oceanodroma leucorhoa*. R Specimens from Rhum received by Gray before 1871; also breeding colony reported at a'Bhrideanach, but no trace in 1881, nor on three visits between 1955 and 1962.

E C Single specimens from each island received by Gray before 1871.

Storm Petrel *Hydrobates pelagicus*. R Gray (1871) thought they bred, but no supporting evidence.

E Gray thought they bred but record rejected by Macphersons. One seen $\frac{1}{2}$ mile inland July 1955; several offshore July 1962.

M Occasionally seen offshore.

C Reported as breeding by Gray but no confirmation. Occasionally seen July and August; one calling from rabbit burrow near Dun Mor, Sanday, June 1965. Seen over Humla Stack July 1928 and August 1959.

Manx Shearwater. *Procellaria p. puffinus*. R Recorded breeding 1716 and all subsequent visits. In 1889 the main colony was reputed to be on the Harris side of Trallval. In 1950s Bourne believed that the colony numbered hundreds of thousands along the main Barkeval-Hallival-Askival-Trallval ridge, but more recent study indicates this was an overestimate (P. Wormell *in litt.*). Reported absent from Ainsval and Sgurr nan Gillean in 1934, but present then on NW sea cliffs of Bloodstone Hill and Cave Bay. In 1950s several observers noted absences from these cliffs, though in 1959 a few flew inland calling towards Orval and in 1960 an occupied burrow was found on Bloodstone Hill. In the main colony, nests everywhere above 1500 ft. In 1950, 1955 and again 1965, 1966, nests were found down to 750 ft in Glen Dibidil and above Kinloch. Recoveries of birds ringed on Rhum, particularly on Hallival, are shown in fig. 6.

E Recorded breeding 1871 and thereafter. In 1886 a few bred in cliffs above Laig beach and village, and others above Cleadale and in NE cliffs.

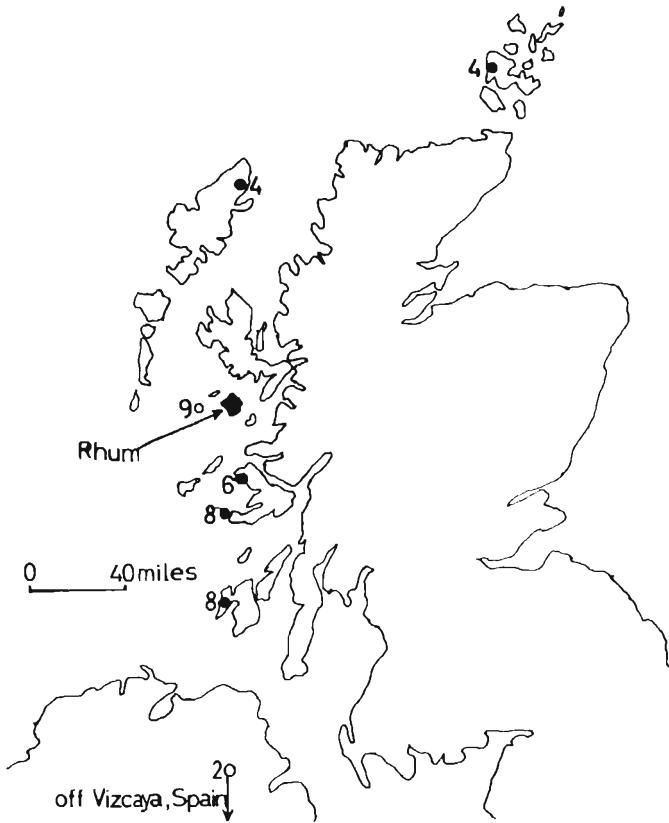


FIG. 6. Recoveries of Manx Shearwaters ringed on Rhum. Open circles, ringed as nestlings; filled circles, ringed as full-grown. Figures denote months of recovery; the three autumn recoveries occurred in the year the birds were ringed, but spring recoveries were in later years only.

By 1890s the colony stretched from Laig via Cleadale to Rudha nam tri Clach on NE coast—along 5-6 miles of cliff. Whether this represents an increase or merely more extensive observations is not known. The extent of the colony was maintained until 1930, though by then burrows were higher up the cliffs than before. In 1949 few chicks were reared, at least partly because of rats. Apparently otters also used to go to the hilltops in spring to eat shearwaters in the burrows. By 1950s the colony was confined to cliffs above Cleadale and Tolain, and the decrease continued. For example, in 1955 and 1957 there were perhaps only 100 prs and many of the burrows were occupied by rats; in 1964 the estimate was less than 50 prs. The island is no longer a big Manx Shearwater station (*contra* Darling & Boyd 1964).

M None breed, but regularly seen offshore.

C Large colonies reported along S crags near the road to Tarbert in 1933. Estimates in 1960s indicate hundreds, possibly thousands, of pairs there, nesting down to 100 ft. Colonies also reported from E half of N cliffs in

1887 and 1930s, and from W half in 1948, but no recent confirmation. In 1962 apparently absent from Compass Hill, though they have been heard at night in that area.

Sooty Shearwater *Procellaria grisea*. **R** Single birds offshore August 1961 and 1962.

Fulmar *Fulmarus glacialis*. **R** 22 prs near Dibidil in 1934, increasing to 250+ prs 1955. A new colony near Welshman's Rock held 25 prs 1950, 75 prs 1960. Birds prospected N cliffs in 1961.

E First seen on cliffs W of Grulin 1940, but no proven breeding until 1963, though occupied sites noted July 1953. These cliffs are more exposed to Atlantic storms than those occupied on the other islands.

M First prospected Horse Island June 1930. In 1934 6 prs at Fionn-Ard, but no proven breeding Horse Island. A rapid increase to c. 100 prs in late 1940s. In late July 1963 c. 40 occupied sites at Fionn-Ard and c. 50 on Horse Island; presumably many more sites had been occupied earlier in the season.

C First established on Sanday in 1930. Birds began to prospect N cliffs of Canna, W of Bod an Stoil, in 1935, and occupied sites in 1936. Many records refer to different months in different years, so impossible to trace accurately the expansion of these colonies. Sanday had 21 occupied sites on 31st July 1946, and a similar number has survived till this part of the breeding season in most years since then, though up to 40 sites have been occupied in early June. The N cliffs colony had c. 150 occupied sites in June 1939, but few young reared. In late June 1963 at least 85 occupied sites, and a steady increase noted in young reared. This colony needs to be surveyed from the sea in future years.

Gannet *Sula bassana*. Regular offshore June-October, all islands.

R Monro (1549) wrote "many Solan Geese were taken in abundance in the high rocks," but it is difficult to imagine where. Possibly he meant Manx Shearwaters (Munro 1961). Gannets follow mackerel shoals to entrance of L. Scresort, especially in July and August.

E Monro (1549) wrote "there are many Solan Geese in Egga" but Harvie-Brown did not believe the statement; see also Munro (1961).

Cormorant *Phalacrocorax carbo*. Gray (1871) reported breeding on Rhum, Eigg and Canna, but no later confirmation; regular visitor to all four islands.

R Small numbers offshore, chiefly July to September.

E Scarce in summer, more common in winter.

M Seen more frequently in recent years, probably from the colony on Ardnamurchan.

C The Joint Schools Expedition (Anon. 1948) record of breeding at Garrisdale must have referred to young Shags. Recorded chiefly in winter.

Shag *Phalacrocorax aristotelis*. **R** Large numbers in W caves in 1881. Colonies in 1930s between Dibidil and Papadil, and at Rudha Shamhan Insir. In 1950s the former colonies held up to 100 nests in several places, whereas the N colonies numbered less than 25 prs. In 1961 new colonies were established at Kilmory, Rudha na Roinne and below Sgor Reidh. A ringing recovery is shown in fig. 7.

E Common breeding bird both in caves and on cliffs in the S and W, and on Castle Isle. In 1958 several hundred pairs must have bred, and a raft of 200+ birds was seen offshore in August.

M 4-6 prs 1934. Marked increase by 1963 when c. 70 nests on Horse Island, Eagamol and Fionn-Ard cliffs.

C Large breeding colonies at W end, and below N cliffs; the former lies under large boulders below Garrisdale and Bre Sgor cliffs; a few hundred pairs nested there in the 1960s. On the N side, another colony under boulders lies below Laum Sgor, whereas colonies W of Bod an Stoil are

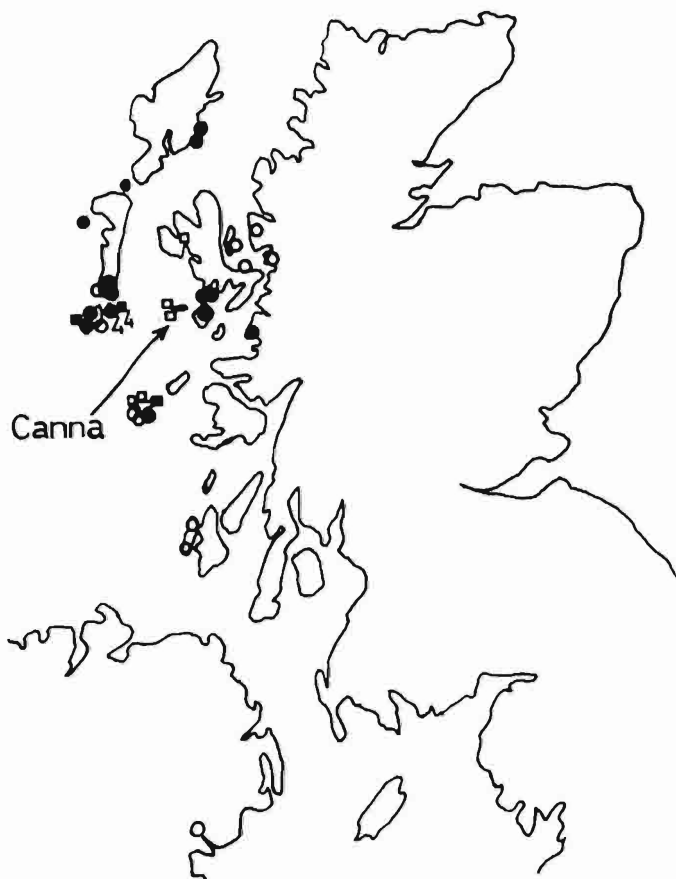


FIG. 7. Recoveries of Shags ringed as nestlings on Canna. Circles denote birds recovered in their first year of life, squares those recovered in later years. Filled symbols show birds recovered July-December, open symbols January-June. The figures beside the recoveries on Eriskay indicate that four birds of each age group were recovered there.

chiefly on open cliff sites. A few pairs nest on cliffs on Sanday (at Easubric) and in NW Canna at Cumha Chalain. In 1961-65, 440 nestlings were ringed at Garrisdale; the 40 recoveries are shown in fig. 7. Only 10 refer to Shags more than one year old; mortality is evidently very heavy in the first winter. In the dispersal after fledging, longer movements occur chiefly in a southerly direction; recoveries tend to be nearer Canna in the first autumn than in the following spring, so birds may not return to their home area when one year old, but only in later years.

Heron *Ardea cinerea*. **R** A cliff nest in 1869. Since then no breeding recorded until 1960 when 4 prs nested in wood on N side of L. Sresort. Two pairs reared 5 young 1963, but eggs taken by Hooded Crows 1964. **E** Pair nested on NW cliff 1882; small heronry near Manse 1926, but not thereafter, though winter roost of up to 30 in this wood in 1930s. One

nest there 1955-57, and one near the Lodge 1962. Non-breeding birds seen frequently in summer.

M Pair nested regularly 1955-64 in middle plantation, and two pairs 1965-66. The first clutch is often taken by Hooded Crows, and young may be in the nest until July.

C No breeding records, but up to 15 by Sanday lochan in late summer.

Spoonbill *Platalea leucorodia*. **C** Two November 1907.

Mallard *Anas platyrhynchos*. **R** A few recorded 1796. Reared and released at Kinloch in 1920s. A very few pairs have bred in many years in various localities. Winter flock of up to 12 assembles in October.

E Many reported to have bred on lochs near the Sgurr 1871-90. First bred Laig pond 1909. Since 1930s only 1-2 prs breed, but numbers increase in winter.

M About 8 prs bred in 1963. Breeds regularly; some winter on the sea.
C Before 1914 bred on both Sanday and Canna. Recently one pair has bred by Sanday lochan each year. Winter flock of up to 20.

Teal *Anas crecca*. **R** Bred Glen Shellesder 1965 and 1966. Otherwise recorded regularly since 1957, small numbers, chiefly in autumn.

E Regular winter visitor 1880s; now only occasional.

M Occasional winter visitor, up to 8; seen more often in recent years.

C Scarce winter visitor; also one Sanday lochan 8th August 1964.

Wigeon *Anas penelope*. **R** Drake November 1963 and three 31st January 1965.

M 12+ prs winter 1964/65.

C One January 1957.

Pintail *Anas acuta*. **C** Four April 1935 and four October 1938.

Scaup *Aythya marila*. **C** One February 1956.

Tufted Duck *Aythya fuligula*. **E** One shot before 1933.

Goldeneye *Bucephala clangula*. **R** Seven winter records, all since 1958; maximum 5 birds, staying up to one month.

Long-tailed Duck *Clangula hyemalis*. **R** One November 1957.

M 4-6 prs winter 1955/56.

Velvet Scoter *Melanitta fusca*. **R** One October 1957.

Common Scoter *Melanitta nigra*. **R** Pairs offshore August 1958 and June 1963.

Eider *Somateria mollissima*. **R** Increased from few pairs in 1880s to many in 1934, especially in L. Scresort and on NE coast. These are still favoured breeding areas, though odd pairs also found along most of the coast where no cliffs. Young are heavily predated by gulls; in some recent years few have survived.

E Bred on Castle Isle from 1880s onwards; small numbers only, c. 20 prs 1933. On main island bred in 1950s round the bays at Kildonan, Laig and Camas Sgiotaig; at least 8 prs April 1962.

M Very few nesting 1890, but c. 30 prs 1963. By late 1940s also nested on Horse Island and Eagamol.

C More common than on Rhum in 1880s (though less than on Hyskeir). Now fairly common along S coast Canna, round the harbour, and at Garrisdale in most years, but less than 100 prs. In 1960s nests also found at Rudha Langanes, and on Haslam and Sanday.

Goosander *Mergus merganser*. **E** One seen 1965.

Red-breasted Merganser *Mergus serrator*. **R** Used to be persecuted, but bred 1934 at Camas Pliasgaig and L. Scresort. At latter site, 1-2 prs breed regularly now; in 1961 also a pair at Kilmory. Often seen in winter.

E Occasionally nested 1890s; since then at least one pair has bred most years, and 3 prs 1933.

M No breeding records; often 2 prs in winter.

C Up to 12 in harbour, chiefly in winter. Occasional June and July.

Shelduck *Tadoma tadorna*. **R** 3 prs used to breed before 1910; no proven breeding thereafter until one pair at Rudha na Moine 1959 and at Kilmory 1965, 1966.

E Supposed to have bred E side 1882 and on Castle Isle 1884. Now 2 prs seen each year by the pier, and at least one of these nests at Kildonan; a pair seen on Castle Isle 1962.

M Said to have bred 1871, but only one seen 1934. Increase to 5-6 prs 1963; young often predated by gulls.

C Persecuted and no proven breeding 1880s. One pair Garrisdale 1933, 2 prs 1956. Bred 1960 at Tarbert, on Sanday and by the harbour. Four prs present 1963 and 4 broods raised 1965, including one at Garrisdale.

Grey Lag Goose *Anser anser*. **R** Fairly regular passage migrant, NW in April and SE in October. One June 1934; one wintered at Kinloch 1958/59 and two 1963/64.

E 'Grey' geese shot at Laig in winter during 1880s; one shot in winter 1942.

M Occasional on passage or in winter; often pairs.

C Fairly regular passage migrant April and September. One 7th August 1964 may have summered; occasionally winters.

White-fronted Goose *Anser albifrons*. **R** Occasional on passage April and October; numbers up to 30. One of Greenland race identified October 1957.

E Three November 1951.

M Up to 20 most winters.

Pink-footed Goose *Anser arvensis brachyrhynchus*. **E** Three November 1950.

C Single birds June 1925 and 1962.

Brent Goose *Branta bernicla*. **R** About 30 at Kinloch 18th April 1965.

M About 6 over the last 25 years.

C Six May 1935 and one October 1952.

Barnacle Goose *Branta leucopsis*. **R** Two flew S August 1962.

E One at Kildonan 1932/33.

M Regular winter visitor, up to 24.

C One shot 1890s, nine January 1933, two August 1959.

Canada Goose *Branta canadensis*. **R** 12 on L. Scresort 9th June 1966.

Mute Swan *Cygnus olor*. **M** Regular winter visitor, 2-5 birds.

C Occasional winter visitor; also one July 1958.

Whooper Swan *Cygnus cygnus*. Recorded on passage in varying numbers from all four islands.

R Northward movement late March and first week April; return passage late October and November (maximum 22 together, October). Eight remained until mid June and an immature stayed at Kilmory July and August 1957; one Glen Shellesder June 1962.

E Fairly regularly winters in small numbers.

Golden Eagle *Aquila chrysaetos*. **R** Until 1886, at least 5 prs bred. Persecution thereafter kept down numbers, and possibly none nested successfully until early 1950s. Since then at least 2 prs have laid each year, with up to 4 prs present.

E Until 1927 an occasional visitor from Rhum or the mainland. Breeding proved at Sron na h-Iolaire 1930 and thereafter. In 1955 and 1956 a second pair nested on SW cliffs, but this eyrie has been tenanted only irregularly since.

M First seen mid 1950s. Nest built 1956, but breeding not proved. The pair disappeared in 1958 or 1959.

C Occasional visitor until 1935, when pair seen in April. One pair on NE cliffs in 1940s and 2 prs from 1953, with second pair in W half of Canna. The female of this pair was found dead on the nest May 1964, but 2 prs again in 1966.

Buzzard *Buteo buteo*. **R** Breeding recorded only in 1950 and 1955 (there are no rabbits on Rhum). In recent years occasional birds have been present in winter, September-May; 6 in October 1958.

E Until 1891 only one pair, but increased to 6 in 1909, 7 in 1926. After this, numbers probably 'controlled' somewhat, for population fluctuated from 1-5 prs during 1930s, and some young killed. Very few young reared 1955-57, after myxomatosis had removed most of the rabbits. Since then at least 3 prs each year, mainly on Cleadale cliffs.

M One pair for many years, but only one bird 1963; bred again 1965, and 3 young reared.

C 4-6 prs recorded June 1933, and good numbers 1948 (though this count must have included some young birds). Directly after the myxomatosis outbreak in 1956 no sign of breeding, but since 1961 pairs have bred on Compass Hill and two along S crags towards Tarbert.

Sparrowhawk *Accipiter nisus*. **R** Old nest found 1934. Seen most winters and springs in late 1950s; bred 1959 and possibly also 1962. Since then 1-2 birds have regularly frequented Kinloch woods.

E Rare visitor from the mainland in the late 19th century. Five shot in five weeks about 1932. Has nested occasionally in recent years.

C Rare visitor on passage.

White-tailed Eagle *Haliaeetus albicilla*. **R** Seen 1772. Eight killed 1866, and only one pair 1898-99. Last nested 1907 at a'Bhrideanach, where the last bird was shot 1911 or 1912.

E Three eyries occupied, one on precipice below the Sgurr, from 1750 to at least 1833. Last nested Cleadale 1877. One shot 1886.

C Last pair bred NW cliffs 1875; one shot 1879. Immatures seen 1902, 1920.

Hen Harrier *Circus cyaneus*. **R** One March 1962; four records August-December 1964 and 1965.

E Three records July-December, all since 1957; males spring 1965 and 1966.

M One February 1962, flew off towards Rhum (see above).

C One November 1936.

Peregrine *Falco peregrinus*. **R** None 1934, but 2+ prs in 1950s. Only one pair bred 1960-62 and regularly thereafter, but second pair sometimes present.

E Two cyries 1879, increasing to 3 or 4 in 1891. Thereafter only one pair, except 1939 when 2 prs. No proven breeding in 1950s, though pair present until 1958.

M One pair nested 1549; bred regularly until 1941 when one bird died; the other remained 10 years. Now only occasional visitor.

C Pair nested 1549; persecuted, but still one pair 1900; two cyries occupied 1933 and thereafter to 1962. Only one pair 1964 and 1965.

Gyr Falcon *Falco rusticolus*. **M** One in garden about 1953 (same year as recorded in Mull); probably of Greenland race.

Merlin *Falco columbarius*. **R** One pair seen 1934 and has bred most years since 1957 in Glen Shellesder; second pair Glen Duain 1958.

E Pairs seen 1953 and 1962, but no proved breeding.

C Occasionally seen in summer and autumn. A pair in early August 1962 may have come from Rhum.

Kestrel *Falco tinnunculus*. **R** Few records before 1955, when 2 prs bred. At least 4 prs 1959; breeding not noted 1962 or 1963, and perhaps only one pair successful in other years since then.

E The most abundant bird of prey in 1891. About 8 prs in 1933, but fewer reported in recent years; however, records of 1-2 prs are probably underestimates, and 3 prs seen 1964. Nests on the Cleadale cliffs.

M None 1934; one pair breeds regularly now.

C One pair 1930s and 1940s but no proved breeding in 1950s. At least one young reared 1962, and one pair 1963, 1964.

Red Grouse *Lagopus lagopus scoticus*. **R** Seen 1772; common 1871 and 1889, when c. 200 prs introduced to augment the stock. Only 6-10 adults seen 1934, and numbers have probably never risen much above 50 at the end of a breeding season in recent years, though a slight increase may have taken place with the cessation of muir burning and the subsequent increase in ground cover.

E Few in 1884, but unable to increase without introductions, which were promptly eliminated (*e.g.* 120 brace shot 1907-08). Now a few pairs at N end, and behind Laig.

C Occasionally strayed from Rhum when a high population there. Last record 1936.

Ptarmigan *Lagopus mutus*. **R** Seen 1772, present on the "high hills" 1796. A pair was introduced 1888, and seven birds seen 1890. None seen 1932-56; single birds Ainshval and Sgurr nan Gillean 1957, and one seen 1959.

E Hen seen September 1963 after northerly gale.

Black Grouse *Lynurus tetrix*. **E** Reported to occur 1879; last bird shot 1904.

Partridge *Perdix perdix*. **R** Fair numbers in 1880s after introductions, but kept to coast; no later records.

E Introduced c. 1881; not plentiful 1884 and died out after 1888. 20 prs reintroduced 1928 reared 25 young; last record, one pair 1931.

[**C** Probably introduced in late 19th century, but no definite record.]

Quail *Coturnix coturnix*. **R** One heard and seen June 1959; another 1st June 1966.

Pheasant *Phasianus colchicus*. **R** Introduced 1888 and increased by 1889, but died out. Reared at Kinloch in 1920s. None now.

E Introduced 1896 but decreased. Large numbers brought in in 1933 and 1934. About 25 birds reported 1958; breeding regularly.

M Reared 1922 but extinct by 1930. Two records since 1940, during shoots on Eigg.

C Introduced before 1914 but did not survive.

Water Rail *Rallus aquaticus*. **R** One at Kinloch winter 1965/66.

E Three pairs bred 1879, one pair 1952.

C Total of 4 in winter since 1892.

Corncrake *Orex crex*. **R** Nested 1910 and 6 calling birds 1934 at Kinloch. Since 1950 1-4 prs have bred each year, but none 1960. Arrive in first week of May; latest bird 20th October at Kinloch.

E Noted 1796 and common in 1880s. No estimates thereafter until 1957 when 5 prs in single hayfield. Few calling 1963, 1966, but 19 in 1964.

M Numerous 1934. In recent years 8 prs have nested regularly, but only 2 prs present 1963.

C 12-15 prs 1933, chiefly at Coroghan, A'Chill, Tarbert and on Sanday. Only 5 calling birds 1956, 1961, but slight increase 1966.

Moorhen *Gallinula chloropus*. **R** One Kilmory August 1959; one Kinloch April 1964.

E 1-2 prs Laig 1888; one pair bred 1933 and 1958, probably at Laig.

M Bred c. 1940 and 1965; only two other sightings.

C Single birds November 1891, December 1933, August 1962 (the last on Sanday lochan).

Coot *Fulica atra*. **C** One January 1954 in the harbour.

Oystercatcher *Haematopus ostralegus*. **R** Several pairs 1910; common round the coast 1934 and thereafter.

E Several nests 1888; 40+ prs round coast April 1962.

M Few pairs 1934. Decreased 1940s, but 50+ prs 1963.

C Seen 1887, common by 1930s. 30+ prs round coast 1963.

Lapwing *Vanellus vanellus*. **R** Seen 1772 and bred 1796; 8-12 prs at Kilmory 1934. Since then has nested only at Harris, from 1950, usually 2-3 prs. Small flocks seen autumn and spring.

E Not numerous 1796 and few pairs 1880s. About 14 prs 1931, and 35 in 1933. After 1947 winter only one pair, increasing thereafter; by 1959 autumn flocks of up to 20 birds. Reduced to 3 prs 1962.

M Nested 1913 and 10-12 prs 1934. None after 1947 winter, but re-established since; 7 juveniles seen 1963.

C 3-5 prs bred Sanday in 1930s. No proven breeding thereafter until 1963; 2 prs 1964.

Ringed Plover *Charadrius hiaticula*. **R** 2+ prs bred 1934. Since 1957 up to 5 prs have nested at Kilmory, also one pair at Shamhnan Insir 1961 and 1965. Autumn passage noted in August; some birds winter.

E 2-3 breeding pairs most years since first recorded 1882; but none 1930-31. Nest by Kildonan and Laig bays, where some passage birds also noted in autumn.

M One pair 1934 and c. 12 prs regularly until 1947 winter. Thereafter only one seen in 10 years, but 4+ prs again by 1963. Some winter.

C Pairs Garrisdale and Sanday 1933, Sanday and Tarbert Bay (3 prs) 1936. In last 10 years, up to 3 prs at Conageraidh, NW Canna, and one pair Sanday in 1964. Also a few passage birds in August.

Grey Plover *Charadrius squatarola*. **R** One at Kinloch January 1961.

Golden Plover *Charadrius apricarius*. **R** Breeds in small numbers on Mullach Mor and Orval—Bloodstone Hill. Birds gather on the hills in July and move to Harris in September; here they winter in flocks of 50-100. A nestling ringed 29th June 1958 was found on Tirec (40m SSW) on 9th December 1959.

E Bred sparingly on hills in 1880s, and seen 1926, but not thereafter until 1964, when one pair bred. Winter visitor, August to April.

M A very few winter regularly.

C Bred until 1902; thereafter winter visitor only, except one on moors near Compass Hill, June 1963.

Turnstone *Arenaria interpres*. **R** One September 1963; 10 on 13th May 1965.

E Seen on four dates in autumn 1939-63.

M 30-50 regularly November to April; also 15 in July 1963.

C Four May 1934; occasional in winter 1935-44.

Snipe *Gallinago gallinago*. **R** Breeds sparingly in widely scattered localities. Noted in small numbers 1796; common on low-lying damp ground in 1950s. In August 1959, 20+ were disturbed from bracken at Kilmory.

E A few 1796 and 1880s. Bred chiefly near Kildonan 1926 to early 1950s; fewer than usual drumming after the hard winter 1963. A late nest with eggs Glen Charadail 13th August 1958. Also winter visitor in varying numbers; up to 80 have been shot in one year.

M A very few bred 1934 and 1963; some also arrive to winter.

C Breeds chiefly on the moors both E and W of Tarbert, but a few also on Sanday. Late nests with eggs July 1936 (several), July 1956 and August 1962; these may have been merely replacement clutches rather than second broods.

Great Snipe *Gallinago media*. **E** One shot between 1903 and 1913.

Jack Snipe *Limnocyptes minimus*. Occasional winter visitor to Rhum, Ligg and Canna (especially Sanday).

R Arrives late September or early October.

Woodcock *Scolopax rusticola*. **R** Bred 1933 and 1934 in all plantations; many pairs in 1950s; several pairs breed regularly now. Also winter visitor in varying numbers; many in winter 1962/63.

E Breeding proved 1957 and 1960, but none roding since 1962. Also winter visitor; many in hard winters of 1880s and 1890s.

M Winter visitor, especially numerous 1962/63.

C Arrives November; many wintered 1938/39.

Curlew *Numenius arquata*. **R** Seen 1772. Probably bred 1960, and at least 2 prs present S side of L. Scresort 1961. Up to 50 winter at Harris.

E Present 1796. Some birds present throughout the year in recent years, but fewest in summer; flocks up to 35 in autumn.

M A few summer occasionally; up to 12 arrive in autumn to winter.

C Usually absent April-July. Flocks up to 25 in August and later.

Whimbrel *Numenius phaeopus*. **R** Three 2nd March 1966; two late April to June 1961, 1966; 4 in September 1961.

E Seen in spring 1880s; one July 1962.

C Singles June 1953, 1962; seven 7th August 1964.

Black-tailed Godwit *Limosa limosa*. **R** Six at Kilmory, early May 1958.

Bar-tailed Godwit *Limosa lapponica*. **R** One at Kilmory, April 1958.

E One at Laig August 1958; one near Pier spring 1959.

M Two autumn 1938, one autumn 1966.

C One shot late autumn 1908.

Common Sandpiper *Tringa hypoleucos*. **R** Breeds on coast and inland. Very few inland 1934, but now breeds beside Kinloch, Kilmory and Harris burns, at Papadil, and beside some of the hill lochs. Up to 5 prs breed on the shores of L. Scresort. Birds arrive in last 10 days of April.

E Nests round the shores; also occasionally by the streams and L. Beinn Tighe. 21 prs in 1964.

M Several pairs breed regularly. Noted 1934.

C "Quite a number" 1933, but only 2 prs 1936. Four prs 1961 and 1963, S coast between the harbour and Tarbert, and at Conageraidh.

Redshank *Tringa totanus*. **R** One non-breeder June 1934. In recent years up to 15 mid August to late March; rare April-July.

E Seen in summer in 1880s, but no evidence of breeding. Occasional visitor up to 1933; thereafter none until 1958. In last 10 years seen on passage August and September, and in late April 1962.

M Regular winter visitor, up to 20.

C A few occasionally in summer; reported also as winter visitor. Passage birds August 1962, and 12 on 3rd August 1964 in harbour.

Greenshank *Tringa nebularia*. **R** Regularly seen July to early September 1957-61; winter records November to January 1959-61 at Kilmory. Noted on spring passage 1961.

E Recorded late July to early August 1939, 1957, 1960.

C Seen April 1937 and singles between late June and August in 5 years.

Knot *Calidris canutus*. **R** One August 1958.

E Up to 5 in August in 3 years since 1959.

M One November 1962, 1965; two October 1966.

C One early September 1937.

Purple Sandpiper *Calidris maritima*. **R** Eight October 1959; one mid January 1966.

E Two late June 1964.

M Occasional in winter with Turnstones.

C Occasional in winter; one killed by striking window, December 1929.

Little Stint *Calidris minuta*. **R** At Kilmory two 28th August 1957, seven 19th August 1961.

Dunlin *Calidris alpina*. **R** Regularly noted since 1957 on passage, mid August and early September; flocks up to 30. Also 6 at Shamhnan Insir 16th May 1964.

E Recorded infrequently on passage, chiefly in August. None noted between 1880s and 1958.

M Seen spring and autumn every year; also one mid July 1963.

C Formerly a regular winter visitor. One June 1953; one throughout August 1962.

Sanderling *Crocethia alba*. **R** Three at Kilmory August 1957, 12 at Shamhnan Insir August 1964.

E Singles at Laig July 1955, August 1958.

M Occasional in autumn; one wintered 1962/63.

C Occasional in autumn, July-September.

Great Skua *Catharacta skua*. **R** Single birds off Bloodstone Hill August 1959 and L. Scresort June 1961 and 1964.

Arctic Skua *Stercorarius parasiticus*. **R** Seen, perhaps breeding, by Pennant July 1772. Occasional offshore August and September; also singles June 1934, 1957.

E Occasional July-September, chasing terns off Castle Isle. One June 1963.

M Seen in autumns 1937-40, 1960.

C Occasional in autumn, chiefly August; sometimes chasing Puffins.

Pomarine Skua *Stercorarius pomarinus*. **R** Few in late summer 1881.

C One shot (? in November 1890).

Ivory Gull *Pagophila eburnea*. **C** One shot December 1922.

Great Black-backed Gull *Larus marinus*. **R** A few pairs breed at Kilmory, Harris, a'Bhrideanach and Rudha Port na Caranean. No marked population change since 1934.

E Reported to nest on hill lochs in 1880s. Up to 4 breeding pairs 1909, 1930. Now only 1-2 prs nest, at N end.

M One pair Eagamol 1934. Two pairs Muck and several Eagamol 1963, but slight decrease over past 20 years.

C About 10 prs bred in 1930s; increased by 1953; 17-18 prs 1961 and 1963.

Lesser Black-backed Gull *Larus fuscus*. **R** "Great numbers" on NE-facing slopes near Rudha Camas Pliasgaig in 1880s; a large colony persisted until recently, but none 1965. Scattered colonies elsewhere amongst Herring Gulls, and breeds amongst ruins at Port na Caranean, usually in good numbers, but few 1965, 40+ prs 1966.

E Reported common in 1880s, but only proven breeding records were 1913, 1933. Now a few pairs nest at N end.

M On Horse Island 12 nests 1934 and c. 20 prs 1963, but in other recent years up to 100 prs there. About 100 prs on Eagamol 1963.

C A few bred on W cliffs in 1933; 12 prs only, scattered in five Herring Gull colonies in 1963.

Herring Gull *Larus argentatus*. **R** Scattered colonies totalling thousands of pairs along W shores in 1880s and 1950s, but noted mainly on E coasts in 1934. Colony at S point of L. Scresort increased markedly in 1960 and held c. 50 nests in 1963.

E Nests Grulin and Castle Isle from earliest records onwards. From 1939 has also nested N end. 67 nests along shore between Pier and Cleadale, via N end, May 1962.

M Breeds Eagamol and a few pairs on Muck, chiefly near Camas Mor.

C Nests chiefly on N coast at Laum Sgor and Rudha Langanes, also at Garrisdale, Haslam and SE point of Sanday. Laum Sgor colony held c.



FIG. 8. Recoveries of Herring Gulls ringed as nestlings on Canna. Symbols as in fig. 7.

50 nests 1936 and 1960s; but total population increasing recently—225+ prs 1961, 290+ prs 1962, 335+ prs 1963. Recoveries of nestlings ringed 1961-65 are shown in fig. 8.

Common Gull *Larus canus*. **R** About 25 prs Welshman's Rock and Shamhnan Insir 1950; also bred elsewhere. Nested 1960 at S point L. Scresort, and c. 25 prs Harris 1965.

E Fluctuating numbers. "Very common" 1888, but only 20 prs S coast 1913. Bred Castle Isle 1926, Kildonan 1939; now chiefly N end and Castle Isle, with 29 nests N end 31st May 1962.

M One possible nest 1930. Small numbers breed round coast and on Horse Island.

C A few nested Sanday 1933, but no proven breeding again until 1962; 4 prs 1963. At foot of N cliffs c. 30 prs 1962, but one pair 1963.

Glaucous Gull *Larus hyperboreus*. **C** One shot in winter 1890s.

Little Gull *Larus minutus*. **R** One at Kinloch in March 1958.

C One shot August 1912.

Black-headed Gull *Larus ridibundus*. **R** Occasional visitor since 1950; chiefly summer, none in autumn; both adults and immatures.

E Occasional July and August, 1880s and recent years; some immatures, but small numbers only. Two in late April 1962.

M Occasional winter and spring.

C Few records, chiefly July; none 1938-58.

Kittiwake *Rissa tridactyla*. **R** In 1880s a small colony in the N; in 1934 two small colonies in NE and many colonies on SE cliffs. Now 3 colonies in NE: 30 nests Rudha Shamhnan Insir, 75 Rudha Camas Pliasgaig, 60 Creag na h'Iolaire (1959 counts). 1961 counts of SE colonies: 100 nests Welshman's Rock to Allt na Ba, 250 Sron na h'Iolaire, 550 Sgor Mor and 250 Rudha na Meirleach.

E Reported to have bred E side 1871 and N end 1891, but no proven breeding 1888 or this century, though pairs seen on S cliffs spring 1966. A 1913 record of "nesting on an islet off the S cliffs" probably refers to Muck.

M Cave colony in 1880s; also some then on Horse Island. Breeding on Eagamol only 1963.

C Large colony 1880s. 588 nests below N cliffs and 180+ on Sanday in 1936, and similar numbers 1953. In 1960s Canna colony held only c. 400 nests and Sanday (Easubric) 115-125.

Common Tern *Sterna hirundo*. **C**. Definite records June 1933, July 1936.

Arctic Tern *Sterna macrura*. **R** Pennant saw large numbers of terns at L. Coire nan Grund in 1772; elsewhere in the same chapter he notes that "Greater Terns" were seen on Rhum. From his textbook (1776) it is clear that these were either Common or Arctic Terns, not Sandwich. More recently 4 prs Arctic Terns bred at Shamhnan Insir in 1934, and 2 prs at Rudha Port na Caranean in 1955; the latter colony increased to more than 10 prs 1963, but only one pair 1965.

E Probably bred 1884 near the Pier. Five nests Castle Isle 1953; up to 12 prs since then. Flocks up to 50 sometimes near Castle Isle in August, probably from other islands.

M About 40 prs Gallanach 1934. In late 1930s Sgaogaig was covered with nests, but birds moved to Lamb Isle 1939. More recently returned to site near Sgaogaig, but decreasing; c. 10 young only 1963, and one pair (no nest) 1966.

C Birds present Haslam 1930s but no proven breeding. Nested in early 1950s in small numbers on islets in harbour, but none now. Up to 8 seen regularly in summer.

Sandwich Tern *Sterna sandvicensis*. **E** Four August 1962, one June 1963.

C Singles July and August 1955, 1961.

Razorbill *Alca torda*. **R** In 1960 a few colonies up to 25 prs in N, and a total of c. 200 prs along S cliffs.

E No proven breeding; a 1913 record must refer to Muck.

M Few bred Eagamol 1889, 1934. Now also on An Liachdach (3 to every Guillemot), but still chiefly on Eagamol (1 to every 10 Guillemots), where an increase noted 1966.

C No accurate counts of breeding numbers, as many under bluffs on N cliffs, Laum Sgor to Rudha Langanes. At Garrisdale 20+ prs and on Sanday (Easubric) 13 prs, both 1963.

Guillemot *Uria aalge*. **R** "Many" breeding 1910. A few colonies up to 25 prs in N and several up to 250 prs in S in early 1950s. Only 250+ prs along S cliffs 1960.

E No proven breeding; a 1913 record must refer to Muck.

M None reported 1889, but bred 1934. Decreasing recently.

C Breeds N cliffs, as Razorbill, but more open sites; no counts; c. 90 prs Sanday 1963.

Black Guillemot *Cepphus grylle*. **R** Noted 1880s, especially W coast Harris to a' Bhrideanach; seen 1934 chiefly on NE coast. Now generally distributed in small numbers.

E Bred below Grulin in 1880s; c. 12 prs 1909. In 1950s and 1960s slightly larger numbers recorded, particularly at N end and off S and SW coasts.

M Only 2 prs for many years, but 8+ prs 1963.

C "Common" near W end in 1880s; c. 10 prs 1933, but increase to 17+ prs 1961, mainly on NW coast (Conageraidh), at Coroghan, and on the low N cliffs of Sanday.

Puffin *Fratercula arctica*. **R** Was breeding 1796. In early 1950s mainly in three colonies on S cliffs, each 100-500 prs; by 1960 only at most 50 prs there. At Camas Pliasgaig a colony has remained at 50 prs.

E Bred in 1796 but not 1888. A 1913 record refers to Muck. By 1926 recolonization at Grulin; several hundred pairs nested until at least 1934, but none 1953 or thereafter.

M Seen on Eagamol 1889, 1934. Now breed chiefly on Horse Island; 170+ seen there July 1963. A few Eagamol and An Liachdach 1966 after 40 years absence.

C Five colonies 1892. Now mainly on N cliffs where c. 1000 counted off-shore 1962. On Sanday chiefly on Dun Mor, where 200+ counted 1962, also a few N of lighthouse.

Stock Dove *Columba oenas*. **E** One (possibly 4) late April 1962.

Rock Dove *Columba livia*. **R** Was breeding 1796 and 1881 in caves along SW shore. None seen 1934, but a few in caves along S shore in 1950s. 12-15 prs may now breed. Large flocks seen sometimes in autumn, maximum 200+ November 1959.

E Seen 1796, and nested in four caves on S side 1888. Many nests in caves at N end 1939. Several flocks up to 25 seen each autumn in recent years.

M Breeds regularly; a few pairs Am Moel, Fionn-Ard and An Liachdach.

C Plentiful in some years, but few 1948 and 1956. In 1960s up to 8 seen daily along S coast, where it presumably breeds in caves. None on N cliffs or Sanday.

Woodpigeon *Columba palumbus*. **R** No firm records until 1955, when a few present Kinloch in summer; c. 12 nesting pairs by 1961, chiefly on N side of L. Scresort. Large flocks occasionally in autumn, such as 250+ in November 1959.

E One pair 1879 and a few pairs until 1891. Thereafter no proven breeding and few sightings until 1953. Now several pairs breed Galmisdale and Kildonan; increasing. Flocks up to 40 in autumn 1959.

M Since 1960 flocks of 30-40 in winter. No proven breeding, but a few present summer 1963.

C Occasionally seen in summer, but has not nested. Large influxes in some autumns, notably 1935 and the early 1960s.

Turtle Dove *Streptopelia turtur*. **R** Five birds in 4 years since 1948, all in May and June.

E Occasional in recent years, June and July.

M About 6 in 25 years, in autumn.

C Rarely recorded, chiefly in July and August.

Collared Dove *Streptopelia decaocto*. **R** Seen at Kinloch May 1960 and each year 1963-66 during May, June or July; up to 3 birds.

E Singles May 1959, 1961, August 1966.

M One May 1960; 4 prs March-July 1966, but no nesting.

Cuckoo *Cuculus canorus*. Fluctuating numbers on all islands; parasitizes chiefly Meadow Pipits, and often seen on the hills (even above 2000 ft on Rhum). Usually arrives in last week of April.

Yellow-billed Cuckoo *Coccyzus americanus*. **M** One October 1953.

Barn Owl *Tyto alba*. **R** One reported 1955; no breeding record. **E** Nested among rocks in centre and W of island 1888, and in a sea cave 1891. Seen at Laig 1912-13 and early 1920s and at Kildonan 1939. Primary feather and pellets found near Kirk 1959.

C Four records between 1910 and 1962.

Snowy Owl *Nyctea scandiaca*. **E** One killed winter 1932/33.

C One November 1942.

Tawny Owl *Strix aluco*. **R** One suspected 1934; one reported 1955; one late June 1963. No breeding record.

E Rare visitor up to 1939; then none until 1964 when pair reared 3 young at Cleadale, and two other adults present.

C Last seen July 1937.

Long-eared Owl *Asio otus*. **R** Bred successfully 1934, and eggs laid May 1966, but clutch lost. Singles seen 1955, 1959.

E First proved to breed 1930; several pairs 1933. Now breeds regularly in several plantations.

M At least one, and up to 4, pairs nest in middle plantation. Another nest in rocks at Cairibh for several years, and in the Port plantation 1953.

C Single birds February 1923, November 1938 and in recent years at Tighard.

Short-eared Owl *Asio flammeus*. **R** Single birds May 1958, 1959, September 1961. A pair reared two young Kilmory Glen 1965.

E 1880s records rejected by Macphersons. 2 prs 1891 and nest in heather c. 1914. Nested 1953 and birds seen most years since.

C One December 1935.

Nightjar *Caprimulgus europaeus*. **R** One near Kinloch 10th June 1964.

E Included in 1880 list (and breeding Arisaig 1884). Heard 1933 and 1955.

Swift *Apus apus*. Occasional visitor to all four isles, chiefly June.

E Breeding suspected 1927 in cliffs.

Hoopoe *Upupa epops*. **E** One 23rd April 1954; another seen and heard May 1965, said to have been killed by a hawk.

Great Spotted Woodpecker *Dendrocopos major*. **R** A drilling at Papadil 1934; one Kinloch in August 1962.

Skylark *Alauda arvensis*. **R** Widespread but rather scarce breeder. Most numerous 1934 and 1959 on grassland top of Bloodstone Hill. Winter flock 30-50 at Kinloch, 1960 only.

E Small numbers nest in short heather. Flocks up to 50 seen on crofting areas in September.

M Numerous on pasture land.

C Fairly common Sanday and cultivated parts of Canna, but few on moorland. Does not winter usually, but hundreds during hard frost January 1940.

Shore Lark *Eremophila alpestris*. **E** One February 1959.

Swallow *Hirundo rustica*. **R** Reported to have bred regularly in farm buildings at Kinloch in 1940s but no longer does so. Often seen on passage, especially in May; earliest record 21st March 1966.

E First proved breeding 1913 at Laig. 1-2 prs only until 1953 when c. 12 prs. Recently at least 10 prs nesting at Kildonan and Cleadale.

M One pair nested for 3 years in 1950s and reared two broods 1966. Also regular spring and autumn migrant

C One pair has bred in some years, most recently 1965.

House Martin *Delichon urbica*. Seen on passage over all four islands, both spring and autumn.

R Records in all months from April to November. Large numbers 16th September 1961. Began building but did not complete nest 1965.

C Many after SW gale September 1938.

Sand Martin *Riparia riparia*. **R** Four spring passage records, totalling 7 birds, since 1957; six at Kinloch 26th June 1965.

E 2-3 prs at mouth of Laig burn 1953, but breeding not proven.

Raven *Corvus corax*. **R** Seen 1772. Persecuted early 20th century and only two seen 1934. In recent years 4 or 5 breeding pairs.

E 2-3 prs 1879-88 at N and S ends; 1-2 prs 1926-53. At least 11 nest sites known 1954, though all may not have been used. Numerous 1955 when myxomatosis reached Eigg; decreased 1957, but at least 7 prs present April 1962.

M Two pairs until 1957; one pair 1963 on Horse Island. Now 2 prs again, Camas Mor and An Liachdach. Birds remain in winter.

C Two prs 1933 and thereafter. By 1961 at least 3 prs. Seldom winter; usually return March. Possible passage mid August 1962.

Carion Crow *Corvus corone corone*. **R** Occasional in winter since 1957; six in December 1962.

M One found dead 1958 or 1959.

C A very few records in July, August and December.

Hooded Crow *Corvus corone cornix*. **R** Seen 1772. Nest contents and some adults destroyed until 1950s; only c. 6 seen 1934. Now breeds regularly, but numbers kept down by shooting; at least 9 prs nested 1958. Autumn flocks regularly number 100-150, but 200 September 1963.

E Common breeding bird 1880s. Probably persecuted until late 1930s; only c. 4 prs 1933, but common again 1939. Now numerous.

M Breeds freely; many winter.

C Seen 1887. Numbers kept down until 1940s; only 5 birds 1937. Increase to c. 100 birds June 1956. Nests chiefly on S cliffs and crags from Tarbert to Compass Hill.

Rook *Corvus frugilegus*. **R** Occasional in winter since 1957, usually single birds; no breeding record.

E Winter visitor before 1884. Few pairs nested 1885, increasing to 30 nests 1909, N of Laig. Nests removed and no further breeding records, though occasionally seen spring and early summer.

C Occasional up to 1930s; last record November 1938.

Jackdaw *Corvus monedula*. **R** Irregular in spring since 1957.

E First seen 1920; 6 prs bred 1933 and steady increase since. Probably up to 100 prs breeding in cliffs near Kildonan now. Flock c. 30 at Cleadale April 1962.

M Flocks 30-40 from Eigg visit Muck in winter.

C Present summer 1953 and 1961 but no proven breeding; driven off by Hooded Crows. Also rare winter visitor.

Chough *Pyrhocorax pyrrhocorax*. **R** Not seen 1772, but Gray (1871) says "No longer breeds on Rhum," implying that it once did so.

E Single birds 1876, 1879. Last bred N cliffs 1886; possibly exterminated by Peregrines.

C Extinct before 1871, if it ever bred.

Great Tit *Parus major*. **R** Bred 1955. A few birds most autumns and many at Kinloch January and February 1965, 1966. The 1957 invasion reached Rhum in late October.

E First seen and bred 1939; breeding proved 1952 (probably several pairs) and 1957. Probably nests regularly now.



FIG. 11. Isle of Rhum from the air, showing (*left to right*) Glen Dòidh, the twin peaks of Askaid (2659 ft) and Hùbhaid (2565 ft), Loch Searsoit with the woodlands and cultivation at Kinted, and the low hills of Mùthach Mòr beyond Kintach Glen. In the distance between Askaid and Hùbhaid lies Kintory Glen. The highest slopes of the main mountain group hold a very large colony of Blank Snowwinters.

Photograph by Dr. K. S. Joseph



PLATE 45. Isle of Eigg from the air, showing Laig Bay and the crofting areas of Cleadale and Tolain. The impressive inland cliffs afford nesting sites to several species of birds of prey.

Photograph by J. K. St Joseph



PLATE 46a. The Scurr of Elgg, a pitchstone outcrop, looking across the woodlands of Galmisdale from Kildonan.

Photograph by W. U. Flower



PLATE 46b. The bay of Camas Mor, Isle of Muck, with the seabird cliffs of An Llachdach and Fionn-Ard, and the Ardnamurchan peninsula in the background.

Photograph by W. U. Flower



PLATE 47a. The islet of Sanday from Canna. In the background is Bloodstone Hill on Rhum. This view emphasises the flat and fertile land of Sanday and the extensive area of sand and mud exposed at low tide in Canna harbour. In the foreground lies the Square.

Photograph by P. R. Evans



PLATE 47b. The Isle of Canna from Sanday, showing Compass Hill, the pine plantation near Coroghan, and the harbour and pier.

Photograph by P. R. Evans

C Seen in 4 winters 1929-56.

Blue Tit *Parus caeruleus*. **R** Six to ten families 1934; numerous in 1950s. Up to 5 prs nested 1959-66, but none 1961-63; one nest 1964 at Papadil, all others at Kinloch. Influxes of birds October 1957 and November 1958.

E Recorded 1880-88; none thereafter until 1933, when bred. Several pairs nested 1957, especially at Kildonan. Some survived the 1962/63 hard winter.

M Occasional in spring.

C Seen in four years 1928-61.

Coal Tit *Parus ater*. **R** Bred 1950 but not again until 1965 (2-3 prs). Influxes in October most recent years, especially 1957, 1958.

E Seen 1888; 6+ prs bred 1934. Increasing in 1950s and now plentiful in conifer woods.

M Occasional in spring.

C Three in January 1946.

Long-tailed Tit *Aegithalos caudatus*. **R** Bred 1934. The source of a 1949 breeding record quoted by Baxter & Rintoul (1953) has not been traced. Occasional in winter; influxes October/November 1957, 1961.

E One record 1880s; three parties between 1949 and 1957. No proven breeding.

M One party autumn 1937 or 1938.

C Reported October 1935, March 1949.

Treecreeper *Certhia familiaris*. **R** Has nested regularly Kinloch since 1938; at least 3 prs 1961. Absent 1962 and 1963 breeding seasons; re-appeared November 1963. Influxes autumn 1957, 1958. Single bird Papadil April 1966.

E Seen 1933, bred 1934. Families seen two woods 1957. Probably at least 2 prs have nested regularly in recent years; at least one survived the 1962/63 winter.

M One seen climbing a wall 1937.

C One autumn 1957 at the Square, one at Tighard 9th August 1964.

Wren *Troglodytes troglodytes*. **R** Breeds around L. Scresort, at Papadil and in rocky places on the hills. Common in the woods and in the heather; family party at over 2000 ft on Hallival 1957.

E Common since earliest records, but no broods seen 1963.

M Common until 1963, when rather few seen.

C Common 1887, scarce 1930s. Confined chiefly to the plantations and gullies along the S coast. Recorded from only 4 sites 1962 and in one plantation 1963, but recolonised most areas by 1964.

Dipper *Cinclus cinclus*. **R** Seen in 1880s; a few pairs 1950, 1955, probably 3-4 prs now. Birds usually descend from the hills to winter at Kinloch, but some seen above 1000 ft November/December 1960.

E Seen in 1880s; at least one pair bred 1909, 1926, 1933. Two pairs Laig burn (Glen Charadail) 1957; one pair 1958 when pairs also bred on two other burns. Two seen 1963, after the hard winter.

C Rare in winter; last seen January 1956.

Mistle Thrush *Turdus viscivorus*. **R** First seen and nested 1934. Up to 3 prs have nested at Kinloch in recent years; one pair at Papadil 1962, 1963. Small flocks noted in autumn.

E First seen 1891; breeding suspected 1909, proved 1933; several pairs in the woods 1934. Increased in 1950s, but few breeding records as observations have been made too late in the year. Parties high on the scree and moors July 1962.

Fieldfare *Turdus pilaris*. Regular on autumn passage (main arrival late October) all four islands; small numbers winter.

Song Thrush *Turdus philomelos*. **R** Breeds in the woods at Kinloch and Papadil. Influx in November; return passage March and April.

E Breeds commonly in the woods at Galmisdale and Kildonan, and on bracken slopes. Seen at 750 ft on the Cleadale cliffs in August.

M A few pairs breed in the gardens and plantations and on heather slopes.

C Less than 15 prs breed, chiefly in the plantations round Canna House.

Redwing *Turdus musicus*. Regular passage migrant, mid October/early November and mid March/mid April; a few winter occasionally.

Ring Ouzel *Turdus torquatus*. **R** Seen July 1772. In 1934, 6-10 prs restricted to high corries. Since 1955, 3-4 prs have bred each year, usually above 1500 ft, though nested at 800 ft (Bloodstone Hill) 1957 and sea level (Papadil) more recently.

E Present 1850; in 1880s bred near the Sgurr, at Grulin and Laig. Males seen near the Sgurr 1891 and 1909, and pair believed to have bred 1931. No later records.

C None seen since 1931.

Blackbird *Turdus merula*. **R** Breeds only in the woods, where slightly more common than Song Thrush. Autumn influx late October or early November each year; many spent January in the woods in 1963 and 1966. Of the immigrant birds, a male and a female ringed early 1960 were recovered S Norway November, 1961 and 1962 respectively; also a male ringed November 1961 was caught and released on the Frisian Islands in March 1964; it was subsequently recaptured twice during winter 1964/65 at Kinloch, and finally recovered on 10th April 1965 in Denmark.

E Found up to 600 ft in bracken and bushes along the burns; also in the woods; slightly less common than Song Thrush. Passage noted each November; also suspected in late April 1962.

M Rarer than Song Thrush 1934; similar numbers and distribution 1963. Large numbers pass through in November.

C One pair 1933, 3 in 1940; probably c. 6 now, mainly in deciduous woods. Often large influxes in autumn.

Wheatear *Oenanthe oenanthe*. **R** Breeds in rather small numbers. Seen 1772; widespread 1934, 1950s and now. Earliest arrival 27th March 1963.

E Probably 100+ prs on island in summer. Noted on passage, especially August 1958 and late April 1962.

M Only a few 1934, but many breeding pairs 1963.

C Very common since records first kept; breeds mainly in the valleys descending from the upper plateau. Perhaps 100 prs.

Stonechat *Saxicola torquata*. **R** Bred 1910; only a few pairs 1934 and early 1950s. Four pairs 1958, nine 1959, falling to three 1962. After the hard winter at least one pair bred 1963, increasing thereafter to 8 prs 1966.

E Fluctuating numbers, but 2-3 prs most years; 4-5 prs 1931; eight families 1959; 4 prs 1964.

C Several pairs along S coast 1930s. After severe winter, only one male 1947; also one family 1958, but 6 prs 1961, 7 in 1962; after another severe winter only 2 prs 1963, 1964. Birds are present on Canna April-October.

Whinchat *Saxicola rubetra*. **R** 3-4 prs have bred most years, chiefly at Kinloch and Kilmory, but at least 5 prs 1958, 6 prs 1966.

E "Numerous" from 1880s onwards, though few in 1930s (only one pair 1931). Now several tens of pairs breed each year.

M A few seen 1934, 1955; at least 2 prs bred 1963.

C Seen 1887; in 1930s 1-2 prs on Canna; several pairs Sanday 1953. Only one pair 1961, 1962, but at least 8 in 1963 and 6+ in 1964.

Redstart *Phoenicurus phoenicurus*. **R** Bred 1961 and males seen in summer 1962, 1963, 1965, 1966.

E Single birds seen each year 1958-61; also 1964.

Robin *Erithacus rubecula*. **R** Restricted to Kinloch woods during summer, but also bred Papadil 1958. Occasional at Kilmory and Harris in autumn; an apparent influx November 1957.

E Very common since records first kept. Chiefly in Galmisdale woods, but a few at Cleadale April 1962.

M None 1934; bred 1963 in garden and the plantations.

C In summer found chiefly in deciduous plantations; in 1960s several pairs, more than the 1-2 prs recorded in 1930s.

Grasshopper Warbler *Locustella naevia*. **R** Heard regularly in two areas, Kinloch Glen, early June 1966.

Sedge Warbler *Acrocephalus schoenobaenus*. **R** First seen and bred 1958; bred again 1966. Singing birds May 1960-62 and 1964-65.

E 1-2 pairs 1888; no further proven breeding until 1955. Probably has bred most years recently; 2 prs 1963, 9 prs 1964.

M At least one pair 1955, but breeding not established.

C At least one pair bred 1953; other singing males present. Bred again 1961, and odd birds seen in recent years.

Blackcap *Sylvia atricapilla*. **R** Four occurrences November and one December since 1957; males singing late summer 1958, 1960.

E Female seen December 1958.

Whitethroat *Sylvia communis*. **R** One pair 1950 and at least one pair bred 1958 and thereafter; 2 prs 1959; also odd birds in several years.

E Fluctuating numbers; few 1880s, abundant 1891, 1913. Up to only 4 prs 1930s. Fairly common early 1950s; several tens of pairs late 1950s.

M One pair bred each year until 1961.

C 2-4 prs 1933, but only one pair late 1930s. Up to 6 prs 1956 and 6 families 1964; smaller numbers in other years.

Willow Warbler *Phylloscopus trochilus*. **R** Common, chiefly at Kinloch but also recorded at Papadil; 15+ singing birds round L. Scresort 1961, 6 nests found 1962. Usually arrives mid April; two May records from Kilmory, but no proven breeding.

E Numerous (several tens of pairs breeding) in all lists except 1930s and early 1950s. Chiefly in small valleys, especially those with cover of hazel. Juvenile ringed Cleadale 29th July 1962 recovered Bilbao, Spain, 6th September 1963.

M One singing bird 1934: breeding first proved 1958 or 1959; several singing birds 1960. Pair bred Port plantation 1963.

C Up to 6 prs in 1930s, chiefly near Canna House and Coroghan; fewer pairs recorded early 1960s, but singing may have stopped before counts made.

Chiffchaff *Phylloscopus collybita*. **R** First seen April 1958, when 6 singing birds on 25th; pair bred 1959. Up to 3 singing birds most springs recently, the earliest on 16th March.

E Singing birds June 1960, September 1963.

C Singing bird July 1963.

Wood Warbler *Phylloscopus sibilatrix*. **R** One singing 1934 and nesting proved 1961, 1962; probably at least one pair has nested annually since. Earliest arrival 21st April 1963.

E Heard several times May 1955.

Goldcrest *Regulus regulus*. **R** Breeds regularly in good numbers; influx noted October 1957.

E Nested 1880s and numerous 1926, 1933, 1934; however, none 1930, 1931, 1939. A steady increase through 1950s, especially in conifer woods. Sev-

eral pairs bred 1963, after the hard winter.

M Regular spring migrant; no breeding record.

C Single birds 1930, 1943; first bred 1956 and probably annually thereafter until 1961. None 1962, 1963; one family August 1964.

Spotted Flycatcher *Muscicapa striata*. **R** Two pairs, possibly more, have bred Kinloch most years; one pair nested at Papadil 1959, 1962.

E Seen at Laig and by woodlands 1879-91; thereafter very few records and no proven breeding until 1957, when 2+ prs nested on seaward edge of Manse wood. Since then a few pairs have nested regularly.

M One 18th May 1960.

C First seen 1936; two 1937. Breeding first proved 1961, 2 prs 1962, none 1963, one 1964.

Pied Flycatcher *Muscicapa hypoleuca*. **R** One Kinloch and 3 Kilmory Glen mid September 1963, after heavy arrivals in E Britain.

E Singles early September 1956 and 1958, also after arrivals in E Britain.

Dunnock *Prunella modularis*. **R** Six or more pairs nest regularly Kinloch. Occasional single birds Kilmory and Harris, October and November; an apparent increase in population in winter, October-March.

E Widespread, not numerous, and no estimates of population size as very secretive in summer and autumn when most observations made. Survived at least in the woodlands in 1963.

M A few breed every year (though none seen July 1963). An apparent increase in autumn.

C Seen 1887, and up to 4 in 1930s and early 1950s. At least 10 prs in woodland near Canna House, and a few pairs in scrub below S crags alongside the Tarbert road in 1961. Seen 1963 after the hard winter.

Meadow Pipit *Anthus pratensis*. **R** Seen 1772. Now a rather scarce but widespread breeding bird, up to 1000 ft. Autumn passage August-September, but some birds linger till mid November. Return passage late March and April.

E Common, especially on moorland. Autumn passage noted August 1958 and 1962, and spring passage late April 1962. One ringed 24th April 1962 was recovered 25th December 1962 at Gaja, Portugal.

M Common breeding bird, but not on Horse Island.

C Thinly distributed in summer on the moorland and coastal pastures. A few tens of pairs August 1964.

Tree Pipit *Anthus trivialis*. **R** Occurs on passage; singing birds June 1958 and at least 3 at Kinloch, May and June 1961. No breeding record.

C One 4th August 1964.

Rock Pipit *Anthus spinoletta*. **R** Several tens of pairs nest along the shore. Birds also seen up to 1500 ft and 1½ miles inland occasionally, but no proven inland nesting.

E Breeds commonly along the shore; at least 50 birds August 1958.

M Seen 1913; a few tens of pairs 1963.

C "Increase" reported 1936; up to 50 prs probably present along the shore most years now.

Pied Wagtail *Motacilla alba*. **R** "White" wagtail seen by Pennant, July 1772. None seen 1934, but since 1950s pairs have nested Kinloch, Kilmory and Harris (maximum 4 prs 1959). Birds present early March to late September. White Wagtails *M. a. alba* noted regularly on passage April and October recent years, and a pair reared young 1960.

E Scarce 1880s, but several families 1926, when a roost of 40+ at Laig. In 1930s 2-4 prs nested; more recently up to 5 family parties seen (in 1959). Passage noted August 1958; one ringed 18th August recovered on Atlantic coast of France at St Nicolas-de-Redon on 25th December 1961. Passage of White Wagtails noted September 1959, May 1962.

M Several pairs nest but do not winter.

C Very few seen and no proven breeding 1930s. 1-2 prs 1956 and c. 4 family parties 1961, 1962; none 1963, but at least one pair bred 1964.

Grey Wagtail *Motacilla cinerea*. **R** Seen 1934, 1950; breeding proved 1957 at Kinloch and Papadil; at least one pair breeding regularly since then. Some birds winter at Kinloch.

E "Yellow" wagtail seen 1880s, probably this species. Single birds early 1930s; bred 1934 in Glen Charadail. At least 2 prs bred 1949-57, but probably only one recently.

C Used to be rare visitor in spring; none recently.

Yellow Wagtail *Motacilla flava*. **R** A male at Kinloch May 1963.

Waxwing *Bombycilla garrulus*. **R** Singles or small flocks October to December in 1950, 1957, 1959 and 1965.

E One c. 1950; small flocks early November 1965.

C Seen December 1946, 1958.

Great Grey Shrike *Lanius excubitor*. **M** Two November 1959; one November 1960.

Starling *Sturnus vulgaris*. **R** Scarce Kinloch 1934, but bred freely in a dovecote there in 1940s; none 1950s, but 3 prs 1962 and one pair 1964-66. At Kilmory c. 3 prs nest most years, but 4 prs 1965. At Harris 4 prs 1965, one pair 1966. Wintering flocks of up to 100 birds seen most years, especially 1962/63. One ringed late December was recovered in Finland in August; another two ringed January were found in mid May and late June in Finland and Norway respectively.

E Few nested 1880s, but several large flocks noted. Bred in good numbers from before 1909 onwards; present breeding population probably 50-100 prs.

M Numerous 1934; slight decrease recently. Breeds freely in stone dykes and holes; perhaps 50 prs. Flocks up to 200 seen in autumn.

C Numerous 1887 and 1930s, but not plentiful 1944 and decreasing until late 1950s. Now several tens of pairs nest on houses and in cliff crevices. A roost which held 300+ birds in July 1936 no longer exists.

Greenfinch *Chloris chloris*. **R** First record 1957; bred 1960, 1963 and possibly 1962; pair at Kinloch May 1966. A few winter most years.

E First seen and bred 1926; steady increase since and now nests in all plantations. Small flocks have been seen Cleadale, but no nests.

M First proved to breed 1937, and breeding most years thereafter. Birds present in all plantations 1963.

C First summer record 1933; odd birds thereafter until 1961 when a flock arrived January and c. 6 prs bred. Also bred 1962-64.

Goldfinch *Carduelis carduelis*. **C** Singles October 1927, May 1934.

Siskin *Carduelis spinus* **R** Occasional in winter; sometimes large numbers, 100+ in late October 1959. At least one pair bred Kinloch 1964 and 1966, and pair present May and June 1965.

E Female seen late April 1962.

Linnet *Carduelis cannabina*. **E** 2-3 seen 1887 and pair 1939; also seen 1964, but no proven breeding yet.

C Male seen June 1963; pair with juvenile August 1964.

Twite *Carduelis flavirostris*. **R** Widespread in summer, but not numerous. Breeds regularly at Harris, and flocks gather at Kinloch in October, but never more than 50. Influxes noted Harris and Kilmory in April.

E Fluctuating numbers. Common most years except 1926, and 1931 when none seen, though numerous 1930. Evidence of passage in August (flock 150+ on 18th August 1958), but some remain on cultivated land, as at Cleadale, until much later. Several tens of pairs breed.

M Breeds regularly, but a decrease in 1963.

C Noted 1887 and plentiful 1930s, when nests with fresh clutches in July. Only a few pairs 1950s but more common 1961, especially on the edges of grazed or cultivated land and the plantations. Flocks up to 50 seen several times August 1962.

Redpoll *Carduelis flammca*. **R** Quite a number seen at Kinloch 1934, and bred there 1962, 1965, 1966, and at Papadil 1963. None seen 1950, 1955, 1960-61, but flocks of 30+ at Kinloch in September 1957 and July-September 1958.

E Seen 1888 and possibly heard 1949.

C Recorded in 4 years 1936-59; pair bred 1940.

Bullfinch *Pyrrhula pyrrhula*. **R** Said to have been seen in early 1940s; 3 in November 1961. In 1964 at Kinloch, female January, male April and pair June.

E Reported 1880, though Macphersons disbelieved record. Small party arrived 1932; one pair Galmisdale 1957, at least 3 prs 1958. Now breeds regularly.

C A very few spring records, but none for at least 15 years.

Crossbill *Loxia curvirostra*. **R** Invasions late June and early July 1958, 1959, 1962; two January/February 1963; small flocks up to 20 in August and early September 1963.

E Flock 60+ July 1888; four January 1963.

C Small flocks June-August 1910, 1927, 1953, 1958.

Chaffinch *Fringilla coelebs*. **R** Very common breeding species in Kinloch woods; also at Papadil. Flocks of several hundred gather at Kinloch August to early April; birds ringed there have been recovered on Eigg in April, and breeding on Soay (Skye) in May.

E Breeding and not uncommon 1880s; steady increase since, though scarce in 1930. Now very common in all deciduous woods, and a few have bred Laig and Cleadale since 1939.

M None 1923; a few pairs 1933. Now breeds regularly in small numbers in gardens and plantations.

C 2-3 prs near Canna House 1930s. Increased steadily to c. 10 prs 1950s. Now several tens of pairs at Coroghan and in the woods above Canna House.

Brambling *Fringilla montifringilla*. **R** Up to 5 at Kinloch in some winters since 1959.

E Male seen 26th December 1963 had been ringed on Rhum a week before.

Yellowhammer *Emberiza citrinella*. **R** Occasional spring visitor, first seen April 1958.

E Common 1880s and possible increase 1930s; now several tens of pairs breed. Up to 10 birds together at Cleadale April 1962.

C Decreased before 1930s; at least one pair bred 1936 and 1939, but then no records until 1962 when 2 seen June and August. None since.

Corn Bunting *Emberiza calandra*. **R** Four records since 1958, maximum 5 birds; three records March-May, one December.

E Abundant 1884-1909 but few by 1913; thereafter singles 1930, 1954.

M Few pairs until 1930s; none after 1937 except one March 1963.

C Common 1880s but only 1-2 prs by 1930s. Last recorded April 1949.

Little Bunting *Emberiza pusilla*. **R** One seen two dates October 1957, possibly two different birds.

Reed Bunting *Emberiza schoeniclus*. **R** One or two birds have been seen most years, mainly January-February and June. No breeding record.

E Bred in two localities 1880s; one pair N of Cleadale 1934. Then no records until 1957 when one pair bred Laig. Now breeds regularly with at least 2 prs 1962.

M One pair 1938, odd records thereafter; bred 1958 and 2-3 prs 1963.
C Winter records 1933, 1935. Then none until pair bred and another present in 1962; one pair 1963.

Snow Bunting *Plectrophenax nivalis*. Winter visitor, recorded from all four islands.

R Regular mid September to mid April; numbers up to 50 (January 1959).

E Regular in small numbers; first record 1926.

M Occasional; very few.

C 20+ in November 1935.

House Sparrow *Passer domesticus*. **R** Bred in pine trees Kinloch 1934. None seen early 1950s but wintered 1957/58 and 7 prs nested 1958. Increase to at least two dozen pairs since 1964.

E First nested Kiel cliffs 1885; by 1888 also nesting Laig farm and steady increase thereafter until 1930s when fairly numerous. Now nest chiefly at Cleadale and on houses at Kildonan and Galmisdale, probably several tens of pairs; flocks up to 50 at Cleadale in August 1960 and 1962.

M "Plague" proportions in early 1930s. Then killed, and decreased, but big increase again 1963.

C None c. 1900, common by 1930s. Decreased markedly in 1940s and restricted to Coroghan. Common again 1953, and many tens of pairs breed now; flocks up to 70 seen in August 1962 and 1964.

Tree Sparrow *Passer montanus*. **R** Injured bird February 1962 and flock of 20 in May that year; 6 at Harris June 1965.

E 6-8 prs nested in ruins at Kildonan 1884-91, but no records thereafter until 1950, when several seen November. Two at Kildonan 1964.

C Less than 3 prs Coroghan 1933; none thereafter until 1961. At least one pair bred Coroghan 1962; breeding suspected in old graveyard 1963; several birds present August 1964.

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Summary

The Small Isles—Rhum, Eigg, Muck and Canna—and their habitats, are described in relation to the breeding birds and mammals. Information on the birds of each island and changes in their status is given in a detailed systematic list, to which is added an extensive list of references to published material and an appendix giving details of ornithological visits to the islands.

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Appendix

Dates of observations from which the systematic list was compiled

RHUM

- 1881—summer, J. A. Harvie-Brown.
- 1886—August, J. A. Harvie-Brown.
- 1889—June, J. A. Harvie-Brown.
- 1910—summer, Miss E. V. Baxter, Miss L. J. Rintoul.
- 1934—19th-26th June (not 1933 as stated in *Scot. Nat.* 1939: 22), A. G. S. Bryson, J. H. B. Munro, G. Waterston.
- 1948—late July, Seton Gordon.
- 1950—19th-22nd June, W. R. P. Bourne.
- 1955—25th-30th July, W. R. P. Bourne.
- 1956—26th-31st May, T. C. Arbuthnott, W. J. Eggeling, A. B. Duncan, E. M. Nicholson.
- 1957-65—V. P. W. Lowe.
- 1957—July, C. Booth, C. Hodgkinson.
- 1958—16th June-3rd July, J. B. Nelson.
- 1958—3rd-15th August, N. G. Campbell.
- 1959—3rd-15th August, P. R. F. and Ampleforth College party.
- 1961—15th-20th May, P. A. Banks, B. Campbell, K. Williamson.
- 1963—15th-22nd June, A. W. Mitton, J. MacCafferty.
- 1963—9th-18th September, P. F. Cornelius, C. J. Evans, D. A. Palmer.

EIGG

- 1875-79—frequent visits, A. F. Joass.
- 1877—August, R. Gray.
- 1870s and early 1880s—G. Scott, manager of the island.
- 1879—late April, A. C. Stark.
- 1879—late May/early June, J. J. Dagleish.
- 1880s—A. H. Macpherson, owner of Eigg.
- 1881-88—short summer visits, Rev. H. A. Macpherson.
- 1882—18th-26th May, Rev. H. A. Macpherson.
- 1884—19th-24th June, W. Evans.
- 1887—17th-23rd June, J. A. Harvie-Brown.

- 1888—July, Rev. H. A. Macpherson.
 1891—late June, J. A. Harvie-Brown.
 1891—Harold Raeburn.
 1909—31st May-4th June, G. G. Blackwood.
 1910—May, Rev. J. M. McWilliam, O. H. Wild.
 1913—20th-24th June, J. Kirke Nash, D. Hamilton.
 1926—July, C. G. Connell.
 1927—summer, A. B. Duncan.
 1930—2nd-12th June, A. G. S. Bryson.
 1931—15th-18th June, G. Waterston, G. L. Sandeman.
 1933—June, G. Waterston.
 1933—13th June, Miss D. Steinthal.
 1934—June, G. Waterston, A. G. S. Bryson, J. H. B. Munro.
 1939—7th-21st July, W. Crow.
 1949—July, J. D. Lockie.
 1952—11th-20th August, Mary Henderson.
 1953—7th-17th July, R. Napier, W. Law.
 1955—23rd-30th July, W.U.F.
 1957—22nd July-1st August, W.U.F.
 1958—11th-21st August, P.R.E. and Ampleforth College party.
 1959—1st-31st August, Mrs E. Hamilton.
 1959—19th-26th September, W.U.F.
 1960—1st-25th August, K. D. Briand.
 1962—April, R. R. Lovegrove, E. Byrne.
 1962—26th May-2nd June, W. Wyper.
 1962—July, R. R. Lovegrove.
 1962—1st-21st August, K. D. Briand.
 1963—20th-25th July, W.U.F.
 1963—31st August-7th September, J. Watson.
 1963—17th September, P. F. Cornelius, D. A. Palmer, C. J. Evans.
 1964—29th June-4th July, J. L. S. Cobb.

MUCK

- 1889—June, J. A. Harvie-Brown.
 1913—23rd June, J. Kirke Nash, D. Hamilton.
 1930—8th August (Horse Island only), G. Waterston, A. G. S. Bryson.
 1934—15th-17th June, J. H. B. Munro, A. G. S. Bryson.
 1955—24th July, W.U.F.
 1960—18th May, K. Williamson, B. Campbell, P. A. Banks.
 1963—15th-20th July, W.U.F.

CANNA

- 1881—June, J. A. Harvie-Brown.
 1887—June, J. A. Harvie-Brown.
 1902—26th June, W. H. Workman.
 1920s—several visits, J. Kirke Nash.
 1920s and early 1930s—notes kept by A. C. Thom, then owner of Canna.
 1933—12th June, Miss D. Steinthal.
 1933—16th-20th June, G. Waterston, A. G. S. Bryson.
 1936—July, R. Carrick.
 1937—June and July, J. D. Robertson.
 1948—20th August-10th September, Merchant Taylors' School, Crosby, and Monkton Combe School, Bath; joint expedition.
 1953—13th-24th June, H. A. Course.
 1954—early July, R. Napier, W. Law.
 1956—23rd-30th June, H. A. Course.
 1956—4th-11th July, Miss D. Bradley.

1958—31st July, A. N. Sykes.

1961—17th-29th July, P.R.E., B. R. Slattery, Miss P. Harrison.

1961—14th-27th August, Repton School party.

1962—2nd-4th June, W. Wypér.

1962—31st July-15th August, P.R.E. and Ampleforth College party.

1962—8th-18th August, Miss F. Kiddie, Miss E. Cubitt.

1962—13th-25th August, Repton School party.

1963—17th-29th June, P.R.E., B. R. Slattery, P. Woods, Mrs P. Woods.

1964—30th July-10th August, K. Williamson.

Short Notes

American Wigeon in Shetland

Shortly after my return from leave on Fair Isle, in the middle of October 1966, I heard that a duck with an American ring had been shot during my absence. For the next few weeks I attempted to get information on the bird, but it was the middle of December before I was able to contact the fisherman concerned and obtain the ring and relevant information.

On 7th October 1966 George Leslie of Virkie was hunting duck and encountered a flock of five on the Loch of Mails, two miles north of Sumburgh airport. He shot one, which he later found to have an American Fish and Wildlife Service ring 665-58773. When I saw him he said it was a normal Wigeon, but I discovered that it was somewhat smaller and lighter than others he had obtained on previous occasions. I did not see the bird at any time, but it was claimed to be good eating although rather small.

Later I learned through the Ringing Office that the bird was an American Wigeon *Anas americana* and had been ringed as a female chick near Sheffield, Grand Lake, New Brunswick, Canada, on 6th August 1966, just two months before it was shot. I calculated that the distance between the ringing and recovery points was 2760 miles NE.

I understand that this is the first satisfactory record for Shetland. It is of particular interest since there can be no doubt that this was a genuine wild bird, whereas there is frequently the suspicion with records of rare ducks that the birds have in fact escaped from collections. On published information this is only the third recovery of an American-ringed duck in Britain. The other two were Pintail.

M. CARINS.

(For details of another Scottish record see Current Notes.—Ed.)

Surf Scoter in Fife

In late autumn and winter there are big flocks of Common and Velvet Scoters off the east shore of Tentsmuir. On 2nd October 1966 my wife and I were using a 60x telescope to examine a flock of about 300, moving out on the ebbing tide, with a few Scaup and Slavonian Grebes and single Red-throated Diver, Great Crested Grebe and Guillemot, when we came on a drake Surf Scoter. It was a large black duck and at $\frac{1}{2}$ mile range clearly showed a bold pear-shaped patch of white on the back of the head, tapering almost to a point towards the base of the nape. When it faced us the bird showed a smaller narrow patch of white above the bill, which at that range looked pale orange and similar in size to the other scoters' bills.

R. JOB.

(Surf Scoters were seen in the same area in 1928 and 1955 (*Scot. Birds* 2: 135). In the past five years there has been an increase in the number of Scottish records, with reports from the Solway and Moray firths, the Outer Hebrides, and Orkney (*Scot. Birds* 2: 306; 3: 195, 252, 362; 4: 294).—Ed.)

King Eider in Shetland

On 6th September 1966 G. D. Joy found a King Eider in a flock of about 1000 common Eider off Sumburgh Head. I had examined a raft of 700-800 Eiders there two days before but failed to find it. On the 7th with James Irvine I scanned these birds for 45 minutes before finding the King Eider. Being a drake in full eclipse it was most inconspicuous.

The birds were diving and feeding and being harried slightly by a small party of Herring Gulls. One Eider was seen with a crab in its bill. After feeding, the King Eider preened and flapped its wings, showing the colour of the feet and the wing and underwing markings. We watched for about two hours and made the following description:

Slightly smaller than Eider; similar shape, but forehead steep and tail shorter and more pointed. Colour mostly brown like female Eider, looking much darker when sun went behind a cloud; back and tail darker brown; breast creamy brown; scapulars white, but area smaller than Eider's; underwing dirty white; no sails visible in wings, nor white patch near legs; head brown, with pale line at edge of hood, extending down and back from eye; pale creamy ring round eye; bill dull pinkish orange, with white tip to upper mandible, the colour being more obvious when bird looked to one quarter; legs dull orange-yellow.

We had both previously seen a drake King Eider in full plumage and another in the final stages of eclipse plumage (*Scot. Birds* 3: 311; 4: 295) and were able to confirm G. D.

Joy's identification. On 9th September the big raft of birds was still there and I showed the bird to John H. Simpson of Whalsay, who also identified it although he had no previous experience of the species.

DENNIS COUTTS.

Buzzards breeding in Orkney

Until well into the 1950s the Buzzard was a very uncommon visitor to Orkney. Buckley and Harvie-Brown in *A Vertebrate Fauna of the Orkney Islands* (1891) only give four occurrences, to which James Omond in *How to Know the Orkney Birds* (1925) has nothing to add. On the other hand the Rough-legged Buzzard has for long been known as a regular passage migrant and sometimes a winter visitor.

I saw my first Buzzard in Orkney in 1954, and in the next few years odd birds were turning up with increasing frequency. Ever since 1961, when a pair were seen together in spring, there have been speculations on the probability of their breeding. Then in 1962 and again in 1964 two different people in each case saw a pair of Buzzards in late summer accompanied by what were apparently flying young. During the intervening summer of 1963 I spent a good deal of time searching, but though the pair was occasionally seen there was no proof or evidence of successful nesting. In April 1965 I thought the problem was going to be solved when I saw a pair building their eyrie on an inland cliff, but three weeks later the nest seemed to have been abandoned.

It was on 27th April 1966, while exploring a Peregrine cliff, that I came across, by mere chance, a Buzzard incubating three eggs. Two young were subsequently reared. They were fed on leverets and rabbits and on one occasion there was a pigmy shrew in the nest. There is strong evidence that a second pair attempted to breed. I saw the pair on 28th April, but they had not yet started building. However on 25th June there was a substantial nest at the 1965 eyrie, which showed every sign of fairly recent occupation but was empty. This pair had evidently failed again.

E. BALFOUR.

Crane in Aberdeenshire

A common Crane was first seen at the farm of Drums, 3 miles north of Newburgh, on Saturday 15th October 1966, and many of the local ornithologists watched it next day. The weekend was characterised by quite thick mist and a southeasterly breeze, bringing a considerable landfall of Fieldfares, Blackbirds, Ring Ouzels, Redstarts, Goldcrests and other birds around Newburgh. The Crane was seen

again on the morning of the 17th and on the 23rd but not since.

We had good views of it both on the ground and in the air. In flight we noted the extended neck, relatively short bill, short rounded tail, and the feet extending far behind. The wings were distinctly splayed at the tips, which were much darker than the rest. On the ground the large size was unmistakable, as were the long neck and legs and the drooping feathers over the tail. The head and neck markings were not well developed, though there was a suggestion of a light stripe extending through the eye to the back of the head. The upper neck was not distinctly darker than the rest and I concluded that this was an immature bird.

GEORGE M. DUNNET.

Gull-billed Tern in West Lothian

While watching a procession of terns moving west up the Forth at Dalmeny two hours before the afternoon high tide on 3rd September 1966 I had the good luck to see a Gull-billed Tern among the several hundred Common and Sandwich Terns. I was using 9x35 binoculars, and the bird was about 50 yards away, flying between two Sandwich Terns.

My attention was first caught by the shorter, relatively thicker and apparently all-black bill of the middle bird, together with its compact and short-tailed appearance between the others. Realising I would have only a moment to observe significant detail, and knowing from past experience how difficult it is to make sure of the shape and colour of a beak against the background of the sea, I concentrated on the colour of the bird's upperparts. The grey of the mantle, which seemed a little darker than a Sandwich Tern's, stretched all the way over the rump and upper tail-coverts and graded without clear demarcation into a somewhat paler grey tail.

The bird had the white forehead but substantially dark nape of an adult entering winter plumage, but I also got the impression of some dark markings on the wing-coverts, which would be consistent with the *Handbook* description of a year-old bird. It did not call. In most respects I thought it much like a Sandwich Tern, and I observed no indication of either a different rhythm of flight or a different general outline, apart from the more compact appearance.

T. C. SMOUT.

(The only previous Scottish records of the Gull-billed Tern are of one in Orkney on 7th May 1913 (*Scot. Nat.* 1913: 154) and one in East Lothian on 11th September 1960 (*Scot. Birds* 1: 335)—Ed.)

Bee-eater in North Sutherland

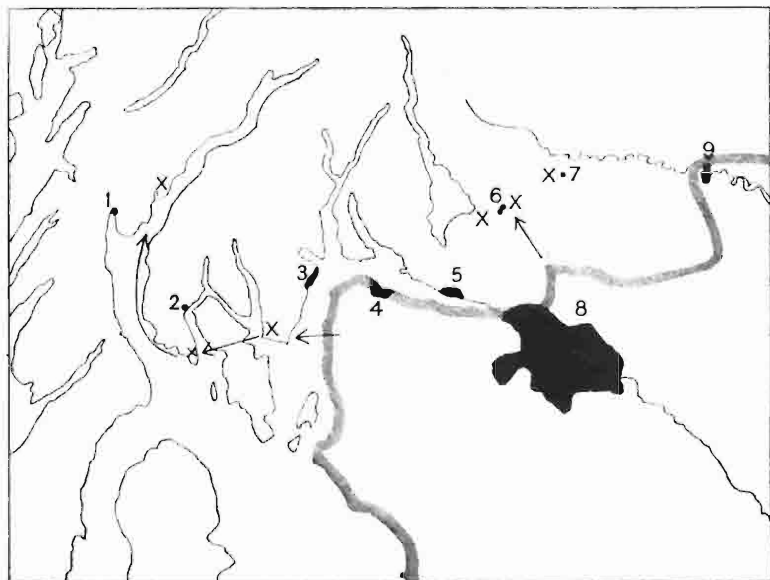
At the beginning of May 1966, from the 2nd to about the 4th, we had a visit from a Bee-eater at Durness. I was busy with the lambing at the time but saw it when I came home for my lunch. It was a most striking bird with deep green breast, yellow throat, and a deep rusty golden colour on the crown and back, and it flew in a most distinctive way like a Swallow. Fuller details have been supplied to the Rarities Committee.

D. E. MACKAY.

(Other 1966 records of three in Orkney from about 31st May to 5th June and one on Fair Isle on 13th June have been noted in *Scottish Birds* 4: 310.—Ed.)

The Magpie in western Scotland

The Magpie in Scotland is extremely local in its distribution. Whereas it is common around Glasgow (8 on map) and to the south of the Clyde, it is never seen in Dumbarton (5). The shaded line on the map marks the western limit of the area in which it commonly occurs. The crosses north of Glasgow represent scattered observations in the Drymen (6) to Buchlyvie (7) area from which one may deduce that the



species is consolidating a recent advance, made possibly in the direction indicated, along the Blane Valley.

Within the last four years Magpies have been seen regularly at a few places in Argyll: Ardyne Point, south of Dunoon (3), Ardlamont Point, south of Tighnabruaich (2), and Asknish Forest, north of Lochgilphead (1). It is reasonable to assume that these birds have spread from Renfrewshire along the lines indicated. It would be interesting, therefore, to hear of any occurrences of Magpies between these three points, perhaps in Bute or along the farmland forming the southeastern shore of Loch Fyne.

T. D. H. MERRIE.

Nuthatch in Kirkcudbrightshire

In the middle of October 1966 on a visit to Dumfries I saw a Nuthatch at a bird table and a nut basket in a garden a few miles west of the town. About a month before this I had a letter from my father telling me that he had seen one at the same place. We both know this bird well, with its blue-grey back, pinky front, dark line through the eye, longish straight sharp beak and short blunt tail, and can be quite sure that what we saw was a Nuthatch. It was seen again towards the end of November.

V. E. C. BALFOUR-BROWNE.

(It is worth looking for this species anywhere in the south of Scotland. Another winter record, of one in Perthshire between November 1963 and February 1964 (*Scot. Birds* 3: 83), is the only other Scottish record for over 20 years, but there have been rumours of one or two others which sounded quite possible, but for which we could not get adequate confirmation.—Ed.)

Dippers diving in icebound loch

On 20th November 1966 about 1.30 p.m. I stopped on the B 846 overlooking Loch Kinardochoy, Perthshire. The loch was almost frozen over, with one or two patches of open water. Amidst the snow and ice my attention was drawn to three birds on the ice. They would suddenly dive into the water and stay under for 10-15 seconds, then bob to the surface, where they swam about like miniature penguins, with their tails sticking up, before jumping clear of the water onto the ice again.

They were very small birds and I could not recognise them until I got the glasses out and found them to be Dippers. I was so fascinated by their behaviour that I watched for about 20 minutes before pushing on. During this whole time they were constantly diving in and out of the water. I have never

seen Dippers behaving in this way before, and indeed I have never seen Dippers anywhere but beside running water.

J. B. MURRAY.

(We referred this note to James Alder, who recently published a picture of two Dippers feeding at an ice hole (*Birds* 1: 9), and he commented: "I would describe this behaviour as characteristic. Dippers are forced by hard weather to come down from smaller streams to seek more open water. I have often watched them behaving like this (although from hundreds of stopwatch checks, I have never recorded dives of longer than 10 seconds). I assume that the Dippers described in the note were foraging at the loch's edge, where the water was shallow. The birds watched by me have never been in water more than 3 feet deep. One was diving from moving icefloes in the River Tyne; another used a small hole in thick ice and obviously foraged well under the ice; two males, both ringed, shared an ice hole, although they had been fighting over territory when the river was unfrozen. All of these birds were feeding outside their normal upstream territories and returned to them before dark. These are but a few typical examples from observations of many known individuals. It is obviously standard practice. What is strange is the shortage of observations by other ornithologists." —Ed.)

Blue Rock Thrush in Orkney

At 1030 hrs GMT on 29th August 1966, in the courtyard of the lighthouse on North Ronaldsay, Iris Walker saw a bird which she described as about the size of a Starling but blue-grey all over except for darker wings and tail. It flew off towards the shore and was lost until the evening, when R. Smith found it under the air receiver tanks. When we flushed it I immediately saw the all-over slate-blue plumage. It was extremely shy, and only by following it about for 30 minutes was I able to write down a description. From my books I recognised it as a male Blue Rock Thrush, and as there was no British record of this species I telephoned Roy Dennis on Fair Isle.

On 30th August I watched it for an hour from 0600 hrs as it fed in a park by the lighthouse, most of the time close to the foundations of a wall which had been taken down. Its feeding movements were very quick; sometimes it would pick at the ground two or three times in succession, and once six times. It took what I thought was a fly from the wall, running quickly forward to get it. None of the food it picked up was recognised, but it definitely did not eat worms, as two Blackbirds were doing close by. Any approach by the

Blackbirds caused it to retreat, once with a short flight.

By the afternoon it had moved to the ruins of a house about a mile away, where I watched for another two hours. It would perch on a rock, make a short low flight to the ground, where it was hidden by the heavy growth, and return to its stone after about 30 seconds. Sometimes it cocked its head on one side. A Starling landed near it and I saw that it was about the same size as the Blue Rock Thrush and its legs were a similar length, but its tail and bill seemed longer and its body slimmer. A flock of Starlings landed on the roof of the house and the rock thrush shot under a stone at a surprising speed. It reappeared after a minute, first sticking its head out to look round. It then began to investigate under stones, and disappeared into an opening for ten minutes before emerging to perch on its stone again. It held its wings low as Blackbirds and Wheatears often do, and constantly flicked its tail up and down, occasionally with a side movement and a twirl like a shrike. The only call I ever heard was similar to a Fieldfare's.

On 31st August Roy Dennis and a party of ornithologists from Fair Isle chartered the *Good Shepherd* to visit North Ronaldsay, but in spite of a long search the bird could not be found. I had two further reports of it, the last on 6th September in a force 10 storm.

Description Head, nape, mantle, back, rump and scapulars slate-blue, decidedly lighter than the "Field Guide" illustration; upper tail-coverts slate-blue; tail dark slate-blue with tips very badly worn and about a third of outer right feather broken off; lesser wing-coverts slate-blue; greater wing-coverts slate-blue but dark towards ends, with extreme tips lighter; primaries dark slate-blue with slight paleness at tips; ear coverts slightly darker than head, showing fairly plainly in good light; eyestripe, slightly darker than head, not noticeable except in very good light; chin, throat, breast, belly and axillaries slate-blue; under wing-coverts slate-blue; primaries slate-blue below, seeming darker than above; bill dark brown, paler on lower mandible, especially at base; legs dark brown.

KENNETH G. WALKER.

(The identification of this bird is accepted by the Rarities Committee, but in view of the number of Blue Rock Thrushes that are now imported it is impossible to be sure that the bird was not an escape. The damaged tail and the fact that this is not a strongly migratory species indicate the need for caution.—Ed.)

Greenish Warbler in Berwickshire

Under a dull sky at about 0930 hrs BST on 15th October 1966 I was engaged in a count of grounded night migrants concentrated round the loch behind St Abbs Head. Near the mid point of the western shore an isolated clump of mature

sycamores held about 20 small birds, mainly Goldcrests and Robins but also several Chiffchaffs and a cock Blackcap.

Whilst watching these birds from the adjacent slope (I was some 20 yards away and above the tree canopy) I spotted a noticeably light-coloured *phylloscopus* moving the canopy of the nearest two trees. Compared to two or three Chiffchaffs moving about in the same foliage it was a paler yet brighter bird. It was also slimmer (though overall its length appeared similar) and much more active, constantly flicking its wings and tail. After two or three minutes it came into open branches and I noted that there appeared to be a light thin bar on the left wing. As several of the Chiffchaffs were showing a light shade on the greater coverts (as they often do) I was not immediately certain that the bar was real. I therefore moved closer and lower down the slope to a position still slightly above and under 15 yards from the bird. From there I saw that the left wing-bar was whitish and a definite plumage mark. On the right wing the bar was slightly less marked, appearing as a thin greyish line.

Realising that the bird was therefore one of the 'single-barred' leaf warblers I then concentrated on the head. This showed a distinct white supercilium, from bill to end of ear coverts, and a noticeably dark line through the eye, both under a greyish-toned crown. The bill was similar in proportion to a Chiffchaff's, which indicated that the bird was a Greenish Warbler. I then switched my attention to the legs and feet. The tarsi were grey, but not as dark as the legs of the Chiffchaffs, and the feet showed a greenish tinge. I therefore concluded that the bird was in fact a Greenish Warbler, a species that I had seen twice before.

A fully annotated field sketch was made and this forms the basis for the following description and a finished coloured drawing made on my return to Edinburgh.

A lighter, whiter bird overall than Chiffchaff, with upperparts greener, greyer, cleaner, less brown, and underparts whiter, brighter. Obvious against dark sycamore canopy, easy to pick out, not getting lost like Chiffchaff. Slimmer than Chiffchaff but same length overall. Very energetic, more so than Chiffchaff, constantly flicking wings and tail. Head well marked with thin white supercilium, fading at end of ear coverts, and dark line through eye, both more prominent than on Chiffchaff. Head less domed than Chiffchaff's and finer. Greyish wash over crown and nape. Dusky patches on sides of chest, surprisingly yellow wash in mid-chest; greenish-yellow wash along top of flanks; white throat and belly. Left wing-bar whitish, more prominent than right; pale but not bright fringes to folded secondaries. Light on rump, contrasting with tail. Thin weak bill. Legs grey (not as black as Chiffchaff); greenish at feet.

D. I. M. WALLACE.

(This is the second record for Forth and the first for the

Scottish mainland. The species was first recorded in Scotland in 1945. Between then and 1961 there were six records from Fair Isle and one each from Whalsay and the Isle of May—one at the beginning of June and the others between 15th July and 19th September.—Ed.)

Pallas's Warbler at Fair Isle—a new Scottish bird

Fair Isle experienced southeast winds, due to an anti-cyclone over northern Europe, from 6th to 11th October 1966. These winds produced large numbers of thrushes, a record total of 1500 Bramblings, and several Richard's Pipits, Great Grey Shrikes and Scarlet Grosbeaks.

After a morning of rain on 11th October my wife and I found a Pallas's Warbler beside a building near the Bird Observatory. G. J. Barnes and D. Parkin were soon on the scene and we watched it for about five minutes as it fed on the ground and then in thistles. It was very confiding and at one stage was feeding only six feet from me. It fed busily in the vegetation and made short sallies after small flies, like a Goldcrest. Quite suddenly it flew off over North Haven and landed in the cliffs; we did not see it again.

It was a very small warbler, even slightly smaller than a Yellow-browed Warbler. It was rather like that species in colour, but the upperparts were greener, more Firecrest colour. The rump was yellow and showed as an obvious yellow patch when the bird was in flight. The head pattern was most distinctive, with a prominent yellow crown stripe and a long yellow superciliary in front of, over and behind the eye, being brighter yellow in front of the eye. The wings were greenish with two creamy-yellow wing-bars formed by the tips of the median and greater coverts, the latter being more prominent. The tertials were fringed creamy-yellow. The tail was short and greenish. The underparts were white, suffused yellowish on the sides of the breast and flanks. The legs, bill and eye were similar to Yellow-browed Warbler. It did not call.

This is the first record for Scotland and the nineteenth for Great Britain. This rare species, which breeds in south Siberia and normally winters in southeast Asia, has been becoming more frequent in England, in late autumn, during the last decade, and seventeen of the eighteen English records have been since 1951.

ROY H. DENNIS.

Current Notes

Compiled by P. J. B. SLATER

(**Key to initials of observers** : D. G. Andrew, R. S. Baillie, I. V. Balfour-Paul, Dr D. A. Bannerman, W. T. G. Bates, Miss P. G. T. Baxter, G. Bennett, F. N. Betts, H. Boase (HBs), H. Boyd (HBd), T. Boyd, W. Brotherston, Miss E. Brown, D. G. Bruce, D. Buchan, N. G. Campbell, J. Carson, R. A. Cheke, D. Coutts, Miss V. C. Cowan, J. K. Cowden, C. N. L. Cowper, G. M. Crighton, W. A. J. Cunningham, R. H. Dennis, G. A. Dickson, R. C. Dickson, Dr I. T. Draper, M. M. Draper, J. Dunbar, Mrs J. P. Dunlop, A. Dunthorn, W. M. M. Eddie, M. J. Everett, K. Forrest, J. E. Forrest, I. Gibson, Mrs J. A. R. Grant, P. Grubb, T. Halliday, C. G. Headlam, M. J. Helps, R. Hewson, D. C. Hulme, Mrs E. Hunter, E. N. Hunter, E. T. Idle, A. Japp, R. A. Jeffery, Dr D. Jenkins, P. Johnson, A. R. Kitson, D. J. Law, R. M. Leaney, A. F. Leitch, J. Lister (JLr), J. Lockerbie (JLb), D. Macdonald, D. W. R. Macdonald, M. A. Macdonald, M. K. Macduff-Duncan, Dr H. N. MacLachlan, A. T. Macmillan, M. P. Macmillan, R. Marrs, Mrs J. Matthews (JMs), Prof. M. F. M. Meiklejohn, T. D. H. Merrie, J. Mitchell (JMl), M. Morrison, C. C. I. Murdoch, D. J. Norden, D. W. Oliver, A. Paterson, R. K. Pollock, J. A. Pollock-Morris, Mrs I. Rainier, A. D. K. Ramsay, G. A. Richards, W. K. Richmond, I. B. Roy, Dr M. Rusk, W. Russell, Miss M. Salmund, J. G. Selwyn, J. R. T. Shanks, Mrs A. F. W. Sharp, P. J. B. Slater, Mrs E. M. Smith, K. G. V. Smith, R. W. J. Smith, D. M. Stark, A. G. Stewart, R. A. Straton, R. L. Swann, C. Tait, I. Taylor, Miss V. M. Thom, B. Thurston, R. B. Tozer, R. J. Tulloch, L. A. Urquhart, K. Walker, G. Waterston, A. D. Watson, J. Watt, Hon. D. N. Weir, G. T. White, Dr D. F. Whyte, Mrs J. A. Whyte, W. H. Wild, D. R. Wise.

(**Unless otherwise stated January to April dates refer to 1967 and all others to 1966.**)

Distribution

Observations made before 1st October 1966 are excluded from this section except where they are used to amplify more recent topics.

In Shetland **Red-throated Divers** were reported from many voes in January and February, whereas usually only odd birds winter (RJT).

In January two **Great Crested Grebes** were inland at Castle Semple Loch, Renfrewshire, on 22nd (LAU), and an immature was at Loch of Lowes, Perthshire, on 28th (HBs). A **Red-necked Grebe** was seen off Innermessan on Loch Ryan, Wigtownshire, on 17th December (RCD), and three off Seafield, Midlothian, on 5th February were further up the Forth than usual (DGA). In the west, a **Black-necked Grebe** was seen at Loch Ken, Kirkcudbrightshire, on 6th January (AP); one was on Loch Ryan on 27th January (JGS), and two were there on 10th March (GAR). Two were near the Lomond Hills in Kinross-shire on 31st December (TDHM); two were

off Gullane Point, East Lothian, on 28th January (CT), and one in summer plumage was there on 26th March (PJ, RLS).

A **Cormorant** showing the characteristics of the southern race, with the sides and back of its neck white, was seen at Eastfield, Midlothian, on 26th February (MFMM, DRW). Nearby, in Leith Docks, about 30 **Shags** were noted on 18th February and about 10 on 5th and 20th March, the locality being unusually inshore and urban for this species (DGA); though odd birds occasionally appear on the tidal part of the Water of Leith (ATM).

A drake **American Wigeon** was seen at Inverness from 16th December to 9th March, almost certainly the same bird as in the two previous winters (3: 360; 4: 294) (RHD, MM). A male **Pintail** in an unusual area was one seen in a flock of about 400 Wigeon on Hoselaw Loch, Roxburghshire, on 31st December (RSB). A drake **Tufted Duck** was seen at Aberlady Bay, East Lothian, on various dates between 29th December and 24th March (GB, PJ, DWRM, MAM).

A female **Long-tailed Duck** was on Loch Leven, Kinrossshire, on 19th November (WTGB), and a pair was on Lindores Loch, Fife, on 12th February (JW). One, perhaps the same as that previously seen on Carlinwark Loch (4: 381), was on Loch Ken from 6th January until at least 4th March (AP, ADW); two were there on 11th February (RBT). On the sea, a particularly high count of 423, mostly males, was made at Leven, Fife, on 12th March (DWO). In Ayrshire, 33 were seen at Barassie on 20th January and at least 20 on 16th March (GAR). Also in that county, a duck and two drake **Velvet Scoters** were recorded at Turnberry on 5th February (AGS), and a single bird was at Barassie on 12th March (GAR). Four **Goosanders**, including one drake, were at Morton Lochs, Fife, on 5th February (DWO).

Wintering **Smews** have been seen in the following places:

River Conon, E. Ross—redhead on 18 Nov (CGH).

Montrose Basin, Angus—♂ on 18 Mar (ADKR).

Kilconquhar Loch, Fife—redhead on 5 Feb (PGTB).

Roseberry reservoir, Midlothian—♂ on 26 Feb (DGA), and 5 Mar (EMS, RWJS).

Castle Semple and Barr Lochs, Renfrew—♂ and redhead on several dates between 15 Jan and 18 Mar (GW, GTW, WHW); ♂ and 2 redheads on 22 Feb (GAR).

Rowbank reservoir—♂ and redhead on 31 Mar (GAD, IG).

Doonfoot, Ayr—♂ on sea after frost on 5 Jan (GAR).

Near Stranraer, Wigtown—♂ shot on 11 Jan (JKC).

Grey Lag Geese were noted going south on Speyside in Inverness-shire as late as 5th February, and they had started going north by 1st March (DNW). An early departure from their wintering area was also noted in Fife (DWO).

The following are reports of **White-fronted Geese** in less usual areas:

- Loch Eye, E. Ross—45 Greenland birds on 23 Feb (RHD).
- Aberdeen—9 over city on 23 Feb (ADKR).
- Dunning, Perth—7 with Pinkfeet on 27 Nov and at least 4 on 8 Jan (TDHM).
- Tibbermore, Perth—European bird on 10 Feb (VMT).
- Near Kinkell Bridge, Perth—2 Greenland birds on 4 Mar (VMT).
- Near Kilconquhar—1 on 12 Feb (DWO).
- New Cumnock, Ayr—18 on 18 Dec (JLb).

Despite efforts to locate more, the only **Bean Geese** found in Kirkcudbrightshire during the winter were eight at Castle Douglas on 9th January (ADW). Outside their usual range 20 **Pink-footed Geese** were at Bridgend, Islay, on 19th February (MFMM).

Five **Snow Geese** have been seen in various localities during the winter. In Fife, they were in the area of Flisk and Balmarino on 21st October, 23rd November and 15th January (HBd), and again on 8th March, having been at Kingskettle on 25th February (JRST). What were presumably the same birds were in Perthshire with Greylags at Powgavie on 6th March and with Pinkfeet on Mugdrum Island on 12th (VMT). It is probable that they had escaped from a collection in Fife. Two were at Loch Leven on 31st December (WTGB); one at Aberlady on 4th January (DJL); and two at Loch Eye from 19th February until at least 10th March (CGH). Birds of definite species were a blue-phase **Lesser Snow Goose** on Mugdrum Island on 12th March (VMT), and a **Ross's Goose** with Greylags near Meigle, Perthshire, on 5th March (JMs).

A Pale-bellied **Brent Goose** was at Dunning, Perthshire, on 27th November and 25th December (TDHM). Two Dark-bellied birds were seen at Loch Ken on 11th February (RBT), and one was at Kilconquhar between 11th February and 11th March (DWO, JW).

The more noteworthy occurrences of **Barnacle Geese** have been as follows:

- Loch Winless, Caithness—1 with Whitefronts on 5 Mar (JARG).
- Old Aberdeen—2 going south on 17 Feb (ADKR).
- Kinkell Bridge, Perth—16 on 22 Jan (VMT).
- Carsebreck, Perth—19 on 4 Mar (VMT).
- Loch Leven, Kinross—2-4 in Nov and Dec (WTGB).
- Endrick Mouth, Stirling/Dunbarton—2 on 1 Jan (TDHM), 5 Feb, 6 Mar and 26 Mar (ETI, JM).
- Muasdale, Kintyre, Argyll—9 on 12 Mar (WR).
- Clachan, Kintyre—4 on 12 Mar (WR).

Further counts of **Whooper Swans** confirm the low proportion of immatures previously reported (4: 383). At Kingskettle, the winter maximum of 312 apparently included only

three immatures (JRTS), and the same number was found in a flock near Loch Garten, Inverness-shire, where the total present varied between 68 and 78 from January to March (RHD). On 1st January an adult **Bewick's Swan** was at Barr Loch (LAU), and five were at Bogside, Ayrshire, on 18th (GAR). Two adults and three immatures were found on ponds near Gartocharn, Dunbartonshire, on 15th January (ETI), and six birds were in a field near Aberlady on 22nd February (DJ).

Rough-legged Buzzards have already been reported in Glenesk, Angus/Kincardine, in the early part of the winter (4: 384); two were still there on 15th January and again on 6th February (GMC, RAC). The bird reported at Evanton, Easter Ross, was still there on 15th March (CGH). In Midlothian, one was seen at Glencorse on 30th December (PJ, RLS), and one was at Garvald, near Heriot, on 29th January (WB). Several have wintered in Shetland on Yell and Unst, the most seen at once being three on Yell and two on Unst, and one was on Fetlar on 22nd February (RJT).

Early **Ospreys** were one seen flying over Upper Loch Torridon, Wester Ross, on 10th March (DFW, JAW), and one perched on a fir tree near Cumnock, Ayrshire, on 27th (RM).

Between 20th January and 20th February a **Peregrine** was seen on five occasions in the area of Carlton Place, Glasgow, whither it was no doubt attracted by the large number of pigeons (LAU).

A cock **Pheasant** seen on Bernera, Lewis, on 25th March was a survivor from several hatched under a hen some five or six years ago and allowed to fend for themselves (WAJC).

Most of the birds which, though resident in this country, are summer visitors to Speyside, were found on their breeding grounds there earlier than usual (RHD, DNW). **Oystercatchers**, **Curlews** and **Lapwings** were all present by early February, left during a storm shortly afterwards, but were back again by 20th (DNW). Oystercatchers well inland during January were pairs at Endrick Mouth on 26th (RKP), and on an island in the Tweed at Kelso, Roxburghshire, on 28th (RSB).

Ten **Black-tailed Godwits** were seen feeding up to their chests in water at Troon, Ayrshire, on 22nd October (RBT). The bird previously mentioned at Barassie (4: 384), wintered there, being seen up to 4th March (GAR). One was seen at the Peffer Burn, Aberlady, on 5th February (RSB). Also at Aberlady, a wintering **Spotted Redshank** was noted on 8th January (WKR), 21st January (GB), 12th February (WMME, PJ, WR, RLS) and 24th March (MAM). One, probably the same as reported previously (4: 384), was at Broomberry,

just south of Ayr, on 15th January (RBT), and one was at Tynninghame, East Lothian, on 8th (CT). A **Greenshank** was back at Upper Loch Torridon by 12th March—an early date (JAW).

There are several records of **Ruff** seen in the first three months of the year. Two males were at Aberlady on 15th January and 11th February (WKR), and in a field near there at least 14 were seen on 4th February and 18 on 18th (DJ). On 16th February a male in near summer plumage was seen at a muddy pool near Langbank, Renfrewshire (RAJ). In March, a male was at Fife Ness on 29th (PGTB); two birds were at Skinflats, Stirlingshire, on 24th (JC, IT); and two were at Maybole, Ayrshire, on 26th (RBT).

In a gale on 18th December a dark-phase **Arctic Skua** was seen amongst Herring Gulls at Loch Keills—an arm of Loch Sween, North Argyll (EH, IR).

As was the case with waders, **Lesser Black-backed Gulls** were noted inland unusually early. On 25th February 25 were at Errol Airfield, Perthshire (VMT), and nine were at Lindores Loch (JW). The first in Lewis was slightly early, on 23rd March (WAJC). A **Herring Gull** which was larger than normal and had darker wings and black patches round the eyes was noted at Belhaven, East Lothian, on 29th January. It was thought to belong to one of the Siberian races (MFMM). An immature **Glaucous Gull** was at Paisley Moss, Renfrewshire, on 11th and 18th March (IG, GTW). Single immature **Iceland Gulls** have been observed at Arbroath harbour, Angus, on 25th February (JD); at Oban, Argyllshire, on 25th March (WMME, DJN); and at Doonfoot on 18th February, in the same place as an adult was seen on 15th (GAR).

Though they do not usually overwinter in the area, **Little Gulls** have been seen regularly off Leven, Fife, this year, the maximum being six on 12th March (DWO). Further afield, an immature was at Loch of Strathbeg, Aberdeenshire, on 5th October (JD), and an adult was on North Ronaldsay, Orkney, on 3rd February (KW). A **Kittiwake** away from the sea was found dead on Inchcailliach, Loch Lomond, in Stirlingshire, on 5th February (RAJ, JMI, BT).

Single winter-plumage **Black Terns** seen in October were over the marsh at Summerston, Glasgow, on 8th and 9th (WMME, WR), and off Gullane Point on 22nd (DGB, PJ, AFL, DWRM).

Outside Shetland, **Little Auks** have been found in the following counties:

Caithness—about 15 found dead in Dounreay, Dunnet, Murkle and Sinclair Bays between Jan and Mar. 1 swimming in Scrabster harbour on 2 Jan (per DMS).

E. Ross—1 found alive on 27 Jan on hill farm between Dingwall and Evanton died subsequently (CGH).

Moray—1 found ashore at Garmouth on 8 Jan and later released (RH).

Fife—1 found dead at St Andrews on 17 Feb; 1 dead at Fife Ness on 15 Feb (PGTB); and 1 recently dead there on 5 Mar (DWO).

E. Lothian—1 seen close in at Aberlady on 29 Jan (DJ).

A **Black Guillemot** was found dead inland at Loch Watten, Caithness, on 29th January (per DMS).

A **Little Owl** was found sitting on the road, apparently stunned, near Dunragit in Wigtownshire on 3rd November; it was released in a nearby field (JKC). A **Kingfisher** was recorded at Montgreenan, Ayrshire, on about 1st December (DNW). Earlier, one had been at New Cumnock in the same county on 31st August and 21st September (JLb).

A **Shore Lark**, the first recorded in Edinburgh, was found at Leith Docks on 5th January (DGB, MAM). It remained in the area for over a month and was seen by many people, the last report being on 11th February (WKR).

Outwith its normal range, a **Magpie** was noted near Hose-law Loch, Roxburghshire, on 18th February (RSB). A pair of **Jays** was present at Montgreenan, Ayrshire, from the beginning of December till at least 14th January (DNW).

Several **Stonechats** have been recorded wintering in East Lothian. An adult male was seen at Aberlady on 30th October (WMME, DJN, WR), 4th March (NGC, PJBS), and 24th March (CT); and it was seen with a female on 18th (PJ, RLS). A male was at Dirleton on 12th February (RSB), and three were there on 25th (PJ, RLS); and a female was recorded at Tynninghame on 12th March (TB, IBR, EMS, RWJS). In Shetland, a male was at Grutness for a week from 7th March (DC), and a female was noted at Cunningsburgh on 13th (RHD). In the autumn, single female **Black Redstarts** were seen at St Andrews on 19th October (RAC), and at Fife Ness on 20th (JARG).

The following are reports of wintering **Blackcaps**:

Inverness—♂ in garden on 9th and 16 Feb; ♀ in another garden on 11 Feb (MR).

Banff—♀ in garden from 22 Feb to at least 29 Mar (AFWS).

Maxwell Park, Glasgow—♂ from 20th to 29 Jan (JPD).

Bonnyrigg, Midlothian—2 ♂♂ in separate gardens early in Jan (per RWJS).

A migrant **Red-breasted Flycatcher** was on St Kilda on 14th October and a very late one was there from 5th to 8th November (PG).

There are good numbers of **Great Grey Shrike** records to add to those already given (4: 389), though these should be compared with the previous list as some probably refer to the same individuals:

Ross—1 at Garve on 8 Mar (CGH), 25 Mar (MKM-D), 7 Apr (CGH); 1 in Torridon/Kinlochewe area on 24 Feb (EB), 2 on 25 Feb (ENH), 1 on 6 Mar (CGH).

Inverness—1 at Loch Moy on 5 Jan; at least 1 at Nethy Bridge from 11 Jan to 25 Feb (RHD); 1 near Coylumbridge on 23 Jan (RH).

Moray—1 at Grantown between 14 Jan and 8 Feb (RHD).

Nairn—1 in Glenferness on 14 Feb (RHD).

Perth—1 at Bridge of Gaur, Loch Rannoch, on 19 Mar (PGTB).

Angus—1 at Balgavies Loch on 15 Jan (GMC, RAC).

Argyll—1 at Loch Don, Mull, on 10 Nov and nearby on 12 Feb (FNB); 1 at White House of Aros, Mull, on 28 Feb (VCC, MS). 1 between Taynuilt and Connel on 25 Oct (KF, MPM).

Stirling—1 at Mugdock Wood on 14 Jan (WMME); 1 at Blanefield on 12 Mar and 3 there on 19th (ITD, MMD); 1 at Endrick Mouth (on Dunbarton border) on 1 Jan (TDHM), 14 Jan (ETI, JMI), 13 Feb (RKP), and 18-19 Mar (ETI, AGS).

Glasgow—1 at Summerston on 7 Jan (WMME) and 20-22 Jan (WR).

Renfrew—1 at Langbank on 15 Jan was seen to swoop behind a hedge and reappear with a Hedge Sparrow in its beak (RAJ); 1 at Lochwinnoch on 12 Mar (LAU).

Midlothian—1 still present at Fountainhall, Stow, up to 30 Mar (see 4: 390) (HNM); 1 flying over reeds at Duddingston on 9 Dec (PJ); 1 at Glencorse on 4th and 5 Jan (MJE, JLR).

Ayr—1 at Kilantringan Loch on 9 Feb (RBT); 1 at Muirhead reservoir on 18 Mar (JAP-M).

Kirkcudbright—1 on west side of Loch Ken on 6 Jan (AP).

North of their normal range, four **Goldfinches** were noted in the outskirts of Dornoch, Sutherland, on 4th February and six were there on 11th March (DM). A **Redpoll** of the Mealy race was seen at Aberlady on 29th December (DWRM), and 25th February (MFMM, DRW); a particularly pale individual was there on 11th February (WKR).

Further reports of **Bramblings** confirm the impression that this year has been exceptional, certainly in the south of the country, the numbers in the largest flocks having proved very hard to assess. The largest concentration was of at least 3000 and possibly up to 5000 near Broughton, Peeblesshire, on 23rd and 25th January (DAB). At Middleton, Midlothian, there was a flock of about 1000 on 1st January (CNLC), and at least 2000 on 2nd March (IVB-P). Other counts have been much smaller, suggesting that the numbers seen earlier in the winter had spread out. About 200 between Heriot and Stow, Midlothian, on 8th January (DB, RAS); 300 near Falkirk, Stirlingshire, on 23rd December (AJ); 250 near Hoselaw Loch on 27th February (RSB); and at least 200 in the vicinity of Forfar, Angus, on 2nd April (JEF), are the highest figures.

Lapland Buntings have already been mentioned near Tain, Easter Ross, in December (4: 392); ten were still in the area on 14th January (CGH). Further south, singles have been reported from Aberlady on 29th December and 7th January

(DWRM, DWO); the shore at Ayr on 17th February (AGS); and Skinflats on 5th and 7th April (JC, IT).

Earlier observations—before 1st October 1966

On 7th August 1966 a **Bittern** was seen at close quarters beside Loch Connel, Wigtownshire, for a short time before it rose vertically into the air and flew off (TH).

An interesting observation is of a compact flock of about 20 **Skuas**, in all probability Arctic, and mostly or all light-phase birds, flying northeastwards low above the trees near Loch Garten, Inverness-shire, on 24th May 1966 (CCIM).

On 20th August 1966 two **Jays** were noted in the plantation of Pitcowdens, Durris, in North Kincardineshire, an area in which this species was recorded for the first time in 1961 (1: 460) (AD).

Some rather older records have come to light of birds seen at Rattray Head, Aberdeenshire. Between 1st and 6th September 1962, 47 **Sooty Shearwaters** were seen passing north (MJH, RML); in 1963, 23 were seen between 25th August and 5th September (ARK); and in 1965 three were seen on 25th September and 14 on 26th (MJH). Between 1st and 5th September 1962 a female **Marsh Harrier** was in the area, and two were present on 6th (MJH, RML), a date for which one was previously recorded (2: 256).

During the big fall of migrants in late September 1965 there was a **Wryneck** at Rattray Head on 28th, a **Red-breasted Flycatcher** on 26th and 27th, and an **Icterine Warbler**, the first for Aberdeenshire, on 27th (MJH). There are very few records of **Lapland Buntings** in Aberdeenshire, where one was at Rattray Head on 31st August 1962 (MJH, RML).

General observations on behaviour

Early return to their breeding grounds has been noted already in the main section for several species. Some others have been found nesting early—no doubt due to the mild weather. Two **Woodpigeon** nests with eggs were found on Speyside on 4th and 5th February (per RHD), and a bird was found sitting on eggs near Alness, Easter Ross, on 14th (CGH). There was a nest containing well-grown young at Culterty, Aberdeenshire, on 13th March and one at Evanton, Easter Ross, on 21st (CGH).

Snow Buntings on Ben Wyvis, Easter Ross, on 22nd February were found to be feeding on small flies dispersed at a density of about one per square yard all over the snow on top of the mountain above 2000 feet (DCH). The fly was later identified as *Leiria modesta czernyi* (KGVs).

Requests for Information

Seabird Breeding Distribution Survey. In 1969 the Seabird Group will be conducting "Operation Seafarer," a general census of the seabirds breeding in the British Isles. This census will include the continuation of the Fulmar, Gannet and Kittiwake censuses falling due in that year, but will also include counts of selected other species to obtain for the first time a national count of the major seabirds breeding in these islands; this will provide the base from which future changes in their populations can be recognised.

To prepare this census the Group has set up its Breeding Censuses Committee, for which it has secured the services of James Fisher and Dr John Coulson as Chairman and Scientific Advisor respectively, and of George Waterston as Scottish Representative. The committee has decided to organise this summer a survey of the breeding distribution of seabirds in the British Isles, with the aim of establishing the presence or absence of each species at colonies in each coastal 10-kilometre square of the National Grid; it is hoped also to obtain rough estimates of the size of each colony, together with information on any special difficulties encountered in censusing that colony. If necessary the survey will be continued next year also. In this way it is hoped to obtain maximum information towards the success of Operation Seafarer in 1969.

Ornithologists living on the coast or holidaying there this summer are invited to complete survey cards for their area this year. Information from past years is also welcome, particularly for colonies in Scotland and Ireland or if the information has not been published in an established ornithological journal. Cards (one for each 10-km square and separate cards for each year) and any further information required may be obtained from the Census Committee Secretary, Raymond O'Connor, Department of Physics, Birkbeck College, Malet Street, London WC1.

Whooper Swans. There have been few young Whoopers with the wintering flocks this year. R. Hewson, 170 Mid Street, Keith, Banffshire, would like data from other parts of Scotland to compare with the situation at Loch Park, which he has studied since 1955. He asks for information on herd size, brood size and number of first-winter birds; and, in view of the smaller numbers wintering at Loch Park now, he would also be glad to hear of any recently colonised areas.

The Scottish Ornithologists' Club

ANNUAL CONFERENCE

The 20th Annual Conference and 30th Annual General Meeting will be held in the Hotel Dunblane, Perthshire, on 27th-29th October 1967. Bookings should be made direct with the hotels. The full programme will be given in the next issue of "Scottish Birds." The registration fee will be 10/-, and the Annual Dinner 25/- for those not staying in the Hotel Dunblane (both to be paid on arrival).

Hotels in Dunblane

Hotel Dunblane (Hydro) (Tel. 2551). Special Conference charge £7.11.0d (or 75/6 per day) including service charge, bed and all meals (except tea on Saturday afternoon) from Friday dinner to Sunday lunch, after-meal coffee, and the Annual Dinner (with wine or soft drinks). For less than a full day, bed and breakfast is 42/-, lunch 11/6 and dinner 17/6.

Stirling Arms Hotel (Tel. 2156). Bed and Breakfast from 25/-.

Neuk Private Hotel, Doune Road (Tel. 2150). B & B 20/- to 23/-.

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Members with cars who have difficulty in getting single rooms in Dunblane should find these two hotels have ample accommodation.

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Prices, except for the Conference Hotel, are provisional and should be confirmed.

LIBRARY ARRANGEMENTS

The Library Committee has formed a duplicate section of the Reference Library, consisting of standard reference books and runs of certain important journals. These are available, at the discretion of the Club Secretary, for lending out to students and others wishing to read up a particular subject. A list of books and journals in this section will be supplied on request.

Normally, not more than two items may be borrowed at one time, to be returned within two weeks. Borrowers will be asked to sign for the books when they take them out, on the understanding that they accept full liability for any loss or damage to the books. Requests for books sent by post will carry the same implication. Borrowers are asked to pay postage both ways and to make sure that the books are adequately packed when returned.

Books cannot be lent out from the Reference Library (except the duplicate section) but any item may be studied on the premises by arrangement with the Club Secretary.

Juniors who wish to choose a book for general reading will still be able to do so. The books available for lending in this way have been incorporated with the collection kept for members of the Young Ornithologists' Club, so that a wider selection is now available to both groups.

THE SCOTTISH ORNITHOLOGISTS' CLUB

THE Scottish Ornithologists' Club was founded in 1936 and membership is open to all interested in Scottish ornithology. Meetings are held during the winter months in Aberdeen, Ayr, Dumfries, Dundee, Edinburgh, Glasgow, St Andrews and elsewhere at which lectures by prominent ornithologists are given and films exhibited. Excursions are organised in the summer to places of ornithological interest.

The aims and objects of the Club are to (a) encourage and direct the study of Scottish Ornithology in all its branches; (b) co-ordinate the efforts of Scottish Ornithologists and encourage co-operation between field and indoor worker; (c) encourage ornithological research in Scotland in co-operation with other organisations; (d) hold meetings at centres to be arranged at which Lectures are given, films exhibited, and discussions held; and (e) publish or arrange for the publication of statistics and information with regard to Scottish ornithology.

There are no entry fees for Membership. The Annual subscription is 25/-; or 7/6 in the case of Members under twenty-one years of age or in the case of University undergraduates who satisfy the Council of their status as such at the time at which their subscriptions fall due in any year. Joint membership is available to married couples at an annual subscription of 40/-. "Scottish Birds" is issued free to members but Joint members will receive only one copy between them.

The affairs of the Club are controlled by a Council composed of the Hon. Presidents, the President, the Vice-President, the Hon. Treasurer, the Editor and Business Editor of "Scottish Birds", the Hon. Treasurer of the House Fabric Fund, one Representative of each Branch Committee appointed annually by the Branch, and ten other Members of the Club elected at an Annual General Meeting. Two of the last named retire annually by rotation and shall not be eligible for re-election for one year.

A Scottish Bird Records' Committee, appointed by the Council, produce an annual Report on "Ornithological Changes in Scotland."

An official tie with small white Crested Tits embroidered on it can be obtained in dark green or in navy blue by Members only from Messrs R. W. Forsyth Ltd., Princess Street, Edinburgh, or 5 Renfield Street, Glasgow, C.2 at a cost of 18s 9d post extra. A small brooch in silver and blue can be obtained for the use of Members of the Club. Price 3s 6d each from the Secretary, or from Hon. Branch Secretaries.

Forms of application for Membership, copy of the Club Constitution, and other literature is obtainable from the Club Secretary, Mrs George Waterston, Scottish Centre for Ornithology and Bird Protection, 21 Regent Terrace, Edinburgh 7. (Tel. Waverley 6042).

CLUB-ROOM AND LIBRARY

The Club-room and Library at 21 Regent Terrace, Edinburgh 7, will be available to Members during office hours, and on Wednesday evenings from 7 to 10 p.m. during the winter months. Members may use the Reference Library and borrow books from the Lending Library. Facilities for making tea or coffee are available at a nominal charge and Members may bring guests by arrangement. The Aldis 2" x 2" slide projector and screen can be used for the informal showing of slides at a charge of 2s 6d per night to cover the replacement of bulbs.

NOTICE TO CONTRIBUTORS

All contributions should be sent to Andrew T. Macmillan, 12 Abinger Gardens, Edinburgh 12. Attention to the following points greatly simplifies production of the journal and is much appreciated.

1. Papers should if possible be typed with double spacing. All contributions should be on one side of the paper only.

2. Topical material for Current Notes should reach the Editors **before the end of March, June, September and December**, at which time they begin to compile this section. All other notes should be sent promptly but important items can be fitted in until a month or so after these dates.

3. Proofs will normally be sent to authors of papers, but not of shorter items. Such proofs should be returned without delay. If alterations are made at this stage it may be necessary to ask the author to bear the cost.

4. Authors of full-length papers who want copies for their own use **MUST ASK FOR THESE** when returning the proofs. If requested we will supply 25 free copies of the issue in which the paper is published. Reprints can be obtained but a charge will be made for these.

5. Particular care should be taken to avoid mistakes in lists of references and to lay them out in the following way, italics being indicated where appropriate by underlining.

DICK, G. & POTTER, J. 1960. Goshawk in East Stirling. *Scot. Birds* 1:329.
EGGELING, W. J. 1960. *The Isle of May*. Edinburgh and London.

6. English names should follow *The Handbook of British Birds* with the alterations detailed in *British Birds* in January 1953 (46:2-3) and January 1956 (49:5). Initial capitals are used for names of species (e.g. Blue Tit, Long-tailed Tit) but not for group names (e.g. diving ducks, tits). Scientific names should be used sparingly (see editorial *Scottish Birds* 2:1-3) and follow the 1952 B.O.U. *Check-List of the Birds of Great Britain and Ireland* with the changes recommended in 1956 by the Taxonomic Sub-Committee (*Ibis* 98:158-68), and the 1957 decisions of the International Commission on Zoological Nomenclature (*Ibis* 99:369). When used with the English names they should follow them, underlined to indicate italics, and with no surrounding brackets.

7. Dates should normally be in the form "1st January 1962", with no commas round the year. Old fashioned conventions should be avoided—e.g. use Arabic numerals rather than Roman, and avoid unnecessary full stops after abbreviations such as "Dr" and "St".

8. Tables must be designed to fit into the page, preferably not sideways, and be self-explanatory.

9. Headings and sub-headings should not be underlined as this may lead the printer to use the wrong type.

10. Illustrations of any kind are welcomed. Drawings and figures should be up to twice the size they will finally appear, and on separate sheets from the text. They should be in Indian ink on good quality paper, with neat lettering by a skilled draughtsman. Photographs should either have a Scottish interest or illustrate contributions. They should be sharp and clear, with good contrast, and preferably large glossy prints.

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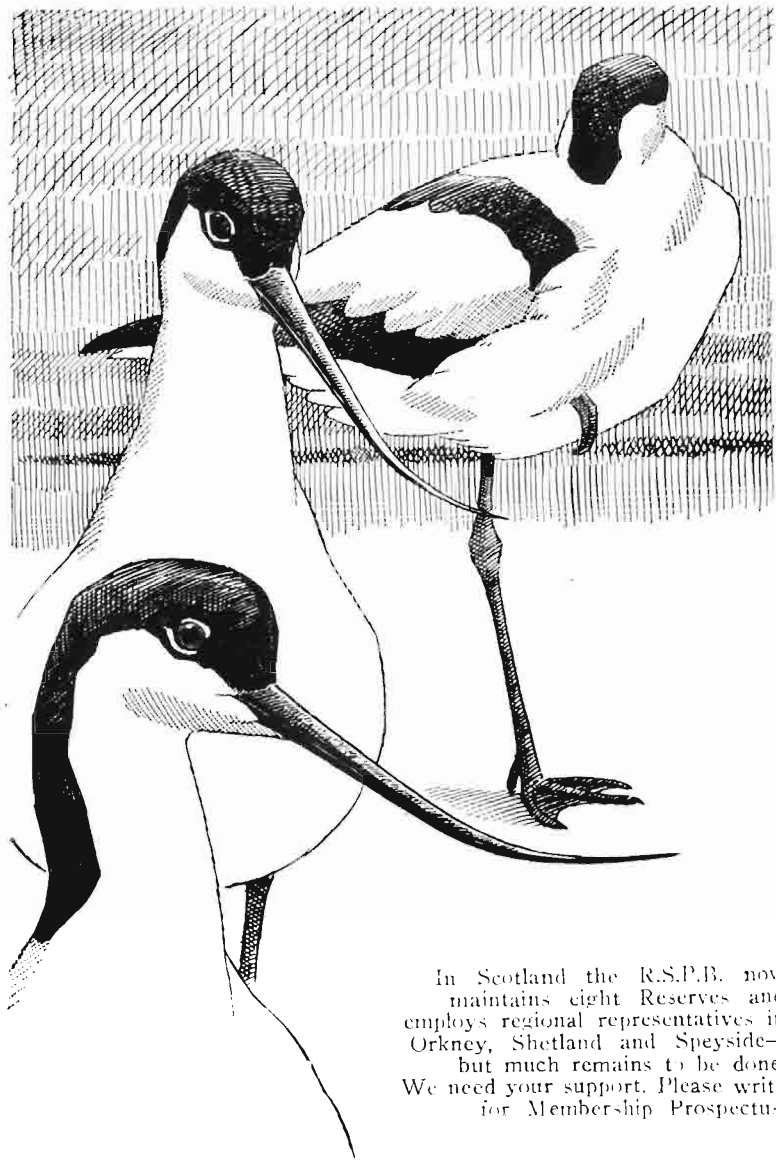
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