

SCOTTISH BIRDS



THE JOURNAL OF THE
SCOTTISH ORNITHOLOGISTS' CLUB

Volume 5 No 4

WINTER 1968

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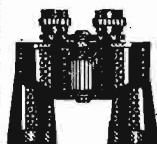
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THE JOURNAL OF THE SCOTTISH ORNITHOLOGISTS' CLUB

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SCOTTISH BIRDS

THE JOURNAL OF THE SCOTTISH ORNITHOLOGISTS' CLUB



Vol. 5 No. 4

Winter 1968

Edited by A. T. MACMILLAN with the assistance of D. G. ANDREW and
M. J. EVERETT. Business Editor, T. C. SMOUT.

Editorial

Scottish Bird Report. We hesitate to bore readers with another appeal on this subject, yet it is too important to let pass unmentioned. 1968 is almost gone. All records for the first ten months should have been in the hands of local recorders for some little time, and no doubt were, so that it remains only to encourage everyone to send the few notes for November and December as early as possible in January 1969. Local recorders should now be well advanced with their summaries, but these cannot be completed satisfactorily until the flow of notes stops and final reports are received from the more active local birdwatchers. We look forward with keen anticipation to seeing the outcome of all the local planning for the Scottish Bird Report; for it remains a matter of confidence rather than certainty that it will be a fine swan and not an ugly duckling; and this depends as much on the cooperation of the local birdwatcher as on the efficiency of the local recorder.

SOC Conference. Another SOC Conference has come and gone, as enjoyable an occasion as ever, and attended by more people than ever before—over 300 of them, with about 280 at the dinner. Professor M. F. M. Meiklejohn delighted his audience with reminiscences of ornithologists he had met, and James Ferguson-Lees described recent studies of trans-Saharan migrants at Lake Chad; but our outstanding recollection is of Dr Martin Holdgate's lucid plea for preservation of the bird islands of the southern oceans and, especially, the mainland of Antarctica, from thoughtless and irreversible damage, and his optimism that in the present atmosphere of international accord this can be achieved. As the first tourists set an ominous foot on the ice, Antarctica is one of the last places on earth where the natural balance of nature remains largely unaltered by man; but the concentration of breeding species at the relatively few suitable sites renders the whole situation particularly vulnerable to disturbance.

New RSPB office. When the Scottish Centre for Ornithology and Bird Protection was opened at 21 Regent Terrace,

Edinburgh 7, in 1959 it provided vastly more space than had previously been available for the joint SOC and RSPB offices. Yet so rapid has been the increase in the scope and activity of the two bodies that by 1968 there was a distinct lack of space, especially for the RSPB, which has now bought No. 17, four doors away. After extensive repairs and redecoration the premises were occupied in the middle of October.

The closest links will be maintained with the SOC at No. 21, and it is hoped to let the surplus parts of the two buildings to other natural history organisations whose aims and interests will blend with ornithology. The RSPB's premises include a fine large room, the whole depth of the building, which is curtained into offices by day and may be converted to a lecture hall by night. A club room will also be available for the Young Ornithologists' Club in the basement.

St Kilda stamps. In the October 1968 *Newsletter* we read that 'local carriage labels' for St Kilda are being introduced by the National Trust for Scotland. They have been designed by Miss Jennifer Toombs and illustrate local birds—Great Auk (4d), St Kilda Wren (5d), Gannet (9d), Shag (1/6d), Leach's Petrel (1/9d), Guillemot (2/-), Kittiwake (2/6d) and Puffin (5/-). Officially these stamps cover the cost of carriage of mail from the islands to the mainland (but not the subsequent postage), and they will be used by Trust work parties and cruise visitors. They are produced in conjunction with the Great Britain Locals Philatelic Agency. The *Newsletter* reports that the stamps have aroused much interest among collectors, many of whom buy them unused. Those interested may obtain them (complete sets only, at 14/9d each) from the Agency, 119 Praed Street, London W2, or from the Trust, 5 Charlotte Square, Edinburgh 2. Further sets will be issued later.

Conference advertisements. We are asked to publicise the 15th International Ornithological Congress (Holland, 30th August to 5th September 1970) and the 3rd All-Ireland Conference on Bird Conservation (County Down, 28th February to 2nd March 1969), of which details may be had respectively from Professor Dr K. H. Voous, c/o Netherlands Congress Centre, 10 Churchillplein, The Hague, and from the RSPB, 58 High Street, Newtownards, Co. Down.

Current literature. Notes with a Scottish interest include:

Food of the Long-eared Owl in Inverness-shire. R. D. Wooller and G. S. Triggs, 1968. *Bird Study* 15: 164-166.

The autumn migration records of the Red-breasted Flycatcher. M. C. Radford, 1968. *Bird Study* 15: 154-160. New analyses, including Fair Isle and Isle of May records.

Ornithological Atlas 1968 - 72

A good start has been made in 1968 towards recording the breeding of all species of birds throughout Scotland. This cooperative enquiry has been launched by the BTO and backed by the SOC Council as a major part of the campaign to record the present status of our breeding birds. Only by establishing a base-line can we judge, in the future, the effects of pesticides, pollution, and the pressure of an expanding human population.

The Atlas project is already indebted to *Scottish Birds* for references to it in recent numbers, and the leaflet describing more fully both the aims and techniques to be used was enclosed with the Spring 1968 issue. In spite of the fact that, unavoidably, this was rather late for the winter Branch meetings, which give members their best opportunity for discussion, exemplary progress has been made in 1968 in the Moray Basin, Perthshire, Angus, and parts of Argyll. In addition, complete coverage has been promised and some progress made in 1968 in ten further counties or major areas, as well as by many individuals. A map showing this was on display at the SOC Conference at Dunblane, and a brief report was given at the AGM by the Scottish Coordinator.

The basic unit of area for fieldwork is the 10 km x 10 km square of the National Grid, shown on all scales of Ordnance Survey maps. It is not necessary, and in many cases impossible because they are not issued, to use the 2½" OS maps, which exactly cover 10 km x 10 km in the provisional series and 20 km x 10 km in the new 2nd series; though this scale will obviously show the 10 km square boundaries more precisely than the usual 1" OS, and much better than the ½" OS. The aim is to record positive proof of breeding for every species that is doing so in the square. No effort will be made to count birds or to determine their relative densities. Detailed instructions and cards for recording are available from the Coordinator and from Regional Organisers.

The information to be noted covers a variety of acceptable evidence, so that it will rarely, if ever, be necessary actually to find nests. This will save time for the observer and disturbance for the birds, which must usually be much more secretive about their nest sites than in the carrying of food to nestlings or recently fledged and begging young; though it is clearly essential to be sure that such activities are correctly interpreted and that the nest is actually in the same area. The non-specialist birdwatcher will find it comparatively easy to record good evidence for the breeding of common species anywhere, and for the majority of species in all accessible areas—an enjoyable and sometimes instruc-

tive pastime. "Time spent in reconnaissance is seldom wasted." If it is possible, before the breeding season, to study both one's area and the instructions, one can later keep one's eyes for the birds rather than for frequent reference to maps and instructions.

There are just under 1100 squares in Scotland and the Islands. In 1968, over 150 squares have been covered to a standard of 50%-80%, about 100 have been well started (and more cards have yet to some in), and firm promises have been received for another 200 (including the Northern and Outer Isles and the counties of Caithness, Renfrewshire and Ayrshire); active support is promised from four further branches but details of the areas have not yet been settled. To avoid undue overlap and duplication of paperwork, disturbance, and problems in some areas with private property, it is essential that Atlas work in Scotland should be organised on a regional basis as far as possible. Volunteers have already come forward for this purpose in nearly all the well populated parts of the country; in almost every case these are the local recorders, to whom much gratitude is due for fully accepting responsibility for their regions.

While all positive and accurate records for any part of Scotland will be welcome and valuable, early application to the Regional Recorder or Branch Secretary is recommended. For the Isles, Sutherland and Ross (apply to C. G. Headlam), Inverness-shire, N. Argyll, and the Border Counties, much help will be needed from non-residents.

Both in the interests of decent behaviour, and to avoid committing an offence under the Protection of Birds Acts, it is essential to avoid disturbance to the nesting of any bird, and particularly those that are rare or at the edge of their geographical range. Records of such species, or of any which a recorder does not want to become publicly known, should be entered on separate cards and sent to the Regional Recorder or to the Coordinator for Scotland with a note asking for security. This problem has been closely studied by a committee including representatives of the RSPB and SOC, and a list of species to be covered by strict security has been agreed.

Please send in, as soon as possible, any Atlas records for 1968. You can use a spare card as a personal record. Any ornithologist doing professional fieldwork is particularly asked to take the small extra step of sending in breeding records for Atlas purposes. Those helping Operation Seafarer in 1969 are asked to report breeding evidence for all species on Atlas cards; they may go to places not approachable by landward birdwatchers.

Foulis Mains, Evanton, Ross-shire. C. G. HEADLAM, Scottish Coordinator.

Birds killed by oil in the Tay Estuary, March and April 1968

J. J. D. GREENWOOD and J. P. F. KEDDIE

The source of pollution

On Thursday 29th February 1968 a crack developed in the hull of the *Tank Duchess* as she lay in the Tay Estuary preparatory to discharging her cargo of 10,373 tons of topped Venezuelan crude oil at Dundee harbour. It was impossible for her to be moved into the harbour to discharge her oil until 24 hours later. As a result, at least 87 tons of oil were lost into the estuary. Consequently, at least 1300 birds were killed.

The oil remained in the estuary for some time, moving about the river with the tide. On the north side, the beaches at Broughty Ferry were polluted considerably, some of those at Monifieth and Carnoustie slightly. On the south side, beaches from two miles east of Newburgh to Tentsmuir Point were polluted in varying degree; particularly heavy deposits were made in the Balmerino, Newport and Tayport areas. Oil also escaped from the estuary to pollute fishermen's nets at Kinshaldy and affect the scoter population of St Andrews Bay. In general, it was rock and pebble beaches that were polluted, while sandy beaches escaped.

Representatives of local authorities in the area met on Monday 4th March and appointed a technical working party to advise on treatment of the pollution. In less than 24 hours the four Dundee University members of this working party produced a paper embodying their recommendations. These were that a surface dredger, which would take the oil from the water, should be used and such a dredger was available at 24 hours' notice; that physical methods of removing the oil (e.g. shovelling it off, absorbing it) should be used on beaches; and that detergents should only be used as a last resort, in view of their grave biological effects (see e.g. Smith 1968).

No local authority was empowered to expend money on cleaning the water lapping its beaches. The Dundee Harbour Trust, while responsible for navigation in the estuary, is not responsible for keeping it clean and was not prepared to finance the hire of a surface dredger. The River Tay Purification Board has no jurisdiction over tidal waters; in any case, it is empowered only to point out pollution and to prosecute polluters, not to clear up pollution. As a result, the cheapest method of cleaning the oil, removing it before it hit the

beaches, was not utilised. The oil remained in the estuary to continue fouling both beaches and birds. Some changes are clearly necessary to prevent a foolish repetition of this in future.

The authority most eager to clean its beaches was Dundee Corporation. Unfortunately, despite the most vigorous representations from the technical working party, this authority discontinued use of physical methods after the scantiest of trials. Some detergent spraying had been carried out on Dundee (Broughty Ferry) beaches previously, as slight oil pollution, possibly from the sewerage system, is a chronic problem in the Tay. The *Tank Duchess* oil was subject to similar, but more vigorous, treatment. During February, March and April, 4700 gallons of detergent were used to wash 10 acres of beaches. While this cleaned the beach, it released into the estuary a detergent/oil/water emulsion that was a further source of contamination for birds.

In the light of later developments on the Fife shore it was particularly unfortunate that Dundee Corporation should have acted in this way. In Fife, where a series of methods of clearing oil from beaches was tried, mainly by Newport Burgh Council, the use of a 'Traxcavator' to scrape the contaminated surface off the beach and of waterproofed limestone dust to remove the oil both proved remarkably effective. Not only was such treatment less of a hazard to birds and other organisms, it was considerably cheaper than the use of detergent.

The birds at risk

The Tay Estuary is famous for holding the largest winter concentration of Eiders in Great Britain. This, judging from Grierson's (1962) account, is probably between 10,000 and 20,000 birds. The population varies from time to time, however, and while up to 20,000 were estimated by one observer before Christmas, there was none on the day of the international wildfowl count. The average figure for last winter seems to have been from 7000 to 8000. From observations made, it can reasonably be concluded that the Eider population in the estuary about the time of the *Tank Duchess* pollution was approximately 4000 birds.

Other ducks are present in the estuary in winter in much smaller numbers—Mallard and Wigeon usually in hundreds, Shelduck, Scaup, Goldeneye and Red-breasted Merganser usually in tens. Various waders and gulls are numerous. Although conspicuous, Mute Swans and Cormorants are present only in fairly small numbers. The goose flocks which enliven the lower Tay basin in winter do not utilise the estuary east of Dundee to any great extent although, up to

this past season when numbers were very small, Headwell and Abertay Sands were regularly used as roosting places for flocks of up to 1750 birds.

Outside the estuary, between it and St Andrews, the major feature of bird life in winter is again the duck population. There are much smaller numbers of Eiders but the scoters number several thousand at times. On 17th February JJDG saw several hundred off St Andrews—Common and Velvet in equal numbers, with a sprinkling of Long-tailed Ducks. By the end of the month, however, most of the Velvet Scoters seem to have left the area. From the Tentsmuir shores small numbers of auks, divers, and other seabirds may be seen throughout the winter, though the Gannets, which feed in the mouth of the Tay in the autumn, are not so apparent in late winter and spring.

Bird rescue during the disaster

A survey of oiled birds in the area between Tayport and Kinshaldy has been carried out by JPFK since October 1966. He began watching the situation closely as soon as the leakage from the *Tank Duchess* was reported. On 1st March he advised Senior Inspector A. MacDougall, Scottish Society for the Prevention of Cruelty to Animals, Cupar, that a serious situation was likely to develop. Operations by the SSPCA began on 4th March on both sides of the river; by this time members of the public had also begun picking up exhausted birds. At this stage, most of the birds collected were humanely destroyed since it was felt, because of the poor success in rehabilitating birds oiled during the *Torrey Canyon* disaster, that to attempt rehabilitation was wasteful and cruel. However, Chief Inspector J. M. Taylor, MM, of the Aberdeen APCA, visited Dundee on 5th March and said that he believed there was a considerably better chance of success than with the *Torrey Canyon* birds. A veteran of the latter campaign, Inspector Taylor has a special interest in the rehabilitation of oiled birds and it is very fortunate that he was able to be in Dundee through the period 6th-22nd March to take charge of the rehabilitation. Inspector MacDougall and Senior Inspector J. Johnston, Kirriemuir, organised SSPCA rescue operations on the Fife and Angus shores respectively and these lasted until 16th March, after which the number of birds rescued became steadily fewer.

Methods of counting oiled birds

Sporadic counts of birds found dead were made by various people in the early days. During the weekend of 9th-10th March a special effort was made on the Fife side of the river by a number of members of the Dundee branch of the SOC

with help, on the Sunday, from the Royal Naval Reserve from HMS *Unicorn* and from the Dundee Unit of Civil Defence. The whole shore and adjoining dunes from Tentsmuir Point to the Eden mouth were covered. Live birds were removed and most of the dead birds buried to minimise the chance of double counting.

Over the weekend of 22nd-23rd March, members of the Dundee and St Andrews branches of the SOC operated on much of the shore line from Dundee to Carnoustie and much of that from Kinshaldy to St Andrews. During this period right wings were removed from all dead birds to prevent duplication in counting and for research. This procedure was continued when completing the search on the Fife shore from Balmerino to St Andrews over the next few days.

Finally, some ringed birds were reported to the British Trust for Ornithology by members of the public and the ringing office has kindly passed to us all ringing returns for the area during the period 1st March to 15th April.

Figures for birds found dead, destroyed, and taken into care have been kindly provided by Inspectors MacDougall and Johnston. We are most grateful that, despite the difficulty of their main task, they took the trouble to record these.

Some birds were rescued or destroyed by other people and we have added these to the totals. All the birds that died at the rehabilitation centre on and after 9th March were passed to JJDG for post-mortem examination. A comparison of the total birds said to have been taken into care with the total of those that we know had died by, or were still alive on, 15th April, provides a check on the former total. For all but three species, the former totals are the same as the latter or bigger by just the amount that are likely to have died before JJDG started receiving corpses. For three species, however, there were more known 'dead plus still alive' on 15th April than the SSPCA officers said had been taken into care, so that extra birds had to be added to their figures (see table 1). The adjustment made in this way has had the remarkable effect of making the grand total of birds taken into care agree to within two birds with a total tally kept by Chief Inspector Taylor. In view of the chaos involved in large-scale rescue operations of oiled birds, such agreement is far closer than one would have expected.

Though the persons reporting some of the birds were not birdwatchers, we ourselves saw all the less usual specimens and found that only two of the SSPCA identifications needed correction. We are grateful to Allan Allison for checking and identifying three problematical wings against museum specimens.

We have taken the end of the incident, for the purpose of counting casualties, as 15th April. Oiled birds were found after that date but their frequency differed little from that for periods of non-pollution during the months preceding the *Tank Duchess* incident.

The numbers of birds affected

Table 1 shows the total number of birds known to have been affected by oil from the *Tank Duchess*. Of the birds taken into care, only some Eiders and Mute Swans survived more than a few days. At the time of writing (late May), about 10% of the Eiders and 75% of the Mute Swans have been rehabilitated or are still alive in captivity. Leaving aside the swans, this means that one may take the figures as minimal estimates of the birds that have been killed in this incident.

It would be useful if one knew what proportion of the birds that actually died are accounted for in table 1. The Eiders, at least, were moving away from the area at the time of the oiling, to return to their breeding-grounds; oiled Eiders were observed in the Ythan Estuary (Aberdeenshire) by Dr H. Milne and M. Gorman, who watch that area daily, on 18th March and subsequently. If many dispersing birds died at sea or on shores outside the Arbroath-St Andrews region, then table 1 presents a marked underestimate of the total number of birds killed.

In view of lack of reports of large numbers of oiled birds elsewhere, it may seem unlikely that the true figure could be more than 2000. On the other hand, during the recent dino-flagellosis outbreak on the Farne Islands, Dr J. C. Coulson (pers. comm.) found that only one of eight of the Shags that died were found on the shore, though the rate was far higher for other species. If the discovery rate for Tay Eiders was as low as that for Farnes Shags, as many as 8,000-10,000 may have died. A figure as high as this is perhaps unlikely since the breeding population of the Ythan Estuary, whence ringing shows many of the Tay birds to have come, has not been noticeably reduced (Dr H. Milne, pers. comm.). A further point is that the true species composition of the kill may have been different from that indicated by table 1; auks, divers, and similar species may have died at sea much more frequently than inshore species such as Eiders.

Discussion

It is clear from a comparison of the data in table 1 with the less precise data we have on the birds exposed to risk during this disaster, that the birds most affected were the diving species. Waders and gulls, for instance, escaped almost totally. Observations made during the disaster on living

Table 1. Birds found oiled between Arbroath and Fife Ness, 1st March-15th April 1968

	Found dead	Alive - destroyed	Alive - kept	Total	Fife	Source of birds Angus	Extra
Great Northern Diver	5	—	—	5	5	—	—
White-billed Diver	—	—	1	1	1	—	—
Red-throated Diver	6	—	—	6	6	—	—
Great Crested Grebe	1	—	—	1	1	—	—
Slavonian Grebe	1	—	—	1	1	—	—
Cormorant	1	1	—	2	1	1	—
Mallard	—	—	1	1	1	—	—
Scaup	1	—	—	1	1	—	—
Long-tailed Duck	—	—	1	1	1	—	—
Velvet Scoter	2	—	—	2	2	—	—
Common Scoter	133	5	29	167	147	2	18
Eider	461	172	494	1127	938	189	—
Red-breasted Merganser	3	4	3	10	9	1	—
Shelduck	6	—	—	6	6	—	—
Mute Swan	—	—	22	22	2	3	17
Oystercatcher	1	1	—	2	2	—	—
Herring Gull	6	1	—	7	7	—	—
Little Gull	1	—	—	1	1	—	—
Razorbill	2	—	—	2	2	—	—
Little Auk	—	—	1	1	1	—	—
Guillemot	1	—	1	2	1	—	1
	631	184	553	1368	1136	196	36

Note White-billed Diver subject to acceptance by Rarities Committee

birds show that this is not due to diving birds being less resistant to the effects of oil than other species; very few of the latter were oiled at all. This has, of course, been found in previous oiling incidents. It is understandable in the light of Bourne's (1968) recent observation that the diving species tend to dive when they meet an oil slick, so that they may surface in it, whereas gulls merely fly away.

Great mortality of Eiders due to oiling has been recorded previously in North America (Burnett & Snyder 1954; Dennis 1959) but not in Britain. In this incident 7%-28% of the British Eider population may have perished (Atkinson-Willes (1963) puts the total population at 30,000 to 40,000). There might be serious consequences if such mortality became more frequent. Dr H. Milne tells us that 7% is approximately the mean annual mortality of adult Eiders, so an annual repetition of the Tay oiling would cause the mean mortality to be doubled at least. If chick mortality was sufficiently dependent on adult density, such extra mortality could be borne without any decrease in the population. This is probably not the case.

Much of the mortality of birds could have been avoided in the present incident if two actions had been taken. Firstly, if the *Tank Duchess* had discharged her oil to land earlier than 24 hours after the crack had been reported. Secondly, if the oil had been cleared from the water soon after it leaked instead of being allowed to float about for weeks. Since these two actions would also have considerably lessened the pollution of the beaches, it would be incredibly foolish if provisions were not made to ensure that they were taken in any similar incident in future.

Acknowledgments

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During the course of this study JJDG was provided with facilities in the Zoology Department, University of Dundee, for which he is grateful to Dr F. L. Waterhouse.

Summary

An account is given of the methods used to count affected birds during the oil pollution of the Tay Estuary that occurred at the end of February 1968.

The total of birds found dead, destroyed, or taken into care was 1368, most of them being Eiders. The diving birds were affected to an extent out of proportion to their numbers.

The total mortality of the Eiders was probably about 2000—though it may have been up to four times as high. This represents approximately 7% of the British population and repetition of the incident could have serious effects on the size of that population.

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A survey of rookeries in Ayrshire in 1966

MALCOLM E. CASTLE

Introduction

A survey of the number and the size of rookeries in Ayrshire was made in 1956 (Walls 1956). In order to determine any changes in the population of the Rook and its distribution ten years later, a second and more detailed survey was made in 1966. This was organised by the committee of the Ayr branch of the SOC, and most of the fieldwork was done by members of the Ayr and Glasgow branches.

Methods

In March 1966, twenty-seven recorders agreed to count rookeries in Ayrshire, and each was supplied with a survey form and a section of the 1" Ordnance Survey map of the county. The form had a simple layout and provided spaces for the address of the rookery, the number of occupied nests,

the type of tree and the date. Recorders were asked to mark clearly on the map the site of each rookery. Recorders all covered areas that they knew, in the hope that this would increase the accuracy of the survey. It was requested that the counts of occupied nests should be made between 9th and 17th April 1966. The sections of map were stuck together again after their return from the recorders, and each rookery was checked with the details on the form and given a 4-figure grid reference. An independent check was made by the author, who visited rookeries in selected areas of the county where it was thought some might have been missed.

Results

The recorders were extremely cooperative, and 73% of the nests were counted in the period requested, 9th-17th April. A further 21% were counted between 18th and 30th April, and the remaining 6% at various dates up to 23rd May.

Table 1. Distribution of rookeries in Ayrshire in 1966 according to size

Number of occupied nests in rookery	Number of rookeries		Number of nests	
	In each group	As % of total	In each group	As % of total
1-100	146	71½	5118	28½
101-200	32	15½	4507	25½
201-300	13	6½	3167	17½
301-400	8	4	2745	15½
401-500	4	2	1727	9½
over 500	1	½	624	3½
	<hr/> 204	<hr/> 100	<hr/> 17888	<hr/> 100

The number of rookeries recorded in the county was 204, containing a total of 17,888 nests. This gives an average of 88 nests per rookery, but a more complete picture of the sizes of rookeries is given in table 1. It will be seen that rookeries of up to 100 nests were the most frequent and made up 71½% of the total number of rookeries in the county. There were 101 rookeries, 49½% of the total number, containing not more than 50 nests, although these accounted for only 14% of the total number of nests in the county. At the other end of the scale the 26 rookeries containing over 200 nests constituted only 13% of the total number of rookeries but contained 46% of the total number of nests.

The total area of Ayrshire is 1132 square miles, giving an average density of 16 nests per square mile, or six per square kilometre. The county has however a considerable area of hill and moorland where Rooks do not breed and rarely even feed. In the 1956 survey only four rookeries were found at altitudes above 600 ft (Walls 1956), and a similar situation

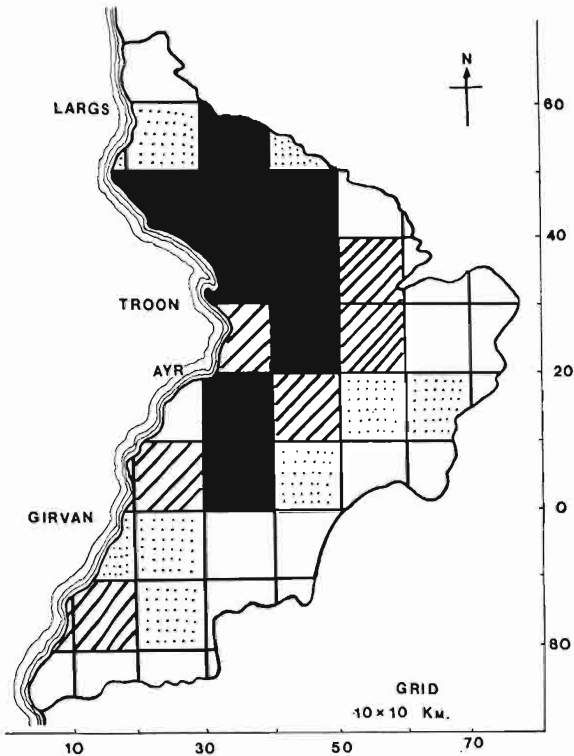


Fig. 1. Density of Rook nests in Ayrshire, 1966. Nests per square kilometre (square mile): uncoloured, up to 1 (0.4); dotted, up to 5 (1.9); hatched, up to 10 (3.8); solid colour, over 10 (3.8).

was found in the 1966 survey. Assuming that the area of arable crops and grassland in the county approximates to the area below the 600 ft contour, then the rookeries are found in an area of only 434 square miles, which gives a density of 41 nests per square mile or 16 nests per square kilometre. The density of nests throughout the county is indicated in fig. 1, which was produced by marking each rookery into its appropriate 10 x 10 km square. The highest general concentration of nests was in an extensive area mainly north of Ayr, with a progressive decrease in density towards the east and the south of the county in the hill and moorland areas. The highest local concentration of nests was in the 10 x 10 km square immediately south of Ayr, where 90 nests per square mile or 35 nests per square kilometre were recorded.

Scots pine was the most frequently used tree for nesting, and 51% of all nests were in this species. The next

Table 2. Number of nests in various species of trees in two areas of Ayrshire in 1966

Species of tree	Percentage of total number of nests	
	Area A	Area B
Scots pine	55	59
Sycamore	20	3
Beech	5	8
Oak	9	14
Horse chestnut	4	—
Elm	4	2
Ash	3	6
Others	—	8
	100	100
Total number of nests	1346	1358

most frequently used tree was beech, with 18% of the nests, followed by sycamore, oak, elm and ash in decreasing order of use. Other trees which were used for nesting included horse chestnut, plane, cherry, lime, birch, Sitka spruce, Norway spruce, Japanese larch, stone pine, alder and hawthorn. Two recorders in separate areas of Ayrshire made particularly detailed studies of the number of nests in the different species of trees and their results are given in table 2. Area A, with rookeries at an average altitude of 150 ft, included the district around Symington, Dundonald and Coodham, north of Ayr; and area B, with rookeries at an average of 300 ft, was south of Ayr in the Maybole, Crosshill, Straiton and Kirkmichael district. Over 1300 nests were counted in each of these areas and table 2 shows that Scots pine was undoubtedly the most frequently used species of tree. Area A consists mainly of high quality agricultural land with scattered shelter belts of planted trees, whereas area B is on the margin of the hill country with large plantations, and yet the marked use of Scots pine for nesting is clearly evident in both districts. At Hatton Castle, Aberdeenshire, in 1957, 62% of all nests were in Scots pine and 25% in beech (Watson 1967), which is similar to the results in the present survey. In many other areas the proportion of deciduous trees used is often much higher. In Edinburgh less than 1% of nests are in conifers (Macmillan 1957), and Wynne (1932) found 90% of nests in elm trees in the Isle of Wight.

The distribution of rookeries and nests according to altitude is shown in table 3. Up to 400 ft above sea level there were 170 rookeries, 83% of the total number in the county, and these contained 89% of the total number of nests. Above 400 ft the number of nests decreased rapidly and progressively with increasing altitude, and only one rookery, Kyle farm near Cumnock (ref. 6519), was found above 700 ft. This

Table 3. Altitude of rookeries in Ayrshire in 1966

Altitude (feet above sea level)	Number of rookeries		Number of nests	
	In each group	As % of total	In each group	As % of total
0-100	43	21	2797	15½
101-200	48	23½	5416	30
201-300	47	23	5237	29½
301-400	32	15½	2510	14
401-500	19	9½	1017	5½
501-600	6	3	443	2½
601-700	8	4	330	2
over 700	1	½	138	1
	204	100	17888	100

rookery was 850 ft above sea level and the number of nests in it had increased from 105 in 1956 to 138 in 1966 although the site is high, wild and exposed. There is usually a sharp drop in the density of Rooks on high ground (Coombs 1961) and the results in the present survey confirm this.

Discussion

Before discussing the results in this survey of rookeries it is worthwhile to comment on the accuracy of the results and the type and the magnitude of errors which could have arisen. The technique employed ensured that the entire county was surveyed, and with the local knowledge of the individual recorders and the relatively small areas covered by each, it is thought that few rookeries were missed. On average, each person counted eight rookeries, although a few of the most experienced helpers had a larger number to count. Cross-checking by members was helpful in confirming results, and the transects of the county made by the author during the period of the survey sorted out some small discrepancies. The dates of the survey, 9th-17th April, were decided many weeks before, but would appear to have been about the optimum. From counts of nests at five rookeries at various dates it is clear that the peak number of nests occurred in mid-to-late April. A similar observation was made by Dunnet and Patterson (1965) in the Ythan valley, and Alexander (1933) suggested that it was important to defer counts as late as possible in order to increase accuracy. The mean date of laying the first egg of the clutch for Rooks in south Scotland has been given as 20th March (Holyoak 1967), and thus with an 18-day incubation period it is likely that at the time of the survey most nests contained eggs or newly hatched young. The few leaves on the trees did not interfere with the counting of the nests in late April, and in retrospect there would seem to have been no valid reasons for having had different dates for the survey. It is suggested however

that the total count of nests could be about 4% too low because of the proportion of rookeries counted in May. In some rookeries it was not always easy to determine with absolute accuracy how many nests were occupied, and, particularly in some Scots pines, how many separate nests were in some of the large accumulations of sticks. This is not a unique problem when counting Rook nests (see *e.g.* Watson 1967), and a certain error must invariably arise. In a small test with two observers counting the same rookeries the difference between counts was only about 1%.

Table 4. Number of rookeries and nests in Ayrshire in 1956 and 1966

	1956	1966	Change
Number of rookeries*	126	204	+62%
Number of nests	25851	17888	-31%
Nests per square mile	23	16	

*Defined differently in two years (see text).

Changes in the number of rookeries and nests from 1956 to 1966 are summarised in table 4. The data for 1956 are taken from the results of Walls (1956). Although the number of rookeries apparently increased by 62%, the number of nests in the county decreased by 31%. Much of the apparent increase in the number of rookeries in the 10-year period is due to a lack of uniformity in the two surveys in distinguishing between a cluster of independent rookeries and a single large scattered one. In the 1956 survey many single rookeries contained two, three or four sections which in the 1966 survey were often classed as separate rookeries by the local recorders. A divided rookery was regarded as one unit by Coombs (1961) if the 'nuptial' pursuit flights of the birds went round both parts and involved members of both parts. No such clear distinction was made in the present survey, but after making adjustments for the differences in defining a rookery it is considered that a more realistic estimate of the increase in the number of rookeries is about 25% rather than 62%. The count of nests is, within the limits already discussed, more accurate than the count of rookeries, and it would seem that there has in fact been a decrease of 31% in the 10-year period. The decrease in numbers is probably slightly larger than this, because the 1956 survey was done by a single observer and it is possible that some rookeries were not counted.

The decline of 31% in the number of nests is similar to the 39% decrease recorded by Coombs (1961) in southwest Cornwall between 1943 and 1953. In the City of Edinburgh the number of Rook nests declined by 51% between 1957 and 1964 (Cowper 1964) and it was not thought

that this was a movement in population. One can only speculate as to the reasons for the large decline in Ayrshire. Twenty-six rookeries listed by Walls in 1956 which then contained 3616 nests were not mentioned by the recorders in 1966. Many old nesting sites have been either cleared or made unsuitable for nesting. In the south of the county, Gorsclays (ref. 0985), a rookery with 548 nests in 1956, no longer exists because of felling, but new rookeries in the area have more than maintained the total number of nests in the district. This however is an exception and in other areas the loss of old rookeries has meant a large decline in the number of nests. Near New Cumnock the felling of trees at Craighbank House rookery (ref. 6012), which had 329 nests in 1956, has reduced the total number of nests in the area from 399 in 1956 to 103 in 1966. Tree felling is taking place constantly and may have a local effect on the number of nests if alternative sites are not available. In most areas there would not appear to be any lack of suitable sites for nesting. Poisoning and shooting undoubtedly take their toll of birds but it was impossible to determine their exact effect. The increased use of toxic chemicals in agriculture cannot be discounted as a possible contributing factor in the decline of such an agricultural bird as the Rook, but evidence on this matter is lacking.

Table 5. Acreages of crops and grassland in Ayrshire in 1956 and 1966

	<u>Thousand acres</u>		
	1956	1966	Change
Cereals	35.6	28.6	—20%
Root crops	15.6	10.4	—33%
Grass	231.9	238.6	+3%

From the June Agricultural Statistics published by the Department of Agriculture and Fisheries, Scotland.

The pattern of land-use and cropping in the county has altered slightly between 1956 and 1966 (table 5) and this may have had some effect on the number of Rooks. The acreages of cereals and root crops have decreased by 20% and 33% respectively in the 10-year period, but the county is still predominantly grassland. Only about 14% of the agricultural area, excluding hill and rough land, was ploughed and cropped in 1966, compared with about 18% in 1956, and this reduction would hardly explain a 31% decrease in the Rook population. The increasing urbanisation of parts of the county would not seem to affect the Rook population if suitable nesting sites are available. The highest concentration of rook nests, 90 per square mile, occurred in the immediate environs of Ayr, where there is a large human population and much new building. Adequate safe nesting

sites are present, and food is available in the surrounding agricultural land and in the town gardens, which are visited regularly.

The density of Rook nests per square mile varies from 5 to 45 in different parts of the British Isles (Coombs 1961). More recently values of 57 and 99 nests per square mile were recorded for the Ythan valley (Dunnet & Patterson 1965) and for an area around Hatton in Aberdeenshire (Watson 1967) respectively. Thus Ayrshire, with an overall density of 16 nests per square mile, has a relatively low number of nests. Calculated on the area of crops and grassland the density is 41 nests per square mile and this is more comparable with that for other areas. Comparisons between counties are not a simple matter, as factors such as altitude (Wynne 1932) and geological formation (Alexander 1933) can exert considerable local effects on the Rook population.

Perhaps the most important result of the present survey has been to show the dramatic decline in the population of a species of bird which is relatively easy to count accurately. No obvious or satisfactory reason for the decline in numbers in the 10-year period can be offered, but it would seem well worthwhile to make a further census in five or ten years time.

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Summary

A total of 204 rookeries containing 17,888 nests was recorded in Ayrshire during a survey conducted in late April and early May 1966. Compared with the results of a survey done in spring 1956 there was a 31% decrease in the number of nests. No single explanation is offered to account for this decrease although tree felling, shooting and changes in land-use have all occurred in the 10-year period.

The average density of nests was 16 per square mile or 6 per square kilometre, but calculated on the area of grass and arable crops there were 41 nests per square mile or 16 per square kilometre.

Scots pine and beech were the most frequently used nesting trees, with 51% and 18% of all nests respectively in these species.

The number of rookeries and nests decreased rapidly and progressively as the altitude increased above 400 ft above sea level. Only 11% of the total number of nests in the county occurred over 400 ft.

The errors which are likely to be made in counting Rook nests are discussed but were thought to be small in the present survey.

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Birds of the Scar Rocks—the Wigtownshire gannetry

JOHN G. YOUNG

(Plates 13-14)

Introduction

The Scar Rocks lie in Luce Bay, Wigtownshire (54°41'N, 4°42'W), roughly halfway between Burrow Head and the Mull of Galloway, six miles from the nearest land. They are formed of a fine-grained, very hard, blue-grey schist, traversed by thin bands of white quartz, and have weathered to a shattered, angular, ledgy surface attractive to breeding seabirds. The rocks, which were leased from the Crown by J. H. Stainton Crosthwaite of Glasgow, have been notified by the Nature Conservancy as a Site of Special Scientific Interest.

The name 'Scar', widespread in southwest Scotland, is derived from the Gaelic 'sgeir' (old Norse 'sker'), a rock or cliff. Although Ordnance Survey maps have the spelling 'Scare', I have preferred the shorter form used by the people of Port William and Drummore, the nearest ports.

No birds nest on the Little Scars, a collection of some six rocks barely 25 ft high, swept by the sea. The Big Scar, more than half a mile distant, is the sole breeding rock; it is 60-70 ft high by about 300 ft long. Castle Rock is a semi-detached stack at its western end.

Except for seaweeds and at least two species of lichen, the rocks are devoid of vegetation. There are no breeding mammals, but since 1963 grey seals have been seen frequently in small numbers, sometimes hauled out.

In 1883 Robert Service of Dumfries found two Gannets' nests on Big Scar, one containing a broken egg. Thereafter it was not until 1939 that the late Rev. John Morell McWil-

Table 1. Pairs of breeding birds on Scar Rocks

	1943 (24th June)	1953 (23rd July)	1965 (25th July)	1968 (8th June)
Gannet	40-50	134	240-300	437
Cormorant	50	40	6	10
Shag	40	20-30	25	24
Great Black-backed Gull	1	2	1-2	1
Lesser Black-backed Gull	—	a few	—	—
Herring Gull	25	30	40	37
Kittiwake	150	100+	130	175
Razorbill	15	50	15	62
Guillemot	1505	1000+	750	1207
Black Guillemot	—	1	—	—

Table 2(a). Birds ringed on Scar Rocks in 1965 and 1968

	1965 (25th July)	1968 (8th June & 20th July)	Total
Gannet	100	213	313
Cormorant	4	5	9
Shag	—	20	20
Great Black-backed Gull	1	—	1
Herring Gull	13	20	33
Kittiwake	5	5	10
Razorbill	2	4	6
Guillemot	96	4	100
	<hr/> 221	<hr/> 271	<hr/> 492

(b) Selected recoveries reported up to 31st July 1968

	Ringed	Recovered
102.4508 Gannet (pull.)	25.7.65	One of 60 taken on fishing lines that day off Agadir, Morocco (30°30'N, 9°40'W) 6.11.65.
102.4510 Gannet (pull.)	25.7.65	Found dead at Asserac (Loire Atlantique), France (47°26'N, 2°23'W) 23.10.66.
102.4514 Gannet (pull.)	25.7.65	Caught on fish-hook at sea 10 miles off Viana do Castelo (Minho), Portugal (c. 41°40'N, 9°00'W) 23.10.65.
102.4546 Gannet (pull.)	25.7.65	Shot at sea off Oporto (Douro Litoral), Portugal (c. 41°10'N, 8°40'W) 4.10.65.
AT92.279 Guillemot (pull.)	27.7.65	Killed at Sallenelles near Caen (Calvados), France (49°16'N, 0°14'W) 1.2.67.

liam and Lord David Stuart discovered that Gannets were again breeding on this rock (*Brit. Birds* 33: 105). A subsequent paper by McWilliam (*Transactions of the Buteshire Natural History Society*, vol. 13, 1945, and reprinted as booklet) contains details of a number of later visits, including a note of counts made by A. B. Duncan on 24th June 1943.

After a landing on 25th July 1965 by a party of six members of the Dumfries Branch of the SOC, Mr McWilliam asked me to bring the ornithological record up to date. It is an indication of the difficulty of gaining access to the Big Scar that in spite of many attempts it was not until 8th June 1968 that I was able again to effect a landing, when a party of ten of us spent over four hours counting, ringing and photographing the birds.

The counts made in 1965 and 1968 are probably as accurate as any that are likely to be made on the Scar, although there will always be a considerable margin of error for Razorbill and Guillemot.

Table 1 shows the number of pairs of breeding birds recorded in different years; table 2 lists the numbers of birds ringed in 1965 and 1968 by the North Solway Ringing Group and is supported by some selected recoveries; table 3 traces the development of the gannetry. A systematic list of the birds of the Scar Rocks follows.

Table 3. Development of Scar Rocks gannetry (and sources of information)

- 1883—2 nests (J. H. Gurney *The Gannet* 1913, p. 112)
 1939—2-6 pairs; 1 nest; 1 chick reared (J. M. McWilliam—in litt., pers. comm.)
 1940—breeding not proved (as 1939)
 1941—breeding not proved; believed about 10 pairs (as 1939)
 1942—at least 20-25 nests, probably over 30 (as 1939)
 1943—40-50 pairs (A. B. Duncan in McWilliam 1945—see Introduction)
 1945—35-45 nests (J. Fisher in Bannerman 1959 *The Birds of The British Isles* 8: 24)
 1946—at least 28 nests (as 1945)
 1948—90 nests (as 1945)
 1949—100 nests (as 1945)
 1953—134 nests (Dr J. A. Gibson, J. H. Stainton Crosthwaite—pers. comm.)
 1954—137 nests (Dr J. A. Gibson—pers. comm.)
 1957—158 nests (as 1954)
 1960—167 nests (as 1954)
 1962—about 200 pairs (A. D. Watson—pers. comm.)
 1964—about 300 pairs (R. W. J. Smith—pers. comm.)
 1965—at least 240 pairs breeding; probable maximum, 300 nests (J. G. Young *et al.*)
 1968—437 nests (as 1965)

Birds recorded from the Scar Rocks

Manx Shearwater. Regular in the vicinity, both singly and in parties; up to 100 in a day.

Fulmar. One bird sitting on a ledge in May 1941, but no evidence of breeding then or since. Seen in the area by most visitors.

Gannet. Breeding annually in increasing numbers (see table 3), with still ample room for further expansion; an increase to at least 650-700 pairs seems possible. The area at the very top of the rock where nests were concentrated in 1943 is no longer the centre of the colony; it is now occupied by younger breeders (Sir A. B. Duncan pers. comm.). On 20th July 1968 the entire colony appeared to be feeding on mackerel.

Cormorant. In 1939 there were at least 71 occupied nests and 12-15 empty—a probable maximum of 90 breeding pairs. There has been a steady decline to 50 in 1943; about 40 in 1953; 12 nests in 1957; and to 6 occupied nests in 1965, increasing to 10 nests in 1968. This decline may be associated with increasing Gannet numbers, as in recent years the breeding population of the Cormorant has been increasing in Solway.

Shag. Probable maximum of 16 nests in 1939; 40 in 1943; 20-30 in 1953; about 25 in 1965; 24 in 1968. Some of the differences between totals may be due to the differing dates of visits.

Eider. A pair close inshore on 2nd July 1954. No other record.

Peregrine. Bred about 1922. No other record.

Oystercatcher. One on 16th June 1957 is the only record.

Purple Sandpiper. Five on 25th July 1965; 6 on 20th July 1968.

Great Black-backed Gull. Single pairs bred in 1921, 1939 and 1943; two in 1953; one in 1957. Two pairs were present in 1965 (one breeding on the Big Scar, the other possibly on Castle Rock); one pair bred in 1968.

Lesser Black-backed Gull. A "few" pairs bred in 1953; recorded frequently in small numbers, but no other evidence of breeding.

Herring Gull. Has bred since at least 1870. Several nests in 1921; 25 in 1943; 30 in 1957; and a gradual increase to about 40 in recent years.

Common Gull. Recorded as breeding in 1869 (Gray and Anderson *The Birds of Ayrshire and Wigtownshire*, p. 53) but this was considered by McWilliam to be very doubtful. The species has bred freely on other Solway islands since as far back as 1900.

Kittiwake. Breeds—150 pairs in 1943; 130 in 1965; 175 in 1968.

Common/Arctic Tern. Recorded regularly in the vicinity.

Sandwich Tern. Only one record—of 4 flying over in July 1965.

Razorbill. Recorded as breeding in 1869; scarce in 1921; 15 pairs in 1943; 50 in 1953; at least 62 in 1968.

Guillemot (apparently the southern race *U. a. albionis*). Breeding abundantly in 1869; 1505 pairs in 1943; 1000+ in 1953; 750 in 1965; 1207 in 1968. The nesting of this species among the Gannets on the flat top has always been a feature of the Big Scar (see photographs by McWilliam deposited in the SOC library). A fear that, as the Gannets increased, the Guillemots would decline has not materialised. Nevertheless, since 1965 there has been a marked shift in their distribution from the flat top of the Scar to the narrow ledges on its south side.

Black Guillemot. Bred in 1953, when one was found incubating two eggs in a crevice on 23rd July; recorded in the immediate area in 1954, 1960 and 1962. Two nests were found on 27th June 1964 (*Scot. Birds* 3: 203). Four adults were on the sea close to the rock in July 1965 and nine were recorded in July 1968, but there has been no further evidence of breeding.

Puffin. Mentioned as breeding by Gray and Anderson (1869) and by Gray (*The Birds of the West of Scotland* 1871). Four were seen near the Scar in 1943 and several were standing on different parts of the Big Scar in 1953. Others were recorded offshore in 1954 and 1957, and out of eight seen in 1965 two showed an attachment to the Castle Rock and one was carrying food. Two adults were seen in June 1968 and a single adult in July. It is possible that a pair or two may still breed.

[**Rock Dove.** A flock of seven feral pigeons, three with the pale rump and black wing bars of the Rock Dove, were over the rock in 1965. These cannot be accepted as pure, because for some time the Solway population has been mixed with escapes of homing strains.]

Sedge Warbler. One on 25th July 1965.

Rock Pipit. Recorded in 1921, and on later occasions, such as four birds present on 24th June 1943; single birds on 16th June 1957, 25th July 1965 and 20th July 1968.

Acknowledgments

I am grateful to the following who have made this paper possible by their contributions either as companions on the Scars or by correspondence: A. Black, J. H. Stainton Crossthwaite, J. McCubbin, Sir Arthur B. Duncan, W. Dunlop, Dr W. J. Eggeling, J. Fisher, Dr J. A. Gibson, C. A. V. Grant, D. McGowan, A. T. Macmillan, J. Maxwell, R. H. Miller, W. Murray, H. Ostroznik, J. L. F. Parslow, D. Skilling, R. T. Smith, R. W. J. Smith, Lord David Stuart, R. Thomson, B. S. Turner, A. E. Truckell, A. D. Watson.

Special mention should be made of William Brawls, boatman of Port William, whose skill and local knowledge has been invaluable, and of James F. Young, my companion on at least 37 mostly-abortive attempts to reach the Scars.

I owe a particular debt to "The Minister"—the late John Morell McWilliam (see obituary in *Scot. Birds* 5: 113)—for hospitality, much kindness and many stimulating chastisements, first at Tynron and latterly at Invergowrie.

Summary

The Scar Rocks are described, and a systematic list is given of the birds recorded, together with censuses of the breeding birds in 1943, 1953, 1965 and 1968, tables of birds ringed and recovered, and a history of the build-up of the gannetry from one or more nests in 1939 to 437 in 1968.

Short Notes

Cory's Shearwater in Outer Hebrides

About 1130 hrs BST on 24th August 1967 I was sitting $\frac{1}{4}$ mile south of the lighthouse at the Butt of Lewis looking northwest over a calm sea. There was a very light northerly breeze and the sun was behind me. Small parties of Manx Shearwaters were passing north about $\frac{1}{2}$ mile out, looking extremely black-and-white, flying very straight and low, and flapping almost continuously in the calm conditions, with only a few short glides. Nearer to me the sea was dotted with small petrels, easily discernible.

Presently a single shearwater approached from the south, within about $\frac{1}{4}$ mile of the land. At once I noted its larger size and slower wingbeat. As it made a big sweeping curve I could see its back. There was no sign of a capped appearance, no collar, and no white on the rump; the whole upperparts were a uniform dullish brown. I could not see the underside of the wings but the underparts were pale. The bird definitely did not have the sharply contrasting black-and-white appearance of the Manx Shearwaters. It gave one or two short glides but flapped nearly all the time. It appeared to have about the same wingspan as a Fulmar but its general appearance was thinner and the wing narrower. I identified it as a Cory's Shearwater. There is one previous record for the Outer Hebrides—from North Uist on 23rd August 1962 (*Scot. Birds* 2: 417).

It may be relevant to note that late the previous afternoon there had been large numbers of seabirds in the Minch—Manx Shearwaters, Guillemots, Gannets, Kittiwakes, and 6-8 Sooty Shearwaters in two hours. The sea was peppered in all directions with small petrels which, judging by their Black Tern size, bounding erratic flight, and the fact that not one investigated the ship's wake, I considered, rather to my surprise, to be all Leach's Petrels. There were also large numbers of the smaller Cetacea, and possibly therefore a lot of fish about.

R. V. A. MARSHALL.

Little Egret in Wigtownshire

On 25th April 1968 I was brought a Little Egret which Miss J. McGaw found dead under telegraph wires near Mochrum Loch two days earlier. Unfortunately the remains could not be preserved, but from them I was able to confirm the bird's identity.

It was basically heron-like, with a long, pointed black bill and long black legs, with the toes and the base of the tarsus yellow. The plumage was white with a crest of two long plumes passing back over the nape. The iris was yellowish, but was probably somewhat faded by the time I saw the bird. I measured its overall length as 25 inches, and its wingspan as 35 inches.

C. A. B. CAMPBELL.

(This species was not recorded in Scotland until 1954, when at least two different birds were seen in Perthshire, Shetland, Lanarkshire and Sutherland between 11th May and 22nd June (*Brit. Birds* 48: 127; *Scot. Nat.* 1955: 66). The only subsequent records are of single birds in the Outer Hebrides on 20th May 1955 (*Brit. Birds* 48: 411) and in Shetland and Orkney between 11th June and 3rd August 1961 (*Scot. Birds* 2: 29; *Fair Isle Bird Obs. Bull.* 4: 226.—ED.)

American Wigeon in Shetland

On 20th January 1968 I found a pair of American Wigeon with a drake and three duck Wigeon resting, preening and feeding on shallow floodwater on a sheep pasture at Norwick, Unst. The drake was immediately identified, but careful scrutiny of the females was required to separate the duck.

Magnus Sinclair accompanied me next day and we were successful in obtaining good views of both birds. They were seen again on 27th January and 3rd February. The following is based on full notes made during the first two sightings:

Drake. Broad white band over head from forehead to nape; dark blackish patch in front of eye, curving above eye to nape, extending below eye to ear coverts; nape, sides of neck, lores, chin and throat grey; upperparts, wing coverts warm rufous-brown; primaries and secondaries appeared black; axillaries white; large white wing-patches; breast and flanks mauvish-pink or vinous-pink; flanks appeared slightly barred; belly off-white; conspicuous white patch on rear flanks; undertail black.

Duck. As ♀ Wigeon but head and neck noticeably greyer and axillaries white.

F. J. WALKER.

(This is the fourth Shetland record and follows closely on the third (*Scot. Birds* 5: 23). It seems possible that both records could refer to the same birds.—ED.)

Red-footed Falcons in Sutherland and Orkney

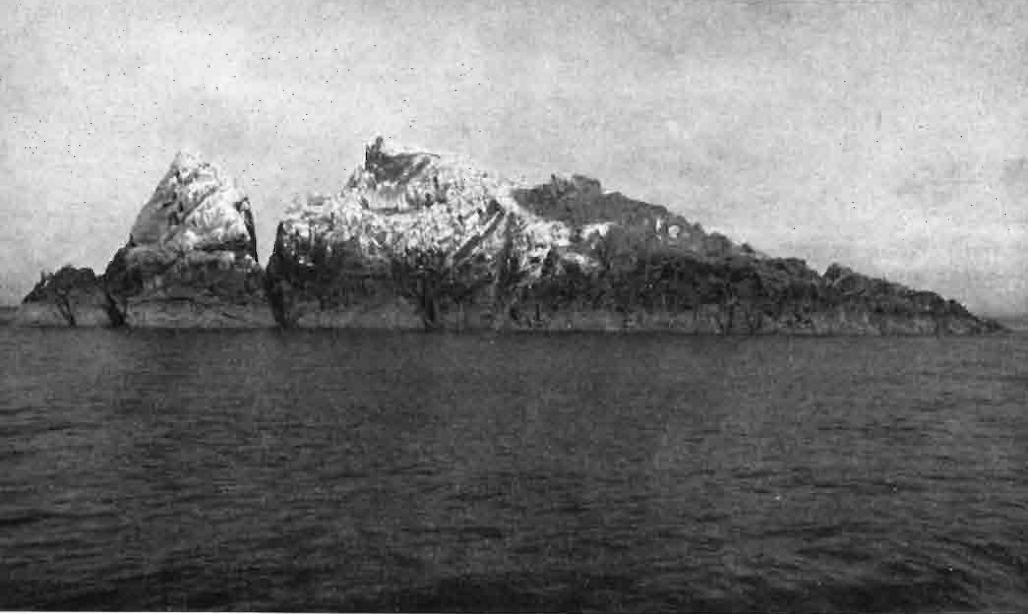
About 8 p.m. on 22nd July 1967, approaching the Keoldale Ferry from Cape Wrath, my wife and I saw an unfamiliar raptor glide from a telegraph pole with several quickish



PLATE 12. Female Bluethroat near first British nest, Moray Basin, 13th June 1968, and view of habitat. The nest was under the end of the branch in the foreground (see page 221).

Photographs by M. J. Cotton





PLATES 13-14. Views of the Big Scar, Wigtownshire, from the sea, with Castle Rock at the western end, and the Little Scars from the Big Scar, and of John G. Young, holding a young Gannet for ringing, on a recent visit to the Scar Rocks (see page 204).

Photographs by J. F. Young (Little Scars) and B. S. Turner



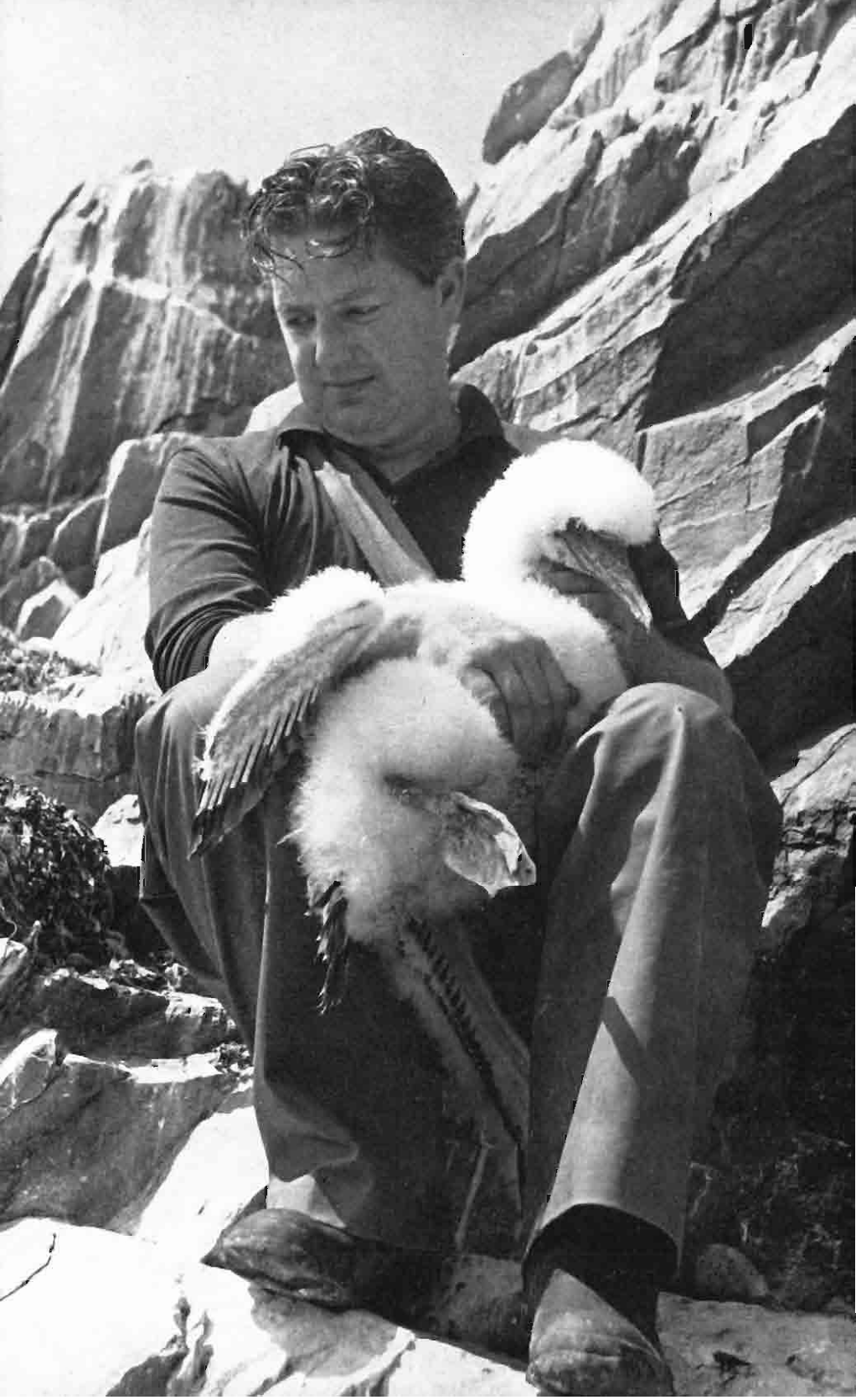




PLATE 15. Fieldfare with young in nest, Shetland, July 1968. The nest was under a slight overhang in the bank of a stream and was quite visible from some distance. Five young were fledged (see page 218).

Photograph by R. J. Tulloch

wing-beats and fly up onto another one. As we continued along the road the bird moved from pole to pole with few wing-beats and looking more clipped and emphatic than a Kestrel. We watched it for 10 minutes. Two or three times it landed in the heather as if hunting for insects, before gliding to the next pole. We got within 100 yards of it but as it was continually flying away it showed little more than a back view, except once when it perched sideways and momentarily when it faced us.

Finally it flew off down the slope towards the Kyle of Durness, disturbing a Buzzard. Earlier a male Kestrel mobbed it briefly and we saw that it was about the same size. It was considerably smaller and slimmer than the Buzzard.

In flight the back, wings and tail appeared dark grey-brown with lighter markings across the feathers of the back, though these did not register as barring. The head was an extremely light, rich buff. Some rufous showed on the flanks. When perched, its attitude always seemed rather hunched and fluffed out; its wings reached near the length of the tail and it did not have the long-tailed appearance of a Kestrel. We now noted the crown as richer buff and ear coverts as paler, creamy, with the eye area black, but did not notice a moustache. The bird had an almost owl-like appearance as it peered back over its shoulder. The underparts were creamy-buff with no discernible spotting or striping. The bill was pale and the feet orange-yellow rather than pale.

We had no idea what it was until we referred to the *Field Guide* and found the illustration of a female Red-footed Falcon fitted almost perfectly. We had not noticed the tail being barred. The front of the bird did not seem so rufous as shown, but the flanks were. The nape did not appear so richly coloured as the crown, and the back was not slate grey but grey-brown, as in the *Handbook* illustration of a juvenile.

We understand that this is the first record of a Red-footed Falcon for the North Coast and for Sutherland.

R. K. BARROW.

From 11th August 1967 a juvenile Red-footed Falcon frequented the Lyde area of Firth and Rendall on the Mainland of Orkney. It was last seen on 10th September by P. J. B. Slater.

The bird was about Kestrel size but of a rather slimmer appearance, with narrower wings. At times it hovered like a Kestrel when hunting and it was seen to capture caterpillars and insects by pouncing on them on the ground. The victims were held in one foot while being eaten, sometimes

in flight and sometimes on a post. Once it took a large black slug. It spent much of the time perched on fence posts in this mainly moorland area, and it roosted in an uninhabited house nearby.

Description. Conspicuously pale creamy head with some darker markings on crown, with nape and sides of head palest; upperparts brownish, shading to slate towards tail, with some rufous edging to feathers, especially on shoulders; tail dull slate, clearly barred with brown; folded wings reached end of tail; underparts creamy-buff streaked rufous-brown; feet and legs orange-yellow; iris dark brown; thin orange ring round eye, surrounded by dark or blackish patch, widest between bill and eye; bill bluish-grey with orange-yellow cere.

This is the second record for Orkney. A female was recorded in Stromness Parish on 8th May 1962 (*Scot. Birds* 2: 422).

E. BALFOUR.

Broad-billed Sandpipers in Stirlingshire and Morayshire

On 23rd July 1967 I found a Broad-billed Sandpiper feeding with Dunlin at one of the pools at Skinflats. It stayed there on the 24th and 25th and I watched it with binoculars and telescope at 10-15 yards range.

It was also seen by John Carson, who was able to get within two yards and found it very tame, but there were always other waders about when I saw it and this may have made it a bit more wary. When feeding, it usually kept away from the small flocks of Dunlin but would join them if they took flight. Often it stood motionless for a few minutes before stepping forward to pick something off the mud.

The most conspicuous features of the bird were the whitish lines on the back, the double white eyestripe, the down-curved tip of the bill, and the small size compared with the Dunlin.

Description. Slightly smaller than Dunlin, with noticeably shorter legs, and appearing shorter in neck and hunched-up when standing with them. Upperparts very dark, with two long whitish stripes down back; back extremely dark in flight, with wings slightly lighter; crown black; black line through eye, with two white stripes above (not so white as in *Field Guide*), converging into one just above eye; neck, breast and lower half of wing (at rest) a muddle of blotches and streaks, the colouring ending in a line at the breast; underparts very white; bill long and downcurved at tip, and noted as rather bulky by JC; legs dark.

IAN TAYLOR.

On 29th August 1967 I watched a Broad-billed Sandpiper on the east beach of the River Lossie at Lossiemouth. It was a very small solitary wader, not associating with Ringed Plovers, Redshanks and Dunlin which were also feeding in

the area, and as it was scarcely larger than a nearby Pied Wagtail I at first took it for a stint.

Closer inspection showed that it was rather like a Dunlin, but had a more heavily streaked breast, shorter legs and a distinctly different bill. The breadth of the upper mandible was a very noticeable feature when the bird faced me. I watched it feeding busily on the drier parts of a sandbank, and noted that it never probed into the sand with its bill or waded deeply. It proved very difficult to flush, and only flew unwillingly for very short distances before settling again.

I made full field notes, summarised as follows:

Double pale superciliary stripe, upper one faint and only obvious at forehead where apparently merged with lower; mantle and wings dark, marbled, contrasting with very white underparts and flanks; breast streaked, more intense at sides, with throat paler; rump greyish; lateral tail-coverts white; tail dark in centre, with paler brown outer feathers; no obvious wing-bar in flight; underwing soft grey; legs short, greenish-black; dark slate bill, slightly decurved at tip with broad upper mandible, held pointing downwards and looking large for size of bird; low, mechanical call *chirrrit*.

K. A. WOOD.

(These are the third and fourth Scottish records of this northern wader, the previous ones both being from North Fife, where one was shot on 12th August 1912 (*Scot. Nat.* 1912: 212) and one was seen on 9th September 1946 (*Brit. Birds* 40: 154).—Ed.)

Ivory Gull in Shetland

On 10th December 1967, after a week of severe west and north gales, I found a first-winter Ivory Gull on the break-water of Symbister harbour, Whalsay. I watched it for seven or eight minutes with 12 x 50 binoculars before it flew off towards the north and settled alongside 40 or 50 seals on some rocks three-quarters of a mile away.

I was able to compare its strong and very buoyant flight with that of Kittiwakes, Common Gulls and Herring Gulls in the area, and made the following notes:

Forehead and around eye, especially lores, mottled grey and white; rest of head, neck, back and underparts white; scapulars and wing coverts spotted black-brown, and primaries heavily marked with the same colour; tail white, with narrow black-brown subterminal band; bill greyish; legs and feet black, with stance peculiarly 'short-legged'.

J. H. SIMPSON.

(This species is rarely recorded in Scotland, the most recent occurrences being during the winter of 1961/62 (*Scot. Birds* 2: 34-35).—Ed.)

Common Gulls using man-made nest sites

Several observers have noted Common Gulls nesting in trees (see *e.g. Scot. Birds* 4: 324, 392, 580). In Perthshire this species is also making use of highly artificial nest sites. The Loch Breaclaich dam, near Killin, is faced with open stonework at an angle of about 50°; in May 1966 some 12 pairs of Common Gulls were nesting in the interstices between the stones. In 1967 a nest was found in the rotted-out top of a post near Ardeonaig on Loch Tay, and in June 1968 at least one pair was making use of a similar site at the derelict Kenmore pier. The most artificial site found was in Glen Lochay, where in June 1968 two or more pairs of Common Gulls were nesting between the joining-plates of the hydro-electric pipeline. These joining-plates are about nine inches apart; they project about five or six inches above the surface of the pipe (which is itself about six feet in diameter) and they have small cross-pieces which serve to retain the nesting material. Any chick wandering out of such a nest is bound to make a speedy and quite irreversible journey to the ground.

VALERIE M. THOM.

Black-headed Gulls chasing feeding plovers

On 26th November 1967, near Loans, Ayrshire, R. D. Macgregor and I watched the behaviour of Black-headed Gulls towards Lapwings and Golden Plovers which were feeding in a grassy field.

Whenever one of the plovers found a worm, it was immediately chased and harried by one or more gulls. It was noticeable that the Lapwings offered very little resistance, and soon dropped their worms for the gulls to pick up, but the Golden Plovers seemed to have the edge over the gulls in speed, and on several occasions were successful in eluding the gulls altogether.

ROGER B. TOZER.

Fieldfares breeding in Shetland

On 12th July 1968 I had a letter from a crofter to tell me a pair of strange birds had nested on his land. I visited the area on the 14th and found that they were Fieldfares and had just hatched four chicks; there was an egg in the nest, and later five young fledged successfully. The nest was placed under a slight overhang in the bank of a little stream and was quite visible from up to 25 yards. It was a few yards

from the edge of a field of oats, and about 200 yards from the occupied croft house.

The parent birds were noisily aggressive, particularly to other birds passing, and were seen to dive at Common Gulls and Hooded Crows, and once at the crofter's son when he went to the nest. The typical aggression call was a harsh churring, quite different from the calls normally heard from birds on migration.

A return visit was made when the young were some ten days old, and the parents were seen to be bringing food about every 10-12 minutes. A hide was quickly erected between visits, about 35 ft away across the stream, and was completely ignored by the returning birds. A number of photographs were taken (plate 15) and the hide was then removed.

Earlier I had been told that a pair of Fieldfares had been seen chasing off gulls (and later followed by what was supposed to be a fledged young bird) about a mile away, and it is possible that what I saw was a second brood, though the date of hatching was much the same as in Orkney in 1967, when the only previous British nest was recorded (*Scot. Birds* 5: 31).

It seems likely that more than one pair of Fieldfares nested in Shetland in 1968. Two adults were found on another island on 28th July with three young birds, so weak on the wing that the observer thought he could have caught them. He got the impression that they still had some down—"a hairy look" was how he put it. Next day at the same place they were sitting on a fence, making no attempt to feed themselves, and the adults were carrying what looked like small moths to them. It is unlikely that these birds had come even from another Shetland island. A 'family party' on yet another island on 22nd July were possibly just early migrants.

It is of interest that there was an unprecedented arrival of Fieldfares in late July and early August, building up in fine high-pressure weather conditions to over 700 by mid August in Fetlar alone. These birds behaved differently from the normal, later, autumn flocks of migrating Fieldfares, which tend to keep more to the hills and moors, in that they came into the townships and crofts readily, feeding in gardens and around the houses. Many seemed to be young birds, and the churring call was often heard. Exceptionally early Fieldfares were recorded also at Fair Isle by R. H. Dennis—1 on 20th July, increasing to 5 on 23rd, 18 on 27th, 41 on 31st, 60 on 3rd August, 100 on 11th, and 300 on 14th-16th. By the end of August 85 had been caught and ringed, most still moulting and in very juvenile plumage.

R. J. TULLOCH.

American Robin on Foula, Shetland

On 11th November 1967, a day of severe gales, my wife and I caught sight of a Blackbird-sized bird with reddish underparts as the wind buffeted it past our window. We had very close views at three or four yards range before the bird flew off into a potato patch, where it fed between the drills. It was wary, but we were able to watch it from 50 yards for about half an hour with 20 x 50 binoculars and to identify it as an American Robin before it flew away. Owing to the gale we did not follow it, but on 16th November Mrs J. A. Gear and I saw it again.

This time the bird was feeding with a selection of other thrushes and was watched through 10 x 50 binoculars and a x30 telescope from 50-60 yards away. We noted that the American Robin was slimly built and slightly smaller than a cock Blackbird, but considerably larger than a Redwing, with the upright posture of a Fieldfare. The following is a description of the bird's plumage:

Top of head black or very dark; white ring around eye; creamy-white stripes from under chin towards cheeks; back and wings slate-grey; upperside of tail black or very dark; breast and underparts to legs red; yellowish from legs to vent; bill part light, part dark; legs dark.

J. R. GEAR.

(This is the third Scottish record of this American vagrant. All have been recent, but the others were both spring records: Orkney, 27th May 1961 (*Brit. Birds* 55: 577) and Kirkcudbright, 12th May 1966 (*Scot. Birds* 4: 376.—ED.)

Bluethroat breeding in Scotland

Yet another first breeding record for Britain has occurred in Scotland. A nest of the Bluethroat *Cyanosylvia svecica* was found this year in the Moray Basin faunal area. It was located in an acid marsh in which *Carex* and *Phragmites* were dominant (plate 12). A mat of dead vegetation overlay most of the marsh, though in places there were areas of open water. When the nest was found, the current year's growth was still pushing up only sparingly through this mat in the area round the nest, though it was thicker elsewhere. Here and there in the fen were clumps of small *Salix* bushes, a number of these being near the nest.

Miss G. M. Bartlett, Dr M. J. Cotton, S. R. Pepper and I were walking along an embankment across this fen at 0950 hrs BST on 13th June when a red-tailed bird flew into a bush some 15 yards away. Not recognising it, we sat on an embankment to watch it. For most of the next half hour it was clearly in view, though it disappeared into some more

distant bushes for a few minutes. Mostly it sat in the bush in which we had first seen it, moving about a little and occasionally preening, but it spent some time feeding on the open mat of dead vegetation in front of us and for the better part of five minutes sat perched on top of a post only ten yards from us. We were thus able to make detailed descriptions of the bird and had no difficulty in identifying it as a female Bluethroat. Indeed, its most noticeable features, the distinctive facial pattern and reddish sides to the base of the tail, were alone sufficient for identification.

The bird's stance and movements could be described as "rather Robin-like, with a dash of Wheatear." It had a rather upright posture, with drooping wings and upcocked tail, the latter being flicked frequently as the bird hopped about feeding. It made two calls occasionally—a high-pitched *seep*, and a *chat-chat*. Both of these calls, especially the latter, were given more frequently when MJC crawled towards the bird in a successful attempt to photograph it (plate 12). At the same time it flew towards him and altogether gave an impression of agitation.

This behaviour suggested that there might be a nest close at hand, so we searched briefly under the nearby willow bushes. Finding nothing we abandoned this admittedly unlikely idea and left the bird in peace. On our return the same way an hour later, however, we looked for the bird again. As we stood around on the area it suddenly appeared "out of the ground" and SRP quickly spotted the nest from which it had flown. We photographed the nest, for confirmation of its identity, but hurried off immediately we had done this.

The nest was beneath a dead branch. One end of this rested on a fence, the other in the marsh. The nest was under the lower end, hidden by a mass of dead stems. It was itself made of such stems and lined with fine, dead grasses. The cup measured 5-6 cm across and was about as deep.

When found it contained three warm eggs. Next day at 1800 hrs BST one member of the party walked past the nest and looked into it; there were four eggs. The bird was not seen. The eggs were slightly smaller than those of the Robin, olive-blue with reddish-brown markings (especially towards the blunter end), their colouring somewhat reminiscent of eggs of the Blackbird.

On 17th and 20th June representatives of the RSPB visited the nest to confirm the report. On both occasions the female was incubating, four eggs on the first visit and six on the second. At the next visit, on 23rd June, she was not seen; there were still six eggs.

No further visits were made until 14th July, by which date it was judged there should have been half-grown young in the nest. However only fragments of the egg-shells were found. They bore tiny tooth marks, and there was a tunnel through the bottom of the nest, so it seems that it was probably a shrew *Sorex* or fieldmouse *Apodemus* that had eaten the eggs.

While excellent views were obtained by several observers of the female bird, her mate was not seen. Although this is not particularly surprising, since the male Bluethroat is said to be nocturnal during incubation (D. A. Bannerman 1953-63, *The Birds of the British Isles*, vol. 3), it is unfortunate, for it means that we do not know to which race the birds belonged. The nominate race, from Scandinavia, seems the most likely possibility, with *C. s. cyaneacula*, of central and southern Europe, second.

Redwing and Wood Sandpiper have been breeding in Scotland for some time and breeding has been confirmed at new localities in 1968. Snowy Owl and Fieldfare have both bred for two years in succession. One wonders if there is a trend for north European species to spread into Scotland. If this speculation is correct, perhaps further records of breeding Bluethroats may be expected.

J. J. D. GREENWOOD.

Arctic Warblers in Shetland

On 3rd September 1967 at Halligarth, Unst, I observed a large leaf-warbler with a striking yellowish-white superciliary and a whitish wing-bar. I watched it at 20 feet in poor light with 10 x 50 binoculars as it fed in the tops of sycamore trees with two Chiffchaffs. It was very restless, and when alarmed it flicked its wings rapidly above its back, calling a harsh *zick* repeatedly.

Description. Forehead, crown, mantle and wing coverts greenish-brown with olive tinge; supercilium yellowish-white, from front of eye almost to nape; lores and eyestripe dark; ear coverts pale yellow, shading to darker olive; chin to belly whitish; flanks greyish-brown; under tail-coverts not clearly seen; primaries and rectrices dark brown; greater coverts edged white, giving distinct wing-bar; upper mandible dark brown, but lower not clearly seen; legs horn.

I concluded that it was an Arctic Warbler, a species that I have seen frequently on migration in Hong Kong and Singapore. In nearly every observation there I recorded the call as a hard or harsh *zick*. The *tswee-ep* note that some reference books describe as the call was rarely heard.

F. J. WALKER.

On 12th September 1967 I was told by Keith Hague, the

RSPB Snowy Owl warden, that there were several warblers in a garden at Leagarth, Fetlar, with certainly Yellow-browed and possibly Arctic among them. I crossed to Fetlar and went to the spot with KH, Alex Temple and Patricia Williams and watched the birds for about half an hour.

The Yellow-browed Warbler was readily identified by its prominent eyestripe and double wing-bar and we saw that it was clearly agitated by the presence of a slightly larger phylloscopine warbler which it scolded with a surprisingly loud *zeep* call and repeatedly chased. The other warbler was very restless, often flying into the open, sometimes to perch on a wall or make a flycatching sally after a flying insect. When perched it repeatedly flicked its wings, and occasionally (especially when near the Yellow-browed) gave a sharp, hard call—though when being chased it was difficult to decide which bird was making which call.

I agreed with Keith Hague that this second bird was an Arctic Warbler. It was a little larger than a Willow Warbler, and rather greyer, with a larger, heavier dark bill and a prominent pale eyestripe extending well back towards the nape, and with a dark mark through the eye, clearly demarking the greyish cheek. There was little or no yellow on the underparts. The upperparts, wings and tail were uniform dark olive, and a single wing-bar was fairly conspicuous. The legs were pale brownish. I managed to stalk the bird closely enough to get a photograph which shows these characteristics fairly well.

R. J. TULLOCH.

(Though this species has been recorded at least a score of times at Fair Isle it is seldom noted elsewhere and these seem to be the first records for the rest of Shetland (see also *Scot. Birds* 4: 576).—ED.)

Subalpine Warbler, Scarlet Grosbeak and Lesser Grey Shrike on North Ronaldsay, Orkney

On 14th September 1967, in an overgrown garden, I mist-netted a male Subalpine Warbler. The bird was shown to O. Scott, W. Scott, H. Swannie and I. Walker before being released. It remained in the area until 17th September. The following description and measurements were made of the bird in the hand:

Head and upperparts light grey, tinged brown on mantle and back; lores and ear coverts slightly darker; distinct white moustachial stripe; chin and throat deep pink; breast paler pink, merging into white belly; under tail-coverts pink tinged brown, most feathers with white tips; tail feathers dark grey with slight amount of brown, edged lighter grey and tipped white; median and lesser coverts light

grey with brown bases; primary coverts dark grey to grey-brown, edged lighter; secondaries same but edged darker brown; primaries similar to primary coverts; bill slate-blue, dark tipped; legs dark yellow; iris light brown; eye-ring terracotta. Wing 62 mm; tail (12 feathers) 53 mm; bill $10\frac{1}{2}$ mm; tarsus 18 mm; primaries—1st 1 mm shorter than primary coverts, 3rd and 4th longest, 2nd 3 mm shorter, 3rd to 5th emarginated.

On 18th September I netted a female or immature Scarlet Grosbeak on the island. It was readily identified in the hand by its streaked yellow-brown upperparts, yellow to greenish-brown rump and double whitish wing-bar. The following measurements were taken as part of a full description:

Wing 81 mm; tail 56 mm; bill 10 mm; tarsus 18 mm; primaries—1st minute, 2nd to 4th longest, 5th 3 mm shorter, 3rd to 5th emarginated.

As I was driving along on 27th September, I saw a shrike proceeding in front of me. It perched on a post, and I was able to watch it and take notes for about three minutes before it flew off.

The forehead, lores, ear coverts and front of the crown were black, and the chin, breast and belly white, tinged with pink, which was deeper on the flanks. These details, together with the grey upperparts and black-and-white wings and tail, confirmed that the bird was a Lesser Grey Shrike. Just prior to seeing it I had seen a Red-backed Shrike at the roadside.

KENNETH G. WALKER.

(The Subalpine Warbler is the first recorded in Orkney.—Ed.)

Firecrest in Orkney

On 13th September 1967 we watched a Firecrest catching flies in the lighthouse garden on Auskerry. It was the size of a Goldcrest and had very energetic flight movements. As soon as we got the glasses on it we saw that it was not a Goldcrest. The face pattern was most noticeable—a white stripe above the eye and a dark one through it, with a very faint whitish mark below. No crest was visible. Otherwise the head and upperparts were greenish olive; wings slightly browner, with one short yellowish wing-bar and a second, longer one with a dark band below it; throat and upper breast yellow-brown, distinctly separated from grey-white belly; bill and legs darkish brown.

The call was rather lower pitched (sweeter and more melodious DMS) than a Goldcrest's, not so thin, cleaner and perhaps a little stronger.

This is the first record for Orkney.

E. BALFOUR, D. M. STARK.

Lesser Grey Shrike in Shetland

On 15th October 1967 at Saxa Vord, Unst, I watched a Lesser Grey Shrike from the window where I was sitting; it was perched on a lamp-post about 30 feet away, and was in view for five to ten minutes.

It was very similar to a Great Grey Shrike I had watched at Saxa Vord the previous day, but was smaller with a narrower tail. It had clear, broad black facial markings which continued right across the forehead, and noticeably pinkish underparts. The upperparts were blue-grey, and the tail showed distinct white outer feathers. A conspicuous white bar showed on the black wings.

E. THOMSON.

(Recent records of this species in Orkney and Shetland have been surprisingly frequent, but the occurrence of Great and Lesser Grey Shrikes on successive days is a curious coincidence, following a similar instance, also in Shetland, two years earlier (*Scot. Birds* 4: 378).—Ed.)

Black-headed and Pine Buntings in Orkney

A male Black-headed Bunting was seen by T. B. Miller about 25th June 1967 near the farm of Whitehow, Papa Westray. It remained there for some three weeks, occasionally feeding with the local sparrows. Mr Miller's description of the bird includes the large size, and the characteristic black head and yellow underparts.

E. BALFOUR.

On 4th August 1967 I identified a Black-headed Bunting near the coastguard lookout on North Ronaldsay. The bird was seen again on 6th and 7th, and full field-notes were compiled from my observations on all three days. The black head showed lighter tips to the feathers, especially on the back of the head. A male Red-headed Bunting was present at the same time.

From 7th to 11th August a male Pine Bunting was seen in some sycamores on the island. It was the most inactive bird I have ever watched, and I was able to compile a full field description from notes made on 7th and the following days.

Crown grey-white; forehead and lower sides of crown black, forming distinct stripe that continued to nape; from in front of eyes to lores and nape chestnut or russet, some feathers tipped white to give a mottled appearance; below eye to centre of ear coverts white; ear coverts outlined in black with some white mixed, giving a mottled appear-

ance; chin and throat russet; lower throat and upper edge of breast off-white, forming distinct band across breast and throat; rest of breast and flanks russet, flecked off-white; belly and under tail-coverts white; back of neck and mantle very light brown, latter streaked with black, and some russet marks on lower back; scapulars similar but with slightly more russet; lesser coverts light brown; greater coverts same but with light russet tips; inner secondaries dark brown edged off-white, outer ones light brown; primaries dark brown, edged off-white, but first four or five distinctly lighter; rump russet; upper tail-coverts russet with white tips; tail feathers dark brown, outer edge of outer pair white; bill brown; legs light brown.

K. G. WALKER.

(These three records have been accepted by the Rarities Committee, subject to the reservation that they may have been escapes—a possibility strengthened by the occurrence of three species of rare buntings, all potential cagebirds, in one week.—Ed.)

Little Bunting on Out Skerries, Shetland

On 20th September 1967 I was on Out Skerries when there was a large number of migrants on the islands. One of these was flushed from a potato patch, calling *tsic* before disappearing into another patch. I failed to get a good look at this bird that day, and on the following day when I found it again I could not be certain that it was a Little Bunting as I suspected. My provisional identification was confirmed when I caught it in a mistnet and was able to examine and measure it in the hand:

Upperparts russet-brown streaked black; head showed characteristic pattern with prominent eyestripe but cheeks not as rufous as in most illustrations; wings brown, edged paler; inner secondaries broadly edged russet; upper secondary coverts with broad pale edgings; tail brown, outer feathers white; underparts pale with dark streaks on flanks and upper breast; orbital ring creamy; legs and bill horn-colour, bill more pointed than usually shown (see e.g. *Popular Handbook*). Wing 69 mm; tail 55 mm; bill 12 mm, about 2 mm longer than quoted in *Handbook*; tarsus 18 mm; 1st primary minute, 2nd, 3rd and 4th emarginated and equal, 2nd 3 mm shorter, 5th 5 mm and 6th 10 mm shorter.

R. J. TULLOCH.

R e c e n t N e w s

ANDREW T. MACMILLAN

We cannot help thinking that this section is still a little thin. Only one local recorder in three sent in notes this quarter, the others presumably feeling they had nothing suitable to report. Certainly we do not intend to go beyond about two pages, and we need only a few items each time, but it

may well require reports from several sources to show what is interesting. To provide even two pages for those who enjoy this section we have had to include some records we would have preferred to leave for publication solely in the Scottish Bird Report. We are anxious to avoid routine notes on arrival dates, semi-scarce migrants and the like, so as to keep the effort of reporting and editing to a minimum, and we would also rather retain casual rarities of no special interest for fuller presentation as Short Notes. This leaves a rather restricted field, but what we seek are news items about birds—irruptions, exceptional falls, unusual concentrations, success or failure of famous individuals or studied populations, the impact of man (nature reserves, pesticides, pollution, alteration of habitat), dramatic range or population changes, unusual excursions. This is a good place for the sort of record that will not fit neatly into the species list of the Scottish Bird Report. Suggestions are welcome, but not for anything on the lines of the former mass of Current Notes.

Ospreys and Snowy Owls. A record total of 37,500 people visited the RSPB's Ospreys at Loch Garten this summer. Two young were reared there and three at the new eyrie first used in 1967, but the eggs failed to hatch at the second Speyside eyrie yet again. There is also evidence that pairs are establishing themselves and may be breeding elsewhere in Scotland.

The Snowy Owls again nested on Fetlar, almost in the same spot as last year, and three young were reared. Well over 500 people found their way to even this remote spot to see the owls under the watchful eye of the RSPB. Towards the end of the summer the male bird was found injured, but fortunately it responded to careful treatment from the wardens and was able to rejoin its family.

Sparrowhawks, At times we have wondered whether reports of this species point to recovery from low numbers or merely to the greater interest in it. No fewer than 46 young were ringed by one Dumfriesshire worker this summer, but it is not thought that this indicates any sharp change in status in a county where the bird has never been scarce.

Terns. The success of a ternery is often a matter of all or nothing. At Tentsmuir disaster struck the main colony in early July in the form of gales, high tides and blown sand, so that nearly 500 pairs had not a single chick on the 13th; some laid again but eventually deserted, evidently because it was too late in the year. The Inchmickery colony in the Forth also had a poor season, for similar reasons, but in interesting contrast the Sands of Forvie ternery was possibly the most successful of all the east coast colonies in 1968. The

Sandwich Terns were in early (from 3rd April) and the first eggs were exceptionally early (on 30th April). Over 1200 pairs reared about 1.3 young each and then dispersed much more rapidly than usual, all but a few being gone by the end of July.

Ducks and geese. Large numbers of **Mallard** and **Teal** were a feature of early September in Dumfriesshire, indicating a good breeding season. It also seems to have been the best breeding season for several years for **Goosanders** in the Glenkens district of Kirkcudbrightshire, 61 on Loch Ken on 15th September being the highest post-breeding assembly since 1961.

The moult migration of **Canada Geese** to the Beaully Firth is well known, but mention may be made of 10-12 flightless birds at the other end of the country, on 19th June on the most southerly of Murray's Isles in the Fleet estuary.

At Loch Leven the first **Pink-footed Geese** of the autumn were 4 on 15th September, and there were 39 on 21st and over 200 on 28th; the main arrival was on 29th, when some 5000 came in, and about 9000 were present on 1st October. There were 160 at Annan as early as 16th September, and Fair Isle had record counts of over 75 on 21st and over 120 on 29th, compared with the previous best of 33. The first 75 **Barnacle Geese** were at Caerlaverock on 18th September, and numbers rose to 240 on 21st and 1800 on 23rd.

Thrushes. There was a most exceptional early arrival of **Fieldfares** in Shetland and at Fair Isle, where the first was on 20th July and numbers rose to 41 by the end of the month and to 300 by the middle of August, most being in moult from the juvenile plumage. Compared with these, reports from the Isle of May on 24th August and Fife Ness on 29th are rather overshadowed. Fair Isle also had unprecedented falls of 2000 **Song Thrushes** and 165 **Ring Ouzels** on 26th September.

Waders. Daily watches on a new Solway sandbank at Glencaple revealed a large movement of waders on 23rd-24th August—**Lapwing** increased to 2000 (and 11,000 between Carsethorn and Annan), 40-50 **Ringed Plover**, 4 **Grey Plover** in almost complete summer plumage, the first 300 **Golden Plover** on the shore, **Curlew** increased to 700, **Black-tailed Godwit** up from 25 on 17th to 50 on 24th (and 142 on 26th, with also 120 **Bar-tailed Godwit**), the first 300-400 presumed **Iceland Redshank** arrived overnight looking very pale in body moult, 2 **Spotted Redshank** (and 8 at Stanhope), 10 **Greenshank** (and 20 in a row at Caerlaverock), the first 200 **Knot** (50 still red) on 24th, **Ruff** up from 2 on 24th to 10 on 26th, and also 2 **Wood Sandpipers** across the Nith on 25th.

Miscellaneous migrants. More **Sooty Shearwaters** than usual were reported between Sumburgh and Fair Isle—over 20 on 23rd August, 10 on 13th September and over 25 on 29th. Good numbers were noted also in east Fife in mid September, with a maximum count of 15 per hour at Fife Ness on 14th.

A substantial movement of **Swifts** was recorded at Loch Leven, Kinross, on 13th-16th July, with minimum daily totals of 700, 1000, 600 and 400 respectively. Many young birds would still be unfledged at these dates. A strong invasion of northern **Great Spotted Woodpeckers** was recorded at Fair Isle, with 10 on 7th September, 9 on 8th, 1 on 9th, 5 on 10th, and a peak of 11 on 13th, with smaller numbers to the end of the month. We have had no other reports of this movement, but one was on the Isle of May on 27th August.

The first note of **Waxwings** is of a flock of 20 on a rowan tree near Braemore Lodge, Wester Ross, on 27th September. Twenty **Crossbills** were at Loch Mannoeh, Kirkcudbrightshire, on 17th July, but it is not clear whether they are part of a new invasion or a residue from an earlier one.

Reviews

The Wreck of the Torrey Canyon. By Crispin Gill, Frank Booker and Tony Soper. Newton Abbot, David & Charles, 1967. Pp. 128; 16 plates (31 photographs) and 6 maps. 21½ x 13½ cm. 21/-.

Conservation and the Torrey Canyon. By I. D. Mercer and others. *The Journal of the Devon Trust for Nature Conservation*, Supplement, July 1967. Pp. 72. 21½ x 14 cm. Paperback, 5/-.

A world seeking to make economies will tend to bring together ever larger amounts of an increasing range of substances, though they may be potentially dangerous, for purposes of processing and storage and will carry them in greater bulk too. Disasters are most likely to occur when these large quantities are being moved. The *Torrey Canyon* made history just as much as an ammunition ship in harbour, during the last World War, which exploded and wiped out half a town. We have learnt how to cope with explosives (in some instances by limiting the quantities that are brought together); can we not also expect to deal safely with all these other potentially harmful substances if we give our minds to solving the problem which each new menace presents?

The first step in preparing to meet a future danger is to know what happened on a past occasion. We should be very grateful to joint authors Crispin Gill, Frank Booker and Tony Soper who, in *The Wreck of the Torrey Canyon*, have produced a blow-by-blow account of the wreck and immediate aftermath which is both clear and exciting and therefore extremely readable. Chapters have been divided among the individual authors—The Wreck, The Break-up (CG); The Black Tide, The Battle on the Beaches, The Oil Comes to Brittany (FB); Effects on Wildlife, Seabird Rescue, Poison in the Sea (TS); Legal Complications (CG); The Treatment of Oiled Birds (TS)—without losing continuity, or conflict in style. The account brings out the unpreparedness of or-

ganisations at all levels within the country to deal with a menace of this type and scale—experience was limited to the clearing up with detergents of minor oil spills at the Milford Haven oilport—while the urge for quick action forced the taking of decisions on scanty information.

The use of detergents followed inevitably from their use at Milford Haven, though even there damage to sea life had been reported. The reported feeling, widespread among naturalists at the time, that the use of detergents "should be avoided where possible on nature reserves and areas of high biological value" would be stated much more strongly now. Tony Soper describes the catastrophic effect of detergents on the life of the shore and of the top metre of the open sea, wherever they were applied, on the English side of the Channel; while Frank Booker reports the situation on the Brittany coast, where the French did not use detergents, in deference to the shellfish industry. Instead, volcanic ash and sawdust were scattered on the sea-borne oil, and the oil-soaked material and free oil were removed mechanically when they reached the beaches. The opposing methods will afford opportunity for comparison of their after-effects.

Tony Soper deals with the rescue, treatment and rehabilitation of oiled seabirds with sympathy, great knowledge and more than a touch of realism. There is a world of difference between the treatment of a regular flow of a few birds at a time by the Mousehole Bird Hospital of the RSPCA and the attempted care of many thousands of birds over a short period when many inexperienced helpers have to be brought in and far less suitable, extra, makeshift accommodation and equipment has to be used. Anyone who has a wish to care for oiled birds personally should read the appendix, in which Tony Soper does not make light of the difficulties. Everyone concerned worked magnificently but the results were disappointing. 8000 birds were collected for treatment (2000 of these were recorded as "dead") of which 479, or 6% of the original 8000, were cleaned, rehabilitated and returned to the wild, there to suffer further heavy losses, as we now know, because some treated birds failed to cope. Percentage success could obviously be raised—and much money and effort saved—by eliminating the more grossly affected birds, as Tony Soper suggested. The book does deal with the question of whether the effort to cleanse and rehabilitate should be made at all. A possible alternative is to limit the numbers treated to those that can be treated at permanent cleansing stations. The Seabird Appeal, a fund set up shortly after the disaster to pay the cost of seabird rescue, also aimed at the support of research into the effects of pollution on seabird and marine life. Part of these funds has been allocated recently for a seabird survey. Clearly there is a choice between the expenditure of relatively large funds on treating individual birds and on seeking information that will benefit birds and wildlife generally. Many conservationists would favour the latter purpose but the choice will continue to be made by the persons who have the money to give.

Shore life is not expected to recover fully for 8-10 years and this period should be one of intensive and yet far-ranging study. The three joint authors have recorded the incident so that we have a datum for future reference. They have also included in their book the names of the many organisations engaged in dealing with incidents at the time, to which we should look for reports of the work they will be doing on the long process of restoration of both environment and wildlife. The Nature Conservancy and the Marine Biological Association, particularly through its station at Plymouth, can be expected to play leading parts. The Government Scientific Advisory Committee under Sir Solly Zuckerman has already produced a report in which lines for future research are suggested, and the various bird organisations have also reported.

The book is excellently produced. Photographs, selected from the large number available to the press at the time, are of a high standard and cover a wide range of subjects. It is a high quality article remarkable for the conciseness of its presentation; it will be wanted by anyone who intends to keep up with the continuing story of the *Torrey Canyon*.

The naturalists' trusts of Cornwall and Devon (particularly of Cornwall, which was the more seriously affected) and local natural history societies were naturally involved in the *Torrey Canyon* incident from the start and they will remain involved throughout the recovery period as their members will probably provide many of the on-the-spot observers needed. The wide range of people and interests encompassed by the trusts is indicated by the variety of articles in the special supplement *Conservation and the Torrey Canyon* to the *Journal of the Devon Trust* for July 1967. Eleven separate articles, between which there is some overlap, deal with oil and detergent pollution, their effect on marine life, and some special aspects of the *Torrey Canyon* incident. Officers of the Nature Conservancy and the Plymouth Marine Biological Laboratory, university and educational staff and trust members, are among the authors. Two Nature Conservancy officers report on Brittany. Two representatives of a Sea Fisheries Joint Committee make observations of damage to marine life caused by the *Torrey Canyon* oil and particularly the detergents used to dispel it. Dr Nelson-Smith of University College, Swansea, in "Oil, Emulsifiers and Marine Life" reports experience of the use of detergents at Milford Haven. I. D. Mercer of the Slapton Ley Field Centre supplies an introduction and asks some sharp questions. The longest article, by Clyde Maxwell and C. M. Ann Baker, discusses the past, present, politics and prospects of oil and detergent pollution in a far-ranging survey which contains a great deal of information, and also a lot of technical terms which will unfortunately discourage many potential readers. In the field of politics the present leadership of science is criticised. The Devon Trust for Nature Conservation is to be congratulated on a supplement which adds considerably to knowledge of the *Torrey Canyon* incident and of pollution in the marine environment. The articles will interest all those who want to know more of the *Torrey Canyon* story and are good background reading to *The Wreck of the Torrey Canyon*.

B. GILCHRIST.

Peril in Perspective. An Account of the Medway Estuary Oil Pollution of September 1966. By Jeffery G. Harrison and W. F. A. Buck. Special Supplement to the Kent Bird Report No. 16 (1967). The Kent Ornithological Society [1968]. Pp. [4] + 24. Map and 4 plates (7 photographs). Paperback, 5/-.

When this incident occurred, the breeding birds had mostly left the area and the wintering ones had not arrived. Even so, 2778 birds were killed, mainly gulls and waders. Commendable follow-up studies showed that there were few apparent effects on the breeding populations and that the wintering populations were back to normal by 1967-68. What effects there were may have been due to widespread destruction of other elements of the ecosystem. This resulted from the saltings being cleaned with detergents, despite these being applied with care. No marine ecologist was present to study this destruction, but it appeared that recovery from it was largely complete within six months. The authors conclude: "Almost certainly it would have been wiser to have left the oil to break down naturally... but this would only have been at the cost of more bird casualties."

It should be noted that this disaster was unusual in that most of the

birds were affected by walking on stranded oil; usually birds are affected by swimming into floating oil. Thus it would usually be better to leave the oil stranded rather than to wash it into the water, where it may come out of emulsion and contaminate more birds.

All birdwatchers should read this report; those living by the coast must read it. They will then perhaps be fired to carry out similar studies in their own areas, should the occasion arise. The more knowledge we have of the effects of oil-pollution, the better. Of course, this knowledge may not be used. Many experiences, including the one reported here, were available before the *Torrey Canyon* incident to show that indiscriminate use of detergents is the height of folly. Nevertheless, in the *Torrey Canyon* incident they were used, if not indiscriminately, then with the minimum of discrimination. Since then we have learned that detergents are not only dangerous but they are a somewhat inefficient treatment for stranded oil. In many situations other methods are at least as good and are cheaper and less dangerous. Nevertheless, a recent report circulated by the government to Local Authorities gives the impression that detergents provide the only practicable treatment. Such a delay in knowledge being put to practical use is rather too much in such an important matter.

J. J. D. GREENWOOD.

Birds of Surinam. By François Haverschmidt. Illustrated by Paul Barruel. Edinburgh and London, Oliver & Boyd, 1968. Pp. xxxii, 445; 40 colour plates (410 bird figures), 30 black-and-white plates (47 photographs), 155 line drawings of birds, fold-out map. 27 x 19 cm. £12, 12/-.

For the past two decades the firm of Oliver & Boyd has earned a reputation for the publication of superbly produced bird books. This sumptuous new volume, which is attractively laid out and profusely illustrated, maintains the high-standard format, style and quality of previous volumes. Quite apart from its being an indispensable textbook to resident and visiting ornithologists in Central and tropical South America, it is, notwithstanding the high price, a work the collector of fine bird books will cherish.

A volume on the birds of a country in the Neotropical region is particularly welcome as books dealing with the rich, abundant bird life of that region are few. An introductory chapter gives short notes on topography, climate, ornithological research, breeding birds, migration and conservation. This is supplemented by an excellent series of photographs depicting typical habitats of the Surinam countryside and a selection of the nests of several indigenous species. It is evident from the main text, which lists over 600 species, that little is known regarding the distribution and habits of many of them. In fact the author states that at least another 100 species can be expected in Surinam, and one of the aims of his book is to arouse interest in the marvellous bird life of the country among the local population in the hope that some of them will develop into acute field observers. A noteworthy feature is that the author, who is Chief Justice of Surinam, has collected all his vast information during his holidays and in his spare time from that elevated office.

Not least among the delights of the book are Paul Barruel's beautifully executed coloured figures and line drawings which will undoubtedly enhance the artist's already high reputation as one of the foremost textbook illustrators of our time.

D. MACDONALD.

The Scottish Ornithologists' Club

Balance Sheet as at 30th June 1968

		As at 30/6/68	As at 30/6/67
Accumulated surplus as at 30th June 1967	...	£2758 9 2	£2435
Deduct: Excess of Expenditure over Income for year	...	361 17 6	Cr.323
		<u>£2396 11 8</u>	<u>£2758</u>
Add: Share of Scottish Ornithological Cruise Ltd surplus on liquidation	...	1809 8 3	—
Premium on repayment of £500 5% Defence Bonds	...	15 0 0	—
Accumulated Surplus as at 30th June 1968	...	<u>£4220 19 11</u>	<u>£2758</u>
<i>(Note. £1000 of this surplus is earmarked for the House Fabric Fund)</i>			
Made up of:			
Cash in hand and bank current accounts	...	£166 12 9	£109
Savings Bank account	...	42 12 0	128
Bookshop stock at valuation	...	602 0 0	597
Tie and Badge stocks at valuation	...	153 7 6	225
Debts due to Club	...	260 12 2	300
Investments at cost, as below	...	<u>4000 6 2</u>	<u>5608</u>
		<u>£5225 10 7</u>	<u>£6967</u>
Less:			
Life Membership Fund	£150 0 0		—
Subscriptions paid in advance	41 5 0		80
Donations not yet expended	—		28
Debts due by Club	357 19 3		378
Sum due to Endowment Fund	158 2 11		13
Sum due to Cruise Company	—		3710
Sums earmarked for			
Library Binding	238 3 6		—
Painting	59 0 0		—
		<u>1004 10 8</u>	<u>4209</u>
		<u>£4220 19 11</u>	<u>£2758</u>

Investments as at 30th June 1968 at cost

5% Defence Bonds	...	—	£500
Loan to Edinburgh Corporation at 6½%	...	—	500
Loan to Edinburgh Corporation at 5½% at 7 days call	£500 0 0		—
Loan to County Borough of Wigan at 7½% repayable 1968	600 0 0		600
Loan to Matlock Urban District Council at 7 days call	—		3500
Safeguard Industrial Investments Ltd—700 Ord. shares of 5/- each	...	507 19 11	508
£950—6½% Treasury Loan 1976	...	945 9 0	—
£1300 British Electricity 3% Guar. Stock 1974/77	...	952 9 0	—
£550—5¼% Conversion Stock 1974	...	494 8 3	—
		<u>£4000 6 2</u>	<u>£5608</u>

Revenue Account for the year ended 30th June 1968

INCOME	Year to Year to			
	30/6/68		30/6/67	
Subscriptions received for year	£2167	14	0	£1966
Income Tax recovered on covenanted subscriptions	301	13	6	248
Interest and Dividends received (gross)	229	7	3	283
Surplus on Bookshop (Sales £3499)	900	6	5	1151
Sale of "Scottish Birds" to non-members	89	10	8	124
Sundry Sales less sundry purchases	21	4	11	16
Contribution from Scottish Ornithological Cruise Ltd towards facilities granted by the Club	—			27
Contribution from the World Wildlife Fund towards facilities granted by the Club	6	0	0	—
Donations received	53	8	0	86
	<u>£3769</u>	<u>4</u>	<u>9</u>	<u>£3901</u>
EXPENDITURE				
Branch Expenses including lectures	£340	1	4	£393
Travel Expenses of Council Members and of Delegates to Conferences	50	18	11	49
Secretarial Services	2089	14	4	1536
Office Expenses	445	10	0	397
Scottish Centre for Ornithology and Bird Protection: Club's share of running expenses including £100 annual contribution to the House Fabric Fund	395	8	7	454
Cost of books purchased for Library	113	5	10	63
Cost of publishing "Scottish Birds" (less advertising revenue £239)	648	14	5	606
Net cost of Annual Conference	18	3	4	64
Subscriptions paid	29	5	6	16
	<u>£4131</u>	<u>2</u>	<u>3</u>	<u>£3578</u>
Excess of Expenditure over Income carried to Balance Sheet	361	17	6	(323)
	<u>£3769</u>	<u>4</u>	<u>9</u>	<u>£3901</u>

House Fabric Fund—Summary of Accounts for year to 30th June 1968

RECEIPTS	Year to Year to			
	30/6/68		30/6/67	
Balance as at 30th June 1967	£26	1	2	£202
Year's rent from Royal Society for Protection of Birds	100	0	0	100
Year's rent from Mr and Mrs George Waterston	100	0	0	100
Annual Contribution from Scottish Ornithologists' Club Revenue Account	100	0	0	100
Special Contribution from do.	—			125
Miscellaneous Interests	1	3	11	5
	<u>£327</u>	<u>5</u>	<u>1</u>	<u>£632</u>
EXPENDITURE				
Repairs and Maintenance	£32	15	7	£379
Property Burdens	166	0	2	212
Insurance	18	6	7	15
	<u>217</u>	<u>2</u>	<u>4</u>	<u>606</u>
On Deposit with Dunedin Building Society	110	2	9	26
	<u>£327</u>	<u>5</u>	<u>1</u>	<u>£632</u>

ENDOWMENT FUND

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

Revenue Account for the year ended 30th June 1968

	Year to Year to	
	30/6/68	30/6/67
INCOME		
Interest and Dividends received (gross) ...	£178 12 9	£115
EXPENDITURE		
Grants (as detailed in Reports of Council) ...	30 0 0	100
Unexpended Income for the year ...	<u>£148 12 9</u>	<u>£15</u>

ENDOWMENT FUND**Balance Sheet as at 30th June 1968**

Endowment Fund as at 30th June 1967 ..	£2079 19 6	£2075
Additions to Fund during year—share of Scottish Ornithological Cruise Ltd on liquidation ...	1000 0 0	5
Endowment Fund as at 30th June 1968 ...	£3079 19 6	£2080
Accumulated Unexpended Income as at 30th June 1967 ...	£128 11 7	114
Add Unexpended Income of year ...	148 12 9	15
Accumulated Unexpended Income as at 30th June 1968	277 4 4	129
	<u>£3357 3 10</u>	<u>£2209</u>

Made up of :

Investments at cost, as below ...	£2999 16 9	£2000
Royal Bank of Scotland—Deposit Account ...	199 4 2	196
Due by Club's main Funds ...	158 2 11	13
	<u>£3357 3 10</u>	<u>£2209</u>

Investments as at 30th June 1968 at cost

£1151—3½% War Stock ...	£1000 0 0	£1000
976 Units of the Equities Investment Trust for Charities Ltd ...	1000 0 0	1000
£1140—5% Exchequer Stock 1976/78 ...	999 16 9	—
	<u>£2999 16 9</u>	<u>£2000</u>

EDINBURGH, 27th September, 1968.—I have audited the foregoing Revenue Accounts for the year to 30th June, 1968, and the Balance Sheet as at that date. I have accepted as correct the Subscriptions and other receipts shown as received in the Books and the value placed on the Bookshop Stock. Subject to this I certify that in my opinion the foregoing accounts are correctly stated and sufficiently vouched.

(Signed) ARTHUR WALKER,
Chartered Accountant.

REPORT OF COUNCIL

Your Council submits the following Report for the year 1967/68 :

Membership At the end of the session Club membership had reached a total of 1949 with 351 new members enrolled during the year, or 26 more than in the previous session. Resignations and lapsed subscriptions (189) were higher than before, partly due to the number of overseas members who joined during the cruise and did not continue to subscribe. The total increase for the year was 162, reflecting the normal steady growth of the Club. Three members transferred to the new Life Membership subscription. A table of membership figures for the past six years is given below :

	31/8/63	30/6/64	30/6/65	30/6/66	30/6/67	30/6/68
Ordinary	1062	1194	1263	1373	1524	1677
Junior	195	198	222	252	259	265
Life	—	—	—	—	—	3
Honorary	4	3	3	3	4	4
	<u>1261</u>	<u>1395</u>	<u>1488</u>	<u>1628</u>	<u>1787</u>	<u>1949</u>
Increase	158	134	93	140	159	162

The number of Deeds of Covenant signed by members for their subscriptions rose from 262 to 313, representing 355 subscriptions and contributing £302 to the income of the Club. This session completed the first seven years of covenanted subscriptions, and the Council wishes to thank the many members who renewed them for a further period, and to stress the value to the Club of this method of subscribing.

Honorary President At the Annual General Meeting the Council had great pleasure in announcing the election of Sir Arthur Duncan as an Honorary President of the Club.

Deaths It is with great regret that the Council records the death of several of our older members : Mr G. G. Blackwood, a founder member; Mr David Hamilton, a founder, and later an Honorary member; the Rev. J. M. McWilliam, one of our Honorary Presidents; Colonel Richard Meinertzhagen, Mr Charles W. Sanderson, and the Rev. E. T. Vernon, a founder member and for many years Chairman of the Glasgow Branch.

Business of Council Five meetings of Council were held during the session. A special Management Committee was appointed under the Chairmanship of the Hon. Treasurer with responsibility for examining and making recommendations as required on matters of Club administration. This Committee was asked to consider an application for a grant towards an expedition organised by student members of the Club to carry out a census of seabirds on St Kilda, and on their recommendation the Council gave a special donation of £30 from the Endowment Fund.

A request was received from the Malta Ornithological Society for support for an appeal to their Government to retain the Gadeira Marsh as a nature reserve. The Council considered a report on this area, and approved a letter written by the Chairman to the Prime Minister of Malta commending this project to him.

The Council also gave their support to two other important projects : the seabird census organised by the Seabird Group, and the Atlas of British Breeding Birds which was launched by the British Trust for Ornithology in the spring, based on an enquiry over a five-year period. Mr C. G. Headlam has been appointed coordinator for Scotland for the Atlas scheme. The Council commends these two projects to all members of the Club and asks for their fullest cooperation.

Sir Landsborough Thomson and Mr George Waterston continued to represent the Club at meetings of the British Section of the International

Council for Bird Preservation, and Miss Valerie Thom was nominated as our representative to the Duck Working Group of the International Wild-fowl Research Bureau.

Annual Conference The Twentieth Annual Conference and Annual General Meeting of the Club, held in Dunblane, was attended by over 250 members and their guests. Papers on ecological studies of seabirds and a preliminary account of the effects and lessons of the Torrey Canyon disaster were given by Dr G. M. Dunnet (Culterty Field Station) and Dr Duncan Poore (Director General of the Nature Conservancy) respectively, and films were shown. A joint meeting was held with the Royal Society for the Protection of Birds when the Director, Mr Peter Conder, gave a lecture on current developments in bird protection.

Branches A full programme of lectures was given in eight Branches and two Groups. As a result of the growth in attendance stimulated by the enthusiasm of the office-bearers, the new Stirling Group has now been given Branch status. Local excursions were organised by the Branches during the summer and the annual weekend excursion to the Solway goose grounds was well attended. The latter was greatly helped by the officers and members of the Dumfries Branch.

"Scottish Birds" Four numbers of the journal were published during the session and Volume 4 was completed with an Index. The Council adopted a proposal by the Editor for an annual report to replace the current notes published in each number, and appointed local recorders throughout Scotland to collect records. The Council wishes to express its thanks to Mr Peter Slater, now retiring from the Editorial staff, for his work in collating the current notes.

A new cover for the journal designed by Mr John Busby was approved and introduced in the new volume.

Club Library The Library Committee met several times during the year to continue their discussions on requirements and the binding programme. Over 60 volumes of important journals were collated and sent for binding, utilising about a third of the special allocation of funds for this purpose.

Council again thanks those who have so generously presented books, journals and reprints which have been a valuable addition to our collection.

Scottish Bird Records Committee The Committee met once during the session under the Chairmanship of Mr D. G. Andrew. Its Annual Review continues to be published in *Scottish Birds*.

Bookshop Sales of books were maintained at a high level. Displays were taken to the annual conferences of the British Trust for Ornithology, and the RSPB/Irish Ornithological Club in Eire, where considerable sales were made. Opportunity was also made available for book displays at local meetings of the Scottish Wildlife Trust, and the Council thanks these bodies warmly for the assistance they have given to our publicity and sales.

Scottish Centre Facilities were again made available for informal discussion groups and for meetings of the Young Ornithologists' Club, the Fair Isle Bird Observatory Trust, the Isle of May Bird Observatory and Field Station Committee, and the Aberlady Bay Nature Reserve Biological Committee. Temporary office accommodation was also provided for Mr Peter Tait, Scottish Organiser of the World Wildlife Fund. Many enquiries were dealt with from British and overseas visitors.

In the spring, Miss Fiona McLaren, Assistant Secretary, left the staff in order to take up a position abroad. Her place was filled temporarily for two months by Miss Jenny Bradley.

Acknowledgments In conclusion, the Council wishes to record its sin-

ere thanks to all those who have helped the Club so freely throughout the session, by covenants, donations, lectures, Branch organisation, editorial assistance, service on special committees and in many other unseen and useful ways.

For the Council, W. J. EGGELING, President.

THIRTY-SECOND ANNUAL GENERAL MEETING OF THE CLUB

The 32nd Annual General Meeting of the Club was held in the Hotel Dunblane, Perthshire, on Saturday 26th October 1968 at 6 p.m. Dr W. J. Eggeling, President of the Club, presided over an attendance of about 150 members.

Apologies Apologies for absence were received from Dr David Boddington, Dr J. Morton Boyd and Dr I. D. Pennie.

Minutes The Minutes of the 31st Annual General Meeting, held in Dunblane on 28th October 1967, were approved and signed.

Report of Council The Report of Council for the last session, presented by the Chairman, was adopted.

Accounts Presenting the Accounts for the year, the Hon. Treasurer said that these showed a deficit for the first time. With the exception of one abnormal item, this had been forecast and he estimated that with present staff commitments, a deficit of £150 could be expected in the coming year. The Accounts were approved.

Commenting on the Accounts, the Chairman emphasised that the Club was now approaching a difficult period in its growth. The development of the RSPB, which had necessitated their removal in the autumn from 21 Regent Terrace to larger premises, had resulted in a loss of rental only partially recovered by leasing one of the vacated offices. The staffing requirements of the Club were being considered again and would be advertised in the December journals. An alteration in the staff structure would correspondingly increase the deficit for the coming year and might result in a proposal to increase the Club subscription.

In response to a question from the Chairman, members present showed that they accepted that there might be good reason for an increase in subscription in a future year and that they looked upon this as not unreasonable.

Appointment of Auditor Mr Arthur Walker, C.A. was re-elected Auditor for the ensuing session.

Election of new Members of Council In the absence of any other nominations, R. S. Baillie and C. G. Headlam were elected Members of Council in place of J. H. B. Munro and G. L. A. Patrick who were due to retire by rotation. The Chairman thanked the retiring Members for their service to the Council.

B.T.O. Atlas of British Breeding Birds At the invitation of the Chairman, C. G. Headlam, Scottish coordinator for the Atlas of British Breeding Birds project, spoke briefly about the areas already covered and asked for the support of members in this important survey. He paid tribute to the help already given by Local Recorders and Branch Secretaries.

Votes of Thanks The Chairman moved a warm vote of thanks to all those who had given their help at the Conference and to the Club staff. The meeting closed with a hearty vote of thanks to the Chairman proposed by A. T. Macmillan.

**COUNCIL AND OFFICE BEARERS OF THE CLUB
FOR SESSION 32**

Hon. Presidents : David A. Bannerman, O.B.E., LL.D., Sc.D., F.R.S.E.; Sir Charles G. Connell, W.S.; Sir Arthur B. Duncan; George Waterston, O.B.E., F.R.S.E.

President : W. J. Eggeling, B.Sc., Ph.D., F.R.S.E.

Vice-President : A. Donald Watson.

Hon. Treasurer : Maxwell K. Hamilton, C.A.

Hon. Treasurer of House Fabric Fund : D. G. Andrew, W.S.

Secretary and Treasurer : Mrs George Waterston.

Editor of "Scottish Birds" : A. T. Macmillan, C.A.

Assistant Editors of "Scottish Birds" : D. G. Andrew, M. J. Everett, Dr T. C. Smout.

Business Editor of "Scottish Birds" : Dr T. C. Smout.

Council : R. S. Baillie, William Brotherston, R. G. Caldow, C. G. Headlam, Dr David Jenkins, H. A. Maxwell, Prof. M. F. M. Meiklejohn, T. D. H. Merrie, R. T. Smith, Miss V. M. Thom.

Branch Representatives to Council : J. E. Forrest (Dundee); Miss F. J. Greig (Aberdeen); S. L. Hunter (Ayr); H. A. Maxwell (Inverness); J. K. R. Melrose (Dumfries); J. H. B. Munro (Edinburgh); A. L. Ogilvy (Glasgow); J. S. Wiffen (St Andrews).

BRANCH AND GROUP OFFICE-BEARERS

Aberdeen : Chairman, Prof. V. C. Wynne-Edwards; Vice-Chairman, A. Anderson; Secretary, Miss F. J. Greig; Committee, Miss A. T. Grant, J. L. Riddell, Dr G. Swapp.

Ayr : Chairman, S. L. Hunter; Vice-Chairman, A. G. Stewart; Secretary, Dr M. E. Castle; Committee, Dr J. A. Begg, Miss M. S. P. Gibson, T. B. Kay, H. A. Murdoch.

Dumfries : Chairman, A. D. Watson; Vice-Chairman, J. K. R. Melrose; Secretary, H. M. Russell; Committee, Miss J. Donnan, J. Maxwell, R. T. Smith, J. F. Young.

Dundee : Chairman, J. E. Forrest; Vice-Chairman, D. B. Thomson; Secretary, Miss J. Stirling; Committee, Dr D. G. Adamson, A. Beat, G. C. Sime, J. Hunter Sutherland.

Edinburgh : Chairman, M. K. Hamilton; Vice-Chairman, J. H. B. Munro; Secretary, J. A. Stewart; Committee, R. S. Baillie, D. R. Grant, Mrs J. H. B. Munro, J. B. Murray.

Glasgow : Chairman, A. L. Ogilvy; Vice-Chairman, R. G. Caldow; Secretary, Mrs I. T. Draper; Committee, Dr I. T. Draper, J. Eunson, John Mitchell, A. D. R. Palmer.

Inverness : Chairman, H. A. Maxwell; Vice-Chairman, C. G. Headlam; Secretary, J. MacGeoch; Committee, Miss J. Banks, Miss G. Bush, Mrs C. MacDuff-Duncan, Mrs W. Morison, L. W. Payne, Dr M. Rusk.

St Andrews : Chairman, Dr W. Cunningham; Vice-Chairman, Miss D. M. Wilson; Secretary, Miss M. M. Spires; Committee, Miss J. V. Black, Miss M. H. E. Cuninghame, Miss G. L. C. Falconer, J. S. Wiffen.

Stirling : Chairman, R. J. Clough; Vice-Chairman, Rev. G. T. Jamieson;

Secretary, T. D. H. Merrie; Committee, P. Clark, Mrs M. Graham, Miss P. Skelton, B. E. Weld.

Thurso : Chairman, Dr P. M. McMorran; Secretary, D. M. Stark.

SCOTTISH BIRD RECORDS COMMITTEE

Chairman : D. G. Andrew.

Committee : A. G. S. Bryson, Dr J. W. Campbell, Sir Arthur Duncan, Dr W. J. Eggeling, A. T. Macmillan, Prof. M. F. M. Meiklejohn, Dr I. D. Pennie, Kenneth Williamson, George Waterston, Prof. V. C. Wynne-Edwards.

MANAGEMENT COMMITTEE

M. K. Hamilton (Convenor), D. G. Andrew, R. G. Caldow, Dr W. J. Eggeling, Miss V. M. Thom, A. D. Watson.

LIBRARY COMMITTEE

Dr W. J. Eggeling (Convenor), Ritchie Seath (Hon. Librarian), A. T. Macmillan, Dr I. D. Pennie, George Waterston.

CLUB REPRESENTATION

British Section, International Council for Bird Preservation : Sir Landsborough Thomson, George Waterston.

International Wildfowl Research Bureau, Duck Working Group : Miss V. M. Thom.

British Trust for Ornithology, Atlas of British Breeding Birds Project : C. G. Headlam (Scottish Coordinator).

HONORARY MEMBERS

Clyde Bain, Henry Boase, P. W. G. Gunn, Sir Landsborough Thomson.

WEEKEND EXCURSION TO DUMFRIES

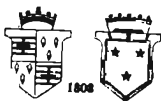
The weekend excursion to the Solway goose grounds has been arranged with the County Hotel, Dumfries, from 7th to 9th March 1969.

Accommodation : inclusive terms £5.12.6, inclusive of gratuities, as follows—bed on Friday, 7th; breakfast, packed lunch, dinner and bed on Saturday 8th; breakfast and packed lunch on Sunday 9th. Members should inform the hotel in advance if they require dinner on Friday night (extra). A limited number of rooms with private bathrooms are available for the additional cost of 20/- per night.

Members may bring guests and should book direct with the Manager, County Hotel, Dumfries (tel. 5401), notifying him that they are attending the Club excursion. It is advisable to bring warm clothing, gum boots if possible, and thermos flasks.

AYR BRANCH WINTER EXCURSIONS

Excursions will take place on the first Saturday of each month, October to April inclusive. Details will be announced at each monthly Branch meeting, or members should contact the Secretary, Dr M. E. Castle, 9 Finlas Avenue, Ayr (tel. Alloway 41828).



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NOTICE TO CONTRIBUTORS

1. General notes (not of sufficient importance to be published on their own as Short Notes) should be sent to the appropriate local recorders for inclusion in their summary for the annual Scottish Bird Report, not to the editor. A list of local recorders is published from time to time, but in cases of doubt the editor will be glad to forward notes to the right person. All other material should be sent to the editor, Andrew T. Macmillan, 12 Abinger Gardens, Edinburgh 12. Attention to the following points greatly simplifies the work of producing the journal and is much appreciated.

2. If not sent earlier, all general notes for January to October each year should be sent to the local recorders early in November, and any for November and December should be sent at the beginning of January. In addition, local recorders will be glad to have brief reports on matters of special current interest at the end of March, June, September and December for the journal. All other material should of course be sent as soon as it is ready.

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