Scottish Birds



The Journal of The Scottish Ornithologists' Club

Vol. 4 No. 7

Autumn 1967

FIVE SHILLINGS

With or without spectacles



Eric Hosking F.R.P.S. the celebrated ornithologist and bird photographer, writes

"I have recently found that for the most exacting observations particularly at twilight or over the sea or misty terrain, I need a binocular with greater brilliance of illumination.

Consequently, after testing various types, I have changed to the new 8 x 50B Zeiss binocular which I find to be a really marvellous production; not only is the quality of illumination and optical correction beyond criticism,

but this binocular gives a remarkably wide field of view for both the spectacle wearer and the naked eye.* The price is high but the Zeiss 8 x 50B binocular is beyond compare and I am delighted with it."

* Actually 130 yards at 1000 which has never been equalled in a spectacle wearer's model of this specification.

Degenhardt & Co. Ltd., Carl Zeiss House, 20/22 Mortimer Street, London, W.1. 01-636 8050 (15 lines)





British Agents for Carl Zeiss West Germany

CHOOSING A BINOCULAR OR A TELESCOPE

EXPERT ADVICE

From a Large Selection . . . New and Secondhand

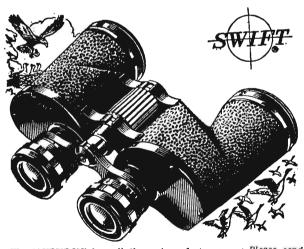


G. HUTCHISON & SONS

Phone CAL. 5579

18 FORREST ROAD, EDINBURGH OPTICIANS

Open till 5.30 p.m. Saturdays Closing all day Tuesday



A SPECIALIST BINOCULAR FOR **BIRD-WATCHERS**

The Swift 'Audubon'

Field of view 445 feet at 1000 yards. Focus down to 12 feet. Designed to the suggested specification of an internationally known group of ornithologists, this is one of the finest naturestudy binoculars available.

The 'AUDUBON' has all the unique features of the Swift 'BCF' range.

- Straw-coloured 'Ve-coated' lenses for 'white
- Straw-coloured 'Ve-coated' lenses for white image'.
 Retractable eyecups for spectacle wearers.
 Long cylindrical focus wheel.
 Tripod adaptor built into the base of the centre spindle.
 Top quality hide Ve-slot case.

Cat. 6244B. Price including finest quality case and P.T. £36/0/0

| Plea | ise . | send | me | le | eaflet | gi | ving | details | 01 |
|------|-------|------|----|----|--------|----|-------|---------|----|
| the | full | ran | ge | of | SWIF | r | binoc | ulars. | |
| | | | | | | | | | |

ADDRESS.....

PYSER-BRITEX (SWIFT) LTD. Fircroft Way, Edenbridge, Kent Edenbridge 2434 (STD OSE 271) SB104



Haith's are noted for the extent of their efforts to satisfy the needs of birds, ornithologists and aviculturists. It is estimated that we supply food and seed to meet the requirements of more than one million birds each day.

For two generations the Haith family has studied birds of most species, their habits and their feeding. The resulting knowledge, backed by the advice of experts in avian nutrition, enables us to offer an unrivalled range of foods and seeds, which, we are sure, will satisfy the most demanding of birds and bird-lovers.

Just a few of our products are mentioned here. A comprehensive list of bird foods and seeds will be sent on request.

JOHN E. HAITH Ltd.

DEPT. S.B.

PARK STREET CLEETHORPES

HAITH'S WILD BIRD FOODS

WILD BIRD FOOD (contains only cultivated seeds—no wild seed used) 5 lb 7/9, 9 lb 11/6, 13 lb 14/-, 28 lb 19/6, 56 lb 34/-, 112 lb 65/-.

FOOD FOR THE TIT FAMILY 5 lb 10/6, 9 lb 16/3, 13 lb 21/6, 28 lb 35/9, 56 lb 67/-, 112 lb 130/-.

SONGSTER FOOD for Blackbirds etc. 5 lb 8/9, 9 lb 13/6, 13 lb 17/-, 28 lb 25/6, 56 lb 46/-, 112 lb 88/-.

SUNFLOWER SEEDS (mixed) 5 lb 9/9, 9 lb 15/-, 13 lb 18/9, 28 lb 31/6, 56 lb 57/-, 112 lb 110/-.

MONKEY NUTS (in shell) for bird feeding 5 lb 10/3, 9 lb 15/3, 13 lb 21/-, 28 lb 34/9, 56 lb 64/6, 112 lb 125/-.

PEANUT KERNELS for bird feeding 5 lb 10/6, 9 lb 16/3, 13 lb 21/6, 28 lb 35/9, 56 lb 67/-, 112 lb 130/-.

WALNUTS (broken) for bird feeding 5 lb 10/6, 9 lb 16/3, 13 lb 21/6, 28 lb 35/9, 56 lb 67/-, 112 lb 130/-.

SULTANAS for bird feeding 5 lb 10/3, 9 lb 15/3, 13 lb 21/-, 28 lb 34/9, 56 lb 64/6, 112 lb 125/-.

All Post or Carriage Paid

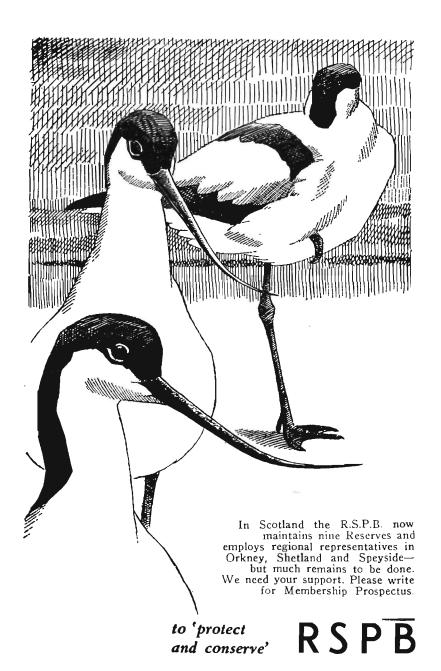
Scottish Birds

THE JOURNAL OF THE SCOTTISH ORNITHOLOGISTS' CLUB

Contents of Volume 4, Number 7, Autumn 1967

| | | | | | | | | | | | Page |
|------------|------------------------|----------------------|---|----------------|-----------------|------------------|-------|-------------|---------|-------|--------------|
| Edite | orial | | | | | | | | | | 465 |
| Birds E | s on Out ! By R. J. | Skerries, Tulloch | Shetla (plates | nd, 19 49-5 |)66. (1) | | | | | | 467 |
| Orkn d | iey Corm lispersal, | orants—t By E. B | heir b alfour, | reedi A. A | ng di Anders | stribut on an | ion a | and M. D | unnet | | 481 |
| | "Carrick" A. T. Mac | | | | | | | | | | 493 |
| Shor | t Notes | | | | | | | | | | |
| | reen-win | | | narks | shire a | and D | unbar | tonsh | ire | | |
| _ | | onfrillo) | | | | | | | | | 502 |
| | Blue-winge | | | - | | | | | | | 503 |
| | Scaup bre | | | | | | | | | | 503 |
| | east San | | | | | | |). J. : | Norde | n) | 504 |
| / | White-rum | | | | | | | • \ / | 1 , | r., | ر ۵ ۷ |
| Y | , | . J. Cun | • | | | | | , , | • | , | 506 |
| | Richard's | | | | | | | • • • | • • • • | | 507 |
| | Woodchat | | | | | | | | • • • | | 508 |
| | The status | | | | | | | • • • | • • • | | 508 |
| 2 | Scarlet Gr | osbeak ii | n Sheti | and (| (J. H. | Simps | on) | | | • • • | 509 |
| Curr | ent Note: | š | | | | | | | | | 509 |
| Revie | ews | | | | | | | | | | |
| | A Wealth | of Wilds | fowl R | w I | Harris | on Re | viewe | d by | I Nev | vton | 521 |
| | Longmans | | | | | | | | 1. 110 | W COM | 521 |
| ~ | | T. Mac | | | | | | | | | 522 |
| A | t Man's 1 | | | | L. Hick | cs. Re | viewe | 1 | | | |
| | by A. | T. Mac | millan | | | | | | | | 523 |
| F | Budgerigan | rs in Col | our: th | ieir C | are ar | d Bre | eding | . Ву . | A. Rut | gers | 523 |
| | shell Nati | | | | | | | | | | 523 |
| Lette | ers | | | | | | | | | | 523 |
| The | Scottish | Ornithol | ogists' | Club |) | | | | | | 525 |

Edited by Andrew T. Macmillan, 12 Abinger Gardens, Edinburgh 12. Assisted by D. G. Andrew, T. C. Smout and P. J. B. Slater. Business Editor T. C. Smout, 93 Warrender Park Road, Edinburgh 9.



THE ROYAL SOCIETY FOR THE PROTECTION OF BIRDS 21 Regent Terrace, Edinburgh 7 Tel. WAVerley 6042

Scottish Birds

THE JOURNAL OF THE SCOTTISH ORNITHOLOGISTS' CLUB



Vol. 4 No. 7

Autumn 1967

Edited by A. T. MAGMILLAN with the assistance of D. G. ANDREW, T. C. SMOUT and P. J. B. SLATER. Business Editor, T. C. SMOUT. Cover Design (Leach's Petrel) by Len Fullerton.

Editorial

Vane Farm. In January the R.S.P.B. bought this 300-acre farm on the south shore of Loch Leven, one of the most important waters for wildfowl in the country. The farmer is sympathetic to conservation and has managed the land in such a way that it attracts large numbers of geese in winter; he will continue to farm the arable land as the R.S.P.B.'s tenant.

Vane Farm is a fine vantage point for viewing the ducks and geese on Loch Leven, and an observation post equipped with powerful binoculars will be built. The idea is to develop the reserve partly as a refuge and partly as an educational area, where people can come and see the birds and learn something about them without disturbing them. A nature trail is planned on the birch-clad hillside above.

In announcing the purchase of this important new reserve the R.S.P.B. also revealed plans for two new reserves in Wales and one in England which include Kites and Blacktailed Godwits among their breeding birds. Money is needed to pay for these reserves and to enable the society to take the chance to buy other good sites which may come on the market from time to time, and a New Reserves Appeal for £100,000 has been launched. An attractive brochure with details of the plans for these reserves and of the different ways in which one can help may be had from George Waterston, Scottish Centre for Ornithology and Bird Protection, 21 Regent Terrace, Edinburgh 7.

A vintage year Rare Scottish birds have been much in the news in 1967, with huge portraits and full coverage in the daily and Sunday press. First it was a lone Crane striding about an Argyll farm which sent reporters and cameramen hurrying off to the Mull of Kintyre. Then out to the Bass Rock following reports that a distinguished zoologist had accidentally photographed a Black-browed Albatross among the Gannets and would have fallen off with surprise had the slope been steeper. After a whole day waiting for the bird

they returned with a fine series of pictures, and christened it Albie the albatross.

Next came front-page photographs of the eggs of Snowy Owls, revealed by the R.S.P.B. to be nesting on Fetlar, where parents forbade their children to go on the moor for fear of attack. Word of this excitement had already spread all over Shetland and so many people were heading for Fetlar that there was nothing for it but to set up a full-scale show on the lines of Operation Osprey. Meanwhile the R.S.P.B.'s Loch Garten Ospreys were rearing a healthy brood of three young, the second pair again failed to hatch their eggs (which were then sent for analysis), and it was announced that, at last, a third pair had been found breeding in Scotland, with two young in the nest.

Such spectacular items made the headlines, but on top of all this it was a good spring for interesting migrants, including unusual numbers of Black and White-winged Black Terns, Icterine and Grasshopper Warblers, Red-headed Buntings (at least six escaped cocks!) and many others; and an unprecedented scatter of summering and breeding Redwings. Sober accounts of these things will appear in time in *Scottish Birds*. A vintage year indeed.

Protection of Birds Act 1967. At the time of the last General Election this measure had almost become law, but with the dissolution of Parliament it had to start over again (Scot. Birds 4: 205). It has been making unobtrusive progress since then, and in July it reached the statute book, so quietly that hardly anyone noticed. The provisions have already been described (4: 61), and should serve to simplify and therefore improve enforcement of the law. Perhaps the change of widest interest is that the Secretary of State no longer has power to deprive the eggs of common wild birds of the general protection given to all birds and their eggs. Children can be taught to watch birds rather than rob them, and teachers will no longer have the impossible task of explaining that it is right to take the eggs of some birds and wrong to take those of others.

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

Bird life in the islands. E. Balfour, 1966. In *The New Orkney Book* (J. Shearer *et al.*), ch. 15, pp. 103-111. Includes status list of breeding and other birds.

The arrival and departure of auks at St Kilda, 1961-62. W. E. Waters, 1967. Seabird Bull. 3: 19-20. Also notes for other sites.

The Hatton Castle rookery and roost in Aberdeenshire. A. Watson, 1967. Bird Study 14: 116-119.

Territory, behaviour and breeding of the Dipper in Banffshire. R. Hewson, 1967. Brit. Birds 60: 244-252.

Migration-seasons of the *Sylvia* warblers at British bird observatories. P. [E.] Davis, 1967. *Bird Study* 14: 65-95. Includes full discussion of Fair Isle data.

Olive-backed Pipits on Fair Isle: a species new to Britain and Ireland. R. H. Dennis, 1967. *Brit. Birds* 60: 161-166, plate. Seen 17th-19th October 1964 and 29th September 1965.

Birds on Out Skerries, Shetland, 1966

R. J. TULLOCH (Plates 49-51)

Introduction

A small group of low-lying, rocky and rather barren islands called Out Skerries lies some ten miles east of the Shetland Mainland, and about the same distance south and east of the two larger islands of Yell and Fetlar. Its nearest neighbour, Whalsay, is about five miles to the southwest, between Out Skerries and the Shetland Mainland.

The group comprises three main islands, surrounded by numerous stacks, holms and reefs which make navigation in the area rather tricky. On the most easterly of these, Bound Skerry, there is a large lighthouse. the most prominent feature of the Out Skerries landscape.

Of the three main islands, the total area of which is only about 600 acres, only Bruray and Housay are inhabited, and these are connected by a bridge. With the third island, Gruney, they combine to form an excellent natural harbour, and this is undoubtedly the reason why there is a population of about 90 people whose living is made almost entirely from the sea. Three large modern fishing boats prosecute the seine net and herring drift-net fishing, and smaller boats fish for lobsters around the rocky shores.

There is only a thin covering of soil, covered with short grass, which in places has been painstakingly cleared of stones to provide little fields where some potatoes and 'Shetland' oats Avena strigosa are grown, the potatoes mainly for human consumption and the oats to provide some winter feeding for the few cattle of the small Shetland breed which are kept to provide the islanders with fresh milk. The remainder of the islands is grazed by the small hardy breed of Shetland sheep, renowned for the fine quality of its wool, which the island women hand-knit into garments, mainly to be sold.

The highest 'hill' is only about 170 feet above sea level,

and during the winter storms the whole islands are swept by the salt spray, so that flowering plants are confined to those resistant to or needing the salty soil, and in summer there is a profusion of species such as thrift, vernal squill, and moss campion, while some of the offshore holms have a carpet of scurvy grass. In the autumn there is often an abundance of excellent field mushrooms which are never eaten by the islanders, who view them with suspicion, but will buy an inferior variety in a tin from the local shop!

When I took on the responsibility of Shetland representative of the Royal Society for the Protection of Birds, I realised that, although I was a Shetlander born and bred, my knowledge of the more remote parts of Shetland was at best inadequate; so, pursuing a policy of learning as much as possible about at least one new district each season, I decided to pay as many visits to the Out Skerries as was practicable during the 1966 season.

The small amount of literature available about bird life on Out Skerries deals exclusively with the breeding species, but different writers suggested that the group might be well worth looking at with regard to migration, and it is known that regular visits were paid to Out Skerries by the late Sammy Bruce, a noted Shetland bird collector whose collection of skins, now in the new museum at Lerwick, contains such rarities as Britain's first Red-flanked Bluetail and the first Scottish Greenish Warbler and Collared Flycatcher.

Spring

Living in Shetland made it easier to time my visits to coincide with a movement of birds actually taking place, and it was not until gales and rain from east and northeast on May 8th and 9th brought the first trickle of birds to Yell that I decided the time was ripe for a visit to Skerries, as it is usually called.

I had hoped to do the 17-mile crossing from Mid Yell in my own 20-foot open boat, but the weather that brought the birds also brought stormy seas, and it would have been foolhardy to go on my own at that time, so I took advantage of the fact that the Out Skerries' only regular link with the rest of Shetland, the mail steamer Earl of Zetland, was due to make her weekly call on Tuesday 10th, and I was deposited, complete with tent and primus, on Bruray about midday. In spite of warnings (joking I thought) about a coming force 9 gale I set up camp in the doubtful shelter of a loose stone dyke, and already it was evident that there were many migrants on the island. Willow Warblers and Whitethroat were hunting flies along the wall, a Pied Flycatcher was making sorties from the top, while in the little field at the back a

'flava' and two White Wagtails were running in and out between the legs of the sheep grazing there.

After I had sorted out myself and belongings, I set out on what I intended to be a quick tour of the two main islands, telling myself I would not be sidetracked by individual birds but try to get a general picture of what birds were on the islands. However I had not gone very far along the stone dyke when I was brought up short by a bird which at first glance I took to be a Lesser Whitethroat but which, through my binoculars, proved to be a bird I had never seen before, and which I recognised as a male Subalpine Warbler in beautiful breeding plumage.

I slowly lowered myself to the wet ground and watched as the bird worked its way along the wall towards me, sometimes hopping on the ground with its tail held at an almost Wren-like angle, and occasionally fluttering up over the lower stones of the wall after some insect. It continued to approach until it was so close I could not focus my glasses on it, and until, even without them I could see the red eye and the clear white 'moustache' stripe. Finally, when no more than 5 or 6 feet from me, the bird decided I was not just part of the scenery, and promptly disappeared into a hole in the wall.

A little further on a Corncrake did the same disappearing trick into the wall, being unable to use its usual cover of grass, which at that point came barely up to its knees.

A freshly manured field next attracted my attention and among the birds I found feeding on it were Woodpigeon, a Turtle Dove, a small flock of Twites with eight Linnets and single Redpoll, Chaffinch, Brambling and Siskin, a few Reed Buntings and a single Tree Sparrow. Parties of Turnstone were everywhere, most having probably wintered, and some were already showing signs of the attractive summer plumage.

Down near the south end of Housay a stone dividing wall about 400 yards long had attracted many small birds, and walking along it, I gathered them in front of me until at the end of the wall I had some 30 or 40 mixed Willow Warbler, Chiffchaff, Whitethroat, Lesser Whitethroat, Goldcrest, Pied Flycatcher, Blackcap, Redstart and Dunnock, which then doubled back to the shelter of the wall again.

Below the bridge which joins the two islands a Sand Martin was hawking flies as I crossed back to Bruray in the evening, and on Bruray hill there were a few Fieldfare, Song Thrush, Ring Ouzel and a solitary Snow Bunting. Some parties of Twites were probably passage birds, the resident population usually spending the winter in the stackyards with

the House Sparrows, where they are assured of a plentiful food supply.

The warning about the weather which I had scoffed at became too evidently true during the night, and I got very little rest, with the tent threatening to tear out its moorings at any minute, my only consolation being in the hope that the gale would blow in more birds.

The next morning showed that little change had taken place during the night. Most of the birds on Bruray seemed to be the same ones, but the Sand Martin, which was still by the bridge, had been joined by a House Martin, and three Carrion Crows—unusual visitors to Shetland—were new. A better thrill awaited me on the rocky knoll above the island's tiny post office where a splendid Red-spotted Bluethroat was showing off his livery as he flirted from stone to stone, behaving quite differently from those I had seen in Yell and on Fair Isle, where they usually skulked in cabbage patches or the like and were very difficult to get a good look at.

At the back of the 'village' on Housay there is a little marshy patch of perhaps half an acre, and when I got there after midday a number of pipits were moving around and through it, so I sat down in the lee of a knoll from where I could get a good view and started to my lunch. A few Rock Pipits, possibly resident birds, were feeding on the drier ground round the edges, Meadow Pipits were calling and moving from place to place among the long grass, and the odd Tree Pipit identified itself by its wheezy call.

A bird got up from quite close to me which looked like a Meadow Pipit in flight but which had me grabbing for my glasses when it uttered a call I had certainly never heard before, a loud clear tseee-ip, quite unlike the call of any of the other pipits nearby. Lunch forgotten, I hurried to where it had dropped in the grass, but again the bird got up without my being able to see it on the ground, and again gave this strange call. I decided these tactics were not getting me anywhere and went back to my 'piece' and just waited, and I was rewarded about ten minutes later by having a Redthroated Pipit come out on the dry short grass only 30 yards away, giving me ample time to study its distinctively marked cheeks and throat, which was clear enough to enable me later to pick out the bird at over 200 yards.

It particularly pleased me to be given this opportunity of comparing the calls of four different species of pipit, and I spent some time at the marsh then and on the following day, when the birds were still there.

On my way back I called on an old lady to pass on greetings from friends in Yell, and while she regretted that she

knew nothing about birds she rather apologetically told me she had seen a 'pink Starling' a short while before, and went on to give me a description of a Rose-coloured Starling that would have no trouble getting past the Rarities Committee, had I been able to get fuller details.

The wind had dropped during the day, but the forecast was again of gales, so I gladly accepted the offer of the sail loft on the pier to set up house in, and spent a much more comfortable night with a pile of nets for a mattress.

The 12th was very wet and windy as another front passed through the Fair Isle sea area. I decided to have a look at the other island, and a young lobsterman put me off on Gruney and arranged to pick me up later in the day.

Gruney has even less shelter than the other two islands. It was obviously less attractive to small migrants, and I saw little other than some Wheatears and the odd Redstart. There was a solitary Grey Lag Goose beside a little pool and it seemed reluctant to leave the isle, perhaps a 'pricked' bird which did not feel up to the long flight to northern breeding grounds. The only other new birds were a couple of Arctic Skuas speeding past, and the first Arctic Tern to appear in the islands, although I had seen a number around Yell before I left.

Back on Bruray I found that there were quite a few birds I had not seen the day before. A fair number of Whinchats had arrived, and where I had seen the Bluethroat the day before there was now a female Black Redstart, and I later saw another—also a female—at the other end of the isle.

A visit to the manured field found several new and exciting species, and at one time I lay prone with a of Reed Bunting, a of Lapland Bunting, and a of Ortolan Bunting in the field of view of my binoculars at about ten yards range, each in perfect summer plumage. The Lapland Bunting would stop feeding every now and then to give a burst of song. While lying there I added another bird to my life list; although it was only a humble hen Greenfinch they are quite rare in Shetland. The fact that I smelled strongly of cow manure for some time afterwards in no way detracted from my enjoyment of that afternoon.

I had arranged to get a lift back to the mainland on Friday 13th on a fishing boat and only had time for a quick dash round before we left, but it was obvious there had been a big departure during the night. Numbers of nearly all species were very much down, but passing a little cabbage yard on my way to the boat I had a tantalising glimpse of a bird which could have been a Thrush Nightingale, and I

did not have time to follow it up, with the boat waiting and the crew anxious to be off.

Summer

My next visit to Out Skerries, on 10th-11th June, was mainly to look at the breeding birds and to see what, if any, changes had taken place since Venables did a survey in 1950 (Birds and Mammals of Shetland 1955).

I found the situation to be very much the same, even to the small cliff-nesting colony of House Sparrows with the rather unusual nesting neighbours of Fulmar and Puffin.

Venables says that the Shetland Wren T. t. zetlandicus became extinct in Out Skerries about 1930 and certainly I saw no signs of any in June, although I did see a pair on my visit in October which appeared to be of the local race.

Blackbirds are another species which, although breeding all over Shetland, are absent from Out Skerries.

Oystercatchers seem to think they own the Out Skerries, and a walk round the shore can be a most exasperating business, with the incessant piping as one pair takes over where the last leaves off, making the possibility of coming on, say, a Ringed Plover leaving the nest, completely out of the question.

Still in June there was some evidence of migration, and I saw Garden Warblers, Spotted Flycatcher, White Wagtails, Heron, Swallow and House Martins.

The weather was at its Shetland best, and I had made the crossing in my own small boat in 2½ hours, and on the following day spent the forenoon going round all the little offshore holms and rocks, going ashore on most of them to count nesting birds and enjoy the sunshine and the pink and white carpet of thrift and scurvy grass. I went ashore on Bound Skerry, where I was made welcome by the lightkeeper and his assistant, who invited me to climb the 120 feet of stair to the balcony, from where I could take photographs of the panorama of islands and skerries shimmering in what was the nearest we get to a real heatwave. In the afternoon I made a leisurely trip back to Yell, calling 3 miles northwest of Skerries at Muckle Skerry, with its gulls, Fulmars, Eiders and Black Guillemots, and disturbing the grey seals at their siesta on the rocks. The sea was glassy smooth and I could hear the short ss-ss as a porpoise came to the surface to breathe, its round little body glistening in the sun.

On the way back I saw the great bulk of a lesser rorqual break the water half a mile away, and its back fin had almost disappeared before the snort of its expelled breath came faintly across the water.

Autumn

The last few days of August were pleasant, with sunshine and light northeast winds as an anticyclone built up over Scandinavia, and I began to see an odd Willow Warbler and Pied Flycatcher, but did not expect to see any numbers of birds until the weather broke a bit and adverse winds and bad visibility encouraged the migrants to come down on to the islands to rest. However on the evening of 30th August I had a telephone call from John Simpson, a keen and knowledgeable birdwatching friend from Whalsay, who told me that he had been given the chance of a few hours in Out Skerries that day and that among a lot of interesting birds he had seen a Treecreper and a Wryneck.

The high over Norway, although weakening, was still keeping the winds light, so early next morning I set off in my boat accompanied by a young birdwatching visitor from the south who was keen to see Out Skerries. Although there was a long swell which often hid us completely from the shore, we made good time on the trip out and arrived in Skerries to find the pier cluttered with strange equipment, as a group of London treasure hunters prepared to go out to the site of a wreck near the south tip of Housay, where they hoped, with the aid of skin-diving equipment, to recover some of the fortune in coin reputed to be on board the ship which had been wrecked there about 1700.

Our 'treasure' was more likely to fly off the islands, so we wasted little time in setting out to see what we could find. Almost the first thing we saw was a Bluethroat scolding from a wall. As we came closer it was joined by another, and we could see that the cause of their displeasure was a cat which was obviously considering the nutritional—rather than the rarity—value of Red-spotted Bluethroat. We later decided there were certainly five, possibly more, Bluethroats on the island, all in varying stages of moult, usually showing only a faint crescent of blue and mostly lacking the red spot.

Again I was struck by the ease with which we could watch these usually very shy birds, although on this occasion there was a lot of cover available in the potato and oat

fields and in the vegetable and cabbage yards.

We spent a long time looking for the Treecreeper, but never found it, and came to the conclusion it had either moved on or been taken by a cat. The Wryneck—a new bird for me—was still where Johnnie Simpson had found it, and we saw a second one pecking about in its slow sedate manner among some House Sparrows in a stack yard, so tame that I was able to poke my camera over the wall and take photographs from only about twelve feet away.

A party of ten Herons was flying around, and was rather ridiculously upset when a hen Merlin impudently stooped past them. A nice flock of 300-400 Golden Plovers was moving about, many of them—or they may have been young birds—already in winter plumage, but many still with traces of summer dress dark enough to suggest they were of a more northerly origin.

Very few Oystercatchers were left on the islands, but we saw a single Ruff and a Dunlin, and there were many parties of Turnstones along the shore or up on the fields.

Of the small passerine migrants Wheatear, Whinchat, and Willow Warbler/Chiffchaff were most numerous, with probably a hundred of each on the islands; next were Garden Warbler with an estimated 50, and there were smaller numbers of Redstart, Blackcap, Whitethroat, 20+ Pied Flycatchers, and single Lesser Whitethroat, Crossbill, Ortolan, and 'flava' Wagtail, and as we returned to the boat in the evening two Fieldfares came in from the northeast and carried on towards the Shetland Mainland, chacking to each other as they flew.

Next day, 1st September, the weather was showing signs of breaking up, and in any case it was apparent that many birds had left during the night. On a quick tour round the best areas we found one Bluethroat, one Wryneck and much reduced numbers of the other birds. We left for Yell on a swell that was occasionally showing a white crest in the rising wind.

Although we had seen a couple of Fieldfares on this trip, the large movements of turdidae had not yet started, and I decided to make one more visit when this got under way. It was not until 29th September, when I went up the hill at West Yell to show a visitor a fine male Snowy Owl which had used the same roost for a couple of weeks, that I found quite a few small parties of Redwing on the hills, and decided I would try to get into Out Skerries for my last visit of the season.

The weather had been unsettled for a time and it was too rough to make the journey in my own boat, but I was lucky enough to get a lift on a fishing boat, and we arrived as darkness fell on the last day of September.

The following morning was dull and rainy with a strong northeast wind, and even before it got light I could hear calls of Redwing and Fieldfare as they passed overhead. My forenoon tour showed that there were indeed large mixed flocks on the islands and a rough estimate gave a figure of well over a thousand. Probably half of this was made up of Redwings, with Song Thrush next and smaller numbers

of Fieldfare, Blackbird and Ring Ouzel. Several times in the past I had listened to thrushes going over in the dark and had been puzzled by a call heard only once or twice, a chortling call something like the flight call of a Skylark, but louder and more bubbly, and I was pleased when I heard this again in daylight and was able to see that a Ring Ouzel was responsible.

All day there was a continual movement of birds on the 600-odd acres, flocks of thrushes were seen to leave in the direction of Shetland, and others were seen arriving from the direction of Scandinavia. A flock of about 50 Wigeon came in from the northeast, flying at a tremendous speed before the rising wind, and after a moment of indecision sped on towards Whalsay. A little group of dark specks low on the waves resolved into a party of Siskins which fell to feeding on the faded thistle heads with much twittering, and a small flock of Snow Buntings settled up on the hill, followed by a lone Lapland Bunting.

There were many other birds already on the islands: Wheatear, Redstart, Robin, Blackcap, Garden Warbler, Whitethroat, Goldcrest, Pied Flycatcher and Dunnock, and on the stubble a flock of over 150 Bramblings and a few Chaffinches.

It rained most of the night and the wind veered to southeast, and almost the first thing I saw in the morning was a very tired-looking of Kestrel sitting hunched up in the shelter of a rock, ignoring the scolding of a pair of Rock Pipits. As I made my way along the narrow road a wisp of three Jack Snipe got up and flew a short distance before dropping silently into some long grass.

Thrush numbers appeared to be about the same except that there were a few more Ring Ouzels. The Bramblings were still on the stubble, the Snow Bunting flock had about doubled and had five or six Lapland Buntings with it now. There had obviously been an arrival of Goldcrests; they were creeping mouse-like along walls and up docken stems, all the while keeping in touch with their penetrating psst psst.

Two Red-breasted Mergansers were resting on the west voe, and another pair came flying from the east but, like the

Wigeon of the day before, carried on past.

As I made my way back to my home on the fishing boat, just as it was getting dark, I heard an excitement of Goldcrest calls from the side of the road, and from only a couple of feet away watched six of these tiny creatures jostling for position on a short bit of dock stem which was sticking horizontally through a tuft of grass. Later on at night, on my way back from visiting some of the islanders, I shone my torch briefly on the six—now pressed tightly together and

looking like little headless green balls.

The wind veered round to the north and all next day blew a severe storm. Huge seas pounded the coast with an incessant roaring, and the whole islands were wet with driven spray. Not a day to do much birding, but I dressed in oilskins and had a walk round, and all over the island were thrushes sheltering under whatever cover they could find. It would have been a shame to have flushed the small birds from the cabbage patches and walls.

A large number of Turnstone had blown in; I saw one flock of over 50 and a number of smaller parties. A Great Skua flew past, causing momentary anxiety among the pier Herring Gulls. A party of Twites was flying about on the lee side of the hill and one looked a little larger than the others in flight. I had difficulty in getting a look at the bird on the ground, and when I did finally get a few seconds view I did not know what it was. I could only see the head and neck and noted the stubby finch bill and the greyish-brown, faintly streaked head with a prominent dark eye; it was not until next day when I was in Fair Isle and Roy Dennis showed me a $\mathcal P$ Scarlet Grosbeak, that I was pretty certain that this was the same bird I had been puzzled by on Out Skerries. I was not able to convince the Rarities Committee.

The storm abated sufficiently for us to get off the next day, and I caught the boat for Fair Isle with only five minutes to spare.

Conclusion

The possibilities of Out Skerries as a regular migration observation station cannot be reliably assessed upon such short acquaintance, and there is no one at present living on the islands who has the interest or knowledge of birds to make regular observations. Certainly it could never compete with Fair Isle in this respect, but it is a fascinating place to visit, and for the individual observer there is the attraction of the small area and very limited cover which makes it possible to see practically every bird that lands on the islands, added to this the fact that Out Skerries lie further east, and therefore nearer the Scandinavian peninsula, than anywhere else in Shetland, which could mean—and my limited observations would seem to support this—that Out Skerries must be the first landfall for some of the birds crossing the North Sea from Scandinavia and the continent.

Summary

The Out Skerries, 10 miles east of the Shetland Mainland, are described, particularly in relation to observing bird migration there. An account is given of short visits, totalling 8 days, in spring, summer and autumn 1966, together with a systematic list of the birds noted each day.

Birds at Out Skerries in 1966

| | Мау 10 | May 11 | May 12 | Jun 10 | Aug 31 | Oct 1 | Oct 2 | Oct 3 | |
|------------------------|-----------|-----------|-----------|-----------|-----------|----------|----------|----------|---------------------------------------|
| Ct. n. 1 | 10 | ** | *** | / | 31 | • | - | 3 | breeds—small numbers |
| Storm Petrel | , | , | , | /, | , | , | , | , | |
| Fulmar | / | /, | /, | /, | /, | / | / | / | breeds—common |
| Gannet | / | / | / | / | / | | | | feeding offshore |
| Cormorant | | | | | 10 | | | | bred late 1880s (Venables) |
| Shag | / | / | / | / | / | / | / | / | breeds—common |
| Heron | 1 | 1 | 1 | 1 | 10 | 2 | 2 | 2 | |
| Mallard | | | | | | | 1 | | |
| Wigeon | | | | | | 50 | | | |
| Eider | / | / | / | / | / | / | / | / | breeds?100 prs; max. fl. 50 on 11 May |
| Red-breasted Merganser | | | | | | | 4 | | |
| Grey Lag Goose | | | 1 | | | | | | |
| Merlin | | | | | 1 | | | | |
| Kestrel | | | | | | | 1 | | |
| Corncrake | 1 | | | | | | | | |
| Oystercatcher | / | / | / | / | 6 | | | | breeds-common |
| Lapwing | / | / | / | / | / | / | 10 | / | 2-3 prs breed-?passage 2 Oct |
| Ringed Plover | / | / | / | / | / | / | / | / | breeds-?20 prs; fewer prob. winter |
| Grey Plover | | | | | | / | | | • |
| Golden Plover | | | | 1 | 300 | 250 | 250 | 250 | |
| Turnstone | 250 | 250 | 250 | | 20 | 90 | 90 | 300 | |
| Snipe | | | | | | | 2 | 2 | |
| Jack Snipe | | | | | | | 5 | 2 | |
| Curlew | | | | 1 | | 10 | 10 | 10 | |
| Redshank | 6 | 6 | 6 | • | 4 | 20 | 30 | 18 | does not breed |

4(7)

478

| | | | May | | | | Oct | Oct | |
|--------------------------|----|----|----------|----|----|----|-----|-----|---|
| 22 | 10 | 11 | 12 | 10 | 31 | 1 | 2 | 3 | |
| Knot | | | | | | | 1 | 2 | |
| Dunlin | | | | 1 | 1 | | | 1 | |
| Ruff | | | | | 1 | | | | |
| Great Skua | | 1 | 1 | 2 | | | | 1 | |
| Arctic Skua | | 2 | 2 | 2 | | | | | |
| Great Black-backed Gull | / | / | / | / | / | / | / | / | breeds-common; winters |
| Lesser Black-backed Gull | / | / | <i>[</i> | / | / | | | | breeds—?50 prs |
| Herring Gull | / | / | / | / | / | / | / | / | breeds-common; winters |
| Common Gull | 1 | / | 1 | / | / | / | / | / | breeds—c. 20 prs |
| Kittiwake | / | / | 1 | / | / | / | / | / | breeds-small colonies |
| Common/Arctic Terns | | | 1 | 1 | 1C | | | | breed?1000 prs, mostly Arctic |
| Razorbill | / | / | 1 | / | / | | | | breeds-small colonies |
| Guillemot | / | / | / | / | / | | | | breeds-small colonies |
| Black Guillemot | / | 1 | / | / | / | / | / | / | breeds-common |
| Puffin | / | / | / | 1 | 1 | | - | | breeds |
| Rock Dove | / | / | , | / | 1 | / | / | / | breeds—c. 15 prs |
| Woodpigeon | 1 | 1 | 2 | | | | | | • |
| Turtle Dove | 1 | 1 | 1 | | | | | | |
| Wryneck | | | | | 2 | | | | first seen 30th |
| Skylark | | | 3 | 1 | | 10 | 12 | 6 | may have bred in past (Venables) |
| Swallow | | | 6 | 1 | | | | | breeds occasionally (Venables) |
| House Martin | | 1 | _ | 8 | | | 1 | | , |
| Sand Martin | 1 | 1 | | | | | - | | |
| Raven | 5 | 5 | 5 | 1 | 2 | | | | pr (3 flying young) evidently bred |
| Carrion Crow | J | 3 | 3 | • | _ | | 1 | | b. (0 1.0 1.1.2 0 1 1 1.1.2) ourgoinery of or |
| Hooded Crow | / | / | 7 | / | / | / | 1 | / | breeds—2-3 prs |

| | Ма у 10 | May | May 12 | Jun 10 | Aug 31 | Oct | Oct 2 | Oct 3 | | 1967 |
|---------------------------|-------------------|-----|-----------|-----------|-----------|-----|----------|----------|------------------------------------|----------|
| Wren | | | | | | 2 | | | breeding ceased c. 1930 (Venables) | |
| Fieldfare | 2 | 1 | | | 2 | 180 | 250 | 300 | | |
| Song Thrush | 2 | 1 | | | | 200 | 200 | 50 | | |
| Redwing | | | | | | 600 | 600 | 600 | | |
| Ring Ouzel | 1 | | | | | 30 | 38 | 12 | | |
| Blackbird | | | | | | 25 | 15 | 6 | | |
| Wheatear | 200 | 200 | 200 | 100 | 100 | 6 | 2 | 4 | breeds—?50 prs | BIRDS |
| Whinchat | | | 10 | | 100 | | 8 | 4 | | RE |
| Redstart | 2 | 2 | 6 | | 8 | 15 | 20 | 20 | | \sim |
| Black Redstart | | | 2 | | | | | | | ON |
| Bluethroat | | 1 | | | 5 | | | | | |
| Robin | | | | | | 1 | 2 | | | OUT |
| Blackcap | 4 | 4 | 6 | | 6 | 10 | 12 | 1 | | 7 |
| Garden Warbler | | | | 4 | 50 | 6 | 4 | | | |
| Whitethroat | 20 | 15 | 12 | | 3 | 1 | | | | SKERKIES |
| Lesser Whitethroat | 12 | 12 | 10 | | 1 | | | | | E |
| Subalpine Warbler | 1 | 1 | | | | | | | | 2 |
| Willow Warbler/Chiffchaff | 10 | 40 | 30 | | 100 | | 4 | 1 | | E |
| Goldcrest | 1 | | | | | 2 | 30 | 20 | | S |
| Spotted Flycatcher | | | | 1 | 2 | 1 | | | | |
| Pied Flycatcher | 1 | 1 | 1 | | 20 | 1 | | | | |
| Dunnock | 1 | | 1 | | | 1 | | | | |
| Meadow Pipit | 50 | 50 | 50 | | 30 | 10 | 6 | 6 | does not breed | |
| Tree Pipit | | 2 | 4 | | | 2 | | | | |
| Red-throated Pipit | | 1 | 1 | | | | | | | |
| Rock Pipit | / | / | / | / | / | / | / | / | breeds—20-40 prs | 43 |

喜

| | May 10 | May 11 | Ма у 12 | Jun 10 | Aug 31 | Oct 1 | Oct 2 | Oct 3 | |
|--------------------|------------------|------------------|-----------------------|-----------|-----------|----------|----------|----------|---|
| White Wagtail | 6 | 8 | 8 | 2 | | | | | |
| 'Yellow' Wagtail | 2 | | | | 1 | | | | |
| Starling | / | / | / | / | / | / | / | / | breeds—few, ?12 prs |
| Greenfinch | | | 1 | | | · | | | |
| Siskin | 1 | 1 | 1 | | | 4 | 20 | 20 | |
| Linnet | 8 | 28 | | | | | | | |
| Twite | 200 | 200 | 200 | 100 | 200 | 175 | 175 | 175 | breeds—common; figures are biggest flocks |
| Redpoll | 1 | | | | | | | | 1100110 |
| [Scarlet Grosbeak] | | | | | | | | 1 | possible only |
| Crossbill | | | | | 1 | | | | |
| Chaffinch | 1 | 6 | | | | 6 | 8 | 6 | |
| Brambling | 1 | 1 | | | | 150 | 150 | 100 | |
| Ortolan Bunting | | | 1 | | 1 | | | | |
| Reed Bunting | 6 | 4 | 1 | | | 2 | | | |
| Lapland Bunting | | | 1 | | | 2 | 6 | 1 | |
| Snow Bunting | 1 | | | | | 50 | 100 | 25 | |
| House Sparrow | / | / | / | / | / | / | / | / | breeds—?100 prs |
| Tree Sparrow | 1 | 1 | 2 | | | | | | |

/ -- present but not counted

Orkney Cormorants—their breeding distribution and dispersal

E. BALFOUR, A. ANDERSON and G. M. DUNNET

Introduction

Information on the breeding status of the Cormorant Phalacrocorax carbo in Orkney in former times is scanty and rather vague. Buckley and Harvie-Brown (1891) say: "The Cormorant, though by no means an uncommon bird, is still far from numerous, and seems to prefer the west side of the islands to the east." In context, this statement seems to refer to breeding birds. The authors give no indication of the size of the colonies they saw over 80 years ago, but say that there was an interesting Cormorant colony on Seal Skerry off North Ronaldsay (numbering 50 nests with eggs in July 1892 according to Briggs 1893); that many were nesting at Rothiesholm at the south of Stronsay; that there was a colony on a small stack near Costa Head (called the Standard); and that nesting also took place on the Calf of Eday, Rousay and Hoy. They also state that Salmon found Cormorants breeding on Copinsay in 1831, but that Irvine-Fortescue saw none there in 1884 (a local boatman recently reported that they began breeding there again in the late 1930s). This list of breeding places rather conflicts with the theory of a western distribution.

The present distribution of breeding colonies could be described as central and eastern (fig. 1), with none on the western side of Orkney. The three largest colonies are in the central area of the North Isles and there are four smaller ones strung out along the eastern seaboard, from Little Pentland Skerry in the extreme south to Seal Skerry, North Ronaldsay, some 53 miles away, in the extreme north.

Since Buckley and Harvie-Brown's time, Cormorants have ceased to breed at the Standard, Rousay and Rothiesholm, and new colonies have become established at Little Pentland Skerry, Horse of Copinsay, the Brough of Stronsay, Muckle Green Holm, Holm of Boray and Taing Skerry.

The present Orkney Cormorant colonies are on very small islands, with the exception of the Calf of Eday (600 acres) and Muckle Green Holm (about 100 acres); they are all uninhabited. Little Skerry and Seal Skerry are low, bare, rocky skerries which are storm-washed in winter. The Horse of Copinsay and the Brough of Stronsay are small stack-type islets. The Horse lies about three-quarters of a mile north of Copinsay and the Brough is separated from the main cliffs



Fig. 1. Distribution of Cormorant colonies in Orkney.

near Burgh Head, Stronsay, by a narrow channel only a few yards across. Taing Skerry is a very small stone-shingle islet on a shallow reef, and Holm of Boray a small, narrow and elongated island only a few feet above sea level. Both lie in a comparatively sheltered area between Shapinsay and Gairsay; they are about three-quarters of a mile apart and constitute a single colony.

We can do little more than speculate on when most of the new colonies came into being during the past 80 years. There seems to be no precise knowledge of how long before the 1960s Little Skerry and the Horse of Copinsay were occupied. The Stronsay colony has been in existence for many years and the Muckle Green Holm colony since 1935, but for how long before that we do not know. Nor do we know exactly how and when the most recently established colony of Holm of Boray/Taing Skerry began; there is no record of Cormorants nesting on the Holm of Boray before the late 1950s.

Nesting habitat

Orkney Cormorants use four different types of nesting habitat: bare, rocky and exposed skerries (Little Skerry and Seal Skerry); shingle or stony beach (Taing Skerry); low, flat, grassy sward (Holm of Boray); and flat cliff-tops (the remaining colonies). All habitats are near to the edge of either the water or the cliff. At the Calf of Eday and the Brough of Stronsay the cliffs exceed 100 ft in height; the Horse of Copinsay is much lower, and the Muckle Green Holm nesting cliffs are not more than 40 ft high.

Nests

The nests are usually closely grouped together, often only a foot or two apart. They vary considerably in bulk. Some may be built only a few inches above the ground, but about a foot is more usual. All nests, except those on the Calf of Eday (which are built of heather), are composed of Laminaria and other seaweeds, with occasionally pieces of flotsam and jetsam, such as creel ropes, bits of wood and skeletal remains of birds and animals.

The breeding season

We have usually visited colonies only in late June or early July for the purpose of ringing the young and have taken no special note of the duration of the breeding season, but there is evidence of a considerable spread in egg laying. At the end of June a number of the young are fully grown, but there are also some still too small for ringing (some are very small), and there are always nests containing eggs, some apparently newly laid. For example, on Muckle Green Holm on 20th July 1961 there were 82 nests, of which 41 had eggs, 2 had small chicks, and 39 had large young, the majority of which could fly.

It has been noted that at the Holm of Boray/Taing Skerry colony, the birds at the smaller group of nests, on whichever island, tend to breed later. For example, on 22nd June 1960, when 98 large young were ringed at Taing Skerry, the 54 nests on Holm of Boray contained only 12 tiny, unringable chicks and 147 eggs. On 5th July 1961 the situation was much the same: 91 large young were ringed on Taing Skerry, but there were only small newly hatched chicks and eggs on Holm of Boray. In 1963 and 1964, however, Holm of Boray had a big group of nests and Taing Skerry a small, later one. On 23rd June 1963 and on 25th June 1964 there were only newly hatched young and eggs on Taing Skerry, but a preponderance of large, ringable young on Holm of Boray.

Constancy of breeding sites

Cormorant breeding colonies have been known to remain in the same place for a very long time. The Seal Skerry and Calf of Eday colonies, for example, have been in existence at least 80 years. Colonies do occasionally die out, as happened at the Standard, Rousay, Rothiesholm and Hoy. Perhaps human interference or persecution caused desertion there.

Since the beginning of casual observations in 1956 it has become evident that from year to year there has always been a shift of at least part of the colony to new ground. Such shifts may entail a movement of only a few yards. A colony is sometimes split into two groups when the birds move out in two different directions from the nesting ground of the previous year, as on the cliff-tops of the Calf of Eday or Muckle Green Holm, but is likely to come together again in some subsequent breeding season; after a year or two, abandoned ground may be used again. On a very small island any shift must necessarily be limited, but at the Calf of Eday, where there is a long stretch of suitable cliff-top, the birds restrict themselves to a certain section of it. Local movements within the colony area have been plainly seen on the twin islands of Holm of Boray and Taing Skerry. Table 1 reveals that since 1960 the main bulk of the colony has occupied Taing Skerry three times and Holm of Boray four times. This has not been strictly alternate, however. Each island has been tenanted by the greater part of the colony in consecutive seasons, but in each year, 1965 excepted, there was a local movement of some of the birds to different ground.

Numbers

In recent years the Orkney Cormorant population has fluctuated fairly closely around 600 breeding pairs. The census unit was the nest containing eggs or chicks, and all counts were made during the last week in June or very early in July, by which time it was reckoned that nest building would have ceased. Taing Skerry was censused from a boat in 1964, 1965 and 1966. All the other counts were obtained whilst walking through, or near to, the colonies. The two largest colonies are at the Calf of Eday and at Holm of Boray/Taing Skerry, each consisting of about 200 breeding pairs. Table 1 gives the number of nests on these three islands in all years for which we have counts since 1956. Censuses of the other five colonies have been made infrequently and are fragmentary. The estimate of more than 40 nests at Seal Skerry in 1964 was made by local fishermen, and we are indebted to K. G. Walker for making the count there

Table 1. Nest censuses of the two largest Cormorant colonies in Orkney (Holm of Boray and Taing Skerry are regarded as a single colony)

| | Holm of Boray | Taing Skerry | Calf of Eday |
|------|---------------|--------------|--------------|
| 1956 | no count | no count | 220 |
| 1959 | 180 | no count | no count |
| 1960 | 54 | 166 | no count |
| 1961 | 17 | 190 | 198 |
| 1962 | 21 | 185 | 168 |
| 1963 | 188 | 43 | 182 |
| 1964 | 202 | 15 | 198 |
| 1965 | 208 | 0 | 170 |
| 1966 | 172 | c.35 | no count |

in 1965. Only one proper count was made at Muckle Green Holm, in 1961, but regular estimates, from a neighbouring cliff-top, were made at the Brough of Stronsay between 1959 and 1963. The two other colonies were estimated from a distance.

Table 2. Counts and estimates of nests at the five smaller Cormorant colonies in Orkney

| Seal Skerry | 35-40 over 40 50 | Estimate 1963 Estimate 1964 Count 1965 |
|--------------------|------------------------|--|
| Muckle Green Holm | 82 | Count 1961 |
| Brough of Stronsay | c.20 | Estimates 1959-63 |
| Horse of Copinsay | 20-30 | Estimate 1962 |
| Little Skerry | 20 | Estimate 1962 |

Ringing

The annual ringing of Orkney Cormorant chicks, jointly carried out by the Orkney Field Club and Aberdeen University, began in July 1959. The Cormorant colonies had previously attracted little serious attention. Because of the accessibility of several of them and the high rate of recovery for the species, we considered that the ringing of chicks might yield useful data on patterns of dispersal in a comparatively short time. No adults have been ringed.

Most of the ringing was done by members of the Field Club, as early as 14th June and at late as 20th July, depending upon the stage of development of the chicks. Up to and including the 1966 breeding season 1023 nestlings were ringed on the four islands Holm of Boray, Taing Skerry, Calf of Eday and Muckle Green Holm. The numbers ringed annually at each place are shown in table 3.

| Table | 3. Corn | norant | nest | ings | ringed | in | Or | kney | 1959-66 |
|-------|---------|--------|------|------|---------|-----|----|------|---------|
| Ьy | Orkney | Field | Club | and | Univers | ity | of | Aber | deen |

| | Holm of Boray | Taing Skerry | | Muckle reen Holm | |
|------|------------------|-----------------|-----|---------------------|------|
| 1959 | 56 | | | | 56 |
| 1960 | | 98 | | | 98 |
| 1961 | | 90 | | 15 | 105 |
| 1962 | | 77 | 50 | | 127 |
| 1963 | 64 | | 40 | | 104 |
| 1964 | 86 | | 50 | | 136 |
| 1965 | 110 | | 87 | | 197 |
| 1966 | 200 | | | | 200 |
| | 516 | 265 | 227 | 15 | 1023 |

Recoveries of Cormorant chicks ringed in Orkney

The only recoveries of Orkney-ringed Cormorants are of birds ringed as pulli under the Orkney Field Club and Aberdeen University ringing programme. In the seven years to 30th September 1966 we have had 142 recoveries (excluding birds ringed in 1966), giving a recovery rate of 17.3%; though there may be some further recoveries to come from this group this is markedly less than the national rate of 23.0% for all Cormorant recoveries (2041 out of 8873 ringed up to 31st December 1965). Our recoveries are grouped in figs. 2, 3 and 4 according to age and whether the birds were found in winter (October-March) or summer (April-September). This division of the year is somewhat arbitrary, but it is a useful grouping employed by Coulson (1961) and used again here in the interest of uniformity.

Dispersal in the summer of hatching

Without conspicuous colour-markers it is difficult to detect precisely when the young Cormorants begin to move away from their natal shores; and unless some indication of the time of death is given by the finder, by reference to the state of decomposition of the body, for example, the recoveries tend to be biased as a measure of the date of dispersal, since it may be some time before the body is found. On the basis of the dates of recovery of ringed birds it seems that young Cormorants arrive on the mainland of Scotland from the last week of August onwards (fig. 2). Observations made by the late Miss E. A. Garden at the Ythan estuary, Aberdeenshire, from 1954 to 1962 indicate that although Cormorants may be seen there in each month of the year they begin to be observed more frequently in September, and there is a decline in frequency from February to June. The proportion of Orkney birds at the Ythan is not known,



Fig. 2. Cormorants ringed in Orkney and recovered by 30th September in the year of hatching; figures against Scottish mainland recoveries show the number of weeks between ringing and recovery.

Three Orkney-ringed Cormorants reached the Firth of Forth by the third week of September.

Their late-summer dispersal from the breeding grounds is clearly southerly, favouring the eastern coastal waters of the Scottish mainland, all but one of the 18 mainland recoveries (the figure includes 5 birds ringed in 1966) having been in the eastern half of the country and none on inland waters. The single exception to the southeasterly distribution is a bird, not included in fig. 2, which was shot near Ulverston, Lancashire, on 11th September 1966, only 10 weeks after ringing. Its presence on the west of England should be considered in conjunction with winter recoveries of birds in their first year of life discussed below. Of the seven remaining summer-of-hatching recoveries, all in Orkney, three were found about 14 miles north to northeast from their place of ringing by the last week of August, one 17 miles southwest by mid September, and three locally, up to the third week of September. Six of the seven summer-of-hatching recoveries in

Orkney were of birds that had been dead for an unknown period, but 71% of the birds recovered on the Scottish mainland are known to have been freshly dead.

Later recoveries in the first year of life

Both immature and adult Cormorants are observed in Orkney waters during winter, and Orkney recoveries in that season are of birds ringed locally (figs. 3 and 4). The proportion of immatures and adults which disperse each year is unknown, but the ratio of distant to local recoveries of first-year birds (6.7:1) and of older birds (8.0:1) indicates that the proportion dispersing some distance is high. maintain the breeding stock a substantial return to Orkney of emigrant birds (or immigrants from elsewhere) must therefore be required each year. It cannot be assumed that birds recovered in Orkney in their first or later summers did in fact take part in distant dispersive, and subsequent return, movements. Nor can it be established for certain that all emigrant Cormorants that are fit to undertake the return journey to Orkney do return at the conclusion of an overwintering period in mainland Britain or elsewhere. Onethird of the recoveries outside Orkney, of both first-year and older birds, were made in the summer period. Half (13) of those first-year recoveries occurred in April, eight in May, three in June (two of them were fresh) and two in July. This shows that at least some first-year birds remain away from Orkney until well into summer. Three of the four Cormorants recovered in summer in mainland Britain after the first year of life were found in or before the last week of April, probably just before the onset of the breeding season.

Cormorants ringed at southern colonies such as Mochrum and the Farne Islands have been shown to have northerly vectors in their dispersal patterns (Coulson 1961; Mills 1965) but no ringed birds from those breeding stations have yet been found in Orkney. Only two first-year Cormorants have been shown to travel more than 20 miles north of their natal colony in Orkney. Three which were recovered in winter in Orkney more than 10 miles from the place of hatching had a northerly component in their dispersal pattern. Only one of the eight summer recoveries in Orkney was north of the place of hatching (15 miles).

The pattern of recoveries of first-year birds dispersing south from Orkney (fig. 3) emphasises the tendency to spread down the east coast of the Scottish mainland, already shown for young birds in their first August and September; the largest concentration of recoveries is in the Montrose area, and the most distant is an oiled bird found in Yorkshire five months after ringing. Only one third as many re-



FIG. 3. Cormorants ringed in Orkney and recovered after 30th September in the first year of life; filled circles indicate winter recoveries (October-March); crosses indicate summer recoveries (April-September).

coveries are from the west coast of Scotland as from the east, and the pattern of these recoveries suggests that some of the birds moving down the east coasts of Caithness, Sutherland and Ross-shire, in a generally southwest direction, may continue straight down the Great Glen and over to the west coast. From there the sheltered seaways of the Sound of Jura and the Firth of Clyde give access to eastern Ireland, where the most distant recovery of a first-winter Cormorant (485 miles) was made in County Wexford.

It is noteworthy that only two Cormorants have been recovered on the considerable stretch of coastline of the north and west of Scotland in Sutherland, Ross, Inverness and the north of Argyll. The sparseness of human population in that region is unlikely to be entirely responsible for the lack of recoveries there, particularly since much of that part of Scotland is well patronised by tourists in summer, but it has been pointed out that the recovery rate of Orkney Cormorants is lower than the national average, and it could be that many rings remain unrecovered on inaccessible or unvisited parts of that coastline.

Although emphasis has been placed on the coastal distribution of the present recoveries and the possibility of regular routes being followed, especially to the west, inland recoveries (over a mile from tidal water) have been made and are included in figs. 3 and 4. Assuming equal probability of recovery for inland and coastal birds, an analysis of the figures between coastal and inland recoveries (omitting Orkney, Shetland and Fair Isle) reveals that Orkney Cormorants do have a strong preference for coastal waters; in winter 50 out of 64 (78%) were recovered at the coast. Of the remaining 22%, the average distance inland was 7.5 miles, one individual being 30 miles from the sea. Of those found in summer, 42 out of 47 (89%) were coastal birds, and the others averaged 12.6 miles inland (maximum 27 miles). From observations, ringing data and published records, Mills (1965) concluded that Cormorants are widely distributed inland in Scotland, and that they "frequently occur as much as 40 miles inland, particularly during winter and early spring."

Recoveries after the first year of life

Although the number of recoveries is much smaller the dispersal pattern of Orkney Cormorants after the first year of life and the distances they cover are remarkably similar to those of the younger birds (fig. 4). The recovery of a third-winter bird over 400 miles away, near Kristiansund, is, however, the only record of an Orkney Cormorant in continental Europe.

In comparing the movements of first-year and older ringed Cormorants from the Farne Islands, Coulson (1961) was able to show that movements in the first winter are greater than those which take place in subsequent winters. Only 18 recoveries of older birds are available for the present analysis of Orkney records—12 birds in the second year of life, four in the third year and two in the fourth year. More time therefore is required before such comparisons can be made for Orkney Cormorants.

Cause of death

For the purpose of analysing cause of death, 64% of our



Fig. 4. Cormorants ringed in Orkney and recovered after the first year of life; filled circles indicate winter recoveries (October-March); crosses indicate summer recoveries (April-September); arrow draws attention to a recovery near Kristiansund.

recoveries had to be disregarded because of lack of information, most of these birds having been reported as "found dead." It is evident (table 4) that shooting constitutes the major hazard of the four categories for which we have data. This takes place from September through to March, which agrees with the dates given by Mills (1965) for the shooting of Cormorants inland in Scotland. The shooting of Orkney Cormorants in mainland Britain (21 recoveries on the east, 5 on the west) seems to take place mainly on firths, estuaries and inland waters where human interest in fisheries may be involved. Only one bird was recorded as shot in Orkney.

Salmon nets are a frequent cause of death to Cormorants, but recoveries got in this way are restricted to the salmon netting season from February to September. Most are likely to be taken in fly nets and bag nets, as they are generally reported as having been drowned. Fourteen were taken in this way in the coastal waters of east Scotland, one in the west and none in Orkney. The single Scandinavian recovery was "drowned in a fishing net at 20 yards depth." Death due to oiling took place irrespective of season, but only five birds were affected, four of them on the east coast. The only record of predation other than by man, was one of a freshly killed Cormorant at a fox's den in Caithness.

Table 4. Cause of death of ringed Orkney Cormorants

| | Fishing net | Shot | Oiled | Other causes |
|-----------------------------------|----------------|-------|-------|---------------------------------------|
| Summer of hatching | 6 | 4 | 1 | |
| First winter | 3 | 19 | 2 | Head in fork of tree (1), Gale (1) |
| First summer | 6 | | 2 | Fox kill (1) |
| After first year of life (winter) | 1 | 4 | | Gale <u>(</u> 1) |
| After first year of life (summer) | | 1 | | |
| | 16 | 28 | 5 | 4 |
| | 30.2% | 52.8% | 9.4% | 7.5% |

Acknowledgments

Our grateful thanks are due to all those members of the Orkney Field Club whose labours made the study possible. We are indebted also to the British Trust for Ornithology for providing data on ringing and recoveries and for other help from its staff.

Summary

Data on the past status of the Cormorant in Orkney are scanty, but about 600 pairs now breed at two main and five smaller colonies, mostly on very small islands. Counts and details of changes are given, and notes on nesting and the breeding season. Part of a colony tends to shift to nearby ground each year.

Over 1000 chicks have been ringed since 1959. Dispersal is mainly southward and young birds reach the Scottish mainland from late August and are recorded on the north coast of Caithness and down the east coast as far south as the Firth of Forth by late September, with a single west coast recovery from Lancashire. A substantial part of the Orkney population moves away in winter, mainly to the east coast of Scotland. Smaller numbers on the west coast may have crossed the country down the Great Glen. Some year-old birds are still away from Orkney well into

summer. A third-winter bird was found in Norway.

The main reported cause of death was shooting, followed by drowning in salmon nets, but 64% of recoveries were of birds "found dead,"

References

BRIGGS, A. 1893. Bird notes from North Ronaldshay. Ann. Scot. Nat. Hist., 1893: 72.

BUOKLEY, T. E. & HABVIE-BROWN, J. A. 1891. A Vertebrate Fauna of the Orkney Islands.

COULSON, J. C. 1961. Movements and seasonal variation in mortality of Shags and Cormorants ringed on the Farne Islands, Northumberland. Brit. Birds 54: 225-235.

MILLS, D. H. 1965. The distribution and food of the Cormorant in Scottish inland waters. Freshwater and Salmon Fisheries Research series No. 35.

The "Carrick" gull and others—Iceland or albino?

ANDREW T. MACMILLAN

(Plate 48)

Identification of the white gull which has spent recent winters in the vicinity of the *Carrick*, moored on the Clyde in central Glasgow, has stimulated such argument that it may be worth putting the story on record.

This bird took up residence on the Carrick in 1964 and had been there for at least a week when M. J. Everett saw it on 18th February (see also Scot. Birds 3: 89); it was last seen on 24th April (C. V. Chilcott). The following winter it had returned by 28th November 1964 (Scot. Birds 3: 265) and remained until at least 22nd April 1965 (Scot. Birds 3: 371). In the autumn it was back by mid August, and W. K. Richmond published a photograph of it in the Scotsman on 20th August 1965; it was last seen that winter on 16th May 1966 (C. V. Chilcott). By 11th August 1966 it was back again (D. J. Norden), and it was there until 22nd April 1967, leaving at a time when the Herring Gulls around the ship dropped from a dozen birds most days to just one or two (R. W. Forrester). During these four winters the bird has remained fairly regularly in the vicinity of the Carrick, although absent from time to time. Recently it has tended to arrive by mid August, and it leaves in late April or May. Only one bird is involved, as it favours the same perches on the ship each winter. W. M. M. Eddie reports that it roosts elsewhere, arriving in the morning and leaving in the evening.

The natural first reaction was to identify it as an Iceland Gull, because it seemed too slight and its bill too slender for a Glaucous. It was pure white all over, and similar in size

to a Herring Gull, or perhaps a shade smaller; there were no dark marks on the head; the wingtips projected at least an inch beyond the tail when it stood on the wall of the quay; in flight some observers maintained that it had a buoyant long-winged look, while others denied this, saying that it looked no more buoyant or long-winged than white wingtips would make a Herring Gull look; there was argument too whether the bill was much the same as a Herring Gull's (British race 48-55 mm, against Iceland Gull's 39-50 mm) or about a quarter smaller and less deep and hooked. At rest the bird seemed identical in general shape to the Herring Gulls with which it associated, and the colours of the bill, legs and eyes were the same as those of an adult Herring Gull, L. A. Urquhart saw a Herring Gull display to it and mount, though it did not copulate (Scot. Birds 3: 371). M. J. Everett watched it join in a mewing session with a Herring Gull that pitched beside it, and there was no difference in posture or voice. Iceland Gulls are said to be shriller.

Several observers with experience of Iceland Gulls felt that this bird or its photograph just did not look right for an Iceland Gull. Two features also cast doubts on the bird being an Iceland Gull—the very early return to Glasgow in mid August, suggesting that the bird had never left Scottish waters, and the fact that, though it had a strong tendency to return year after year to the same place, it apparently was already in adult plumage when first seen, unlike the great majority of Iceland Gulls recorded in Scotland. Observers were agreed that it was white all over—the total whiteness in flight being specially mentioned—whereas the pale grey mantle of an Iceland Gull should contrast noticeably with the white primaries. Supporters of the Iceland Gull theory countered by pointing out that whitemantled Iceland Gulls do in fact occur. The rarity of these, however, would suggest that for the only Iceland Gull in Glasgow to be one of them, and to turn up at a very early date, and to be an adult, was a remote combination of chances, compared with the possibility that the large local population of Herring Gulls should include an occasional albino.

It was suggested also that a brick-red orbital ring pointed to the bird being an Iceland Gull; but, apart from argument about this feature and the difficulty of being absolutely sure of it in the field, one doubts if the range of variation in the Herring Gull has been fully investigated, and the eye colour of an albino might well be unusual. Likewise, B. L. Sage says that it is not unusual for albinos to be a little smaller than normal birds.

At this point W. M. M. Eddie sent us some excellent

PLATE 48. The 'Carrick' gull and a Herring Gull (see p. 493).

Photograph by W. V. M. Eddie



Plate 49. Out Skerries (see μ , 467).

Photograph by R. J. Tulloch



PLATE 50. Out Skerries.

Photograph by R. J. Tulloch

498



PLATE 51a. Wryneck, Out Skerries, 31st August 1966 (see p. 467).

Photograph by R. J. Tulloch



PLATE 51b. White-rumped Sandpiper, Stornoway, 25th November 1966 (see p. 506). $Photograph\ by\ R.\ MacIntyre$

photographs showing the "Carrick" gull by itself and with a Herring Gull (plate 48). We decided to try to settle the matter once and for all, and despatched the photographs and file of conflicting correspondence to various people with extensive experience of Iceland Gulls. All of them made useful comments on the problem and none would go further towards the Iceland Gull theory than to say that it was possible; several of them said emphatically that it was not.

G. T. Kay would have liked to see the bird itself before expressing a definite opinion but saw nothing in the photographs to rule out albino Herring Gull. All the Iceland Gulls he had seen were narrower across the shoulders than Herring Gulls and had noticeably smaller bills. As an aid to identification he commented that in his experience Iceland Gulls always fed on small items—often at sewer outlets with Common and Black-headed Gulls—and never on rubbish tips

with the big gulls.

- R. H. Dennis identified the bird in the photographs as an albino Herring Gull before reading anything about it. The mantle was too white for Iceland, which should show also a few darker markings on the head in winter. The shape was too heavy and short—typically Herring. The wings and tail did not give it a slim enough shape. The bill was too heavy (Iceland is slenderer) and the forehead was too sloping (Iceland tends to have a rounder head with the eye appearing nearer the centre of the head—rather like a Common Gull). In fact the appearance of the bird was wrong. Putting it unscientifically, the bird had the arrogant and cunning look of a Herring Gull in its eve rather than the timid and slightly clueless look of an Iceland Gull. added than on the Beauly Firth, as in Shetland, Iceland Gulls do not gulp away on rubbish tips but are rather delicate feeders on small bits of fish offal and fish fry. The pattern of return in August with Herring Gulls was identical to that of an albino Herring Gull at Inverness discussed below.
- R. J. Tulloch was struck by the head shape, bill size and expression of the bird as being typical of a Herring Gull, the Iceland's head shape being more like a Common Gull or young Herring Gull. He had seen many Iceland Gulls in Shetland but never yet an adult.
- D. Coutts also stated that it was not an Iceland Gull, having the wrong expression on its face. The bill was too long and deep and the top of the head too flat. The feet were too big: the Iceland has dainty feet with much shorter toes than the Herring and they are not so wide across the webs. The legs were longer than an Iceland Gull's.
- D. I. M. Wallace merely observed that the bird was undoubtedly an albino Herring Gull—similar to one discussed

below that he had seen in Jersey in 1956.

One might have thought that all this was pretty conclusive, but ingenious arguments remained to keep the matter open. Then, on 27th October 1966, W. M. M. Eddie and D. J. Norden, planning how to capture the bird and establish its identity, found that it had moulted some or all of its primaries and that the new feathers were marked with a very pale grey-brown which contrasted slightly with white mirrors at the tips of the feathers—in other words, a pale washed-out version of typical Herring Gull primaries. This had not been evident in the two previous winters.

This long account would hardly be justified by the occurrence of one albino or leucistic Herring Gull, except that there seems to be a need to emphasise that albinism can quite readily occur among white birds. Caution is needed in identifying Glaucous, Iceland, Ivory and Mediterranean. Gulls to be sure that they are not in fact albino Herring, Common and Black-headed Gulls, as a few examples will show.

Several albino Herring Gulls which were at first thought to be Iceland Gulls have been noted in Scotland in recent years. One bird at Leith in the winter of 1955/56 and again in August 1956, assuming it was the same bird, seems to have been identified as both Glaucous and Iceland, doubtless because its bill and size were intermediate, as one would expect of a Herring Gull (Edinburgh Bird Bull. 6: 32, 48, 71). The outer primary of at least one wing of this bird had dusky or black markings and was mirrored like a Herring Gull's, though this was by no means easy to see under normal conditions of observation, with the bird sitting on the sea. Doubts were expressed also about supposed sightings of Iceland Gulls, perhaps this same bird, in the same general area in 1958 (loc. cit. 8: 39, 69).

In Jersey D. I. M. Wallace mistook a bird seen briefly on 11th April 1957 for a fourth-year Iceland Gull, but better views twice in the next four days showed that it was an albino Herring Gull, with wingtip markings faintly present and sexual displays to other Herring Gulls. It was a small bird but, above all, it had the 'nasty' look of a Herring Gull. The orbital ring was in fact noted as brick—red.

A white gull was at Inverness during winter 1961/62 (and perhaps earlier). R. H. Dennis first had good views of it on 12th November 1962, up to which time it had been regarded as an Iceland Gull. It was in fact an albino Herring Gull—all white, but with grey-shadowed wingtips with white mirrors, difficult to see except as the bird banked away in flight. It was as if the wingtip pattern had been painted

over with one coat of white paint and still showed through. The size and shape of the bird and its bill, legs and eyes were similar to a nearby Herring Gull. It has returned each winter up to 1966/67, arriving in autumn and staying in the same places each year until March or April. The bird has remained white, but after each moult the wing pattern has become slightly more obvious.

R. H. Dennis has also seen two albino Common Gulls—a pure white bird with normal soft parts at Fair Isle in autumn, and a first-year bird with white wings at Inverness in winter 1965/66. There are records in the Edinburgh Bird Bulletin of one definite albino Black-headed Gull and another probable (8: 37)—the latter taken for a rarity at first—and of a bird which was initially thought to be an Ivory Gull but was more probably an albino Common Gull (1: 19; 8: 37). M. J. Everett and G. Waterston saw an almost wholly white Black-headed Gull on Horse Island, Ayrshire, on 2nd June 1966.

The identification of the "Carrick" gull still troubles some experienced observers who have seen it. The arguments used to identify it as an albino Herring Gull are highly subjective, especially when doubt is expressed whether the wingtips do in fact show any markings. Professor M. F. M. Meiklejohn found it very puzzling compared with an immediately recognisable albino Herring Gull he had seen in Stornoway on 18th November 1961 (Scot. Birds 2: 56, 107, 490).

Such difficulties with the "Carrick" gull serve to emphasise the doubts as to the correct level at which to group Iceland, Herring, Lesser Black-backed and related gulls, whether as a single species, or as individual species, or as components of a superspecies. In view of their close relationship it may be that some borderline or aberrant individuals could prove virtually impossible to identify in the field. The palest of the group are the Iceland Gull (from Greenland) and Kumlien's Gull (from arctic Canada), and this note has concentrated on these, but it must be admitted that there remain the possibilities of mutation and hybridisation to account for the "Carrick" gull. The simpler view, that it is an albino or leucistic Herring Gull, seems preferable; but unless the bird can be examined in the hand by a competent taxonomist it seems likely to go on puzzling people.

It is certainly thought-provoking that this is the best that can be said after long and close investigation involving much correspondence and many views of the bird by various observers. One must wonder how many reports of Iceland Gulls really refer to albino Herring Gulls, in spite of the editorial checking they are given. The common feature seems to be that the bird is first reported as an Iceland Gull and

then later, assuming that it stays in the area, this is challenged by someone with field experience of genuine Iceland Gulls who finds that the bird just does not look right for that species. Sometimes this leads to a prolonged impasse between the supporters of the rival views, for it is often difficult to produce any one conclusive feature that cannot be discounted or disputed. The sometimes subtle distinctions between Iceland Gulls, small Glaucous Gulls and albino Herring Gulls can obviously be difficult if one has no previous experience of them. Some help may be had, though rather with the Iceland/Glaucous distinction than with freaks, from a study of papers in *British Birds* 40: 369-373 (14 plates); 43: 399-402; 56: 263-266 (4 plates).

Summary

A white gull that has been seen in Glasgow between August and May in recent winters is described and the problem of identification discussed. Examples are quoted of albinism in British gulls to show the risk of mistaking such birds for other species.

Short Notes

Green-winged Teal in Lanarkshire and Dunbartonshire

On 8th January 1967 at Gadloch, Lenzie, Lanarkshire, I set up my 45x telescope on a post 200 yards from the loch, pointed it in the direction of some birds standing on the ice, and by sheer coincidence brought into focus a drake Green-winged Teal. It was near a flock of European Teal and I immediately recognised it by the short but clearly visible white vertical stripe on the breast in front of the carpal joint. The white horizontal stripe above the folded wing of a Teal was missing from the American bird. Otherwise it was identical to the European ones. I did not see any buff feathers where the green and brown meet on the head, but in fact these were hard to see on some of the European birds.

I saw the Green-winged Teal again on 15th January. It was difficult to pick out among the other Teal, but once located it quite clearly showed the white vertical stripes, especially head-on.

During the week it was seen by W. Wyper, R. A. Jeffrey, J. M. S. Arnott, C. E. Palmar, J. Mitchell and others. This I believe is the eighth record of this American race of the Teal in Scotland.

BERNARD ZONFRILLO.

(Mrs J. B. Hutchison confirms that the bird was seen fre-

quently at Gadloch from January to March, and at Twechar Marsh, Dunbartonshire, on 4th, 5th, 6th and 12th April. Checking back at Gadloch left little doubt that the same bird was involved at both places.—Ed.)

Blue-winged Teal in Orkney

While examining ducks on Hooling Loch, North Ronaldsay, on 10th November 1966 I noticed an unfamiliar one sitting on the edge of the loch with the Teal. From the following description I identified it as a drake Blue-winged Teal:

Forehead dark brown; cheeks, nape and side of head very deep maroon or plum, with white crescent in front of eye and down to throat; mantle brown, edged with light brown; scapulars similar, but faint green tinge seen in sunlight; back and rump brown with seemingly a deep green gloss over the whole area in the sun; breast and belly buff with brown spots, decidedly larger on flanks and merging into vertical brown stripes (seven counted) towards tail, separated from black under tail-coverts by small vertical white stripe; tail brown; primaries brown; secondaries of closed wing showing intense metallic blue; greater wing coverts tipped white; lesser and median coverts blue; bill black; feet yellow.

The bird was observed for 30 minutes with 7x50 binoculars in a force 5 northerly wind with occasional glimpses of the sun.

KENNETH G. WALKER.

(With the usual reservation that almost any goose or duck could have escaped from a collection, this is the fifth acceptable Scottish record and the first for 16 years. The species has previously been recorded three times in the Outer Hebrides between 6th September and 10th November and once in Dumfriesshire in 1858.—Ep.)

Scaup breeding in Orkney

During summer 1965 a pair of Scaup was seen on and around a loch in North Ronaldsay, the male often feeding on the loch but the female (with a well defined white band at the base of the bill) being seen only in flight. The area where the female landed was searched on numerous occasions, but the cover was dense and no nest was found, though breeding was suspected. For three weeks the female was not seen, until 12th July, when I appeared suddenly in view of a small sheltered area of open water and saw her with four three-quarter-grown young. All five immediately dived. The female surfaced first and took to the wing, calling in a very agitated way. She was followed by one of the young, which being unable to rise flapped its way across the loch into a mass of irises 15 yards away. From the notes

I took at the time I later identified it with the aid of the *Handbook* as a juvenile male. The other three young birds surfaced very close to the irises, but before they disappeared I noticed that two of them had very narrow white bands at the base of the bill.

A pair was seen again in 1966 but breeding was not proved.

KENNETH G. WALKER.

(This is evidently the first satisfactory record of Scaup breeding in Orkney. The species has bred occasionally in the Outer Hebrides and in Ross, Caithness and Sutherland, but there are hardly any recent records.—Ep.)

Least Sandpiper in Clyde

On 11th September 1965 at 1850 hrs GMT we saw an unfamiliar wader, which we later identified as a Least Sandpiper Calidris minutilla, at the Wilderness Sand Quarry near Buchley Farm (grid ref. 591722), Lanarkshire, 1½ miles west of Cadder. It was watched for six hours the following day and seen by J. M. S. Arnott, C. E. Palmar and three others before it disappeared on the 15th after a very heavy rainstorm. WMME managed to take some useful photographs on the 13th, showing the proportions of the bird and its general appearance, but these are not good enough for reproduction here.

It was smaller than a Reeve and about an inch shorter than a Pied Wagtail both species being present for comparison. It stood slightly higher than the wagtail but its body was not so bulky. It was never very close to a Common Sandpiper but looked a good deal smaller, and in flight had proportionately longer and narrower wings. The plumage pattern in flight was practically identical to a Little Stint's, the upperparts being fairly uniform and the white wing-bar not very noticeable. The bill seemed completely straight from a short distance but close inspection showed a slight decurve at the tip; it was just a shade shorter than the head, very slender, tapering and broadened slightly at the tip (but not bulbous or flattened), producing a shape quite unlike the bill of a Little Stint. The legs were proportionately longer than a Little Stint's (tarsus longer than the bill) and this, together with a more upright, dignified carriage, relatively large squarish head and fat cheeks, gave the bird an entirely different jizz from a Little Stint. It had a capped appearance, and white lines on the back separated the dark mantle and very dark scapulars, so that from above and in front the mantle showed as a blackish triangle bordered on two sides by a white line. At certain angles there seemed

to be a narrow dark collar. The following is the detailed description:

Feathers at base of upper mandible and extreme front of forehead whitish; forehead and crown dark brown with rusty edges to feathers and looking a bit pale-reddish in some lights; the cap ending abruptly at nape, with pale streak (very hard to see) on its lower edge behind eye; lores buffish white with dark brown mark from bill to eye; superciliary, side and back of neck and nape buffish white, lightly streaked dusky, appearing pale greyish from a distance in dull light; no noticeable eyestripe but very thin whitish line over eye, and conspicuous white patch directly behind eye, running almost to nape; narrow eye-ring pale buff or whitish; ear covers buff, streaked light brown; collar and mantle very dark brown, almost black, with narrow orange-brown edges to feathers and a few with white edges; white divisions between mantle and scapulars set very high and not as broad at in Little Stint, nor particularly straight, the two white lines tending to form a V but never meeting, and fading out on lower mantle; scapulars dark brown, almost black, with narrow rusty edges to feathers, some with outer webs with white edges that formed a line which at times looked broader and more prominent than the V; small inconspicuous dark-and-white chequered triangular patch in front of scapulars; lesser and median coverts blackish, with broad buffish white or golden edges; dark brown smudge on carpal joint merging with little contrast with lesser coverts and usually hidden by breast and flank feathers; greater coverts dark with broad ash-grey edges; tertiaries blackish with narrow pale rusty edges on inner webs and distal third of outer webs, gradually becoming buffish towards extreme base of inner webs and remainder of outer webs; primaries blackish, extending just beyond tip of tail; centre pair of tail feathers blackish and others pale brown or buffish grey, becoming whiter towards outer pairs, but not so white as sides of tail-coverts; centre of upper tail-coverts blackish; sides of rump and upper tail-coverts white.

Throat, chin and front of neck pure white; breast whitish with a pale buff wash (pale greyish in dull light) and extremely small, faint, pale grey streaks (exceedingly difficult to detect, so that breast just looked whitish at a distance); smuge on either side of breast (much as on a Common Sandpiper), joined to collar, buff with dark brown mottling and streaks, and fanning out to form spots; belly, flanks and under tail-coverts white, brightest where feathers fluff over carpal joint and on flanks.

Legs and feet extremely dark, looking blackish at 30 yards in dull light, but not studied closely or under better conditions (published descriptions indicate that leg colour is very variable); bill blackish; eye dark.

Never once was the bird heard calling on the ground. In the air the commonest note was a soft, liquid, monosyllabic peet which could carry at least 50 yards. This call was occasionally doubled and once it was trebled with an almost Swallow-like quality. Also heard were cheek and a soft trilling trreep-trreep. Once, when surprised, the bird uttered a rapid peet-peet-weet-weet with the last two notes higher pitched.

Its flight was very fast and wavering and once it flew with its legs dangling. It was a very active bird, running here and there and picking at the surface of the mud. Occasionally it ran very fast for short distances like a Sanderling, and it fed mostly out of the water along the wet mud, but a few times it was belly-deep in the water. We were surprised at the speed at which it could run when this deep in the water, and once it was seen to spin like a phalarope.

On the 11th it looked tired and we approached to within 10 yards, but later with Ruffs it rose at about 50 yards. At times we were within 5 yards, but it was always an essentially nervous bird, ducking if any large bird such as a gull flew over. It associated freely with Ruffs, Lapwings and Pied Wagtails but was chased around the pools frequently by the aggressive Ruffs and, to a lesser extent, by the Lapwings. When disturbed it flew off with the Ruffs, and they all returned to the same spot after a flight of at least $\frac{3}{4}$ mile from the pools, during which they crossed the River Kelvin from Lanarkshire into Stirlingshire several times.

We compared our description with skins of Least Sandpipers (taken in Iowa, U.S.A., mostly in September) and concluded that the bird was a fairly typical juvenile. The only previous Scottish record is of an undescribed bird, now in the Royal Scottish Museum, shot in Shetland on 14th August 1955 (Fair Isle Bird Obs. Bull. 3:76; Scot. Nat. 1957: 170). It is in fact an adult in heavily abraded breeding plumage (WMME).

W. M. M. Eddie, D. J. Norden.

White-rumped Sandpiper in Outer Hebrides

At Melbost, Stornoway, on 21st November 1966 W.A.J.C. took M.F.M.M. to catch a 'plane and arrived 15 minutes early to have a look at Loch Branahuie, a shallow turfedged pool among sand dunes. We saw, about 20 yards away, a small wader which showed a white rump when disturbed by a Redshank. It flew to the west side of the loch, but presently returned and fed actively within 15 yards. The light was bad, so that even with 12x50 binoculars the dark parts of its plumage appeared black. We watched it for 10 minutes and made the following notes, from which we identified it as a White-rumped Sandpiper—a name which seems less apt than the former Bonaparte's Sandpiper, considering there are three much commoner sandpipers in Britain with white rumps.

Size about that of Dunlin (Redshank only comparison), but different shape, with long wings projecting beyond tail, giving it a more slender look. General appearance, grey above and white below. Crown apparently black; back blackish with faint V backwards from shoulders; rump white; tail black with no visible white on outer edges; broad pale supercilium and faint dark eyestreak; wings grey, dappled with light flecks, but no obvious wing-bar; underparts white with faint

pink flush on throat and upper breast; breast band of thin dark streaks; legs black; bill black, very slightly decurved at tip, but not so much as in any Dunlin. Call a feeble 'tsip.'

The bird was seen again on the 24th by W.A.J.C., who noted that in a better light the crown and back appeared less black, and by I. D. MacLean on the 24th and 25th. It was last seen by R. MacIntyre on the 27th. On the 25th he was able to photograph the bird with a telephoto lens, and one of his pictures is reproduced to illustrate this note (plate 51).

W. A. J. CUNNINGHAM, M. F. M. MEIKLEJOHN.

(There are two previous records of this species in Scotland—in Midlothian on 21st-24th August 1955 and in East Lothian on 12th October 1958 (Edin. Bird Bull. 5: 75; 8: 112; Brit. Birds 49: 39; 53: 165).—Ed.)

Richard's Pipit in Shetland

At Fair Isle, Richard's Pipits are recorded each autumn in very small numbers, mostly at the end of September or early in October, but there are extremely few acceptable records for the rest of Shetland, no doubt because the bird is easily missed and rather tricky to identify with certainty. On 20th October 1966, driving between grass fields by Sumburgh airport, G. D. Joy and I were attracted by a bird which blew, rather than flew, across the road and settled 30 yards away in a field.

Almost immediately I recognised it as a Richard's Pipit, because I had been to Fair Isle only a week earlier and had spent a considerable time watching three of these birds. This one was wet and bedraggled. Every now and then as it walked about feeding it stopped to flutter its wings, ruffle its feathers, and preen. It walked in the long-legged, rather important manner I had noted on Fair Isle, stopping from time to time to stretch up its neck and look suspiciously round; twice it gave a little, almost convulsive flutter in the air, but, like at least one of the Fair Isle birds, not seeming to catch anything. Its body looked roughly Skylark size, but standing much taller on its legs, GDJ remarking that with the thickish bill it looked more like a small thrush than a large pipit. Plumage detail and colour were confused by the wet, so that it looked darker than the Fair Isle birds, though browner than a Rock Pipit and with the same sort of general streaking as a Meadow Pipit; the relatively longer tail and white outer feathers were noticeable, and the legs were pale brown.

When flushed it was blown over a hillock without giving

us any reliable flight features, but for me the identification was confirmed when it gave the distinctive, loud and rather harsh zreep call as it flew away.

ROBERT J. TULLOCH.

Woodchat Shrike in Orkney

Near the lighthouse, North Ronaldsay, on 8th May 1964 a bird flew past me and landed on a drystone wall. I recognised it as a Woodchat Shrike and took a full description. The day was bright, with passing showers and a force 7 SW wind. I watched the bird for 90 minutes and noted that it constantly moved its tail in a flicking motion and occasionally flicked its wings as well. It made some short flights but took no food during this time.

My notebook was mislaid, and it was only when it came to light lately that I was able to submit the record to the *British Birds* Rarities Committee for acceptance.

KENNETH G. WALKER.

(1964 saw an increase in the number of Woodchat Shrikes recorded in Britain (*Brit. Birds* 58: 368; 59: 301) but this was the only one in Scotland, whereas in 1965, an even better year (*Brit. Birds* 59: 296), there were five Scottish records.— Ed.)

The status of the Twite

The following observations on Twite were made during a visit to northwest Sutherland in August 1966. They may be of interest in view of the relatively small amount of recently published information on this species and the present B.T.Ö. enquiry into the status of Twite in England, Wales and south Scotland.

At Tarbet, 3 miles north of Scourie, parties of 4-20 Twite fed in grassland in the village area. Sometimes there were larger groups, such as about 45 on 12th August on overhead electricity wires. Where the food could be identified it was seeds of sorrel Rumex acetosa in 14 instances and of ryegrass Lolium spp. once. On many other occasions Twite were perched on sorrel but were not actually seen to feed. Seeds of unidentified roadside weeds were taken once, and on a few occasions Twite fed on moorland near the edge of cultivated ground—a complex of deer sedge Scirpus cespitosus, bell heather Erica cinerea, dwarf ling Calluna vulgaris and moorland grasses. Grassland near Tarbet contained, besides abundant sorrel, much knapweed Centaurea spp., ragwort Senecio spp. and meadowsweet Filipendula ulmaria.

Outside areas of cultivation, or past cultivation, there were few Twite. Thus between Scourie and Tarbet, across $2\frac{1}{2}$ miles of moorland of the type described above, none was seen; and along 3 miles of track across moorland from near Rhiconich to Ardmore, Twite were seen only where a croft was still worked, and at Ardmore where old grassland remained from former cultivation.

This pattern of distribution may partly explain changes in the status of Twite. Harvie-Brown and Buckley (A Vertebrate Fauna of the Moray Basin 1895) found them "exceedingly general" in the Cabrach area of Banffshire where they sometimes fed on thatched roofs. They are now uncommon, and the thatched roofs have fallen in or been replaced by corrugated iron or other unpalatable material. The amount of cultivated land has greatly declined. As in Sutherland, areas of heather moorland are not frequented by Twite.

R. HEWSON.

Scarlet Grosbeak in Shetland

On 15th September 1966 I came on a Scarlet Grosbeak in the Symbister district of Whalsay. I flushed it off stubble and had good views at down to 30 yards while it perched on fences.

Description Sparrow size and general shape; head, breast and rump bright carmine; scapulars, mantle and back brown; lower breast pinkish white; belly and under tail whitish; bill brown, heavy and conical.

A bird fitting this description had been reported in the same area a few days before, when the weather was very stormy from the west or northwest. It was reported as being in an exhausted condition, and was approached within a few feet as it fluttered in the lee of a stone wall.

JOHN H. SIMPSON.

(Red males are extremely rare in this country, though brown immatures or females are annual in autumn at Fair Isle in very small numbers, mostly in September.— Ed.)

Current Notes

Compiled by P. J. B. SLATER

(Key to initials of observers: D. R. Anderson, W. Austin, R. S. Baillie, D. Baty, Miss P. G. T. Baxter, Mr and Mrs P. Black, Dr W. R. P. Bourne, J. Brock, W. Brotherston, Miss C. F. H. Bruce, R. G. Caldow, E. D. Cameron, L. H. Campbell, N. G. Campbell, J. F. M. Carson, G. M. Crighton, Miss M. H. E. Cuninghame, W. A. J. Cunningham, R. H. Dennis, G. A. Dickson, R. C. Dickson, Miss J. M. Donnan, Hon. H. Douglas-Home, N. Elkins, J. E. Forrest, I. Gibson,

K. Goodchild, C. G. Headlam, K. Holt, J. A. D. Hope, Sir G. Hughes-Onslow, D. C. Hulme, E. N. Hunter, Miss R. S. Hunter, Dr D. Jenkins, P. Johnson, T. H. Jorgensen, D. E. Kelly, J. M. B. King, A. R. Kitson, D. J. Law, A. F. Leitch, J. A. Lister (JALr), D. G. Long, J. A. Love (JALv), A. Macdonald (AMcD), D. Macdonald, M. A. Macdonald, R. D. Macgregor, I. M. MacLean, A. MacRae (AMcR), A. R. Mainwood, A. Malcolm (AMm), S. Manson, R. Marrs, W. Matheson (WMn), Prof M. F. M. Meiklejohn, M. G. Miller, R. H. Miller, J. Mitchell, N. C. Morgan, W. M. Morrison, M. Marquiss, W. Moss (WMs), I. S. Oates, D. W. Oliver, G. Oliver, T. Paterson, B. Philp, R. K. Pollock, J. A. Pollok-Morris, A. Pringle, Mrs I. Rainier (IRr), R. M. Ramage, A. D. K. Ramsay, Dr M. N. Rankin, G. A. Richards, W. K. Richmond, I. Riddell (IRI), G. L. Sandeman, S. Saxby, Mrs A. F. W. Sharp, P. J. B. Slater, H. D. Smith, R. T. Smith, D. M. Stark, A. G. Stewart, Dr C. Suffern. C. Tait (CTt), I. Taylor, Miss V. M. Thom, Miss O. T. Thompson, D. A. Tindal, C. Townsend (CTd), R. B. Tozer, R. J. Tulloch, F. J. Walker, K. G. Walker, Miss E. Wallace, R. Walls, G. Waterston, Mrs M. I. Waterston, Dr R. S. Weir, G. T. White, Mrs J. A. Whyte. W. Wyper, B. Zonfrillo.

Unless otherwise stated all dates refer to 1967.)

Distribution

Records from before 1st March 1967 are excluded from this section except where they are relevant to more recent topics.

Records of Black-necked Grebes on Loch Ryan, Wigtownshire, during the winter have been given previously (4: 380, 455): the last to be seen there were three on 11th April (RCD).

In Ayrshire, a Storm Petrel was found dead just up from the shore near Girvan on 8th June (RW). In Edinburgh a Fulmar was flying round Arthur's Seat on 13th May (DGL), and two were in the same area on 29th (MAM); one flew south over the Braid Hills on 23rd June (GLS). After a period of strong westerly winds one, thought to be the first for Renfrewshire, was seen at Barr Loch on 10th June (IG, GTW).

A Cormorant showing the characteristics of the southern race was noted at Black Loch, Wigtownshire, on 12th April (RCD). It seems that the incidence of such birds in the Scottish population may be greater than published observations would suggest, for of about 50 Cormorants in the area of Leven, Fife, each winter there are generally around six which look like southern birds (DWO).

Further north than usual, a drake Garganey was at the ponds at Gartocharn, Dunbartonshire, on 16th May (per JM), and a pair of Gadwall was on the mudflats at Dornoch, Sutherland, on 14th (DM). The Pintail has not previously been recorded in Wester Ross but a drake was frequenting a pond at Gairloch between 28th April and 2nd May. There may be some doubt as to the origin of this bird, however, as a pair was introduced to the same pond in 1965, although these birds

have not been seen for over two years (ENH). A pair was at Kingoodie, Perthshire, on 22nd April (VMT). A duck Redcrested Pochard was recorded at Loch of Strathbeg, Aberdeen-

shire, on 30th April (NE, JALv).

Scaup are often seen on Duddingston Loch, Edinburgh, but the numbers during April were quite exceptional, with a peak of 26 on 27th; 19 were still there on 3rd May (DRA). The last wintering bird to be seen off Musselburgh, Midlothian, was a male on 5th June (IRI). A summer Goldeneye was at Gadloch, Lanarkshire, on 12th June (WW, BZ). On 20th May a party of at least eight Long-tailed Duck was seen on fresh water at Skaill Loch, Orkney (PJBS), and a very late bird was near Stornoway on 25th June (WAJC).

Richards (A Check-list of the Birds of Ayrshire, 1966) records a pair of Grey Lag Geese breeding on a loch in the county in 1963 and 1964. There appears to have been a substantial influx of breeding birds since then, as 12 nests were found this year at the same place (JAP-M).

Four Bean Geese were seen near Cameron Reservoir, Fife, in association with Pinkfeet and Greylag on 2nd April; they were unringed and wary (PGTB, DWO). On 30th April 4000 Pink-footed Geese were still at Tibbermore, Perthshire (VMT), and there are several reports of skeins moving north in early May. A pair of birds at Loch of Hillwell, Shetland, on 24th May proved to be Bar-headed Geese and were presumably escapes as this is a central Asian species (per RJT). Four adult Snow Geese, one of them ringed, were first recorded at Wooden Loch, near Eckford, Roxburghshire, on 10th June and were still there on 24th, by which time they were beginning to moult (RSB). One, also bearing a ring, was on North Ronaldsay, Orkney, on 12th and 13th May (KGW). There is also an earlier report of two with Greylags at Loch Spynie, Morayshire, on 15th January (AP).

Two Brent Geese were seen flying in to Aberlady Bay, East Lothian on 23rd April (WKR per GW). A Pale-bellied bird was at the Ythan estuary, Aberdeenshire, on 27th April and again on 10th May (NE), and in Lewis two were noted at Broad Bay on 23rd May (IMM), and again on 4th June, when one was seen to have an injured leg (WAJC). A large count of Barnacle Geese for Perthshire was of 16 at Tibbermore on

9th April (VMT).

Canada Geese are reported nesting at Loch Mahaick, near Doune, Perthshire. One mated to a hybrid goose was unsuccessful but a normal pair reared four young (TP). A pair on an island in Loch Tummel, Perthshire, on 14th May may have been nesting (PGTB). The only report so far of the flock which congregates annually on the Beauly Firth to moult is of 123 at Newtown Bay, on 20th June (DCH).

In May three Whooper Swans were at Loch of Strathbeg on 14th (NE, WMM), and one was at Loch Mallachie, Inverness-shire, on 27th (RBT). Four were at the Ythan estuary on 1st and one was still there on 23rd (NE, WMM). June records are of two adults on Loch Hope, Sutherland, on 13th (DCH), and one on the River Ayr between 22nd and 28th (AGS). A pair of Bewick's Swans was recorded at Gadloch, Lanarkshire, on 7th May (WW, BZ).

In the Queen's Park, Edinburgh, where this species is rare, a Buzzard was seen flying over Duddingston Loch on 12th February (DRA), and one was circling round Arthur's Seat on 2nd June (DGL). A Rough-legged Buzzard was recorded at Lang Crags, near Dumbarton, on 22nd April (DJL).

Several Marsh Harriers were reported during the second week of May, at a time when southeast winds were bringing large numbers of smaller migrants into the country. In Aberdeenshire, a female was at Blackdog links, just north of Aberdeen, on 7th and 8th (LHC, JALv, MM, BP), and what may have been the same bird was at Strathbeg on 14th (NE); a male was at Balmedie on 10th (ADKR). Further north, a male was seen near Reay, Caithness, on 7th (KG), and a female was on Fair Isle, Shetland, between 9th and 11th (RHD). A female was quartering a marsh near Machrihanish, Argyllshire, on 13th (JB, CTd).

An Osprey was found dead at Bridge of Don, Aberdeenshire, on 7th May (MM); one was in the area of Old Dailly, near Girvan, Ayrshire, from 13th to 15th May (GH-O, RW); and one was seen flying over Temple, Midlothian, on 22nd May (JALr). At the observatories, one was on Fair Isle on 8th and 9th May (RHD), and one was seen on the Isle of May on 31st (per AMcD). At Eyebroughty, East Lothian, where this species was seen twice last year (4: 243, 316), one was noted on 2nd July (RSB).

The only Quails heard have been in the north. In Shetland, at least one was calling on Foula between 9th and 11th June (ARM), and on Fair Isle there were singles on 24th and from 28th to 30th May and up to three in song during June (RHD). One was heard in a field near Invergordon, Easter Ross, on 10th June (CGH).

A Spotted Crake was back at the marsh in West Sutherland where several were heard calling last year (4: 372) by 24th April (per DM). The earliest Corncrake, and the only April bird, was at Yetholm, Roxburghshire, on 16th (per RSB): the first at Fair Isle was not until 5th May (RHD).

A Coot, apparently the first to breed at Aberlady, was seen on its nest at the Marl Loch on 21st May, and on 24th June the pair was seen with two young (AFL). Also in East

Lothian, a single bird was on the sea outside North Berwick harbour on 27th June (MIW).

Oystercatchers were proved to breed at Tentsmuir for the first time this year, though suspected of doing so pre-viously. An egg-shell was found on Earlshall on 22nd May and the alarm of the pair showed that they had chicks (DWO). In Lewis, the breeding population of Lapwings was noticeably greater than in the past few years (WAJC).

Dotterel probably bred in Sutherland in the middle of the last century (2:182), but a nest containing two eggs found in the North division of the county this year is the first record since (DCH).

Spring records of Black-tailed Godwits are as follows:

Foula—1 from 28 Apr to 4 May (ARM).
Fair Isle—3 on 19th; 6 on 20th and 21st and still 2 on 25 Apr (RHD).
Torridon—1 beside small pool on 2 May (ENH, EW, JAW).
Montrose Basin, Angus—2 on 18 May (GMC).

Eden Estuary, Fife-30 on 14 Apr (GO).

Aberlady—I on 12 Apr (AFL, MAM); 2 on 22 May (WMs). Seafield, Midlothian—I on 1 Apr (WMs). Barassie, Ayr—wintering bird (4: 384, 458) up to 7 May (GAR).

Troon, Ayr-1 on 16 Apr (RGC).

New Cumnock, Ayr-1 on 16 Apr (RM).

At the locality in southern Scotland where a pair of this species has bred each year since 1964 (4: 317), there is a possibility that two pairs nested this summer. Only one bird was present on 13th and 23rd May but on 29th two pairs were in the area. Their behaviour on 8th June suggested that there was at least one nest and three adults were calling anxiously some distance from the original territories at the beginning of July (ED.).

In Aberdeenshire, single migrant Green Sandpipers were seen over Meikle Loch on 25th April (NE), and at the Ythan estuary on 8th May (WRPB). Between 5th and 11th May one or two were seen daily on Fair Isle (RHD). A Wood Sandpiper was at Montrose Basin on 10th May (GMC); there was one on Fair Isle on 8th and 9th and another on 26th (RHD); and one was at Skinflats, Stirlingshire, on 26th June (IT).

While the first Common Sandpiper was at Glencorse reservoir, Midlothian, by 9th April (CFHB, ADKR), the next birds were not until 17th, when one was at Aberlady (MAM), and another at Yetholm (RSB). In Lewis, two had arrived by 29th April (IMM), and passage at Fair Isle started with three on 7th May (RHD).

Wintering Spotted Redshanks previously mentioned (4: 458) included one at Broomberry, Ayrshire, which was there up to 22nd April (RBT), and one at Aberlady which was seen on 5th and 12th April (AFL, MAM) and again on 27th, by

which time it was getting into summer plumage (JADH). A further record is of one at Tentsmuir on 13th April (PGTB). The first Greenshank to be back in Lewis was seen on 8th April (IMM).

A Temminck's Stint on Foula on 25th May fits the general pattern of the handful of Scottish spring records, which are almost all from Shetland (ARM). A curious date for a Curlew Sandpiper was 24th June when one was at Aberlady (MAM).

A record of a flock of **Ruffs** at Aberlady in early March has already been given (4: 245); these birds were apparently present in a field there between 3rd February and 27th March, the maximum count being 25 (DJ). Also at Aberlady, a male in full breeding plumage was seen on 23rd April (WKR per GW). Five birds of this species were at Garlieston, Wigtownshire, on 9th April (PGTB); and in May, singles were near Kilwinning, Ayrshire, on 6th (GAR); at the Ythan estuary on 8th (WRPB); and at Gartocharn on 16th (per JM). One was at Paisley Moss, Renfrewshire, on 15th May and 4th June (GAD, IG, GTW).

The first Arctic Skuas to return to their breeding sites on Foula were four seen on 22nd April (ARM). In Aberdeenshire, two were seen off Cruden Bay on 25th May and one at Balmedie on 23rd June (NE). Single Great Skuas were noted in the same county at Sands of Forvie on 12th June and at Balmedie on 23rd and 24th (NE); and also at Fife Ness on 12th June (PGTB). One was near Stornoway on 25th June (WAJC), while one at Garroch Head, Bute, on 27th May had a wing and leg caught in some string but was otherwise in good condition, flying off immediately when freed (WW, BZ). The first back on Foula were two on 25th March; by 22nd April 1000 were there (ARM). On 23rd May a Pomarine Skua was recorded there (ARM).

Single Glaucous Gulls were seen at Fair Isle on 4th, 10th and 12th June (RHD), and two even later birds were at Scrabster harbour, Caithness, on 23rd (KG, SM). An Iceland Gull was at Wick, Caithness, on 4th April (per DMS), and an immature was at Nigg Bay, Kincardineshire, on 18th March (MM). At least six Little Gulls were at Morton Lochs, Fife, on 23rd April (AMcD); an immature was at Carnoustie, Angus, on 19th May (GMC); and two were at Kilconquhar Loch, Fife, on 27th June (PGTB).

The most striking feature of the quarter was an influx of Black Terns in the north between 5th and 10th May:

Shetland—On 6th: 1 at Fair Isle (RHD). On 7th: 3 at Cullivoe, Yell; 3 at Aywick, Yell; 2 at Clickhimin; 2 at Hillwell. On 8th: about 10 at Otterswick, Yell; about 6 at Spiggie; 4 between Unst and Hascosay. On 9th: 2 at Whalsay and 1 at Fetlar (per RJT).

Orknev-4 on North Ronaldsay on 9th (KGW).

Lewis—1 at small loch in the outskirts of Stornoway on 7th (WMn). Moray—1 at the mouth of the Spey on 5th (IT).

Aberdeen—5 at Cruden Bay on 8th (WRPB); 3 at Blackdog links, Aberdeen, on 7th and 2 on 8th (LHC, JALv, MM, BP); 1 at Bridge of Don on 7th (MM); and 2 flying north near Balmedie on 10th (ADKR).

Angus-1 at Montrose Basin on 7th (GMC).

The first Common/Arctic Terns seen were three off Aberdeen on 16th April (CFHB, ADKR), and one had reached North Ronaldsay by 29th (KGW). The earliest definite Common Tern was at Kingoodie on 22nd April (VMT), and an Arctic Tern at Stornoway on 12th May had arrived at about the usual time (WAJC). No fewer than 85 Roseate Terns were resting at Shell Bay, Elie, Fife, on 2nd June with 40 Sandwich and 2 Common Terns (PGTB). April Little Terns were one at Turnberry, Ayrshire, on 18th (GAR), and three at Aberlady on 27th (JADH). Two were recorded on North Ronaldsay on 7th May (KGW). Two Sandwich Terns flying west at Cramond. Midlothian, on 4th April were the first (DB, ADKR); on 5th one was at Aberlady (MAM, ADKR), and two were seen at Kirkcudbright (PGTB). One was reported at Skirza, Caithness, on 11th (per DMS).

A Little Auk was found about 20 miles inland at Leitholm. Berwickshire, on 18th April (HD-H per GW). The scarcity of Puffins in the southwest makes it worth recording one seen off Prestwick, Ayrshire, on 18th April (GAR), and four close inshore at the Mull of Galloway, Wigtownshire, on 25th June (RDM, RBT).

A Turtle Dove was seen amongst a flock of Collared Doves in a Dumfries garden on 29th May (JMD). Few arrival dates for Cuckoos have been reported: the only April birds were one heard at Dunbeath Strath, Caithness, on 16th (per DMS), and one near Carlops, Peeblesshire, on 29th (AFL).

Long-eared Owls in unusual areas were one seen hunting in broad daylight at Airlie, Angus, on 28th May (DAT), and an adult at Rosemount, Perthshire, on 23rd June (VMT).

An April Swift was seen in Glasgow on 29th (ADKR). On 2nd May, one was at Craiglockhart, Edinburgh (AFL), and two were recorded at Braco, Perthshire (RMR). Of many reports during the ensuing week the furthest north were two at Inverness on 6th (DCH), and three at Fair Isle on 7th (RHD). About 100 were observed in incongruous surroundings, catching insects over a large area of snow on the summit of Ben Lawers, Perthshire, on 11th June (AFL).

On 29th May a Hoopoe was watched for about two hours amongst birch trees at Inverey, Aberdeenshire (MNR).

A female Green Woodpecker was noted at Faskally, Perth-

shire, on 7th May (NCM), and a pair was heard on Inchcailliach, an island in the Stirlingshire part of Loch Lomond, on 6th April (JM); both records are on the edge of the range of this species.

Early May saw a spectacular fall of continental migrants in Shetland. Among the less common species involved were Wrynecks: six were on Out Skerries on 8th (RJT), one on Foula on 8th and 9th (ARM), and on Fair Isle five were present on 7th, three on 8th and five on 9th, as well as singles later in the month (RHD).

Single Short-toed Larks were at Fair Isle on 7th and 11th-13th May (RHD). The Shore Lark at Leith Docks, Edinburgh (4: 460), was there for longer than previously stated, being seen in the area on 26th February (WMs). In Berwickshire, five were at Coldingham Loch on 17th April (CTt), and not far away, fine views were had of at least 17 spread across a field in the area of Fast Castle on 20th April (JADH). A remarkable movement took place in Shetland during May, On Fair Isle, where this species is rare in spring, six were seen on 3rd, three on 8th, one on 10th, two on 11th and three on 12th and 13th (RHD). One was on Foula on 20th and 21st, with five on 22nd, at least four on 23rd and one on 27th (ARM).

A very early Swallow was at Troon on 21st March (AMcR), and another at Applegarthtown Dumfriesshire, on 23rd (RTS). The next records were not until 9th April when one was at Colinsburgh, Fife (DWO), and 10th when one was seen at South Queensferry, West Lothian (ADKR). Reports from 15th to 19th April are too numerous to list but suggest a substantial arrival during this period. Swallows bred in Stornoway last year (4: 247); this year they returned to the same site and another nest containing young was found elsewhere in the area (IMM). A House Martin was seen at Musselburgh on 17th April (MAM), and by 18th singles had returned to St Andrews, Fife (MHEC), and Aberdeen (CFHB, ADKR). Good numbers were amongst the hirundines recorded with other migrants in Shetland during May.: four at Fair Isle on 7th were the first there (RHD). The earliest Sand Martins were right at the start of April: ten at Lochmaben, Dumfriesshire (RTS), and one at Aberlady (THJ) on 1st; one at Fife Ness on 2nd (DWO), Four at Braco, Perthshire, on 11th (RMR) is the only other record before 16th but, as with Swallows, many seem to have arrived in the few days after this.

A Jay on North Ronaldsay on 11th May is the first to be recorded in Orkney, being well north of its normal range (KGW). Also in May, one was at Auchairne House, Ballantrae, Ayrshire, on 7th (GH-O). Another unusual occurrence was a Chough seen briefly at the roadside near Daviot, Inverness-shire, on 23rd April (CS).

An early **Dipper** nest, especially for so far north, contained three fully fledged young at Carloway, Lewis, on 8th April. They had left a week later (WAJC).

The peak spring count of Fieldfares at Fair Isle was of 1200 on 7th May. Late birds were two there on 11th June (RHD), and one on the Isle of May on 24th May (AMcD). A Redwing was singing at Gairloch between 25th May and 15th June, but was not heard subsequently (ENH).

A very early Ring Ouzel, doubtless wintering, was at Braemore Junction near Ullapool, Wester Ross, on 12th February (ADKR). March birds, all cocks, were two near Garvald, Midlothian, on 26th (WB); one near Anstruther, Fife, on 27th (DWO); one singing at Westwater reservoir, Peeblesshire, on 25th (JADH); and two at Loganlea reservoir, Midlothian, on 30th (ADKR).

A few lone male Wheatears were recorded in the last few days of March: at Garvald on 25th and 26th (WB); near the top of Soutra Hill in Berwickshire, on 25th (RSB); at Peat Inn, Fife, on 27th (DWO); at Gifford, East Lothian, on 28th (KH); and at the mouth of the River Doon, Ayrshire, on 29th (AMcR). By 2nd April there were several males and two or three females at Garvald (WB). Four on 12th were the first at Fair Isle (RHD). Two Whinchats on Fair Isle on 4th May (RHD), and one on Foula on 6th (ARM), were the first noted, but the almost total lack of records from further south makes it impossible to decide when they arrived. The same applies to Redstarts, the only April observations being one heard at Yetholm on 15th (RSB), one on Foula on 26th (ARM), and a pair at Ladykirk, Berwickshire, on 29th (DWO).

A female Black Redstart was on Out Skerries on 8th May and a male on Fetlar on 9th (RJT). The first on Fair Isle was on 13th April and good numbers were seen throughout May, with maxima of four on 29th and five on 30th (RHD). The same applies to Foula, where three on 10th was the maximum (ARM). In Fife, females were on the Isle of May on 9th and 12th April (LHC, JALv, BP), and a cock was at Fife Ness on 15th May (DWO). The first Nightingale for Orkney was caught at North Ronaldsay on 11th May (JMBK, KGW), and singles were at Fair Isle on 8th May and 10th June (RHD). Several Bluethroats were recorded at Fair Isle between 18th and 27th May, the largest daily count being three on 23rd (RHD). On 6th May a bird of the White-spotted race was on North Ronaldsay (KGW), and a male Red-spotted bird was at Fife Ness on 14th (DWO).

Several observers have commented that Grasshopper Warblers have been more common than usual this year: certainly May

records for Shetland suggest a good passage. Single birds were seen at Fair Isle on five days between 5th and 25th May (RHD), and one was at Foula on 10th (ARM). Reeling birds are reported from the following counties:

Easter Ross-1 caught and ringed at Maryburgh on 20 May was there with a mate and 3 newly fledged young on 2 July (DWO, HDS). Inverness-1 by Nairn road a few miles east of Inverness on 7 May (AP).

Angus—2 at Forfar Loch on 16 May (GMC).

Fife—I at Fife Ness from 30 Apr to 23 May at least (PGTB, JEF, DWO); I at Earlsferry on 25 and 29 May; I at Largo Bay on 5 June; I at Kilconquhar on 29 Apr; I beside road between St Michaels and Tayport on 10th May, first for Tentsmuir (DWO).

Perth—2 at Braes of Dounc on 12 May (RMR).

Midlothian—1 in Blackford Glen, Edinburgh, on 13th June (MAM). East Lothian—1 at Gifford during May and June; 1 at Haddington in June (per AMcD); 1 at Aberlady on 22nd and 24 June (PJ, AFL, GLS); 2 at Yellowcraig on 7 May; 1 at Eyebroughty Point on 25 June (RSB).

Roxburgh-1 at Yetholm on 21 May (RSB). Argyll—1 at Minard on 13-14 May (IB, CTd).

Lanark-1 at Biggar on 18 May (RSH).

Renfrew-count in early June revealed: at least 3 at Castle Semple and Barr Lochs; 4 or 5 at Caplaw Dam; 1 at Georgetown; 2 in Bishopton area (IG, GTW). Also 2 were at Uplawmoor on 7 May (AMm); and 1 at Langbank on 6 June (GAD).

Avr—1 at Dalrymple on 28 April (RBT).

Wigtown-first at Moor of Genoch on 25 Apr; 3 there on 27th (RCD).

This list is, of course, not comprehensive as it does not include records from several areas where this species breeds regularly.

As with most other species, Sedge Warblers returned at about the usual time, there being two records in April: one at Kilconguhar on 23rd (DWO), and one at Martnaham, Ayrshire, on 29th (GAR).

This spring at Fair Isle was exceptionally good for continental migrants with big falls in both early and late May. A characteristic of this latter influx was the unusual number of Icterine Warblers involved. Six on 25th May were the first, the highest count was eight on 27th and the last was seen on 5th June (RHD). An unringed bird was found singing near Invermark Castle, Angus, from 11 a.m. until 4 p.m. on 23rd June—a very odd date, suggesting that it had taken up residence—but it could not be found on subsequent visits (PB, GMC).

A wintering female Blackcap, first seen in Banff on 22nd February (4: 460), was last noted there on 22nd April (AFWS). A male was seen near Minishant, Ayrshire, on 8th May (GAR), and one was singing near Lake of Menteith, Perthshire, on 28th (MFMM). A further male was seen feeding young in the Hermitage of Braid Edinburgh, on 26th June (GLS).

Barred Warblers are recorded very much less frequently in spring than in autumn: one which was caught on Foula on 1st June was last seen on 8th (ARM).

The earliest Garden Warblers on Fair Isle were two on 5th May (RHD), and one was at Fife Ness on 6th (DWO). The first breeding record for Sutherland is of one, feeding young and singing, on the slopes of Ben Hope on 13th June (DCH).

On 21st April a Whitethroat was seen in Finnich Wood, Stirlingshire (RKP), and one was back in Dumbarton by the same day (DJL). The only other one in April was at Ladykirk, Berwickshire, on 29th (DWO). By 8th May they were numerous in Midlothian (AMcD). A Lesser Whitethroat was singing on the north side of Threipmuir reservoir, Midlothian, on 10th June (MAM).

A Willow Warbler was heard in Dumfriesshire on 5th April (RTS), but the next reports were not until 16th, when two were at Liberton, Edinburgh (MAM), and two in Seaton Park, Aberdeen (CFHB, ADKR). In this species, as with others, the main arrival seems to have occurred during the following week: on 16th none was heard in Saltoun Woods, East Lothian, but they were numerous there by 23rd (NGC, PJBS).

An early Chiffchaff was at Rockcliffe, Kirkcudbrightshire, on 20th March (WA). In April, one was at Crosshill, Ayrshire, on 5th (RBT); one at Yetholm on 9th (RSB); and four at Lochnaw, Wigtownshire, by 11th (RCD). Birds singing in northern localities were two within 100 yards of each other at Skibo, Sutherland, in May and June (DM); one near Edzell, Angus, on 11th May (GMC); one near Muir of Ord, Easter Ross, on 17th June (DCH); and one in Stornoway Woods for three weeks from 23rd April (IMM).

Several Wood Warblers singing at Aberfeldy on 29th April were well up to time (VMT), and one was at Dirleton on 30th (MFMM). There are few reports of the arrival of Spotted Flycatchers, the earliest being near Minishant, Ayrshire, on 8th May (GAR). A pair of Pied Flycatchers was seen feeding young near Ardvorlich, Perthshire, on 24th June (VMT).

Two pairs of Grey Wagtails bred near Stornoway this year, one of them certainly successfully as the nest contained young on 21st May (IMM, WM).

Numbers of Yellow Wagtails were noted with the other migrants during May, particularly in Shetland. The earliest was one at Kilconquhar on 30th April (PGTB, RSW). A flava showing the characteristics of a female Grey-headed was

seen near Anstruther, Fife, on 23rd May (AMcD, OTT), at about the time when three of this race were on Fair Isle (RHD).

Further reports of Great Grey Shrikes are from the following counties:

Shetland-1 at Fair Isle on 13 Apr and 1 on 23 Apr (RHD); 1 on Out Skerries on 8 May (RJT).
Caithness—1 at Loch Calder on 13 Apr (per DMS).

Wester Ross-1 noted before in Glen Torridon (4: 461), there till mid Apr (JAW).

Kincardine-1 at Banchory on 7 Apr (JALv).

Perth-1 near Lake of Menteith on 13 Apr (RKP); 1 near St Fillans on 31 Dec 1966 and 1, possibly the same, in Glen Tarken on 5 Feb (EDC).

Argyll-2 in Lochgilphead on 23 Mar; 1 in Kilmichael Glen on 25 Apr (IRr).

Fife-1 near Kirkcaldy on 9 Apr (DWO); 1 on Isle of May on 10-13 Apr (JALv).

A male Woodchat Shrike was at Fair Isle from 9th to 13th June (RHD).

Two Hawfinches were seen on several occasions in early April in a garden in Comrie, Perthshire, where a pair had also been seen in May 1966 (ISO). The remains of a female, ringed in east Germany on 27th March 1962 at Meerane, were found at Haroldswick, Unst, on 7th May (per FJW). A single bird was caught on North Ronaldsay on 11th May (KGW), and another was seen flying over Dirleton, East Lothian at dusk on 15th (MFMM).

A female Scarlet Grosbeak, a species of which spring records are rare, was on Fair Isle on 5th June (RHD). Six Red-headed Bunting records are all of male birds and all probably escapes: three occurred on Fair Isle in May and June (RHD); one was at Halligarth, Unst, on 10th June (MGM, SS, FJW); one was at Paisley Moss from 23rd to 26th May (IG, GTW); and one was at Burrow Head, Wigtownshire, on 12th and 13th June (DEK, RHM). Odd Ortolan Buntings were on Fair Isle between 7th and 26th May, with one on 13th and 14th June. The largest number on one day was three on 8th and 9th May (RHD). Single birds were noted on Foula on several days from 13th to 26th May; three were probably involved (ARM). Two were on Out Skerries on 8th May (RJT).

At Fair Isle a female Rustic Bunting was seen on 25th May and a male on 11th June (RHD). Apart from a small passage of Lapland Buntings at Fair Isle from 3rd April to 5th May (RHD), two were on North Ronaldsay on 14th April (KGW); and a male, previously noted (4: 462), was still at Skinflats, East Stirlingshire, on 23rd April (JFMC, IT).

Earlier observations—before 1st March 1967

A note of 30 Shags in Leith Docks on 18th February was

given previously (4: 456): this count is apparently not exceptional, 70 having been there early in the morning of the same day and the maximum count in several years of observations being over 100 in spring 1964 (CTt).

Single redhead Smews were in Aberdeenshire on Loch Skene on 4th December 1966 and at Strathbeg on 12th February (MM). At Rattray Head, in the same county, a Honey Buzzard was seen on 3rd September 1963 (ARK), and three Shore Larks, possibly the same as those at Newburgh a week later (4: 386), were there on 23rd October 1966 (MM).

General observations—behaviour, etc.

On 16th June a small colony of about five pairs of Kittiwakes was discovered to have established itself on the seaward side of one of the jetties at Scrabster harbour, Caithness. The nests were on a ledge about five feet above high water level and were thought to be the only ones on manmade sites in the county (KG).

One of a number of **Swifts** feeding low over Duddingston Loch on 16th May was seen in difficulty after landing in the water. Its repeated attempts to rise were to no avail, but it finally succeeded in covering the 30 yards to dry land by using its wings as paddles (DRA).

A Blackbird was heard imitating a Mistle Thrush in Athole Gardens, Glasgow, on 8th April. As the thrush uttered its disjointed phrases, the Blackbird copied each one in succession for about five minutes (MFMM.)

Corrections

The report of two Dark-bellied **Brent Geese** at Loch Ken on 11th February (4: 457) was published in error, the report having referred to one at Caerlaverock on 29th January (RBT).

All those records in the last number attributed to R. L. Swann were in fact seen, not by him, but by A. F. Leitch.

Reviews

A Wealth of Wildfowl. Survival Books series No. 8. By Jeffery Harrison. Illustrated by Pamela Harrison. London, Deutsch, 1967. Pp. 176; 12 plates (23 photographs), figures, maps; 21 x 16½ cm. 30/-.

This is the eighth in the Survival Books series (edited by Colin Willock), which aims to discuss "the relations between people and wild animals in a shrinking world." The present book deals with the relationship between wildfowl and men in Britain, especially with the role of men in destroying, creating and modifying wildfowl habitats. There can be few men so well qualified to discuss these problems as Jeffery Harrison, himself a life-long wildfowler, as well as a keen naturalist and pioneer in many aspects of wildfowl management. The author draws

largely on his own knowledge gained both in Britain and abroad, but recent British research in this field is also summarised in most readable form. The book does not set out to discuss in detail duck biology, but four chapters deal with those aspects of ecology, movements and distribution immediately relevant to conservation. One of these discusses the natural causes of duck mortality, dealing mainly with the effects of climate and predators on duck populations. More on the potential roles of disease, parasites and food in regulating populations would have been welcome here.

There is a good deal on the history of duck conservation in this country, and of the development during the past two decades of the fruitful partnership between the Wildfowlers' Association, the Wildfowl Trust and the Nature Conservancy, a process in which the author himself played no small part. The book well shows how successfully wildfowl can be managed, how easy is the creation of suitable refuges, and how adaptable are many species in adjusting themselves to live in close association with man in a rapidly changing environment. The creation and planting of a small reserve in Kent in which the author participated, and its subsequent use by wildfowl, is described in detail and provides some useful tips on management.

The final chapter, entitled "The New Wildfowler," deals largely with the recent activities of the Wildfowlers' Association in establishing and managing refuges, rearing and releasing ducks, and re-establishing species, such as the Greylag, in areas from which they were long since eliminated by man. Let us hope that these reintroductions are carried out sensibly, only with native stock, and on not too grand a scale until the effects of the earliest introductions have been properly assessed. Ideally, detailed records should be kept after an introducton, of population growth, breeding success, annual culls, and, above all, of any conflict with local agriculture.

On the whole the book is balanced and fair, engagingly written, and—unlike many other recent books on conservation—refreshingly optimistic about the future. It is also good value, and if widely read could do a great deal for the conservation/management movement, especially since it illustrates so well the results of cooperation between bodies of apparently conflicting interests. In these problems, Britain is already half a century behind America.

IAN NEWTON.

Longmans Birds: The Blue Tit; The Chaffinch; The Robin; The Swallow; The Song Thrush; The House Sparrow; The Collared Dove; The Black-headed Gull. Eight booklets. By Humphrey M. Dobinson. Illustrated by Robert Gillmor. London, Longmans, 1966. Each 16 pp; numerous coloured and other illustrations. 184 x 132 cm. 15/- the set, 2/- each.

These excellently produced booklets for the younger birdwatcher are very attractively illustrated, mostly in colour. The text is short and easily read, but written in a way that is bound to rouse the interest of the reader at the same time as it gently educates him. Each booklet is full of useful information, and there are details and pictures of closely related species and any that might cause confusion. A particularly useful feature is a section of practical hints and suggestions for things to do. These booklets will be invaluable to anyone trying to encourage children's interest in birds, and many adult birdwatchers will find them irresistible.

ANDREW T. MACMILLAN.

At Man's Door the Crime... By Leslie Hicks. Newquay (Cornwall). L. F. & V. D. Hicks, 1967. Pp. 33; 25 photographs and 10 line drawings (3 on cover). 20½ x 12¾ cm. Paperback 3/6.

This is an account, rather over-dramatised for the reviewer's taste, of the efforts of one dedicated group to care for auks and other seabirds caught in oil from the wreck of the *Torrey Canyon*. Over 1000 birds were picked up, cleaned and taken to places of safety in Operation Seabird Rescue—Perranporth, but the author does not say how many of these died. For the whole area, the July issue of *Birds* tells us that, in spite of the most devoted attention, fewer than 400 then survived of over 5800 birds cleaned and sent to rehabilitation centres.

ANDREW T. MACMILLAN.

Budgerigars in Colour: their Care and Breeding. By A. Rutgers. Revised English edition edited by C. H. Rogers. London, Blandford Press, 1967. Pp. 240; line drawings and 64 colour plates. 18 x 114 cm. 25/-.

Eye-opener to the outdoor birdwatcher on the range of possible colour-schemes, and concise textbook for the breeder.

A.T.M.

Field and Open Countryside Birds and Marsh and Riverside Birds. Shell Nature Records. British Birds series. Nos. DCL 705 and 707. Two 33\frac{1}{3} r.p.m. 7" records in illustrated descriptive sleeves. Recorded and edited by Lawrence Shove. Published 1967 for Shell & B.P. Ltd by Discourses Ltd, London. 12/6 each.

The fourth and fifth records in a series of which the first was reviewed in Scot. Birds 4: 326. Two further records are in preparation—Estuary Birds and Moor and Heath Birds, Nos. DCL 704 and 706.

Letters

SIR.

Dippers diving in icebound loch

With reference to the note in *Scottish Birds* 4: 450, I regularly saw Dippers diving under the ice on the River Spey when I lived at Newtonmore.

On a further point, Dippers may be found on the shores of Loch Earn at all times of the year, and at least one pair nests on the lochside. The nest is on a ledge on a rock-face jutting into the water, and it is just over a mile, as the Dipper flies, from the foot of the loch. I wonder if there are many records of Dippers nesting over still water, as reference books suggest that they always use a site over running water.

EUAN D. CAMERON.

SIR,

I have often seen Dippers diving into rivers from ice at the banks. This is a typical winter sight at Crathes Bridge on the River Dee in Kincardineshire; the river is usually frozen for 3-4 feet at both banks in midwinter. This behaviour is obviously quite normal, and I discussed it with Ray Hewson when we watched it one day near Applecross.

DAVID JENKINS.

SIR.

The Magpie in western Scotland

Regarding T. D. H. Merrie's notes on Magpies in Argyll (Scot. Birds 4: 449), I have seen them in Knapdale as follows: two mobbing a Buzzard on 4th March 1955 above the Crinan Canal at Bellanoch; one reported, but not seen by me, in October 1956 about three miles from Tayvallich; one on 14th December 1958 at Achnamara at the head of Loch Sween: and one on 15th December 1961 at Tavvallich. They are now quite well established in Asknish, Loch Gair, five miles NE of Lochgilphead (as marked on T. D. H. Merrie's map), and I have seen there, one on 22nd September 1965, two on 5th March and 28th April, eight on 30th April and seven on 12th August 1966.

I. RAINIER.

Sir,

In the summer of 1966 I saw a single Magpie flying into the woods lining the A815 between Tom Dubh and Bathachban, near the head of Loch Fyne. Recent enquiries among local people further down the loch produced unsubstantiated sightings at Strathlachan Forest, north of Lephinmore Point, which lies more or less opposite Ardcastle Wood, Asknish, where also Magpies have been seen.

CHRISTOPHER O. BADENOCH.

SIR.

Several notes have appeared in the Campbeltown Courier (8th, 15th and 22nd June 1967). A Magpie was reported separately by two people at Saddell, about 9 miles north of Campbeltown; then one was seen at Baraskomil, just outside Campbeltown on the Carradale road; and finally a correspondent wrote wondering if it could be the pet bird that a couple left near Tarbert because it seemed to like the area. They could, of course, all be different birds.

FRANK R TRAYNOR

Official Section

TWENTIETH ANNUAL CONFERENCE HOTEL DUNBLANE, PERTHSHIRE

27th to 29th October 1967

Friday 27th October

5 to 7.30 p.m. Conference Office in the Hotel Dunblane opens for and 8 to 9 p.m. members and guests to register and collect name cards and Annual Dinner tickets.

6.15 p.m. Meeting of Council.

8.30 to 9.30 p.m. FILM AND SLIDE PROGRAMME in the Ballroom. At 9.30 p.m. details of excursions on Saturday and Sunday afternoons will be given.

9.30 p.m. to Lounges available for informal discussions and refresh-

Saturday 28th October

midnight

8.45 to 9.15 a.m. Conference Office opens for registrations.

9.20 a.m.

Official Opening of Conference in the Ballroom. ADDRESS OF WELCOME by David R. Grant, Esq., Provost of Dunblane.

ments (late licence).

LECTURE, "Ecological Studies of Seabirds," by Dr G. M. Dunnet (Culterty Field Station, Newburgh), followed 9.30 a.m.

by discussion.

INTERVAL for coffee and biscuits. ll a.m.

11.30 a.m.

LECTURE, "A Preliminary Account of the Effects and Lessons of the Torrey Canyon Disaster," by Dr Duncan Poore (Director General of the Nature Conservancy),

followed by discussion.

INTERVAL for lunch. 1 p.m.

2 p.m. EXCURSIONS by private cars leaving the Conference Hotel car park. Details will be posted on the Conference

notice board.

31st ANNUAL GENERAL MEETING OF THE CLUB 6 p.m.

in the Ballroom. BUSINESS:

(1) Apologies for absence.

(2) Approval of Minutes of 30th Annual General Meeting of the Club held in Dunblane on 22nd October 1966 (see "Scottish Birds" 4: 331).
(3) Report of Council for Session 30.
(4) Approval of Accounts for Session 30.

(5) Appointment of Auditor.

(6) Election of Hon. President. The Council recommends that Sir Arthur B. Duncan be elected an

Honorary President of the Club.

(7) Election of new Members of Council. The Council recommends the election of Professor M. F. M. Meiklejohn and T. D. H. Merrie to replace C. K. Mylne and A. J. Smith who are due to retire by

(8) Consideration of the following proposed amend-

ment to the Constitution (additions in italics) under

3. MEMBERSHIP (e):

"There shall be no entry fees. The Annual Subscription shall be 25s; or 7s 6d in the case of Members who are under 21 years of age, or in the case University Undergraduates who satisfy Council of their status as such at the time at which their subscriptions fall due in any year. The Life Subscription shall be £50. Married couples shall be eligible for joint Membership at an Annual Sub-scription of 40s or a Life Subscription of £75, and shall enjoy all the usual privileges of Membership with the exception that they shall be entitled to receive only one copy of Scottish Birds (Club Journal). and any other literature circulated by the Club, between them."

(9) Any other competent business.

7.30 for 8 p.m. ANNUAL DINNER in the Diningroom of the Hotel Dunblane (dress informal).

Sunday 29th October

PROGRAMME OF FILMS, including a film of the 9.30 a.m.

Torrey Canyon.

10.45 a.m. INTERVAL for coffee and biscuits.

11.15 a.m. JOINT MEETING with members of the Royal Society

for the Protection of Birds, in the Ballroom. ADDRESS, "Current Developments in Bird Protection" by Peter Conder (Director of the R.S.P.B.), followed by colour films and slides of the third pair of nesting Ospreys, the Snowy Owls, and the "New Reserves" film.

INTERVAL for lunch. 1 p.m.

2 p.m. EXCURSIONS by private cars leaving the Conference

Hotel car park.

3 p.m. OFFICIAL OPENING by the Right Hon. The Earl of Mansfield of Vane Farm Reserve, Loch Leven, to which all Conference members are cordially invited.

Conference Office

Outwith registration hours the Conference Office will also be open at intervals during the weekend for members to see the exhibits. A wide selection of new books from the S.O.C. Bird Bookshop will be displayed for purchase or orders. R.S.P.B. literature, Christmas cards, garden bird equipment and gramophone records will be on sale, and also a selection of B.T.O. literature and Christmas cards.

Film and Slide Programme

The programme from 8.30 to 9.30 p.m. on Friday evening is intended to give members and guests an opportunity of showing 2" x 2" slides or 16 mm films. These must however be submitted beforehand to the Conference Film Committee, and should be sent, by 13th October at the latest, to the Club Secretary, 21 Regent Terrace, Edinburgh 7. The slides should be titled and sent with brief notes on what will be said about them, to enable the Committee to make a selection and to form a good programme. It will not be possible to show material which has not been received by this date.

INFORMATION

- (1) Hotel Reservations. All reservations must be made direct. Owing to the shortage of single rooms, members are urged to make arrangements to share a room with a friend.
- (2) Conference Post Card. It is essential that members intending to be present should complete the enclosed printed post card and send it to the Club Secretary not later than 23rd October. Because of limited seating accommodation, the Council regrets that members may invite only one guest each to the Annual Dinner.
- (3) Registration. Everyone attending the Conference must register on arrival (10s each) at the Conference Office (for opening times, see Programme). Members attending only the Annual General Meeting do not require to pay the registration fee, which covers morning coffees and incidental expenses.
- (4) Annual Dinner. Tickets for the Annual Dinner (price 25s inclusive of red or white wine or fruit cup, and of gratuities) should be purchased when registering. Members and guests staying in the Conference Hotel pay for the Annual Dinner in their inclusive hotel account, but must obtain a dinner ticket from the Conference Office as all tickets will be collected at the Annual Dinner. No payments should be made in advance to the office in Edinburgh.
- (5) Other Meals. Dinner on Friday evening is served in the Conference Hotel from 6.30 to 9 p.m. Non-residents will be able to obtain lunch on Saturday or Sunday by prior arrangement with the Hotel Reception desk.
- (6) Swimming Pool. The indoor swimming pool in the Conference Hotel will be available during the weekend at no extra charge.
- (7) Excursions. Members are asked to provide cars if possible and to fill their passenger seats; to avoid congestion in the car park the minimum numbers of cars will be used. The following 1" O.S. maps cover the area: Old Edition 62, 63, 66 and 67; New Edition 53, 54, 55, 60 and 61. Members wishing to go out on their own are particularly asked not to go in advance of led excursions to avoid disturbing the birds.

Hotels in Dunblane

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

Stirling Arms Hotel (Tel. 2156). Bed and Breakfast from 25/-. Neuk Private Hotel, Doune Road (Tel. 2150). B & B 20/- to 23/-. Schiehallion Hotel, Doune Road (Tel. 3141). B & B 18/6 to 21/-. Ardleighton Hotel (near Hotel Dunblane gates) (Tel. 2273). B & B 22/6

Ardleighton Hotel (near Hotel Dunolane gates) (181. 22/3). B & B 22/0 to 25/-.

Hotels in Bridge of Allan (3 miles from Dunblane)

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

Allan Water Hotel (Tel. 2293). B & B 42/- to 53/6.

Royal Hotel (Tel. 2284). B & B from 39/-.

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

SUBSCRIPTIONS, COVENANTS AND BANKER'S ORDERS

Your subscription for the new session is now due and should be sent at once with the enclosed form to the Club Secretary or paid to Branch Secretaries. The winter number of the journal will only be sent to paidup subscribers.

If you pay income tax at the full rate and have not already signed a seven-year Deed of Covenant, this is the way you can help the Club funds at no extra cost to yourself, as the tax we are allowed to reclaim on a subscription of 25s is nearly 18s. If only 50% of our members signed Covenants the Club would gain an annual income of nearly £600, which could be used to give increased services through the journal and other publications, Conferences and lectures, more reference books for the Library, and in many other ways. May we invite you to use the enclosed form, which should be sent on completion to the Secretary, who will forward a Certificate of Deduction of Tax for signature each year.

A Banker's Order is enclosed for the use of members who find this a more convenient way of paying the annual subscription, and it will also help to lessen the administrative work in the Club office; this should be returned to the Secretary and not to the Bank.

CLUB TIES

The official tie of the Club, which carries the emblem of a small crested tit in white on a dark green, navy or maroon ground, can be purchased from the Club office. As stocks have now been obtained direct from a manufacturer, it has been possible to reduce the price, and the ties will be sold at 17s 6d each in future.

LIBRARY REQUIREMENTS

We publish below a list of certain parts of journals which are lacking from the Reference Library which we would like to acquire in order to complete the runs. Any member who has one or more of these parts to spare is asked to get in touch with the Secretary:

London Bird Report for the years 1937, 1938, 1939 and 1941.

The Sea Swallow (Royal Naval Bird Watching Society). Report for 1953.

Transactions of the Stirling Natural History Society Vol 4 (1881/82); Vols 6-9 (1883/84 to 1886/87); Vol 15 (1892/93); Vol 48 (1925/26); Vol 50 (1927/28); Vol 53 (1930/31); Vol 58 (1935/36) and Vol 60 (1937/38).

Transactions of the Perth Society of Natural Sciences Vol 1 Part 3 (1888/89); Vol 2 Pt 1 (1892/93) and Pt 3 (1894/95); Vol 3 Pt 4 (1901/02); Vol 4 Pt 2 (1904/05); Vol 5 Pt 5 (1912/13) and Appendix Pt 2; Vol 8 Pt 4 (1926/27); Vol 9 Pt 1 (1929/30) and Pt 6 (1935/36) and Vol 10 Pt 1 (1938/43).

Transactions Dumfries and Galloway Natural History Society Vol 33 (Third Series) (1954/55).



SUTHERLAND ARMS HOTEL

GOLSPIE SUTHERLAND SCOTLAND

Telephone: Golspie 216

Situated on the main North Road near the sea, Golspie offers invigorating open air holidays to all.

In addition to its unique golf course, it has fine loch fishings, sea bathing, tennis, bowls, hill climbing, unrivalled scenery including inexhaustible subjects for the field sketcher and artist and is an ornithologist's paradise. It is, indeed, impossible to find elsewhere so many natural amenities in so small a compass.

The B.T.O. Regional Representative, who lives in the village, will be pleased to offer local advice regarding the astonishing diversity of bird life in the vicinity and to receive lists of birds from visitors.

The Hotel is fully modern, but retains its old world charm of other days, and enjoys a wide renown for its comfort and fine cuisine.

Fully descriptive brochures, including birdwatching, will gladly be forwarded on request.

Central Heating

Proprietor, Mrs F. HEXLEY

A.A. R.A.C. R.S.A.C.

GARAGE AND LOCK-UPS AVAILABLE

THE BOAT HOTEL



Set amidst mountain and moorland scenery, the Boat Hotel, with its reputation for comfort and good food, is an ideal centre for studying birds—the Ospreys at Loch Garten are only three miles away, and this is the country for Crested Tit, Crossbill, Capercaillie and much besides. Also ideal for photography, fishing and climbing. 18-hole golf course 2 minutes from hotel. Permits available for the river Spey. Under ownership of Mr and Mrs James Harris. Reduced rates for children.

BOAT OF GARTEN

BIRDS IN COLOUR

Send for our colour-slide list covering our incomparable collection of British, European and African birds—many fine studies and close-ups. Sets of 100 for hire.

BINOCULARS

Try the Swift "Audubon" bird watcher's binoculars — made for the job. Other binoculars by the world's leading makers.

W. Cowen - Keswick

Bird Books



Please support

The Scottish Centre for Ornithology and Bird Protection

by buying all your new Bird Books from

The Bird Bookshop

21 REGENT TERRACE EDINBURGH, 7

Managed by the Scottish Ornithologists' Club, profits help to maintain services to ornithology at the Scottish Centre

We offer expert advice on the largest and most comprehensive choice of bird books in Scotland

We stock Peterson's American "Field Guides"

ALL BOOKS SENT POST FREE

Terms: Strictly cash with order

Ask for the latest Price List and Catalogue

Notice to Contributors

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

- 1. Papers should if possible be typed with double spacing. All contributions should be on one side of the paper only.
- 2. Topical material for Current Notes should reach the Editors before the end of March, June, September and December, at which time they begin to compile this section. All other notes should be sent promptly but important items can be fitted in until a month or so after these dates.
- 3. Proofs will normally be sent to authors of papers, but not of shorter items. Such proofs should be returned without delay. If alterations are made at this stage it may be necessary to ask the author to bear the cost.
- 4. Authors of full-length papers who want copies for their own use MUST ASK FOR THESE when returning the proofs. If requested we will supply 25 free copies of the issue in which the paper is published. Reprints can be obtained but a charge will be made for these.
- 5. Particular care should be taken to avoid mistakes in lists of references and to lay them out in the following way, italics being indicated where appropriate by underlining.

 DICK, G. & POTTER, J. 1960. Goshawk in East Stirling. Scot. Birds 1:329. EGGELING, W. J. 1960. The Isle of May. Edinburgh and London.
- 6. English names should follow The Handbook of British Birds with the alterations detailed in British Birds in January 1953 (46:2-3) and January 1956 (49:5). Initial capitals are used for names of species (e.g. Blue Tit, Long-tailed Tit) but not for group names (e.g. diving ducks, tits). Scientific names should be used sparingly (see editorial Scottish Birds 2:1-3) and follow the 1952 B.O.U. Check-List of the Birds of Great Britain and Ireland with the changes recommended in 1956 by the Taxonomic Sub-Committee (Ibis 98:158-68), and the 1957 decisions of the International Commission on Zoological Nomenclature (Ibis 99:369). When used with the English names they should follow them, underlined to indicate italics, and with no surrounding brackets.
- 7. Dates should normally be in the form "1st January 1962", with no commas round the year. Old fashioned conventions should be avoided—e.g. use Arabic numerals rather than Roman, and avoid unnecessary full stops after abbreviations such as "Dr" and "St".
- 8. Tables must be designed to fit into the page, preferably not sideways, and be self-explanatory.
- 9. Headings and sub-headings should not be underlined as this may lead the printer to use the wrong type.
- 10. Illustrations of any kind are welcomed. Drawings and figures should be up to twice the size they will finally appear, and on separate sheets from the text. They should be in Indian ink on good quality paper, with neat lettering by a skilled draughtsman. Photographs should either have a Scottish interest or illustrate contributions. They should be sharp and clear, with good contrast, and preferably large glossy prints.

THE SCOTTISH ORNITHOLOGISTS' CLUB

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

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

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

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

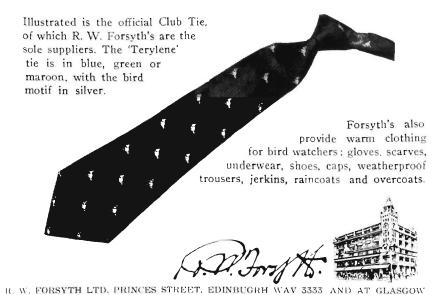
A Scottish Bird Records' Committee, appointed by the Council, produce an annual Report on "Ornithological Changes in Scotland."

An official tie in dark green, navy or maroon terylene, embroidered with small crested tits in white, can be obtained by Members only from the Club Secretary, at a cost of 17s 6d. A brooch in silver and blue is also available to Members, price 3s 6d, from the Club Secretary or from Hon. Branch Secretaries.

The Club-room and Library at 21 Regent Terrace, Edinburgh 7, will be available to Members during office hours, and on Wednesday evenings from 7 to 10 p.m. during the winter months. Members may use the Reference Library, and there is a small duplicate section, consisting of standard reference books and important journals, which can be lent to students and others wishing to read a particular subject. A lending section for junior Members, which is shared with the Young Ornithologists' Club, is also available.

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

The Scottish Ornithologists' Club Tie



The London

Natural History Society

This Society, which covers all branches of natural history, has a strong ornithological section. Lectures, film shows, practical demonstrations and field meetings are arranged and research work is undertaken, most, though not all, of these activities taking place within the Society's area, that is within a 20 mile radius of St Paul's.

Members of this Society help run the independent Dungeness Bird Observatory, which provides experience in bird ringing, studying birds in the hand and migration watching.

The London Bird Report, compiled by the Ornithological Section and published annually, includes papers, facts and figures of special interest to bird watchers in London.

Further details can be had from the General Secretary:

MRS L M. P. SMALL, 13 Woodfield Crescent, Ealing, London, W.5.

A SELECTION OF NEW AND USED BINOCULARS SPECIALLY RECOMMENDED BY MR FRANK

NIPOLE binoculars from Japan are made to our specification and are imported exclusvely by us. Perperformance is excellent and we have sufficient faith in them to guarantee them for five years. The 10x50 costs £15 10s 6d, and the 8x30 £10 19s 6d, (both with case).

A SPECIALIST BINOCULAR FOR THE BIRD WATCH-ER. The Swift 'AUDUBON' 8.5 x 44 designed to the specification of the world-renowned Audubon Society of America. Unusually wide field of 445 ft. at 1000 yards. Extra close focusing of down to 12 ft. enables feeding activities etc., to be watched as from 18". Included amongst other features are retractable eyecups for spectacle users, built-in Adaptor to suit any camera tripod. This outstanding binocular has easy positive focusing by cylindrical control, weighs 38.4 oz. and the height closed is 63". Price with fine leather case, £36.

The new LEITZ TRINOVID is indisputably the binocular of the century. It is of revolutionary design and performance, and the 10 x 40 model, which we particularly like, is extremely light and wonderfully complete. Price with soft leather case is £86.14.2.

In good British glasses, we have no hesitation in suggesting the ROSS 9x35 STEPRUVA. Compact and weighing only 21 ozs. £43 4s 9d.

We stock binoculars by Zeiss, Leitz, Barr & Stroud, Ross, Swift etc.



145 QUEEN ST., GLASGOW C1

STD 041 - 221 6666

YOUNG BIRD WATCHERS

of up to 18 years of age qualify for special price concession. Details on request.



For wildfowling, etc., we recommend the ex-Admiralty 7 x 42 or 7 x 50 Barr & Stroud binoculars and can offer these instruments in specially good conditions, complete in original cases, at £16 10s. The Bausch & Lomb (Canadian naval) 7 x 50 is still available at £24. Amongst general purpose binoculars, which will stand up to a tremendous amount of rough usage, there is little to beat the 6 x 30 Service Prismatic at £8 15s; if reminded, we will probably be able to select a pair in new condition and can provide a web pouch at 4s 6d extra.

Amongst heavyweight prismatic binoculars suitable for mounting, we can offer a host of truly wonderful bargains; for instance, a Ross 7 x 50 Heavy Duty binocular with filters in brand new condition, and complete in fitted box, can be supplied for 7 gns. (original cost estimated over £120); the 10 x 70 model can be supplied for £20. These instruments are too heavy to be hand-held, and mount and tripod can be provided at a moderate charge.

TELESCOPES—Just a mention of the portable NICKEL SUPRA TELESCOPE. It zooms from 15x to 60x with 60 mm. O.G. and is truly a remarkable instrument. Price £38 9s.