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# FAIR ISLE BIRD OBSERVATORY

# BULLETIN

Edited by

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Director

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# E D I T O R I A L

SO far as Fair Isle was concerned the recent autumn season was easily the best for ringing, rarities and general interest that we have had in our short career. Early reports suggest that the east-coast observatories did less well, but opportunities for a full comparison of the results are not likely to occur before the bird observatories hold their first annual conference, under the auspices of the British Trust for Ornithology, at Oxford early in the New Year.

THE bulk of reports to hand, or promised, will require another Bulletin hot on the heels of the present one. Space in this issue is devoted largely to reports on the more interesting rare birds that have appeared at Fair Isle and in other parts of Scotland. Nevertheless we have striven to maintain the wider interest of our previous Bulletins with the inclusion of a variety of migration notes from further afield.

THE invasion of American birds in the autumn of 1953 was phenomenal and includes one, the GRAY-CHEEKED THRUSH Hylocichla minima, that is new not only to the British List but also to the Continent of Europe. The occurrence of these eastern North American birds on our shores should bring home, with particular force, the reality of down-wind drift. Their appearance on this side of the Atlantic could not possibly be expl-

ained on the basis of the lateral drift with which some migration students are prepared to compromise, - i.e. a movement in which the route is a resultant between the velocity of the wind and that of the bird orientated in its "standard direction".

THE objection may be made against the Gray-cheeked Thrush (as against other American passerines in the past) that the bird could not possibly have reached the British Isles without "assisted passage" aboard a ship. The knowledge we have gained over several years of the alarming rate of weight-loss in migrant birds during a sea-crossing (see Bull. no.6, paras. 60-61; no.9, para. 103, and also paras. 1 and 13 of the present issue for examples) should explode this fallacy. There are no worms on the decks of ocean liners, nor any food suited to the rather specialised diets of such birds, and a delay of even a few hours' duration on board a vessel would seriously prejudice a small bird's chances of completing the crossing alive.

SPEED is the sine qua non of a successful transatlantic flight, and it is doubtful if any small or medium-sized passerine could make that crossing other than by a continuous down-wind drift in the strong westerly airstream of a vast Atlantic low. Peter Davis's notes on 'The Transatlantic Flight' of an American Robin Turdus migratorius to Lundy in late October 1952 are worth attention in this respect (Brit. Bds. 46: 364-8). The possibility of assisted passage in such cases is not entirely ruled out, but for any small bird which reaches this side of the ocean alive it is made to look an extremely remote and unlikely contingency.

## 1. An American Thrush, New to Britain, at Fair Isle.

KENNETH WILLIAMSON.

Late in the afternoon of October 5th 1953 William S. Eunson caught a small bird in the Observatory Trap. I can best describe it as a dwarf thrush, with uniform olive-brown mantle and tail and whitish underparts, and the breast suffused with buff and heavily spotted. Its appearance recalled the American genus *Hylocichla* and reference to Roger Tory Peterson's "A Field Guide to the Birds" (1947) confirmed this impression. The bird was identified as the Gray-cheeked Thrush *H. minima*, on the evidence of the dark grey loral region and indistinct eye-rim, in which it differs from the Olive-backed Thrush *H. ustulata*, a sibling species having the lores and eye-rim buff.

The description taken down in the laboratory is as follows. Head, mantle and tail uniform olive-brown (more greenish-olive in tone than in Song Thrush or Redwing); the head with slight black streaks as in the Redwing. Wings dark brown with outer webs of primary feathers buffish-brown, this colour being less evident on the secondaries and absent from the tertials. Tips of greater coverts white, and small white spots at the tips of the innermost and 2nd tertials (presumably an indication of immaturity). Primary coverts tipped with blackish, bastard-wing with outer web brown and inner web blackish. Axillaries dusky brown, under wing-coverts white.

There were large black spots on a buffish ground on the upper breast, and olivaceous spotting on the whiter lower breast. Chin, belly and vent white, but sides of breast, flanks and under tail-coverts dusky

olive. Black moustachial streaks bordered the white chin. Lores and ear-coverts were dark grey minutely peppered with white, and the eye-rim was indistinct. Tail square, 12 feathers with pointed tips. Iris dark brown. Tarsi and toes purplish-brown. Inside of mouth orange. 3 rictal bristles. Upper mandible and tip of lower mandible black; basal half of lower one pale, becoming yellowish at the base.

In the wing-formula the 3rd primary was longest and the 2nd 1 mm. shorter, the 4th 2 mm. shorter. The 3rd and 4th were clearly emarginate and the 5th (6.5 mm. less than the wing-point) less obviously so. The minute 1st primary was 4.5 mm. shorter than the primary coverts. Length of wing, taken along the natural curve of the primaries, 99 mm.; bill 15 mm. measured from skull; tarsus 28 mm.; tail 68 mm. The total length of the bird was not more than $6\frac{1}{2}$ inches. Ring no. JC 260.

Dusk had fallen by the time laboratory examination was complete, so the bird was put to roost in one of the boxes. It was weighed at 0630 hrs. next morning, the measurements were carefully checked, and after photographs had been taken by Harry A. Craw the bird was released. It was lively and obviously in good condition, and once gave a somewhat harsh whistling note. Unfortunately we were not able to watch it in the field as it flew to the cliffs and quickly disappeared.

Peterson's "Field Guide" indicates that two races of this species, separable on size, inhabit N. America. The Northern Gray-cheeked Thrush Hylocichla m. minima (synonym, H. aliciae) ranges from Alaska across Canada to Newfoundland. Bicknell's Thrush H. m. bicknelli (synonym, H. minima) breeds in Nova

Scotia and the mountains of New York State and New England, south to the Catskills.

As we have no taxonomic literature concerning American passerines I telephoned to Professor V. C. Wynne-Edwards on the evening of 5th, and he kindly gave me the measurements of the two races from "The Birds of Massachusetts" by E.H. Forbush, and found a few weight records from other sources. The Forbush measurements are in inches, - converted to mm., they read:

| | MINIMA | BICKNELLI |
|---|---|---|
| Wing | 100 - 110 mm. | 85 - 95 mm. |
| Bill | 16 - 18 | 14½ - 16½ |
| Tarsus | 28 - 33 | 27 - 31 |
| Tail | 76 - 86 | 64 - 72 |
| Total length | 7½ to 8½ ins. | 6¼ to 7¼ ins. |

It will be seen that the Fair Isle bird is a small one, agreeing with Bicknell's Thrush in all but the wing-length, which approximates to the minimum given for the Northern race. As I felt that a racial name (assuming it were possible to give one) could not be founded on these data, I sent a copy of the record-card to Dr. Charles Vaurie at the American Museum of Natural History, asking for his opinion. He kindly replied as follows:

"Dr. Amadon and I have looked at our series of gray-cheeked thrushes and following are wing-lengths of the two races:

Hylocichla m. minima (= bicknelli)

♀♀ 90, 94, 96. ♂♂ 89, 90, 95, 101.

Hylocichla m. aliciae (= minima)

♀♀ 100, 101, 101, 101, 107.

♂♂ 103, 105, 107, 108, 111, 112.

"As you say, your bird is somewhat intermediate in measurements, and since these races are at best rather slight we feel that there is no point in trying to identify it subspecifically. Naturally, one might assume that the northern race would be the one to reach the British Isles, and it is perhaps worth mentioning that this is one of the few American song-birds which has established itself in north-east Siberia." Later study of the material in the British Museum (Nat. Hist.) and Col. R. Meinertzhagen's collection confirms the uselessness of attempting a subspecific diagnosis.

On its chin, the Fair Isle bird carried a tick which was identified by Dr. Evans and Mr. Browning (British Museum) as Haemophysalis leporis-palustris Packard, larva. This has been recorded from Canada, Alaska and all the United States, where it is common on rabbits and has also been taken from birds. The specimen apparently represents the first British one and it has been deposited in the British Museum.

The normal weight of this bird, from data sent by Prof. Wynne-Edwards, is in the neighbourhood of 30 to 33 gm. (autumn migrants). When trapped, our bird weighed 24.92 gm. and this, although low, does not suggest a bird newly-arrived from a long transatlantic crossing. However, its overnight loss brought the weight down to 21.60 gm., a drop of 3.32 gm. in 14 hrs. It is clear that this loss must have been very largely due to voided faeces and body fluids, and it it is likely that whilst the bird had been here long enough to feed well and recover from its initial exhaustion, it had not yet begun to replace the store of fats it must have utilised in crossing the ocean. It seems likely to have lost over 30% of its normal weight on the journey, and arrival probably took place one or two days before its capture.

The view that this first record for Britain and Europe was brought to Scotland by the same weather as was responsible for the arrival of at least two of the American cuckoos (see para. 2), and perhaps also the Buff-breasted Sandpiper Tryngites subruficollis found at Peterborough on October 4th, is inescapable. The first of the cuckoos was found dead on the island of Muck on October 3rd, and we must take this as the most likely date of arrival of this movement on our shores. An examination of the "Daily Weather Report" of the Meteorological Office (Air Ministry) for the days preceding 3rd shows that such a movement could well have taken place as a down-wind drift.

On September 30th a strong anticyclone, centred on Nova Scotia, provided excellent conditions for bird-migration through the eastern coastal regions of North America from Labrador south to Florida. On either side of this high were depressions, in mid-Atlantic and over Hudson's Bay. During the night the latter deepened and developed warm and cold fronts which quickly swept over the St. Lawrence estuary and the New England coast, the high retreating eastwards into the Atlantic. Meanwhile, the mid-Atlantic low moved north-east towards Iceland.

Offshore drift in the westerly winds of the warm sector of the American low could have taken place on this night anywhere from Labrador south to Cape Hatteras, in all probability continuing during October 1st, since at least one station (Halifax N.S.) had fog that day. Any birds incurring such a drift would be borne north-east for a time in the complementary air-streams of the North American low and the high it had so suddenly displaced, until they came within the orbit of the eastwards-moving depression near Iceland, in all likelihood during October 2nd.

The mid-day weather-map of October 3rd shows an interesting situation: the American low has passed out to sea and is centred south of Greenland, high pressure and clear migration weather have returned to the eastern States, and the Icelandic low is now half-way to the Norwegian coast with its strong north-westerly airflow sweeping across the Hebrides, most of Scotland and the northern isles.

2. American Cuckoos in Scotland.

During the first fortnight of October no fewer than four American cuckoos appeared in Scotland, and a fifth bird reached Scarborough in Yorkshire. With one exception they were of the Yellow-billed species, Coccyzus americanus, the other being a Black-billed Cuckoo C. erythropthalmus.

The first to be reported was found dead on the island of Muck (Inner Hebrides) on October 3rd, and the second was found dead at Nairn, on the Moray coast, on October 5th, - the day that the Gray-cheeked Thrush was trapped at Fair Isle. The weather during the preceding three days had favoured a transatlantic crossing by down-wind drift, as shown above. Both specimens are preserved in the Royal Scottish Museum.

When returning from the autumn conference of the Scottish Ornithologists' Club at Aberdeen, on October 10th, a number of the members had the unique experience of watching a Yellow-billed Cuckoo flying along the roadside near Montrose Basin. An account of this event will appear in a future issue of the Scot. Naturalist.

The example of the Black-billed Cuckoo was found dead on the island of Foula, Shetland, by Mrs. D. M. Gear, on October 12th. It was identified at the British Museum (Nat. Hist.), where the specimen is kept.

It is an interesting fact that of the British records of these cuckoos, now some two dozen in all, the Montrose example appears to be the only one which has been seen in a healthy condition. It seems likely that transatlantic drift-migrants of this genus cannot long survive their arrival in Britain, owing to their failure to find the caterpillars which constitute their diet. They are voracious eaters, and suitable supplies of larvae are scarce in Britain at this season.

In view of this, it is likely that the Foula and Montrose birds, recorded a week later than the movement which was dealt with in para.1, arrived as the result of a second transatlantic drift beginning probably on October 7th-8th. Study of the appropriate weather charts shows that such a movement was entirely possible in the westerly airstream of a complex eastwards moving depression which could have deposited North American birds anywhere along the western seaboard of the British Isles. Shortly after this time there were records of American waders (including a second Buff-breasted Sandpiper Tryngites subruficollis, Lesser Yellowlegs Tringa flavipes and - we understand - a Semipalmated Sandpiper Calidris pusilla) in various parts of England.

The present records raise the number of Yellow-billed Cuckoos recorded in Scotland from 3 to 6. The Black-billed Cuckoo has occurred only once before, at Kintyre on November 8th 1950 (Scot. Nat. 63: 131), and the Foula example constitutes the fourth for Britain.

3. A Blue Snow Goose in Shetland.

KENNETH WILLIAMSON.

When Commander Gilbert visited Fair Isle on October 14th in the course of his duties as principal H.M. Coastguard officer for the north of Scotland, he described to me a strange goose which he had seen in Shetland the previous day. The description fitted perfectly the Blue Snow Goose Anser c. caerulescens, and as this bird had never appeared in England or Scotland in the wild state I telephoned to Theo Kay at Lerwick and asked him to look into the occurrence.

Kay, in company with John Peterson, saw the bird on the following day, and he reported that it was in fact a Blue Snow of the dark-breasted form. On this and later occasions they photographed the goose in colour and black-and-white, and took several feet of Kodachrome film. The bird was in company with a small party of domestic geese at a Delting loch. All but one of these geese were full-winged, and although they were sometimes difficult to approach in the open, the situation was such that close views could be obtained from the cover of the car. The gander in charge of the party saw to it that the Blue Snow Goose kept a little apart from the rest.

When I left Fair Isle the Blue Goose was still present, and Kay and Peterson took Tom Henderson and me to see it on November 12th. The excellence of the photographs makes a detailed description superfluous, and it will suffice to say that it was a handsome bird, much smaller than its companions, and dark bluish-grey on the breast. Belly and vent were dark grey lacking the sheen of the breast, with a slight touch of white

immediately below the tail. Our first views were rather distant, as we had to approach in the open, but later the geese browsed on the grassy slope to within a few feet of the road, and we got to within 25 ft. in the car. At this distance the corrugations in the white neck could be clearly seen, also the small white thigh patches and the pinkish bill and legs.

Our near approach unsettled the birds and they rose and flew to the far side of the loch, the spanned wings of the smaller bird appearing grey-blue with a broad black border on the trailing edge. I could not resist remarking to my companions that the majority of the domestic geese were white: did the Blue Snow Goose imagine that it had fallen in with a band of Greater Snow Geese, as they sometimes do on migration in the St. Lawrence estuary ? (See Peter Scott, Severn Wildfowl Trust 3rd Annual Report 1949-50: 130, where also are detailed previous occurrences of Blue Snow Geese at Wexford Slob, Ireland).

There was no ring on the leg, and no outward sign that the bird might be an escape from captivity, except that the white head was not rust-stained as is the case with the great majority of Snow Geese in the wild. (This bird, however, cannot long have completed its body-moult). On enquiry, the Severn Wildfowl Trust informed Mr. Kay that they knew of no recent escapes; and although Dr. H. Edgar Smith lost two Blue Snows from his collection at Culterty, Aberdeenshire, in March 1952, it seems most improbable that one of these should turn up in Shetland after 18 months in obscurity.

The date of the bird's arrival is unfortunately not known. So far as can be ascertained, the Venables were the first to see the bird at the loch, when they

passed on September 20th. It should be noted that in early and mid-September a large invasion of Lapland Buntings Calcarius lapponicus took place from Greenland, and I saw an American Pipit Anthus s. rubescens at Fair Isle on 18th (see para. 5), so that favourable weather conditions for a crossing of the Atlantic certainly existed.

As a postscript to the foregoing, I quote from The Scotsman for Monday, December 21st 1953:

> "The American Blue Goose, which disappeared from the Delting lochs, in Shetland, when the flock of local geese to which it had attached itself were removed to be fattened for Cristmas, has returned to the area and been seen standing near the croft where the geese are now being kept."

Apparently it likes to live dangerously: we wish it a better Christmas than it deserves!

4. A Snow Goose in Caithness.

James Gunn informs us that a Snow Goose came to Reay, Caithness, at the end of September. He will contribute a note on the occurrence to the next number of the Bulletin.

The only escapes of Snow Geese known to us are of two birds from Dr. Smith's sanctuary at Culterty as long ago as February 1952. As neither of these has been seen since, it is most unlikely that the Reay bird is one of them. In view of the weather conditions during much of September and the arrival of other American birds in the country the Caithness goose may well be a genuine wild immigrant.

## 5. An American Pipit at Fair Isle.

KENNETH WILLIAMSON.

When observing along the top of the west cliffs on September 17th 1953 I came suddenly upon a bird which I first took to be a wagtail, feeding near Rock Pipits on the close-cropped grassy turf at the head of the geo called Guithicum. When I used my glasses it was at once apparent that the plumage-pattern was entirely wrong for a wagtail, and that the bird was in fact an American Pipit Anthus spinoletta rubescens. It was darker and richer brown above than our own Rock Pipit Anthus s. kleinschmidti and without the greenish-olive tinge. There was a clear, pale eye-stripe. The most striking feature of the plumage was the buff underside, very rich on the brown-streaked breast. The upper and under parts afforded a much greater and more colourful contrast than is the case in the Rock Pipit, and a suggestion of buff invaded the sides of the head. There were pale tips to the greater and median wing-coverts. The outer tail-feathers were white and this fact was readily noticeable, in view of the wagtail-like flicking of the tail, when the bird was at rest.

After two or three minutes it rose and disappeared into the geo. I wrote down the call it gave on rising as "syit, syit": it was very like the call of a Rock Pipit but higher pitched, clearer and more incisive. There is one previous record for Scotland (at St. Kilda, September 30th 1910, Dr. W. Eagle Clarke) and the second British record, at Great Saltee (Ireland) in September 1952, was described by R.F. Ruttledge in Bull. no. 5, para. 54. The range of the American Pipit extends to low Arctic Greenland and it is more than likely that the rare European occurrences are due to arrival from this source in the same weather that brings us the autumn Lapland Bunting movements.

6. Richard's Pipits in Mid-August.

One of the interesting features of the mid-August invasion of Crossbills at Fair Isle was that these birds, drifted north-west from the Low Countries, were accompanied by at least two Richard's Pipits Anthus richardi.

These were seen in the crofting area near Quoy and Kennaby on August 19th-20th, and a single bird was seen on 17th and 24th. The one watched on 17th (also seen by James Wilson), and again on 20th, was at first puzzling, as the tail was too short for Richard's Pipit, though the bird agreed well with this species in all other respects. The view obtained on 20th, however, by R. Spencer, R. Porter and the writer, solved this difficulty, as the bird was clearly in moult. The wing had a much abraded appearance, and the outer tail-feathers were shorter than the central ones. The other bird, seen by the same party on 19th and again on 24th, had the tail fully grown, and had a habit of flicking it in Redstart fashion when perching on the wires and fencing-posts, so that the white outers were clearly visible.

The birds were slightly bigger than Rock Pipits feeding in the same area and they had longer, stouter bills. There was a pale but rather ill-defined eye-stripe, pale brown lores, striated mantle, and white chin and belly. The sides of the breast were strongly suffused with buff and heavily spotted, the dark spots being grouped to the sides rather than the middle of the breast. The greater wing-coverts were dark-centred and the bill appeared to be black. The legs were a yellowish-brown. Of a number of previous autumn records at Fair Isle none is earlier than September 26th, and September 7th 1928 in Shetland appears to be the earliest previous date. K.W.

## 7. A Paddyfield Warbler at Fair Isle.

KENNETH WILLIAMSON.

The period of strong anticyclonic winds from the south-east in mid-September brought a number of interesting birds to Fair Isle, but none more interesting than the second Paddyfield Warbler Acrocephalus agricola to be recorded in the British Isles. The previous one, also at Fair Isle, concerns a ♂ collected on October 1st 1925 (J.H. Stenhouse, Scot. Nat. 1925: 173-174).

The bird was found among bracken on the Brae of Restingsgeo by John Wightman and Bill Conn on the morning of September 16th. It seemed tired, and was loth to leave the cover. Together with my wife and visitors to the Observatory (Anthea Riddolls, Helga Hitchen, John Webb and Robert Burn), I was able to watch it at close quarters for a considerable time. We all found it a distinctive but very puzzling bird: Wightman, in first reporting it to me, had called it a "huge, exotic warbler," and this description seemed very apt. It looked at least as big as a Barred Warbler, with an equally long tail: its general appearance was reddish-brown above and sandy-buff below, and there was a very prominent pale superciliary stripe. My own first impression was that it must be a Great Reed Warbler, but on reflection the eyestripe ruled out this possibility. Rufous Warbler was considered, but there was no white in the tail; and Gray's Grasshopper Warbler Locustella fasciolata (which has occurred twice in western Europe, at Ushant) was another possibility, - but quite clearly we had to trap the bird if we were to identify its species.

So all the temporary trapping gear we could lay hands on was assembled at the spot whilst two of the

party kept watch on the bracken-patch where the bird had taken cover. A small "Heligoland" with a portable aluminium catching-box was rigged up and the bird was driven through the entrance, only to escape with ease through the $\frac{3}{4}$inch mesh. We had thought this net quite adequate for so large a bird.

The warbler then took cover in some bracken at the foot of a 3-ft. high peat-bank, and we decided that our only chance of catching it lay in stalking it from above the bank with the smaller-mesh Yeoman net, - with which we planned to drop on top of it! This unorthodox method sufficed, and when we had the bird beneath the net we were all very surprised to see how small it really was! Indeed, one observer expressed the view that we had captured a different bird!

In the laboratory the bird presented much less of a problem than it had done in the field. The usual routine was followed, - weighing, search for ectoparasites (none found), measuring, and then plumage and wing-formula examination. The bird was clearly an Acrocephalus, and plumage details and especially the wing-formula agreed with A. agricola. There was a skin of this species and also skins of Reed, Marsh and Blyth's Reed Warblers in the collection loaned by the Royal Scottish Museum, and our bird matched the first of these perfectly except that the fresh plumage was of a brighter tone.

The following data were recorded in the lab. Rounded tail of 12 feathers, the outermost 8 mm. and the penultimate pair 3.5 mm. shorter than the central pair. Iris olive (not "pale brown" as stated in "The Handbook of Brit. Bds." 2: 55). Upper mandible blackish, the lower one pale flesh but brown at the tip. Legs and feet flesh-colour, claws strong, soles yellow.

The wing-formula, with the 2nd primary between 6th and 7th, indicated the typical race (Kirghiz Steppes and central Urals east to SW. Siberia) and not one of the concinens group of more eastern races, in which the 2nd primary is shorter than the 8th. The 3rd and 4th primaries were equal and longest and the 1st about equal to the primary coverts; 2nd primary 4.5 mm. shorter than the wing-point and the 5th to 8th 2 mm., 3.5 mm., 6.5 mm. and 8 mm. shorter in that order. The 3rd, 4th and 5th were emarginate, and the notch on the inner web of the 2nd was considerably below the tips of the secondaries.

The bird weighed 11.29 gm., about the same as newly-arrived Marsh Warblers A. palustris we have trapped. The wing measured 60 mm., tail 53 mm., bill from skull 13 mm. and tarsus 23 mm. The bird was ringed JC 178 and was released: it flew to the North Haven beach and was not seen again.

Under the heading 'Field Characters', the "Handbook" merely says that the Paddyfield "resembles a small Reed Warbler," which is very misleading. In the first place, the distinctive eye-stripe prevents even a momentary confusion with Reed or Marsh. Furthermore, all of us were agreed that in recording the occurrence the strongest emphasis should be laid on the fact that in the field the bird did NOT look small. Throughout our encounter with it we were impressed by its apparent large size, and it was not until it went so easily through the mesh of the first net that we began to have doubts. My preliminary attempts to identify the bird - all of them wide of the mark - were biased by this impression, which I now believe was due to a combination of its pale, almost sandy coloration and the dark background of the exposed peat and old heather on those occasions when we studied it in the open. No other bird was present to afford an adequate size comparison.

As the Paddyfield Warbler is most likely to be found in this country as a newly-arrived drift migrant on some exposed headland or island, with an environment probably not dissimilar from Fair Isle, we think it is worth while emphasising that watchers should be on their guard against the possibility of a repetition of this optical illusion.

Apart from this, we would summarise its field-characters by saying that it is a pale, almost sandy reed warbler inclining to russet above, with a fairly long tail and a distinctive pale superciliary stripe.

## 8. Recoveries of Ringed Blackbirds.

More Blackbird Turdus merula recoveries have been reported by Miss E.P. Leach, all of autumn drift-migrants subsequently found in west and SW. Scandinavia, presumably on or near their breeding grounds.

1st w. ♀ ringed October 25th 1950. At Hjelle, Nordfjord, NORWAY (280 miles NE.), on July 22nd 1953.

♀ ringed October 3rd 1951. At Fitjar, island of Stord, NORWAY (230 miles east), on July 25th 1953.

Ad. ♂ ringed October 18th 1951. At Stigen, nr. Uddevalla, SW. SWEDEN (500 miles east), July 29th 1953.

1st.w. ♂ ringed October 29th 1951. Found at Stemshaug, Nordmore, near Trondhjem, NORWAY (500 miles NE.), on August 1st 1953.

Ad. ♀ ringed on October 27th 1952 (apparently wintered, as it was retrapped on November 2nd and again on February 23rd). Recovered near Molde, NORWAY (450 miles NE.), on October 20th 1953, having been dead ca. one month.

Ad. ♀ ringed October 19th 1952. At Nordfjordeid, NORWAY (280 miles NE.), on November 4th 1953.

9. Crossbill "Irruption" News.

In Shetland

A ♂ was seen at Kergord Plantations on August 8th and a few were reported at Fethaland, the northern tip of Mainland, next day. Also on 9th one was present on the island of Noss.

The Venables visited Papa Stour, off the west side of Mainland, on August 13th and en route saw a party of 5 Crossbills at Sandness, and a similar party soon after their arrival. There was a red bird and a juvenile on 16th taking seeds of Sea-thrift Armeria maritima; a flock of 10 (2 red ♂♂, 2 ad.♀♀ and 6 juvs.) at Scotch Thistles Onopordon acanthium next day, and 4 on 18th eating seeds of Marsh Plume Thistle Cnicus palustris.

Tom Henderson saw a party of 3 at Spiggie, eating thistle-seeds, on 18th, and a flock of 20 passed over that day. There was a party of 8 down the cliffs at the Venables home at Noss (a township near Scousburgh) on 19th, and 3 small parties were heard flying over Spiggie on 20th. On 21st there was a small group and 2 dlocks in flight over Spiggie, and August records closed with a juv. in the Venables garden on 23rd and 3 juvs. at oats on 26th. The last recorded seems to have been a young bird at Spiggie on September 15th.

At Fair Isle

The biggest movement of the summer at Fair Isle took place on August 12th-13th. No birds had been noted since 4th, when 2 were seen, until 11 appeared on 12th during a day of heavy rain with strong S.SE. wind. Next day the crofting area seemed to be full of birds, and our estimate of 200 for the schedule entry is very probably on the low side. Many had gone out by next day, but more arrived (probably ex Shetland) on 16th, and there were still over 100 on 18th and 50 on 20th.

The decline thereafter was steady, numbers being down to 30 or so by 22nd, 15 on 24th and 4 only on 30th. On the last day of the month 16 birds appeared.

During the first few days of this big "rush" many of the Crossbills fed on the centres of the Ragwort Senecio aquaticus var. ornatus which is such a feature of the Fair Isle fields at this time. Later, most of the birds concentrated on the seeding thistles, and a number were caught near the Bird Observatory in a temporary trap put up over a thistle-patch. Several were also in the cornfields, and after the harvest were to be seen feeding at the oat-stooks.

Numbers were small during September, often one or two only, and the fluctuation suggests passage from farther north. The last date on which any number were present was 19th with 17 birds, and these may have been new arrivals from the Low Countries in the mid-September drift. By the end of the month there were two only, and these stayed on, haunting the oat-ricks in the yard at Shirva until the last week of October.

## Parrot Crossbill at Isle of May

A.G.S. Bryson writes that there were no Crossbills at the May in autumn until September 18th, when 12 arrived. Nine of these were trapped, 4 ♀♀ (wings 90 - 95 mm.), 4 ♂♂ (wings 94 - 98 mm.), and the one mentioned in the next paragraph. Their weights varied from about 30 - 33½ gm., with one young ♂ near 37 gm. They were all very tame, so much so that 2 were caught with a butterfly-net, and they fed mainly on seeds of Ragwort, Scotch Thistle and Sowthistle.

The remaining bird of the 9 was identified by its captors, J. Ramsay Gordon and W.D. Grant, as a Parrot Crossbill Loxia (c.) pityopsittacus. It was an adult ♀ with a wing-length of 102 mm. and weighed 38.2 gm. The length of the upper mandible was 20 mm. and the depth of bill 14.5 mm., - greatly in excess of

the bill-depth of the 100 or so Crossbills measured at Fair Isle. At close quarters it appeared markedly bigger than the Crossbills it accompanied, and it was greyer on crown and nape than the other females. It was photographed in the hand, alongside the largest of the Common Crossbills, and the heavier bill is obvious.

## Fair Isle to Italy

The two recoveries of Fair Isle Crossbills so far to hand provide an interesting contrast in migratory behaviour.

R 7886. A ♀ trapped in the Double Dyke Trap on June 28th 1953 was ringed and set free at once as it was rather exhausted. Alex Stout took the freshly-killed remains of this bird from a cat on September 17th. It had spent 12 weeks on the island.

R 7394. A juv. ♂ taken in the Single Dyke Trap on July 6th 1953, wing 100 mm. and weight 31.72 gm. It was reported by Professor Ghigi of Bologna University as having been shot at Bergamo, in north Italy, on August 25th, a straight-line distance of 1100 miles SE.

## In Aberdeenshire

Miss Betty Garden reports flocks of 4 + and 15 at Grandholme on July 4th and 14th respectively, the bigger group in a Larch plantation. A few flew over, going north, on July 20th, and a flock of 20 flew high in a SE. direction on 29th. A flock of 14 flew past Grandholme on September 18th, a date which coincides with arrivals at Isle of May and Fair Isle. A small party was still in the neighbourhood between October 25th and 31st.

## In Norfolk

Graham H.C. Byford writes that on the evening of June 22nd he saw, at his home at High Kelling, Holt,

an ad. ♂ feeding in Scots Pine. "A large quantity of frayed cones on the ground bore evidence of extensive feeding in the area, and this led to the discovery of a mixed flock of ca. 20 birds. Almost immediately, they flew noisily away. Some half-an-hour later, showers of seeds and cones heralded the arrival of an even larger party of Crossbills, and they conveniently came to feed on a row of Scots Pine bordering the roadway. In this party 4 ad. ♂♂ were identified, and of the rest there seemed to be as many juveniles as ♀♀. A count of 54 was made.

Crossbills in Sweden

Carl-Fredrik Lundevall writes: "At Ottenby Bird Observatory, south Oeland, there has been a striking 'irruption' and emigration since June. It is still going on (I returned yesterday, October 1st). Since August 24th we have ringed the following numbers of curvirostra: August 24th, 1; 27th, 3; September 8th, 2; 9th, 1; 12th, 1; 16th, 1; 17th, 1; 20th, 1; 28th, 1. They are very difficult to catch, however. Of the flocks, containing from about 3 to 30 birds, probably only 1 - 5% were caught.

"At Falsterbö Bird Observatory, south Skane, a fairly large emigration has also taken place, according to Torsten Malmberg.

"Arne Blomgren, Harads, outside Boden in north Sweden, says he has seen no Crossbills during the summer. Baron Sten Baner, Sjöö, Hjälstaby, Upsala, in central Sweden has reported some few flocks during the summer. I noted 3 small flocks during June and July and a single bird on August 30th at Norrköping."

Col. Meinertzhagen wrote from Swedish Lapland on August 16th: "I have been making enquiries about Crossbills. There is no apparent decrease in numbers nor have flocks been seen passing through. Whence do our invaders come ?"

## The Swedish Cone Crop

Lundevall continues: "The conifers from about Dalälven (north Upland) and Dalarna in central Sweden, and northwards, did not go to seed (very low germinativeness) last season, although there were plenty of cones, since the summer and autumn of 1952 were unusually cold and wet. From River Dalälven southwards, however, the conifers had cones with seeds, which may explain the occurrence of Crossbills in the south Swedish forests.

"We found on Oeland that fairly many of the Crossbills were slightly damaged at the base of the bill, though most of the sores were healed again. I don't know if they do damage themselves usually when they break up the cones, or whether the curvirostra have tried to feed on harder cones (Pinus) than usual. In general, curvirostra here prefer Spruce (Picea) and similar weaker cones (Larix etc.). Pinus sylvestris goes high up in the north, and is probably less delicate of cold weather than Spruce Picea abies.

## Weights of Crossbills

Alec Butterfield writes: "Despite the large number of individuals weighed, the weight-records of the Crossbill invasion proved to have little of interest. There was a considerable range of variation from 44.02 gm. (ad.♂) to 28.27 gm. (juv.), but no discernible difference in mean weight between the sexes, or between adults and juveniles. The normal tendency for birds to become heavier as the day progressed was apparent.

"The most interesting observations concerned the birds roosted overnight in the laboratory. Their losses in weight are given below:

| Adults. | | | Juveniles. | |
|---|---|---|---|---|
| 1.61 gm. | 1.68 gm. | 1.25 gm. | 1.15 gm. | 0.49 gm. |
| 0.59 | 1.60 | 0.81 | 0.41 | 0.47 |
| 1.82 | 1.61 | 1.74 | 0.62 | 0.56 |
| | 1.74 | | 1.49 | |

The mean for the adults is therefore 1.43 gm. and for the juveniles 0.71 gm.

"Two points are remarkable, - the fact that juveniles lose only half as much as adults, and the size of the loss, only about 4% for adults and 2% for juveniles. For birds of this size, our experience suggests that the overnight losses should be 7% at least for both groups. It is just possible that this small loss is correlated with the very solid food, - Juniper berry kernels, - which the Crossbills were eating at the period when the observations were made. So far we have not looked for a difference in overnight weight-loss between birds of different ages, and the records for other species will be re-examined with this in mind."

## The Source of the Irruption

In 1953 a polar high appeared over Jan Mayen Seas on June 6th, spreading east and intensifying over NW. Russia by 8th. It was the controlling factor of north European weather during the following month.

There was an easterly airflow south of this high from June 8th-10th and again on 12th on the usual drift-migrants' route to northern Britain, - but NO CROSSBILLS CAME! The vanguard did not arrive till 14th.

In view of this time-lag, and the absence of records from north Sweden (see above), the "irruption" probably had a distant source, since nearly a week was required for the mass of birds to get into a position where drift could carry them across the North Sea.

It is suggested that they came by anticyclonic drift along the corridor of easterly winds from NW. Russia, through south Sweden to SW. Norway, between the polar high and a northwards-moving low then over the Baltic States.

A synoptical study of the "invasion" is being prepared for publication.

## 10. The Fledging of a Group of Young Fulmars.

NEIL MALCOLM.

Four members of the Joint Schools' Expedition to Fair Isle kept watch on an area of cliffs known as Johnny's Peats from August 24th-29th 1953, to discover the manner in which young Fulmars Fulmarus glacialis first took to the wing. The chicks under observation were known as A - Z and 1 - 12, but continuous watching was possible only with A - O. This was maintained by Colin MacDougall, David Norman, Geoffrey Yates and the writer, all of Merchant Taylors School, Crosby, Lancs. The Director also took part, studying in particular the behaviour of the young birds.

This short account deals mainly with the visits of adults, the fledging of the young, and the reoccupation of the deserted nest-sites by the presumed parent birds. A more detailed paper has been accepted for publication in the Scottish Naturalist.

### 1. Feeding of the Young

It was possible to find out the period between the last feed and first flight in 3 cases only, - E, G and X. E was fed for the last time on August 27th, and G and X on August 23rd. E flew on September 6th, G on August 25th and X on 27th or early 28th. Therefore, the intervening periods were of 10 days, 2 days and 4 - 5 days respectively. E, the least developed chick when the watch began, was fed the most, - once on 24th, at least 3 times on 25th, and once on 27th. J. Fisher, "The Fulmar" 1952, and others have stated that the young are deserted by their parents at about 5 weeks old and left to last out the remainder of the fledging period on their accumulated fat reserves. Except in

the case of E, there is no support in our observations for this view.

## 2. Adult Aggression

All the chicks watched were visited by adults (presumably their parents) on most days, and commonly two, three or more times a day, right up to leaving the cliff. These visits varied in length from 5 minutes to as much as 3 hours. It is believed that many of these visits were made by parent birds with the intention of persuading the chicks to fly, so that the ledges could be reclaimed.

As the chick developed and neared its fledging-day it showed periods of restlessness. It would often stand on the edge of the nest-ledge and flap its wings vigorously. At other times it would shuffle along its ledge, 'exploring'. Sometimes, when the fledging urge was strong, it would approach the edge and spread its wings, as though about to take off; but it would often lose its 'nerve' at the critical moment and retire to the nest. There it would rest for a time, preening or 'pseudo-sleeping'.

It was very noticeable that when a chick took wing-flapping exercise with its face to the cliff, an adult would often glide up very close to it. The first flights of G and L (see below) suggest that the adult thus hopes to stimulate the chick to turn quickly and 'spit' defensively, and in so doing overbalance and fall from the ledge. There were many instances where a youngster so situated responded with the 'spitting' threat-reaction, and managed to repel the adult without itself coming to grief.

## 3. Maiden Flights

Throughout our observations we distinguished three different types of "maiden flight":

(a) Both L and G first flew as the result of adult or parental interference on August 25th. They were wing-flapping on the edge of the nest when an adult glided up, and they overbalanced and fell in trying to "spit" at the intruder. They flew low out to sea.

(b) H's first flight on August 26th was the only purely accidental one: it was definitely not a case of adult interference. This bird slipped from his own to J's ledge below, and clung there precariously for some time until forced to let go by J's repeated aggressive reactions. Another youngster, 12, narrowly escaped an accident of a similar kind, but the grassy slope to which he fell was unoccupied, and ultimately he found a new ledge where he stayed for the next few days.

(c) There were 4 definite cases of deliberate flight and 2 probable cases. At 1000 hrs. on 27th, after a period of wing-flapping, O shuffled to the edge of his ledge and flew. On 28th, at 0850 hrs., J flew in the same manner, landing in the sea with a splash half-a-mile out. M also flew in this way at 1545 hrs. on 29th, coming down in the bay 600 yds. away, where he was joined by 4 adults. E, after an hour of restlessness during which he made several "false starts", took wing at 1008 hrs. on September 6th and flew ably until out of sight more than a mile away. N on 27th, and B on 29th, both made their first flights after a period of restlessness just when the watchers' backs were turned for a minute. In both cases, it is certain that no adults were near.

There are 18 other youngsters recorded as having flown at or near a certain time, and it is a safe guess that the majority left the cliff of their own accord. It was noted that the newly-fledged young hardly ever glided, and E did not do so at all over the mile or so during which he was observed.

The recorded departures showed a peak period from August 25th to 29th during which they intensified almost daily, culminating in 11 maiden flights on 28th and 29th. Of the 16 accurate or reasonably accurate times recorded, 10 youngsters left during the 3 hours from 1000 - 1300 hrs. GMT, 3 others before 1000 hrs., and 3 after 1300 hrs. The latest of these was between 1700 - 1900 hrs.

## 4. Reoccupation of the Ledges

The frequent cases of aggression by the adults, and the two cases of departure due to adult interference, suggest that the parents have a great need to recover their ledges, perhaps in order to deny their use to non-breeders prospecting the cliffs at this time. Sites were recorded as being reclaimed in 11 cases, G within 3 minutes (a "forced departure"), D within 5 minutes, and 12's original ledge within 7 minutes of his falling from it. Site B was reoccupied after 90 minutes, J and U on the fledging-day, and O, R and W on the following day.

## 5. Young Blue Fulmar

The youngster B was, so far as we know, the first "blue" Fulmar to fledge at a British site: it was the chick of the "blue" x normal pair called "A" in K. Williamson's study of the incubation period in Soot. Nat. 64: 138-147.

## 11. The Status of the Iceland Merlin.

ALEC BUTTERFIELD.

In Bull. no.8, para. 98, and more recently in a paper in Scot. Nat.(65: 65-94), Kenneth Williamson has referred to the regular occurrence of the Icelandic Merlin Falco columbarius subaesalon Brehm at Fair Is. Many ornithologists do not recognise this race (vide "The Handbook of Brit. Bds." 3: 25) and regard this name as a synonym of F. c. aesalon Tunstall, a view which is shared by the compilers of "A Checklist of the Birds of Great Britain and Ireland" published in 1952 by the British Ornithologists' Union.

During last winter K.W. assembled measurements of 300 Merlins from various collections, the most important sources being the British Museum (Nat. Hist.) and Royal Scottish Museum (which he personally measured) and the Universitetets Zoologiske Museum, Copenhagen. The splendid series of Faeroe, Iceland and Scandinavian birds at the last institution was kindly measured by Arne Norrevang. Data were also obtained from birds in some private collections, notably those of Colonel R. Meinertzhagen, Dr. J.M. Harrison and Mr. Arthur Duncan.

A preliminary statistical examination of the wing-lengths of these birds leads me to the following conclusions:

Faeroe - Iceland Group.

97% of ♂♂ have the wings longer than 203 mm.
94% of ♀♀ have the wings longer than 219 mm.

Continental Group.

97% of ♂♂ have the wings shorter than 204 mm.
94% of ♀♀ have the wings shorter than 220 mm.

British birds occupy a curious position, with ♂♂ almost identical to Continental ♂♂ in size, and some of the ♀♀ (particularly in the north and west of our islands) closer to the Faeroes-Iceland group. It is difficult to account for this anomalous situation, unless the explanation is that some wintering Iceland ♀♀ are attracted by resident ♂♂ of the British population early in spring, and so remain in this country to breed. Since the greater size of ♀♀ in birds of prey is apparently sex-linked, such 'hybrisisation' should not affect the ♂♂ offspring.

The type-locality of Falco c. aesalon is France, where the Merlin, if it breeds at all, must do so only very rarely. It can be accepted, therefore, that the type-specimen must have been a migrant or wintering bird, and since the British stock is sedentary this must have come from Scandinavia. The validity of F. c. subaesalon therefore rests on a comparison between Icelandic and Scandinavian birds, and we must conclude that on the criterion of wing-length this is a very good race.

We know from the four recoveries of nestlings ringed in Iceland that this large form of the Merlin winters in Scotland, Ireland and northern England. To these must be added two Fair Isle migrants of this big form also recovered in Scotland (Bull. no.8, para. 96 and no.10 para. 117). As Meinertzhagen and Williamson have proposed in Ibis 95: 365, the Iceland Merlin must be admitted to the British list.

In the list of Fair Isle birds given on p. 32 it is considered that all are Icelandic migrants with the exception of the ♂ from August 31st 1953, and the ♀♀ from October 11th 1950 and October 8th 1953.

## 12. Sex Recognition Characters in Young Merlins.

KENNETH WILLIAMSON.

When I measured the British, Royal Scottish and other museum material of this species for the study described by Alec Butterfield in the previous note, I was struck by the fact that a number of young birds had been inaccurately sexed. In all cases these were ♂♂ birds stated on the labels to be ♀♀. The female and 1st-winter plumage of both sexes are very alike, and it was clear that some collectors or taxidermists had based their sexing on the femininity of the plumage and not on gonadal examination.

I have examined such data as we now have at Fair Isle for our series of trapped birds with a view to finding what structural characters can be used to assist in correctly determining 1st-year birds. The data are given in the table on p. 32. It should be borne in mind, of course, that this information is derived from the race Falco c. subaesalon, but it is probable that a similar key could be drawn up for the Continental and British birds.

Weight is a character of value only in bird observatory work (since so few collectors appear to weigh their specimens), and the best museum taxonomic character is the bill-length taken from cere to tip of upper mandible. Tail length should give good confirmatory evidence, but it is likely that there is some overlap (as in wing-length) between the different stocks. Wing-formula should not be relied upon except in conjunction with one or more of the other characters, since there appears to be a slight overlap in this respect also.

TABLE.

Measurements of Merlins at Fair Is.

| | Date. | Wing. | Bill. | Tarsus. | Tail. | Weight. |
|---|---|---|---|---|---|---|
| A. MALES: | | | | | | |
| 1950 | 8.x. | 209 mm | 11 mm | 42 mm | | 170 gm. |
| | 21.x. | 204 | 12.5 | | | |
| 1952 | 19.viii. | 205 | 12 | 38 | 138 | |
| | 4.ix. | 205 | 12 | 41 | | 170 |
| | " | 210 | 12 | 40 | 127 | 185 |
| | 20.ix. | 210 | 12.5 | 40 | 130 | 185 |
| 1953 | 17.viii. | 208 | 12 | | 130 | |
| | 18.viii. | 203 | 12 | | 123 | 174 |
| | " | 208 | 12 | | | 174 |
| | 28.viii. | 205 | 12 | | 136 | 177 |
| | 31.viii. | 201 | 12.5 | | 135 | 179 |
| | 25.ix. | 215 | 11.5 | | 130 | 189 |
| | 1.x. | 208 | 12 | 42 | 126 | 166 |
| | 6.x. | 210 | 12 | 38 | 125 | 172 |
| B. FEMALES: | | | | | | |
| 1949 | 1.x. | 230 | | | | 226 |
| 1950 | 5.x. | 226 | 14 | | | 212 |
| | 11.x. | 218 | 13 | | | 198 |
| | 18.x. | 230 | 14 | 40 | | 240 |
| 1951 | 17.ix. | 225 | | | | 220 |
| | 18.ix. | 223 | | | | 198 |
| | 28.ix. | | | | | 210 |
| 1952 | 20.viii. | 228 | 14 | 40 | | 192 |
| | 4.ix. | 232 | 14.5 | 40 | 140 | 220 |
| | 16.ix. | 228 | 14.5 | 38 | 143 | 210 |
| 1953 | 18.viii. | 230 | 13.5 | | 141 | 214 |
| | " | 227 | 14 | | 138 | 214 |
| | 4.x. | 235 | 14 | 42 | 145 | 274 |
| | 8.x. | 219 | 13 | | 139 | 237 |
| | 14.x. | 227 | 14 | 41 | 143 | 260 |

## Sex Recognition of Young Merlins

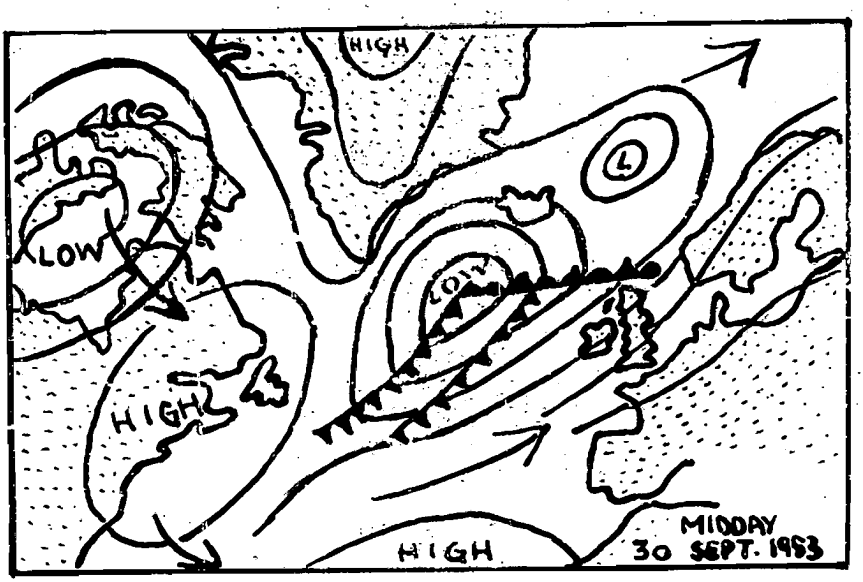
WEIGHT: No ♂♂ more than 190 gm., majority less than 180 gm.
No ♀♀ less than 190 gm., majority more than 200 gm.

BILL: Measured from cere to tip, ♂♂ are 11-12.5 mm (usually 12 mm.); ♀♀ are 13-14.5 mm. (and usually 14 mm.).

TAIL: In ♂♂, not more than 138 mm.; in ♀♀, not less than 138 mm.

WING-FORMULA: Notch on inner web of 1st long primary falls between tips of 6th - 7th in majority of ♂♂, and is equal to 7th in majority of ♀♀.
Notch on inner web of 2nd long primary falls between tips of 4th - 5th (or = 5th) in majority of ♂♂ and is between 5th - 6th (rarely = 5th) in ♀♀.

Although there is, of course, a sex difference in the wing-length I have purposely left this out of consideration, as in any British collection it is likely that the races will be mixed, and there may therefore be some overlap of Iceland ♂♂ - Scandinavian ♀♀. In all probability this will also be found to apply to tail length; but I have yet to find a bird that cannot be sexed on the length of the upper mandible from cere to tip. A similar sex-difference is also manifest in the Sparrow-hawk Accipiter nisus (♂♂ 10 - 12 mm., ♀♀ 15 - 17 mm., a dozen Fair Isle migrants measured), and probably other birds of prey.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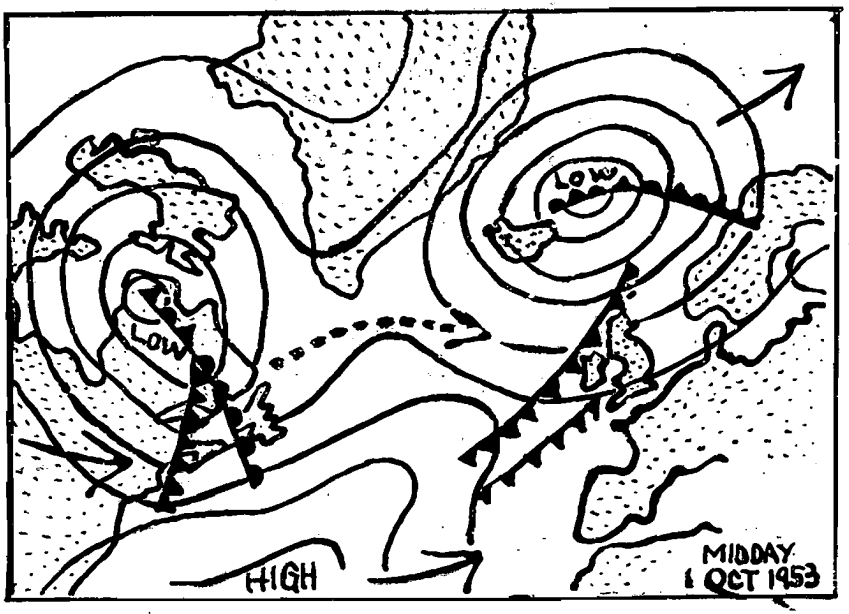
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13. A Week of Wheatear Passage.

KENNETH WILLIAMSON.

The first few days of September 1953 witnessed the most remarkable Wheatear Oenanthe oenanthe passage we have yet had at Fair Isle. The first day of the month saw a continuation of movement from the north-west, of Shetland and Faeroe-Iceland birds, which had begun the previous day. Of 14 trapped on September 1st 13 belonged to one or other of these categories.

As has been pointed out before (Bull. no.6, para. 56; Scot. Nat. 65: 69-74) there is no clear-cut line of separation between these two groups, since they intergrade, but on average the Faeroe-Iceland birds (which have been described as Oe. oe. schiøleri Salomonsen) are rather heavier and slightly longer in the wing. However, for the purpose of this note there is no point in trying to separate them, and we will call the Faeroe-Iceland and Shetland stocks "birds of north-western origin." The 13 birds had wing-length 94-98 mm. and tail-length 53-57 mm., and weights normal for this class of migrant Wheatear at 23 gm. to 29.5.gm.

There was an odd bird on each day; a small bird with a wing of 92 mm., tail 50 mm. and weight only 19.76 gm. on August 31st, and a big one with wing 102 mm., tail 59 mm. and an even lower weight of 18.98 gm. on September 1st.

Despite its incredibly low weight for the race this last bird was clearly Oe. oe. leucorrhoa on wing and tail measurements. It proved to be the forerunner of several Greenland Wheatears which were taken in the traps on September 2nd, 3rd and 4th. Full data of these captures are:

| Date. | Time. | Age. | Wing. | Tail. | Weight. |
|---|---|---|---|---|---|
| 1.ix. | 1915 | 1st.w. | 102 mm. | 59 mm. | 18.98 gm |
| 2.ix. | 0700 | Ad. ♀ | 103 | 59 | 25.59 |
| " | 1150 | Ad. ♂ | 100 | 59 | 22.40 |
| " | " | " | 103 | 59 | 27.18 |
| " | 1330 | Ad. ♀ | 102 | 59 | 23.71 |
| " | 1915 | " | 106 | 63 | 22.60 |
| 3.ix. | 0530 | Ad. ♂ | 107 | 62 | 23.80 |
| " | 0700 | 1st.w. | 105 | 63 | 21.96 |
| " | 0830 | Ad. ♂ | 102 | 60 | 21.34 |
| " | 1345 | " | 102 | 62 | 20.88 |
| " | " | Ad. ♀ | 98 | 58 | 20.32 |
| 4.ix | 1500 | Ad. ♂ | 107 | 65 | 23.55 |
| " | " | 1st.w. | 102 | 62 | 22.74 |

Some birds of north-western origin, 8 in all, were also trapped on 2nd, but none was taken on 3rd or 4th. The only non-Greenlander on 3rd was a small bird for Fair-Isle with wing 93 mm., tail 55 mm. and weight 20.02 gm. A small bird had also been ringed the previous day, - wing 88 mm., tail 50 mm., weight 19.29 gm. These data indicate a probable Continental origin for these birds and the other small one of 31st. On September 5th only "north-western" Wheatears were trapped, at weights normal for this class.

Thus, during the 6 days the pattern of Wheatear passage was very complex. First we had strong through-passage from the islands in the north-west, continuing on September 2nd but ceasing on 3rd-4th, recommencing however on 5th. Late 1st brought the first leucorrhoa and arrival of these continued from 2nd to 4th at such low weights (the normal is over 30 gm. at this season) that a long and arduous cyclonic approach from the west is indicated. Their arrival ceased on 4th, and the north-western flow was again evident on 5th.

During 31st and 1st col conditions, with the highs over Iceland and mid-Europe and the lows to west of Ireland and in the Baltic region, prevailed in our area. These are the conditions with which much of the passerine migration from the north-west is associated (see Scot. Nat. 65: 65 - 94). Late on 1st, however, this "fine-weather bridge" was closed by the eastwards movement of the Atlantic depression. Its warm front crossed the north of Scotland at mid-day, bringing an interesting and important change in the wind. This had been E.SE. ahead of the front across the Dogger, Forties and east Fair Isle sea-areas, and had brought some drift-migrants (including the small Wheatears) from the Skagerrak and south Scandinavia. Late in the afternoon of 1st, with Fair Isle in the warm sector of the depression behind this front, the wind had veered to SW. The trapping of the first Greenland Wheatear coincided with this change.

The situation in Greenland from 31st to Sept. 2nd inclusive was markedly anticyclonic with conditions excellent for departure and a fair way to go in col weather south of Cape Farvel. South of Iceland, however, there was this depression, and the last half of the journey had to be made round its eastern perimeter. At Fair Isle the wind continued SW. on 2nd and veered still further, to north of west, on 3rd. Meanwhile, with the low retreating eastwards, a ridge of high pressure from an Azorean high was building up in the west. This was well established on 4th, with calm in Faeroe, and next day a high had developed over the whole North Sea area. The change on 4th coincided with the cessation of Greenland arrivals (the 2 birds of that day are heavier than those of 3rd and may not be new) and the resumption of migration of the "north-western" birds which reached Fair Isle next day.

## 14. Recaptures of Starlings Ringed in Previous Years.

Since autumn 1948 nearly 1400 Starlings Sturnus vulgaris have been trapped and ringed at Fair Isle, the great majority of these being island-bred birds. A few of these are now known to be 5 years old, as shown by the recaptures listed below.

From 1948 Season

SK 42. ♂, September 30th (retrapped October 25th in the same year, weight 78.2 gm.). Recaptured September 19th 1952, weighing 81.25 gm.

SK 83. ♂, caught in a Potter trap at N. Haven on October 25th. Retrapped December 5th 1949, 85.4 gm. Again caught on September 24th 1952 at 85.6 gm. Was roosted overnight in the lab. and lost 6.6 gm.

SP 035. Ringed on Christmas Day 1948 at 98 gm. Found dead in the Church on May 31st 1953.

From 1949 Season

SP 046. Ad.♀ at the Haa (south end of the isle) on April 9th, weight 77 gm. Retrapped in a Potter on the shore near the Observatory, October 8th 1953, at 79 gm.

SP 100. Ad.♂ on October 3rd, weight 91.25 gm. Retrapped September 26th 1952 at 92.37 gm. and on October 10th 1952 at 93.10 gm. At least 4 years old.

SP 192. A juvenile on September 3rd, 80.5 gm. Retrapped on December 6th 1952 at 91.8 gm. At least 3 years old.

SP 435. ♀ on November 13th at 95.3 gm. Retrapped on December 6th 1952 at 92 gm. At least 3 years old.

SP 522. ♂ on December 4th at 86 gm. Caught on October 9th 1952 at 81 gm. At least 3 years old.

## 15. Late May Migrants in the English Channel and a Frigate Bird in the Eastern Atlantic.

W. KENNETH RICHMOND.

The S.S. MAURETANIA sailed from Southampton soon after noon on Saturday May 23rd and called at Le Havre, leaving late at night. About 10 o'clock the following morning the ship was hove-to in thick fog 5 miles south of Lizard Head. After a short time she proceeded slowly. We were due to call at Cobh that morning, but in fact did not make it until evening. As a result, I cannot be sure of the ship's position when the events described below occurred but we were steaming a course somewhere south of St. George's Channel along a line from Land's End to Cobh. (Noon position on May 24th given as Lat. 49 57' N. Long. 5 36' W.). The weather cleared about noon, with bright sun, but this was followed by more patches of fog, and finally an overcast evening.

During the morning and afternoon I have notes of the following birds coming aboard or flying near: (1) ♂ Pied Flycatcher Muscicapa hypoleuca, (2) 4 Swallows Hirundo rustica apparently flying due west, (3) a Swift Apus apus heading west also, (4) a Turtle Dove Streptopelia turtur which followed the wake for an hour, then settled on the boat-deck, (5) another Turtle Dove which tried several times to alight, (6) 2 Common Whitethroats Sylvia communis, one of which I caught, (7) 2 ♂♂ Red-backed Shrikes Lanius collurio, one of which flew in abeam and which I also caught.

It may be worth recording that at one time in the afternoon there was a swarm of black flies of an unidentified species.

We left Cobh at 0430 hrs. next morning, 25th, and there was nothing but the occasional Gannet and one Great Shearwater to be seen. The forenoon was sunny and calm. Shortly before 1 p.m. I saw the queerest bird ever, sailing aft and gradually overhauling the ship. It forged ahead, following exactly the same course, and finally disappeared in a W.SW. direction, - a Frigate Bird! The noon position that day was Lat. 51 04' N. Long. 13 05' W., so that this bird was seen only 150 miles of so W.SW. of the southern tip of Ireland.

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Mr. Richmond's notes are of great interest and once again emphasise the disastrous effect on migrant birds of a combination of fog and offshore wind. At 0600 hrs. May 24th practically all middle Europe was dominated by a high centred over Germany: clear weather with light winds, eminently suitable for migration, prevailed in France, but along the Channel coast there were light easterly airs and widespread fog. A further point is that migration was so extensive (as is to be expected in such a vast anticyclonic system) that drift of much the same species was taking place across the North Sea, with Pied Flycatchers, Swallows, Turtle Doves and both Red-backed and Woodchat Shrikes reaching Fair Isle between May 22nd-24th (Bull. no.11, para. 134).

The occurrence of the neotropical Frigate Bird Fregata magnificens so near to the south-west coast of Ireland is also very interesting. The first British specimen of this bird - now in the Royal Scottish Museum - was captured at Tiree, in the Inner Hebrides, in early July.

We are grateful to the Cunard Steamship Company Ltd. for kindly supplying information with regard to S.S. MAURETANIA's position at certain times. - Ed.

16. Autumn Migration through Kenya.

D.I.M. WALLACE.

The first Whinchat appeared on September 9th and a Common Wheatear three days later. With the Whinchat came the first flava wagtails, but as they were all very much in moult I made no attempt at sub-specifying them! The 9th also brought the first Great Snipe of the autumn.

The first harrier, a Pallid, was actually seen from the air: I was up on an air recce and going over some plains north of Nakuru when one drifted by below. That was on the 11th. The 13th saw a big influx of waders and the first Bee-eaters appeared. From then until the end of the month fairly heavy passage continued and marsh terns appeared at the lake and Wheatears were everywhere in the camp. The 26th saw a movement of Nightjars, but these may have been local birds. A Lesser Grey Shrike appeared on the 29th and on October 2nd I saw my third Isabelline Shrike some 20 miles to the north of Nakuru. The same day brought the first Pied Wheatears.

On the 3rd Lake Nakuru had a "red-letter day" and in addition to the usual concourse there were three Shoveler, two Turnstones and a Sanderling, and a Purple Heron. Juvenile Ringed Plovers were seen for the first time. The 4th brought a Grey Wagtail, my first record of this species in Africa. It was not until October 8th that a warbler appeared, a Common Whitethroat. On the same day both Wheatears and Bee-eaters increased, and more flava wagtails arrived.

Bad weather set in over the 9th-12th but the birds kept coming and numbers at Lake Naivasha on 12th

were very high. Species of note there were Little Ringed Plover, Black-tailed Godwit, Redstart, Roller, Black-winged Pratincole and a Blue-cheeked Bee-eater (though this has to be under suspicion because an allied form from Madagascar also visits the country). There were present three species of European duck, - Teal (50), Garganey (50) and Shoveler (150). On 13th Mau-Mau became obstreperous and I made no more detailed observations until 20th. That day I saw what I believe was the last big passage of Swifts, though flocks are still going through. Lake Nakuru on 24th produced a dozen Garganey, a Dunlin, a Nightingale, five Golden Orioles (a first record for me) and a number of Willow Warblers. These, apart from the single Whitethroat, are the only warblers seen to date (October 28th).

The next day there were more Willow Warblers and I spent some time looking at them. The contrast between some was very noticeable, and hesitant though I am about subspecific determinations in the field I think at least four may have been acredula. Their upper parts were much browner and the yellow of the underparts hardly noticeable.

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Passage has now largely died away (December 10th), with the exception of northern duck, four of which - Pintail, Garganey, Teal and Shoveler - are going south in varying numbers, the second and last being the most numerous. Waders have fallen off considerably and at the moment there are no Swifts in the area, and warblers too are s carce.

As a highway for migrants Nakuru stands out and I have now recorded over 80 species since starting to watch in early August; and in the case of some birds tens of thousands of individuals must have passed by.

## 17. Rare Vagrants to Scandinavia from East and South-east. - Part 2.

CARL-FREDRIK LUNDEVALL.

The following notes are supplementary to earlier papers which appeared in Bull. nos. 9 & 10 (paras. 102, 113 and 119) and no.12 (para. 155).

Yellow-breasted Bunting. Emberiza aureola. R. Tenovuo has now published a paper in Ornis Fennica 1953: 25-26, about this species in its new area in northern Finland. Eight singing males and one female were observed in two restricted localities at Liminka (ca. Lat. 64 50' N. Long. 25 20' E.) in northern East Bothnia in 1952. In another locality nearby several singing males were seen.

Great Reed Warbler. Acrocephalus arundinaceus. In connection with the influx in 1952, birds were recorded at Kalmar, Gotland (2), and outside Örebro (Var Fagelvärld 1953: 35).

Blyth's Reed Warbler. Acrocephalus dumetorum. One was recorded at Ottenby, south Oeland, on June 5th 1952.

Greenish Warbler. Phylloscopus trochiloides viridanus. The first Danish record was made on the island of Als near the east coast of south Jutland on June 5th 1952 (B. Palm, D.O.F.T. 1953: 99-106). My own records in south Oeland in 1952 were on June 2nd, 9th and 10th.

Hoopoe. Upupa epops. There seems to have been a small influx in south-east Sweden in 1953. Between April 18th and May 3rd at least five were seen at

Ottenby, and one at Segerstad Lighthouse, south Oeland. Several were reported at other places in SE. Sweden.

Red-footed Falcon. Falco vespertinus. The Danish list of records contains not only "at least 40", but in actual fact 54; and it is of interest to note that of 49 the dates of which are known, 24 were seen in May (T. Donark, D.O.F.T. 1953: 55).

Pallid Harrier. Circus macrourus. Four birds were seen and one shot as far north as Nordmaling, in Angermanland (Lat. 63 35' N. Long. 19 30' E.) on May 3rd 1952. It is probably the northernmost record during the "irruption" of that year (M. Häggblöff, Var Fagelvärld, 1953: 80). Most of the Swedish breeding-places of 1952 were revisited between May 5th-11th 1953 to find out if the birds had returned, but they had not.

Gadwall. Anas strepera. Since the influx in 1943 the species seems to have declined and the whole population probably consists now of 10-12 pairs. In 1946 about 25 pairs were observed at Sjö, Lake Mälaren, just before the breeding-season, but on May 14th 1953 only two pairs could be found at the same place.

Southern Cormorant. Phalacrocorax carbo sinensis. The new breeding-site, established a few years ago in south-east Sweden, held 15 nesting pairs in 1952. At the beginning of May 1953 25 or 26 pairs wereincubating and a flock of 34 birds was recorded when about 15 were sitting on nests. The birds are breeding together with Common Herons Ardea cinerea.

Avocet. Recurvirostra avosetta. There were at least 100 birds on Oeland in May 1953.

## 18. Unusual Number of Turtle Doves in Faeroe in Autumn 1951.

KENNETH WILLIAMSON.

Samuel Petersen of Klakksvik, Faeroe Islands, noted three distinct movements of Turtle Doves Streptopelia turtur in autumn 1951, an astonishing record for a species which breeds no nearer to Faeroe than Denmark. Two birds were seen east of Klakksvik on September 13th and there was a later influx of six birds on October 2nd. A dead bird which he received on 6th may have been one of these. There were also three birds on the west side of the town as late as November 8th. Thus, within two months there were as many Turtle Doves in Faeroe as have been recorded in all previous years.

It is interesting to find that these important arrivals link up neatly with the migratory movements observed in that autumn in the British area, supporting the view that such vagrancy is due to down-wind drift. Our Fair Isle records for September 13th 1951 summarise the meteorological situation in the following words.

"An extensive high pressure system covered almost the whole of Europe, except the British area, which lay under the influence of a fairly stationary depression south-west of Ireland. A southerly air-stream prevailed over the North Sea, with a more easterly airt off south-west Norway and Denmark. Winds were light, and it seems probable that such drift as occurred was in a generally north-westerly direction from the high covering Germany and the Low Countries, caused by the winds backing slowly as the occluded front of an Icelandic low bulged eastwards into the North Sea.

There were several southern elements at Fair Isle on this and the following days, supporting the interpretation given above. They included a Black-headed Bunting Emberiza melanocephala, Tawny Pipit Anthus campestris and Turtle Dove (see Bull. no. 4, paras. 35-36).

Little need be said concerning the six Turtle Doves of October 2nd, for the immense immigration of Robins Erithacus rubecula and many other species, with some southern and eastern elements, into Britain in the easterly airstream of a vast Continental high at this period is not likely to be soon forgotten by migration students. The winds at Fair Isle and Faeroe at this time were south-east. The period has been studied and reported on at length by David Jenkins in Brit. Bds. 46: 77-98 & 121-131.

The weather-map for November 8th also shows a drift situation, but in this case the south-easterly air-current between south Scandinavia and Faeroe was cyclonic, on the northern perimeter of a complex low with centres to west and south of the British Isles. There was a big movement of Fieldfares and other thrushes and some owls at Fair Isle on this date, and about this time a Hoopoe Upupa epops appeared at the Isle of May.

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The second Faeroe record of an Ortolan Bunting Emberiza hortulana was made at Nolsoy on May 6th 1952. It may be remembered that on this same day a big invasion of drift-migrants which included 15 Ortolans took place at Fair Isle (see Editorial of Bull. no. 7). Curiously, the Faeroe bird is a ♀, whereas only one of this sex could be found among the birds at Fair Isle. The specimen is in Niels a Botni's collection.

## 19. Rare Birds in Norway in 1953.

HOLGER HOLGERSEN.

We had a Great Reed Warbler Acrocephalus arundinaceus in the vicinity of Stavanger early in the summer, the third record for Norway. The song was preserved for later generations by means of a tape recorder, - a nice way of securing the proof without shooting the bird!

A great event was the capture of a Siberian Thrush Turdus sibiricus, female, in September. It was snared in the southern part of the country and was sent to the Stavanger Museum. It is the second Norwegian and Scandinavian specimen, the first one being snared east of Oslo in 1905.

Another fine species has turned up at Utsira: Lanius elegans pallidirostris. An example was taken in September and the Museum has purchased the skin. Details will appear in a coming publication in the Stavanger Museum's Sterna series.

## 20. A Notice of Interest to Overseas Visitors.

It has been suggested that Bird Observatories and Field Centres which are supervised by a resident ornithologist, and have comfortable accommodation for guests, should make some provision for overseas bird-students who may spend time in Britain either before or after the XIth International Ornithological Congress to be held at Basel, Switzerland, from May 29th to June 5th 1954.

The following centres would welcome overseas visitors who are desirous of seeing something of bird observatory work and methods in this country, and a brief note is given of the general programme at that time, and of special arrangements which could be made if there were a sufficient demand.

LUNDY BIRD OBSERVATORY.

Spring migration (May); breeding sea-bird colonies (June); Atlantic Grey Seals.

Peter Davis, Lundy Bird Observatory, via Devonair, Braunton, North Devon.

DALE FORT FIELD CENTRE and SKOKHOLM BIRD OBSERVATORY.

Course on coastal birds (incl. Chough, Raven and Peregrine) May 5th-12th. Regular access to Skokholm (migration; Manx Shearwater & Storm Petrel colonies). Special: visit to GRASSHOLM (Gannetry, Shags, Seals).

J.H. Barrett, Dale Fort, Haverfordwest, Pembs.

MONKS' HOUSE BIRD OBSERVATORY and FIELD CENTRE.

Coastal, estuarine and moorland birds; spring migration (May). Special: visit to FARNE IS. (big sea-bird colonies incl. Eider & terns. Grey Seals).

Dr. E.A.R. Ennion, Monks' House, nr. Seahouses, Northumberland.

FAIR ISLE BIRD OBSERVATORY.

Spring migration (May); sea-bird colonies (incl. Black Guillemot & Puffin). Arctic Skua, Great Skua & Fulmar breeding-studies. Special: visit to FOULA (immense Great Skua and sea-bird colonies).

K. Williamson, 17 India Street, Edinburgh 3.

Enquiries should be made well ahead of the intended date. Terms vary from 5½ to 7 guineas per week.

# FAIR ISLE BIRD OBSERVATORY

## THE WORK OF THE OBSERVATORY

The purpose of the Bird Observatory is to provide facilities for visitors to carry out scientific research on the island, not only in the sphere of ornithology, but in every aspect of Natural History. Work will be mainly concentrated however on ornithology under the supervision of the Director.

## TERMS

Full board, including service, is *Six Guineas per Head per week.* Reduced terms are available for parties of students from schools and universities.

## APPLICATIONS

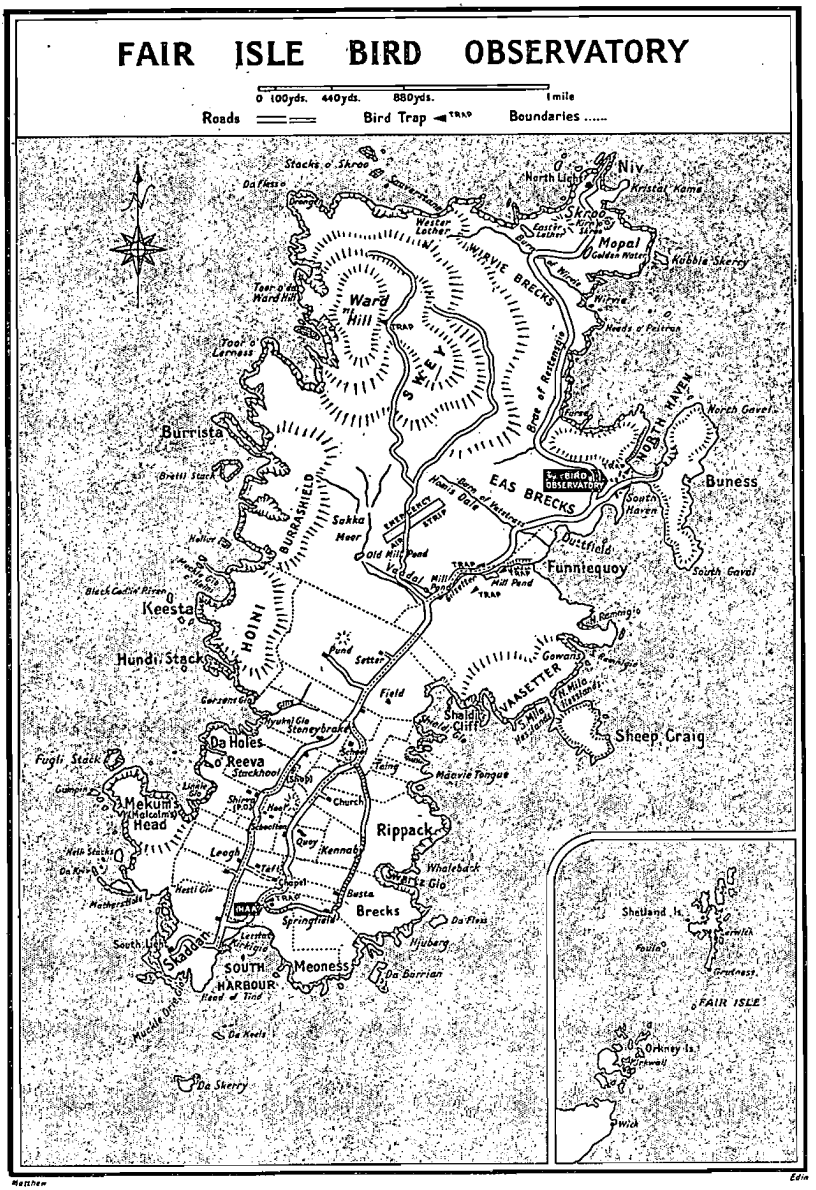
Priority in bookings will be given to "Friends of Fair Isle," and to *bona fide* naturalists prepared to take part in the scientific investigations of the station under the leadership of the Director, and to help with such other duties as may be necessary from time to time in connection with the station or hostel. Anyone else wishing to visit the island will be made welcome, provided room is available. Those who are not keen ornithologists are asked to book for the summer months—June, July, and August—so that more accommodation will be available in the spring and autumn for students of bird migration. Application should be made as follows:—

(1) *If made between* 1*st April and* 31*st October.* To the Director, Fair Isle Bird Observatory, by Lerwick, Shetland. Telegraphic address: "Migrant, Fairisle." Telephone: Fair Isle 8.

(2) *If made between* 1*st November and* 31*st March.* To the Director, Fair Isle Bird Observatory Trust, 17 India Street, Edinburgh. Telephone: Edinburgh CENtral 4532.

## PROSPECTUS

Prospectus giving details of transport to and from Fair Isle, and other information, will be sent on application.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Toor o' Larness
Burrista
Burra Firth
BURRASHIELD
Sakka Moor
Old Hill Pond
Valdi
Hill Pond
TRAP
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HOINI
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Pund Setter
Field
Gowans
Shaldi Cliff
VAASETTER
Sheep Craig
Da Holes
Reeva
Stackhool
Fugli Stack
Mekum
Head
Loch
Church
Rippack
Kennat
Whaleback
Busta
Brecks
Springfield
Da Flaa
Hjuberg
Da Barrian
Meoness
SOUTH HARBOUR
Skaddan
South Light
Da Kneels
Da Sherry
Da Skaw
Stacks o' Skroo
Da Flaa
Conservation
Water Lather
Easter Lather
Burn of Rettenga
North Haven
North Gavel
Buness
BIRD OBSERVATORY
South Haven
Burn of Vesterdale
EAS BRECKS
Dutchfield
Funniequoy
South Gavel
Gamnigio
Mill Pond
Hjukni Gio
Stoneybrake
Mavie Tongue
Taing
Church
Shirva Wick
Quoy
Leagh
Hestli Gio
Whaleback Gio
Lesting Kirkigrid
Head of Tind
Da Kneels
Shetland Is.
Fair Isle
Orkney Is.
Wick
Matthew
Edin