

FAIR ISLE BIRD OBSERVATORY BULLETIN



Edited by

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Director .

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EDITORIAL.

BOOKS on birds appear with such monotonous regularity that it takes a good one indeed to shake the ardent bird-watcher from his come of indifference towards new aids for the identification of feathered friends. Now this indifference has been shattered by the appearance of a small volume, pocket size, which is at once the most exciting and useful contribution to field ornithology since "The Handbook." It is LA Field Guide to the Birds of Britain and Europe" by the American bird-artist Roger Peterson and two Englishhexperts in field identification and distribution, Guy Mountfort and P.A. D. Hollom. Published by Collins at 25/-, it is certain to become a part of the standard equipment of the bird-watcher.

THE plates are the backbone of this work. They are feather-maps, without any irrelevant strokes of the brush to distract attention from the artist's main aim, - to portray those characters by which a bird can be most quickly and easily recognised. It would be a mistake, however, to suppose that they are inartistic, - far from it; but what one admires most is the ingenuity of presentation and commonsense arrangement. A few of the headings will make this clear, "Buzzards and small Eagles overhead," "Ducks in flight," "Gulls - immature," "Heads of Ferns," and so on. In the plate of Tits, 12 species are displayed in an identical, characteristic posture, a fact which greatly facilitates comparison. The text is in keeping, accurate and precise, stressing field-characters, differences from similar birds, sex

and age-group distinctions, and important features of voice and habitat. Summer and winter distribution are indicated in small maps. We have detected very few errors and omissions, and on the whole these are minor ones. That the birds of a Continent should have been described so accurately in just over 300 pages is a great achievement, and the "Field Guide" deserves a high place among the practical bird-books of our time.

ANOTHER Collins bird-identification book we received some time ago is "The Pocket Guide to British Birds." by R.S.R. Fitter and R.A. Richardson, the junior author being responsible for the plates. These, although very different in technique from Peterson's, are excellent. and more emphasis is placed on age and sex differences. Thus, we find the Black Redstart shown in ad. & summer and autumn plumages, Q and imm. &: the Bluethroats (both White-spotted and Red-spotted) in ad. Summer, Q and imm. &. and so on. Monochrome pictures of geese, ducks and waders etc. in flight are equally successful, and there is one showing the age-groups of the Gannet. interesting and valuable feature is that the work is the first of its kind to pay attention to acclimatised foreigners such as the introduced pheasants and geese and ducks of ornamental waters. As a matter of fact, we ourselves first used this book to identify a Khaki Campbell drake which had been brought down with some Mallard flighting into Colsay in Shetland! The text gives the main plumage features, notes on movement, voice, fieldmarks, habitat, range and status. The arrangement of species according to habitat preference and size of the bird is artificial and unnecessarily complicated, but a good index renders the book easy to use. It is the only serious claimant for the right to occupy the other pocket, and provides the ideal balance for the "Field Guide" in more ways than one.

21. The Phenomenal Invasion of Lapland Buntings in September 1953.

KENNETH WILLIAMSON and PETER DAVIS.

A remarkable feature of the past autumn at Fair Isle and Lundy - at extreme ends of the British Isles - was the quite unprecedented invasion of Lapland Buntings Calcarius lapponicus. This species is a usual September migrant at both places, its peak numbers at Fair Isle fluctuating from a dozen in some years to 40 or so in exceptional seasons such as 1949. At Lundy it is much scarcer, but nevertheless regular. Study of the weather at the time of these occurrences in past years leaves no doubt in our own minds that this immigration has its source in the low arctic regions of south and east Greenland, where this is an abundant breeding-bird. This view has been put forward recently by the authors in separate papers in Scot. Nat. 65: 65-94 (Williamson) and British Birds 47; 21-23 (Davis).

The fact that these immigrants could be Greenland birds does not appear to be generally appreciated. Dr. Finn Salomonsen, in his magnificent work "Grønlands Fugle" 3: 523-533, whilst noting that some of the east-coast birds may wander to Iceland and the British Isles as vagrants, considers that the main bulk of east and west Greenland birds winter in North America. In an equally monumental work, "The Birds of the British Isles," 1: 312-321 (1953), David Bannerman seeks to explain these visitations to the north and west islands of Britain as due to breeders from the fjelds of southern Norway. But he admits that "our knowledge of the migrations of the Lapland Bunting is far from complete."

It is because of this confusion of views, and the obvious deduction from a study of migrational drift

that Greenland is an important source of British immigrants, that the authors have decided to undertake a full investigation not only of the 1953 invasion, but also of all previous movements for which sufficiently reliable data can be found.

Lapland Buntings - all single birds - made their first appearance in 1953 at Lundy, Fair Isle, and Inishtrahull off NW. Ireland, on September 3rd. On 5th there were only 3 to be found at Fair Isle but this was a peak day at Lundy with 20 birds, - more than have ever been seen there at one time before. A steady build-up was also taking place at Inishtrahull, 8 birds being present.

These first arrivals were "cyclonic". Weather in Greenland was suitable for departure at the beginning of the month: it was anticyclonic, and there was a light NW. wind in a mid-Atlantic col leading to a region of westerly winds on the perimeter of a low moving to NE., and centred on Faeroe during the night of 2nd-3rd. On 3rd this col moved eastwards behind the depression, now over Norway, so that there was a veering airstream at Fair Isle, at first northerly, later NE. Westerly wind still prevailed farther south, however, and the migrants on the move in this col, or leaving via Iceland on 3rd, would be deflected from north Britain by the NE. winds and concentrated in the south-west of the country.

The movement through Lundy fell away from 5th and only 8 birds were there on 8th. On that day a big arrival took place at Fair Isle, 30 being recorded, — which is just about as many as we expect to see on the peak day in a "good" Lapland Bunting year. Yet by the following morning this number had more than doubled and it was estimated that at least 75 were present. This also was the first peak day at Inishtrahull, P.S. Redman counting 26 birds, or far more than have ever

been recorded in Ireland before: These arrivals, again leaving Greenland in calm anticyclonic weather, ran into a new "polar front" depression south of Iceland and on the north-western boundary of a high then covering the British Isles, so that they drifted towards us in the complementary airstreams of these two pressure-systems. As the depression developed and moved quickly eastwards during 8th the wind became cyclonic in character and veered to W.NW., a direction which it held over the whole ocean between Greenland and northern Britain.

Meanwhile, the high over south-west Britain had "blocked" the route to Lundy, but on 8th it moved south-westwards and from 9th this station also came within the influence of the same cyclonic airstream, - and at once Lapland Buntings began to arrive. This, the second peak at Lundy (25 birds), occurred a day later than at Fair Isle and Inishtrahull. on 10th.

The same high expanded north-eastwards on lithe and for several days afterwards it is probable that Lap Buntings continued to arrive at Fair Isle, though there were so many on the island (including one flock of over 50 birds) that it was impossible to be certain of new arrivals. The counts do suggest an increase on 12th, when our top number of 80 birds was achieved. This situation was identical in broad outline with those which have brought us our best Lapland Bunting flocks in all previous years, - namely, a marked north-eastward extension of the Azores high pressure system, with light to moderate westerlies blowing on its northern periphery.

There was a third peak at Lundy (35 birds) on 15th, a cyclonic arrival, whilst Fair Isle was getting Continental drift from the Low Countries in the S.SE. airflow of the anticyclone, which by that time had passed into Europe. Fair Isle and Inishtrahull both showed

increases next day, when calm "redetermined passage" conflitions obtained to the north-west. Probably a good deal of through movement went on at this period, numbers showing some fluctuation but remaining generally high; and on 18th especially, but other days as well, Lap Buntings were observed "coasting" past Malin Head.

We may add here that there is little doubt but that those Lapland Buntings which overshot northern Britain (and they must have been many) at the time of the second and third peaks, 9th and 12th, would keep on drifting until they reached the Norwegian coast. We believe that the Lapland Bunting concentration which was later noted by Michael Swales and his team at Lista in SW. Norway consisted of Greenland birds, and not of Scandinavian Lapponicus, whose "standard direction" of autumn migration lies to the south-east.

This, of course, is just one of the interesting facets of the Lapland Bunting problem which we want to solve if we can. If these Norwegian migrants are in fact of Greenland origin, where do they go from there? Are they the Lapland Buntings which ultimately winter at Cley and in south-east England? Or are these birds of a different stock, wind-drifted like so many other vagrants from the tundras of northern Europe? These will not be easy questions to solve, - but there is a faint ray of hope in that some taxonomists consider the two populations distinct, separating the Greenland one as Calcarius 1. subcalcaratus on its darker coloration and bulkier bill.

Meanwhile, an important part of the investigation is to collect as many records of Lapland Buntings for the autumn and winter of 1953-4 as we can. There is no doubt that the species, - as indeed would be expected following such a phenomenal invasion, - is commoner in

Scotland than for very many years. Small flocks have been reported by the Edinburgh district bird-watchers at Aberlady Bay Nature Reserve, Tyninghame, and Gladhouse Reservoir, and a few individuals have been seen elsewhere. The authors of this note would be grateful for any data concerning the appearance of this species during the autumn and winter, and information sent to Peter Davis, Lundy Bird Observatory, via Devonair Ltd., Braunton, N. Devon, will be gratefully acknowledge in any publication which may follow.

22. Recoveries of Birds Ringed at Fair Isle.

ARCTIC SKUA. Stercorarius parasiticus. The Swey North chick of 1952, ringed on July 10th and on the wing on 31st, was shot at Benguela, PORTUGESE WEST AFRICA, on October 25th 1953. This suggests that our Fair Isle skuas may well travel between six and seven thousand miles, twice yearly, to and from their winter area. The Swey North chick was "adopted" by Mr. R. Spencer, who is, incidentally, the new Secretary and Organiser of the B.T.O. Ringing Scheme in succession to Miss E.P. Leach, who retired at the end of 1953 after more than 30 years invaluable service to British bird-migration studies.

TYSTIE. Cepphus grylle atlanticus. The only young Black Guillemot we ringed at the small South Haven colony in 1953 was shot among some ducks on the Black-water Estuary, ESSEX, on November 28th. This is a quite remarkable recovery for a species with such sedentary habits, and R. Spencer informs us that it is only the 3rd occurrence of a Black Guillemot in the county.

ICELAND MERLIN. Falco columbarius subaesalon. A 1st-winter &, one of 3 Merlins all self-caught in the Double Dyke Trap on August 18th 1953, was killed at Hammut, Liege, BELGIUM, on October 18th. So far as is known from recoveries of Iceland ringed nestlings the Low Countries are beyond the normal wintering-range of this sub-species.

SPARROW HAWK. Accipiter nisus. A & caught in the Double Dyke Trap on September 18th 1953 was shot at Fyvie, ABERDEENSHIRE, in early December.

BLACKBIRD. Turdus merula. One of 5 nestlings at Dael, Bressay, SHETLAND, ringed for us on June 23rd by Alex. Tulloch, was recovered at Tingwell, SHETLAND Mainland, on November 11th 1953.

ICELAND REDWING. Turdus musicus coburni. One of 5 birds of this race which arrived during anticyclonic weather on October 14th 1953 was recovered near Antwerp, BELGIUM, on November 10th 1953. The trapped birds were compared with skins of both forms in the lab., and the wing-length of the present bird was 122 mm. As in the case of the Merlin, this bird appears to have passed on beyond the normal range of wintering of the Iceland race. Three recoveries of Iceland-ringed nestlings have been made in western Britain, - Donegal on April 9th 1932, Harris in December 1936, and near Stornoway in Lewis on October 31st 1953.

STARLING. Sturnus vulgaris. A wintering Q ringed by James A. Stout on January 6th 1953 was found dead at Trondhjem, NORWAY (500 miles NE.), on April 8th 1953. The only other foreign recovery we have of a Starling ringed at Fair Isle is from the Tromsö district of NORWAY (920 miles NE.), - marked on October 25th 1948 and recovered on March 20th 1950.

23. A Snow Goose in Caithness.

JAMES GUNN.

The Snow Goose Anser caerulescens mentioned on p. 12 of the last issue was first seen in Reay at Isauld Farm about 2 miles east of the village, quite near Dounreay Aerodrome. It arrived on September 27th, after a period of strong westerly winds. A Barnacle Goose Branta leucopsis joined it about November 15th and the pair spent most of their time quite close to the main road.

Before the Barnacle came, the Snow Goose went to an old water-filled, reed-covered quarry at night; afterwards, both birds spent the night on a small, open pond in the middle of a grass field. Previous to the arrival of the Barnacle, the Snow Goose would always graze close to sheep or horses, and schemes for trapping it were in vain. When it flew from one field to the next it invariably landed where the sheep were thickest, or settled close to a horse. After being joined by the Barnacle it did not seem to mind grazing in a field where there were no animals.

The Snow Goose appeared to feed only on grass, although there were corn and barley fields nearby. On November 22nd I was trying to locate the geese at Isauld Farm when both flew in from the direction of the sea. They were last seen in Reay about December 1st, according to one of the farm hands.

The Snow Goose was a lovely bird, with faint brownish marks (doubtless rust-staining) on the sides of the head. Both birds were fairly tame and by careful stalking, behind a stone dyke, we were able to approach to within 30 feet of them. The Snow Goose did not seem to be appreciably bigger than the Barnacle, although it was longer in the leg.

24. A Greater Snow Goose and a Harlequin Drake in South-east Scotland.

As reported by William Brotherston in Edinburgh Bird Bull. 4: 33-4, the partly decomposed remains of a Snow Goose were found on an island in Gladhouse Reservoir (Midlothian) early in the New Year. The head and wings were preserved at the Royal Scottish Museum after the bird had been examined in the flesh by D.R. Wotherspoon, D.G. Andrew and K. Williamson.

It was a female by dissection, and although the wing-length of 430 mm. falls within the range of overlap of the Greater and Lesser Snow Geese, the bill-length of 65 mm. exceeds by 4 mm. the maximum given by F.H. Kennard for a long series of the smaller race (vide "Handbook of British Birds," 3: 203-4). The bird must therefore be ascribed to the more northerly subspecies Anser caerulescens atlanticus, which breeds in high arctic Greenland and arctic islands to the west. It is the second time a specimen of this race has been obtained in Scotland.

Lt.-Col. Henry Douglas Home reported in "The Scotsman" of February 6th that a young drake Harlequin Histrionicus histrionicus was shot on the River Teviot in Roxburghshire on January 16th, the day after a severe westerly gale. This bird also was sent to the Royal Scottish Museum and a full description of it will be given in a future issue of The Scottish Naturalist.

It is the first specimen of this handsome nearctic duck to have been collected in Scotland, but there are two sight-records of adult drakes, - February 13th 1931 in the Sound of Harris, and March 5th 1953 off Whalsay, in Shetland. For several days prior to the first occurrence, and to January 16th in the present year, strong to gale westerly winds embraced the full width of the Atlantic Ocean, so that almost certainly the birds had drifted downwind from the American side.

25. <u>Migrational Drift in the Thirteenth</u> Century.

The cyclonic drift of so many American species to Britain in 1953-4, and the greater frequency of such records in general in recent years, could be accounted for by an increase in the activity of the depressions which sweep north-eastwards along the Atlantic stormbelt. In this note we offer what we think is important ornithological confirmation of the climatic evidence that this storm-track is not fixed, but is subject to fluctuations in its intensity and direction.

One of us is engaged upon a translation of "De Arte Venandi cum Avibus" ("The Art of Falconry") of the Holy Roman Emperor Frederick II, and among the many interesting observations of this remarkable man it is recorded that in his day the Barnacle Goose Branta leucopsis was a common winter visitor to Italy, where it is now exceedingly scarce.

According to C.E.P. Brooks, "Climate through the Ages" (1927), the first half of the 13th Century was a period of great storminess in the North Sea and of much flooding in Belgium and Holland. This and other evidence he gives suggests that the Atlantic depressions then followed a more southerly course, entering the Channel and moving up the North Sea instead of sweeping north-eastwards through sea-areas Rockall, Hebrides and west Fair Isle towards the Icelandic minimum, as happens today. Such a displacement of the storm-track would mean that late Greenland migrants, of which the Barnacle is one, would make a longer and more circuitous journey in the north-westerly (backing westerly) airstream on the southern periphery of the depressions, and so enter and winter in the Meditteranean region instead of western Scotland and Ireland, as they do today.

K. WILLIAMSON and M.F.M. MEIKLEJOHN

26. Bird Observatories' Annual Conference.

The first annual conference of the Bird Observatories' Committee of the British Trust for Ornithology was
held at Oxford from January 2nd-4th 1954. Representatives
from all the observatories except Cley (Norfolk) attended,
and a number of other interested migration workers were
present by invitation. These included Dr. K.B. Rooke, who
has undertaken field-work at Portland Bill (Dorset), M.K.
Swales, leader of the Cambridge University team at Lista
(south Norway) in 1953; P.S. Redman, who carried out observations at Inishtrahull (NW. Ireland) from September
19th to November 10th; and H.E. Axell, who took part in a
watch organised by J.H.R. Boswall on the Smith's Knoll
and Dudgeon Lightships off the East Anglian coast.

Professor P.A. Sheppard, of Imperial College, London, was guest speaker, his subject being "Migration and Meteorology." He discussed the particular meteorological phenomena which, it seemed to him, might be most important in stimulating or contributing towards various aspects of migratory behaviour, - such as the stimulus to begin (and continue) migration, orientation and navigation, choice of flight level, preference for day or night flight, and determination of end-point of the journey. In his view the meteorological factors most likely to influence the bird would be wind-speed and direction, cloud amount and opacity, air temperature (actual and accumulated), length and quality of daylight, and perhaps also snow-cover.

Discussions were held with the Bird Ringing Committee, represented by Miss E.P. Leach and R. Spencer, the retiring Organiser and her successor; and with one of the Editors of "British Birds" on future Bird Observatories' publications in that journal. Colour-films of the Jersey and Dungeness Bird Observatories were shown.

ISLE OF MAY BIRD OBSERVATORY. Firth of Forth.

Manning proved more difficult than in previous years and no observers were on the island between Oct. 3rd-12th, and the station had to close on October 25th. Early and late October are important periods and as a result of this brief and interrupted autumn season fewer birds were ringed, - only 1,589 against 1,926 last year.

Among interesting spring movements was one early in April which brought two or three Black Redstarts to the isle. The species was present down to 22nd, and a recovery of one trapped is mentioned on page 92. In mid-May there was a Wryneck from 13th-15th, a Goldfinch on 15th (the third record only, the others being May 15th 1937 and November 27th 1923), a Grasshopper Warbler on 15th-16th, an ad. White-spotted Bluethroat Luscinia svecica cyanecula on 17th, an Icterine Warbler on 19th and a Grey-headed Wagtail Motacilla flava thunbergi on 23rd. A female Bluethroat appeared on May 20th, and in autumn there were 2 birds on September 18th, one on 20th, and again 2 on 22nd.

Crossbills were present on the island from July 1st-12th, with a maximum of 24 on 3rd. There was one bird only on August 12th-13th, when a considerable movement reached the northern isles (see p. 19), and a new influx from September 18th-20th. One of 12 on 18th was a large-billed bird of the form at present afforded specific rank as Loxia pytyopsittacus: this and 8 other birds, all L. curvirostra, were trapped. Other midsummer migrants were a Reed Warbler on June 13th-14th and a Turtle Dove on July 28th.

Interesting autumn birds were Little Stints on September 9th, 10th and 14th, a Common Buzzard on 29th, Barred Warbler on October 13th and Great Spotted Woodpecker on 20th.

MONKS' HOUSE BIRD OBSERVATORY. Northumberland.

Drives of the Heligoland Trap yielding 77 birds on one occasion and 64 on another were described by Dr. E.A.R. Ennion. The birds were Greenfinches, over 1000 being ringed in the season, mostly in the winter months. Recoveries so far to hand show a random distribution within 100 miles of the observatory. This great concentration of birds was attracted by the seeds of Sea Rocket Cakile maritima on the upper reaches of the beach.

Passage of Scandinavian Rock Pipits Anthus spinoletta littoralis was noted in early spring and several were trapped. An exciting visitor for some days from April 14th was a White-spotted Bluethroat Luscinia s. cyanecula. A Northern Willow-warbler Phylloscopus t. acredula was trapped and identified by comparison with a series of skins on May 15th. Crossbills were seen in the late summer on the mainland and on the Farne Is.

A six-weeks' passage of Pied Wagtails Motacilla a. yarrellii in August-September resulted in over 50 being caught in Swedish type wader traps set on the seaweed. A Blue-headed Wagtail M. f. flava was also captured. For the second autumn in succession a Lesser Grey Shrike appeared, on September 8th; and a Scops Owl came to Holy Island on October 4th. A pair of Siskins was seen on September 18th, coinciding with a drift of this species to Fair Isle. A Lapland Bunting was recorded on November 8th.

Principal Meadow Pipit passage took place on August 27th-28th and Rock Pipit movement occurred on October 9th-10th. The first considerable lark-thrush immigration was on October 2nd-3rd and heavy thrush movement (particularly of Blackbirds) followed on 19th, 31st, November 11th and 15th-16th.

SPURN POINT BIRD OBSERVATORY. East Yorkshire.

Little migration was observed despite easterly winds in mid-September and again in October. Some good catches of Meadow Pipits were made with the wind in a westerly quarter.

A few Crossbills were seen on June 21st and a Cuckoo was trapped for the third season in succession. A number of re-trappings of Whitethroats ringed in previous years were also obtained. The ringing total was 1,733 birds of 39 species. The Little Terns' had an unsuccessful breeding-season, only one juvenile being seen although 100 eggs were laid.

A colour-transparency was shown of the Yellowbilled Cuckes which haunted a garden near Scarborough for several days in November (see p. 8). It spent much of its time hunting out and devouring pupae of the Large White Butterfly Pieris brassicae.

GIBRALTAR POINT BIRD OBSERVATORY, Lincolnshire,

The chief news from this station is of the successful aversion of a threat to open a caravan site on land next the Bird Observatory and Nature Reserve, the County Council's case for compulsory purchase of the land to prevent this exploitation being upheld. On the reserve Arctic Tern and Oyster-catcher nested and the Little Tern colony hatched 14 nests.

Crossbills were seen on July 6th, 27th (ca. 5), Aug. 19th-20th and Sept. 13th. There was a Waxwing on October 27th and a late Sand Martin was observed on December 20th.

DUNGENESS BIRD OBSERVATORY. Kent.

The ringing total of 2,261 birds (69 species and subspecies) included 534 Common Whitethroats, bringing the Observatory's total of this species to 730 in 15 month's work. Other figures were 462 Willow-warblers, 119 Sedge Warblers and 118 Blackbirds. In autumn 18 Black Redstarts were caught and ringed, and a Grey Plover ringed at the Lighthouse was recovered at CHERBOURG, France, 10 days later. A young Woodchat Shrike and 7 Nightingales were also in the trapping list.

CLEY BIRD OBSERVATORY. Norfolk.

In the report sent by Cley it was stated that 1,017 birds of 76 species were ringed, including 3 Wood Sandpipers, a Purple Sandpiper, a Black-bellied Dipper, a Great Grey Shrike and a Little Grebe. A Turtle Dove marked on October 1st was shot in France 3 days later.

JERSEY BIRD OBSERVATORY. Channel Islands.

During the season 1,500 birds of 59 species were ringed, including 300 Reed Warblers (mostly local birds) and 207 Sedge Warblers (all on spring passage). A visit was made to Les Etacs for the purpose of marking young Gannets. Other interesting species handled were three Bluethroats, two Aquatic Warblers and a Woodchat Shrike. There was an increase in breeding Stonechats in Jersey in 1953 but no Yellow Wagtails nested.

GREAT SALTEE BIRD OBSERVATORY. SE. Ireland.

Major R.F. Ruttledge gave a short report, but a full account of the season can be found in Bull. no. 11 para 129 (spring) and in the present number (autumn).

LUNDY BIRD OBSERVATORY. North Devon.

This observatory had a long field season, from February 13th to December 14th. A Common Whitethroat rush on May 5th-6th yielded over 140 birds, one of which had been ringed by the Jersey Society in the previous autumn. An adult & Woodchat appeared on May 14th and an adult & Golden Oriole on 23rd was joined next day by a Q which stayed until June 5th. There was a & Red-headed Bunting on June 4th and another Woodchat Shrike appeared on 8th. The first Quail recorded for the island was seen on May 27th.

Crossbills were present between June 28th-30th and there were 5 on 14th-15th, 4 on August 3rd, 5 on 27th and 11 on 28th. There were a few during September and 3 on October 8th. As at Fair Isle, there was a remarkable invasion of Lapland Buntings during September, described in fuller detail in para. 21.

There was a big influx of Pied Flycatchers on October 6th and 3 Ortolan Buntings stayed from then until 9th. Woodchat and Red-backed Shrikes appeared about this time. There were a dozen Black Redstarts on October 24th; and on November 17th, a day of Chaffinch passage, a single Hawfinch was seen flying north-west. A big Blackbird rush took place on this day, but Fieldfares were fewer in 1953 than in former years.

The ringing total reached 1700 birds of 53 species. Two Lundy Razorbills and a Guillemot were recovered in the Mediterranean at Genoa and Marseilles respectively. A migrant Woodcock ringed in October 1951 was recorded at Bergen, NORWAY, in October 1953, and a Spotted Flycatcher was reported on migration through Morocco.

SKOKHOLM BIRD OBSERVATORY. Pembrokeshire.

The total of 4,200 birds ringed (48 species) included many of the isle's Manx Shearwaters and Storm Petrels, Rustic and Red-headed Buntings, and the first Subalpine Warbler for Wales. A Wheatear ringed as a nestling in 1946 was retrapped in 1953 as a breeding adult.

SEVERN WILDFOWL TRUST. Gloucestershire.

In lighter vein was Hugh Boyd's account of the 1953 activities of the Severn Wildfowl Trust. Their visit to Iceland in the summer "would have been irrelevant to the present discussion had we not seen a single Crossbill," and a visit to Tiree (Inner Hebrides) in the late autumn was justified by the recording of a Lapland Bunting! The work of netting and banding geese was continued with marked success, and during the summer a phenomenal catch of Pink-footed Geese was made in Iceland. Many of these birds have since been recovered in the British Isles, and one as far south as the Canary Islands.

BARDSEY BIRD OBSERVATORY. North Wales.

One trap was in operation at this new Bird Observatory in autumn, but caught nothing half so exciting as the Rose-coloured Starling which was seen perching on the framework when the trap was still only half-built; Casualties at the Lighthouse were heavy on occasion in spring, and on one night alone no fewer than 25 Water Rails were killed. Over 100 Manx Shearwaters were dug out of their burrows for ringing, and one proved to have been marked on Skokholm 3 years ago. Spoonbill and Dotterel were recorded, and young of Corncrake and Curlew were ringed. Other island species are Raven, Chough, Little Owl and Storm Petrel.

FAIR ISLE BIRD OBSERVATORY. Shetland.

1953 was undoubtedly the best year, both for the quality and general interest of the various movements, since the observatory opened in 1948. The invasions of Crossbills (June-August) and Lapland Buntings (September) which have been described in the Bulletins were followed by unusual numbers of Kestrels and Siskins in mid-Sept., and Bramblings and Fieldfares in October.

The ringing total, with 2,550 birds of 80 species, was better than in any previous year, and at the top of the list were Wheatear 483, Blackbird 424, Starling 249, Rock Pipit 198, Meadow Pipit 156, Puffin 141, Twite 138, Crossbill 110, Redwing 110 and Arctic Skua 53. Among the rare species trapped were the American Gray-cheeked Thrush (1st British) and Paddyfield Warbler (2nd British); a Swift, Pied Woodpeckers (2), Bluethroats (4), Barred Warblers (2), March Warbler, Red-breasted Flycatchers (2), Lapland Buntings (4), Little Bunting and Little Auk.

The chief research, as in former years, was concerned with the meteorological aspects of migration, the Lapland Bunting, Crossbill and Iceland Merlin being selected for special study in this respect. More data on bird-weights were amassed and are being filed and studied by Mr. Alec Butterfield. An improved technique for collecting ectoparasites was evolved in discussion with Dr. W.A. Timperley and was tried out in the late autumn. An interesting feature of the summer work in this department was the marking, release and recapture of flat-flies Ornithomyia fringillina, described in Bull. no. 12, para. 156.

No new traps were constructed, but more use was made in 1953 of temporary traps at various sites, for Wheatears, pipits and Crossbills. The Gully had about 650 captures, the Double Dyke 415, the Observatory 280, and the Vaadal and Single Dyke traps just over 100 each.

INISHTRAHULL and MALIN HEAD. NW. Ireland.

P.S. Redman gave an account of an autumn visit to Inishtrahull, off Donegal, 20 miles NW. of Loch Foyle and 6 miles NE. of Malin Head, where a coast-watch was also kept. The party, the first to visit the island since Professor C.J. Patten made observations there between the two wars, included Ian C.T. Nisbet and Tony Gibbs. A small Heligoland was erected and some birds were trapped.

Sooty and Great Shearwaters were observed passing offshore, the former in some numbers. Barnacle Geese arrived in mid-October and 19 Brent Geese were seen on September 4th. There was a Buzzard on October 4th and 4 Great Skuas, seldom recorded in Irish waters, were seen. Redwing movements between October 13th-15th and on November 11th were thought to include birds of the Iceland race Turdus m. coburni, and in fact these corresponded with coburni movements at Fair Isle.

A feature of the September migration, as at Fair Isle in the north and Lundy in the south, was the big influx of Lapland Buntings. First seen on September 3rd and 4th, they peaked at Inishtrahull with 26 birds on 9th and 20 on 15th, but there was also considerable coasting going on past Malin Head on many days. A Redheaded Bunting was seen on September 10th and an Ortolan on 13th-14th. Snow Buntings arrived on 23rd and the maximum number was seen on 26th. Over 300 Fieldfares came in from north or NE. on November 3rd.

SMITH'S KNOLL and other Lightships.

"Operation Sea-Migrant", a resourceful (not to say intrepid!) expedition organised by J.H.R. Boswall, was described by H.E. Axell, who participated in the watch at the Smith's Knoll Lightship. We hope to give a further account in a future Bulletin.

28. Migrants at Sea in October.

R.E. SHARLAND.

In October 1953 I travelled out to Nigeria on the VOLTA PALM and kept a daily log of all birds seen. October is one of the best months for observing birds at sea and easterly winds at the start of the voyage helped to bring several interesting migrants on board. I found that birds on a ship are usually tame and are fairly approachable.

A Meadow Pipit and a Pied Wagtail Motacilla alba yarrellii came on board soon after we left Liverpool, and both stayed for 5 days. The Meadow Pipit found very few insects to eat and got weaker and weaker. I caught it on the fifth day and found it to be very thin and covered in oil from the ship's winches, in which it used to roost. I cleaned it, but it died that night. The wagtail, however, seemed to flourish: it soon found the galley, and used to drop down to the kitchen table through the skylight on the boat-deck.

Swallows perched in regular places on the rails and were not worried by people a few yards away. One warbler perched for a moment on the head of a lady passenger sitting in a deck chair. Skylarks and Turtle Doves sat on the taffrails or bulwarks. Wheatears either perched high in the rigging or walked on the deck.

After Freetown, where we picked up Krooboys to work the ship's cargo, no further migrants came aboard; but I saw a Blue-headed Wagtail Budytes flavus, and 3 Whimbrel, and heard waders occasionally at night.

Amongst the Herring Gulls that came on board in the Mersey was one bearing a ring, but the number could not be deciphered. Other birds which joined the ship were flycatchers, a Pied on 10th and Spotted on 11th; 4 Chiffchaffs and 2 Willow-warblers also on 10th, and a single Willow-warbler was with us from 15th to 17th. Eleven Skylarks and a Garden Warbler appeared on 10th and 2 Turtle Doves next day. There was a Kestrel on 9th and 2 on 11th, and the Lesser Kestrel was seen singly on 11th, 12th and 15th. Three Swallows were seen on October 8th and 4 came next day, there was one on 12th and 2 each day 14th to 17th. Greenland Wheatear Ochanthe oc. leucorrhoa and Redstart came aboard on 18th, with 3 common Wheatears, and the last also appeared singly on 21st (off Dakar) and 22nd (off Bathurst).

Petrels and skuas followed the ship continuously outside a range of 10 miles from land. Immature skuas are sometimes very similar, so in cases of doubt I apprortioned them in proportion to the adults present. The Pomatorhine Skua is dimorphic and the percentage of dark birds seen was 6, which is about the same as in British waters. The Great Skua is not recorded in Bannerman's "Birds of Tropical West Africa", but I saw them at sea until Abidjan (14 and 23 on 15th and 16th respectively, 6 on 18th, 3 on 14th and 17th and singly from 21st) and two were seen when we were at anchor off Accra. Pomatorhine Skuas were also most plentiful on 15th-16th with over 20 each day, and there were 30 on 25th. The only Arctic Skuas were two seen on 26th.

Shearwaters do not come near ships as a rule, so the species are not easily determined. The Manx was seen only in home waters; there were 2 Great on 10th and 7 on 13th, and a P. kuhlii on 12th. Five Little Shearwaters seen on 16th may have been the Madeiran or Cape Verde species. Several large parties of terms, mostly Black Terms, were feeding on shoals of fish off Mauretenia. Three Black Terms came on board on 16th, one of them settling on the deck barely 5 feet from me.

29. Late Autumn Days at Fair Isle - Extracts from "The Log."

KENNETH WILLIAMSON.

October 16th. The wind was slightly east of south last night, and was still in that airt when I made my early cup of tea by torch-light at 0615 hrs. When I set out for the traps it was still too dark to identify birds other than by their call-notes: the sky was alive, and it was obvious that a great deal was coming in.

The early drives gave a poor yield, however, - a Woodcock and Redwing at the Gully in the gloaming, two Blackbirds and a Robin at Vaadal, two Song-thrushes on returning to the Gully. Masses of birds were on the move all the time in the half-light, going overhead in the direction of the village, or rising from the moorland round about. They were mainly Fieldfares and Redwings, but several flocks of Bramblings went over, including one of 20 birds, and 14 Golden Plovers called forlornly as they flew above Vaasetter.

About 8 o'clock Blackbirds began to come up into the Gully, to be followed at 8.30 by Goldcrests. Robins were also appearing there and along the walls at this time. Everything was very wild - evidence of a good journey unhampered by rain - and even the Blackbirds were surprisingly difficult to trap. I walked continuously between Vaadal and the Gully and got birds at every visit, but nothing would go near the Double Dyke trap. Periodically I returned north and handed the spoils to Esther, who weighed and measured and ringed with quiet efficiency in the lab. When breakfast called at 9.30 the total was only 16, but there was the promise of more trapping to come.

The Goldcrests had gone up through the Gully by 11 o'clock and even the Blackbirds seemed to have stopped

moving, though there were still very many on the cliffs. Vast numbers of Redwings and Fieldfares rose "seeping" and chuckling from the moors from time to time, but they always stayed on the open ground. A hawk, being mobbed by Hoodies over Tarryfield, was found again at the Pund and proved to be a "ringtail" harrier. The most notable feature of the bird-life of the village, apart from the mixed flocks of thrushes everywhere, was the abundance of Bramblings. There were big flocks in the Barkland stubble, at Kennaby and Busta, and east of the Haa, and there must be at least 500+ on the isle.

October 17th. Situation much as yesterday - very little appears to have left. Redwing and Fieldfare were less common on the hill but thick in the village area, - especially on Meoness, Malcolm's Head and sheep-cropped grassy ground in general.

The "small dark Song-thrushes" which have been a headache to British ornithology since T.A. Coward wrote about them in "Birds of the British Isles and Their Eggs" (and which P.A. Clancey subsequently identified with his SW. Scottish race catherinae) were more abundant, and were with Redwings in every turnip rigg. It is quite obvious that they come from the Continent, - but which part? There were flocks of Snow Buntings, 60+ in each, at Upper Stoneybrake and Busta, and some 250 Bramblings between Busta and Kennaby and more at Barkland. This is a bigger Brambling invasion than we have seen before. The evening wind was light to moderate SW., sky with little cloud and an anticyclonic appearance: a great deal of dusk activity of Turdidae took place under these clear conditions, many going out.

October 19th. James Stout of Midway and George Stout of Field both saw and reported independently to me a bird which can only have been a Black Wheatear Oenanthe leucura, probably a Q. George told me about it when I met

him on my early trapping round; James saw it when returning from an abortive Woodcock hunt on the hill, and he 'phoned north about it when he reached the Post Office. When I met him later at Vaadal he told me the bird's general coloration was a dark earth-brown (pointing to an exposed peat-bank), except that the belly and flanks appeared quite black. The white tail and its coverts were very striking in contrast. He left his gun by the road-side and went to the Setter croft to borrow their telescope, but unfortunately the bird disappeared across Field on his return.

George saw only the upper side of the bird as it flitted along in the lee of the Setter dyke; he also spoke of the marked contrast between the white tail and sooty back and wings. I looked all over the place for the bird in the late morning and afternoon and was left with the impression (not for the first time!) that this is a very big island! Everyone knew about the wheatear by mid-morning and it was the day's topic of conversation. But nobody saw it again.

October 21st. Drizzle this-morning, clearing soon after dawn and "The Good Shepherd's" departure. Jerry of Leogh and I were alone in the winch-house and the whole operation of lowering the boat and taking up the cradle when she was clear occupied 25 minutes. By that time the boat was a quarter-of-an-hour out from the isle. What a contrast to last year's launchings, when half of the crew had to stay ashore and haul with the rest before going aboard. The new power-winch takes a good hour off the round trip, which means that the number of trips in the year when the crew must approach Fair Isle in darkness (a job they don't relish in dirty weather) is much reduced.

The ground everywhere in the south is studded with Redwings, Blackbirds and Fieldfares. It was noticeable at Meoness that whereas the Fieldfares (and 44 Lapwings) were right on top of the headland, the Redwings and Blackbirds

were on the lower and somewhat wetter ground at Gaila, - the Redwings tending to keep in the open, and the Blackbirds near to the dykes.

October 24th. The day's most interesting bird was a Wren caught at the Gully in mid-morning and compared in the lab. with skins of typical birds and Atlantic insular races. The nearest match was a skin from Pentland Skerries Lighthouse, October 22nd 1915, and almost certainly a migrant from the Continent. Today's bird was identical with this and English birds on the upper parts, but more heavily barred on under tail-coverts and flanks. Perhaps its name is Troglodytes t. bergensis, but when I examined skins of Norwegian Wrens from Utsira, sent by Dr. Holger Holgersen two years ago, I could find no constant difference between them and birds of the typical race, although a few were more heavily barred beneath.

Field George presented me with another field-mouse - one of the biggest I have seen this autumn - and I skinned it for our growing collection. The interesting thing about these field-mice from Field is that their coat-colour is distinctly darker than that of the mice we catch in the hostel kitchen, these being altogether more reddish, especially on the flanks. The difference has nothing to do with age, although it seems that the adult "Field" mice retain a more juvenile type of pelage. Yet the two communities live only a mile or so apart and it is difficult to see what there is to prevent active gene-flow between them, other than their sedentariness. If this difference is constant (and it certainly seems to be) then the fact is probably of some importance to the taxonomy of Apodemus with its conglomeration of named island forms.

October. 26th. Severe southerly gale. As I set out for the traps at 8.30 a skein of Grey Lags flew in, in echelon, from the east, and descended on the hill.

October 27th. Severe gale continuing. It was at its worst during the hours of darkness, and with so much noise of breakers on the rocks, shingle grating on the beach, wind howling round the corners, pebbles flung at the woodwork, and windows and doors rattling as though the whole place would collapse about us, we got little sleep. But so long as the noises are recognisable ones we don't mind, - it is when we hear quite unfamiliar bangs and bumps that we begin to feel apprehensive!

Inside half-an-hour, about noon, the rain ceased and the wind died away to a whisper. It was a remarkable change, but the calm weather did not last. The wind began to freahen at dusk and was blowing a near-gale at night. Just after the cessation of the gale and rain clouds of seaweed-flies came up from the South Haven wrack, all of which must have been immersed during the morning flood. We saw scores, and very soon hundreds, swarming on the window-panes, and they struck one's face with the intensity of hailstones as one walked along the causeway between the two Havens. The short-lived surmy period following the storm must have caused this mass-emergence.

October 30th. Gale from south, blowing all day. The forecast is that it will continue, backing SE., but it seems unlikely that this will bring us anything since the same Oracle says south to SW. winds in sea areas Dogger and Heligoland, which is where the down-wind drift of the Fair Isle passage-migrants begins.

November 2nd. Severe gale once again, and such rain! I was caught in it when returning from the traps before breakfast and it was quite impossible to continue along the road home. The rain was a thin, shimmering, semi-opaque curtain billowing in the wind. I sheltered in the lee of the dyke, but even so was soon wet to the skin as the rain sprayed through the holes in the dry-

stone wall with shower-bath intensity. The swirling, glistening atmosphere away over the moors of Homisdale and Swey produced some wonderful effects.

November 3rd. The long-awaited fall of Woodcock arrived with the night's SE. gale and the dim figures of able-bodied islanders were stravaging the hilltops in the grey dawn. James Wilson, whose breakfast-time score was 21, saw a Ring Ousel and some Mealy Redpolls up on Burrashield. Blackbirds thronged the isle, and I was busy going between the traps with a "daisy-chain" of lA rings round my neck. There was no time to weigh and measure: Blackbirds are most important to us for their recoveries abroad, so the more with rings the merrier. 48 were caught during the day, also 2 Robins, a very thin Continental Starling, and an adult & Sparrow Hawk. The day became fine and pleasant, with a moderate SE. wind which strengthened after dark.

November 4th. South-east gale at dawn, but new arrivals were few: there seemed to be more Fieldfares about, however, and much the same quantity of Redwings and Blackbirds as yesterday. The trapping total of 59 required the output of a good deal more energy, however. In the early part of the morning, with the gale blowing from SE., the trapping area was comparatively sheltered by the height of Vaasetter. Spume was coming in over the Duttfield cliffs as thick as snow. In late morning the wind veered to SW. and increased in strength. By midafternoon it was difficult to move without staggering, and actually dangerous to drive the Gully in a hurry along the sheep-track on the northern side. About this time the western half of the Double Dyke was put out of action, the wind (now due west) blowing so violently that the main door was forced shut, and nothing would hold it open without putting too great a strain on the framework. After dusk part of the drystone wall inside the trap was demolished by the sheer force of the wind.

Also in mid-afternoon the box of the temporary roadside trap was bowled over, and a promising drive of the Gully came to naught because the trapper's door had been blown open and a posse of Blackbirds went through with chuckling cries! It was as wild a day as I have seen at Fair Isle, yet great fun to be out in it. The wind fell after dark and I went out with torch and hand-net and added 2 roosting Blackbirds and 3 Redwings to the day's bag.

November 5th. The Eight O'Clock Oracle should have said: "Before the Gales Forecast, here is a Fine Weather Warning ..." There was much less wind, moderate westerly, and the change in the seascape had to be seen to be believed. It is a commentary on the fickleness of this northern clime that the crew of "The Good Shepherd" appeared soon after 8 and took the golden opportunity of fitting in the weekly run.

When the lorry went north to the slipway I was removing a Reed Bunting (the first trapped this year) from the Gully box. Ten minutes later I put a Little Bunting (the first we have ever trapped) into Vaadal. This was indeed an occasion, to have two so similar and "critical" species in the lab. together, and Esther and I dallied over the comparison. Both were young of and the Reed was much bigger and plumper in the hand: it is curious how similar, basically, is the head pattern in the two birds, the Reed however having a much swarthier complexion. The tarsi of the Little were pale flesh and not pale brown as the "Handbook" says, and the emargination of the 6th primary was extremely slight.

There were more Snow Buntings on the moors today and must have been upwards of a hundred in the Vatstrass and Gilsetter areas. The Common Tern has now taken to joining with the Herring Gulls who dip down on to the floating garbage when the kitchen bin is emptied over the edge of the South Haven cliff. He has haunted the Havens for a fortnight now.

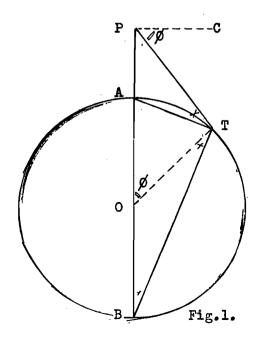
30. The Height of Sheep Craig.

W. G. HARPER.

The Ordnance Survey party of 1877 did not set foot on Fair Isle's prominent and imposing landmark, the Sheep Craig, nor do they seem to have determined its height by survey from accurately measured points on the main isle, for no indication of its height is given on the 6 in. Ordnance Survey map.

One of Fair Isle's unforgettable summer days, when Foula was clearly visible 44 miles away to NW. and the horizon a clear blue line, decided me to solve this local mystery, which had proved a lively topic of debate among fellow-customers at Shirva, with expressed opinions ranging from 400 to 600 feet!

The method adopted was simple yet quite accurate. If in Fig. 1 PT is a tangent to the circle with centre



O, it is easy to show that the triabgles PAT, PTB are similar, and we have

PA/PT = PT/PB

or $PT^2 = PA.PB$

Applying this to the earth of diameter D, with PA the height h of the observingpoint, and PT the horizon distance H, this gives

 $H^2 = h (D + h)$ As h is negligibly small compared with D this may be taken as

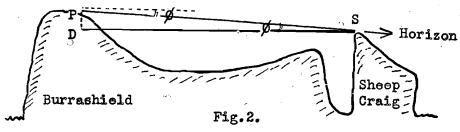
Also the depression of the horizon \emptyset is equal to the angle AOT and

 $tan \emptyset = PT/TO$

As \emptyset is very small in our case this simplifies to

$$\emptyset$$
 = PT/TO = 2H/D = $\sqrt{4h/D}$

A point on Burrashield, whose height is given on the 6 in. O.S. map as 476 ft. above mean sea level was



accurately identified and from this the top of Sheep Craig appeared slightly below the horizon. It was accurately on the horizon from a point close by, 11 ft. below the 476 ft. level (see fig. 2). The angle PSD = Ø, so that

 $PD/DS = \emptyset = \sqrt{4h/D}$

and if h is known, and DS can be measured, we can calculate PD, and so by subtraction obtain the height of Sheep Craig.

DS measured from the 6 in. O.S. map is 6,460 ft., h is 465 ft., and D is 7,910 miles ("Dictionary of Geography" in Bird Observatory library), from which the angle \emptyset works out at 0.38 degrees, PD as 43 ft., and hence

The Height of Sheep Craig is 422 ft.

This measurement is not of course accurate by Ordnance Survey standards, but it is certainly accurate to within a few feet.

31. Recaptures of Fair Isle Wheatears.

During the 1953 season there were a number of recaptures of Wheatears Oenanthe cenanthe ringed in former years. The most interesting bird, F 0544, is now at least 5 years old, having been marked as an adult 3 on May 5th 1950. (Adult 3 are distinguishable from 1st-summer 3 by their blacker wing-feathers). On that occasion the bird was caught in the Observatory Trap, where it was recaptured on August 10th 1952. In the present season it was taken in a Potter Trap on the nearby South Haven beach on July 10th.

One nestling of the 1950 season, F 0748 of July 1st, in a nest near the Observatory buildings, was also captured in a Potter set on the South Haven beach on July 10th 1953. This bird, now an adult 3, is 3 years old. It was again trapped on August 6th at the same place.

There have been 2 recaptures of 1951 nestlings, both now adult 33. One, taken in a meal-worm baited spring-net below Tarryfield on August 31st, is believed to have bred in that area in 1953. Its birth-place was a tumulus in the Burn of Furse, a mile away. The other, born in Homisdale, was caught in a Potter on the South Haven shore on August 4th.

L 1453, ringed as a juvenile on July 14th 1951, was re-trapped as an adult & on August 24th 1953. M 2139, also a 1951 juvenile, was caught as an adult & on May 11th 1953, on both occasions in the Gully Trap. Two 1952 nestlings, one bird ringed as a juvenile, and three ringed in that year as adults, were recaptured on dates in July and August 1953.

32. Autumn Migration (1953) at Great Saltee, SE. Ireland.

R.F. RUTTLEDGE and JOHN WEAVING.

The Observatory was manned continuously from September 12th until November 16th. It is a healthy sign to find observers returning for their second, third and even fourth visits to the Observatory. All the same, numbers too often have been below the minimum for efficiency.

Weather.

SEPTEMBER. Light SW. winds of the 12th changed to SE. on 13th and light to moderate winds, with an easterly component, lasted until 16th. From 17th to 23rd SW. winds predominated with gales on 19th, 20th and 21st. The 24th had moderate NE. wind and moderate to fresh westerlies held until the end of the month.

OCTOBER. Light westerlies from 1st to 3rd changed to NE. and light east winds were experienced until 8th. Moderate SW. winds from 8th changed to SE. on 1lth and easterly winds then lasted until 15th. For the rest of the month westerly winds, predominantly SW., held except on 18th and 19th, which had light to moderate south-by-east to north-by-east wind. There were westerly gales on 26th and 31st.

NOVEMBER. Mainly SW. winds until 16th, with a westerly gale from 1st-3rd and again on 7th. There were brief periods of south or south-by-east and NE. winds on 3rd and 8th.

During the whole period the average visibility was good. There was no persistent fog, and such fog as there was

occurred on October 22nd, November 5th and 16th, for short periods only. Nights were bright on the whole, or there was only a thin cloud-cover.

Migration.

The following notes are selected from those made on the migrants seen. Notable occurrences were a MELODIOUS WARBLER, a YELLOW-BROWED WARBLER, and a LITTLE BUNTING. "Northern" Chiffchaffs also appeared.

FULMAR. Fulmarus glacialis. A single bird was first noticed on Nev. 7th; by 14th at least 15 were in the vicinity of the island.

SPARROW-HAWK. Accipiter nisus. One, sometimes 2, on many days. A Q or immature HARRIER Circus sp. was seen on Oct. 30th.

MERLIN. Falce columbarius. One, sometimes 2, on most days from Sept. 26th to Nov. 15th, but absent from Oct. 23rd-28th. A 1st-winter Q found freshly dead on Nov. 15th had a wing of 236 mm. and must therefore be assigned to the Iceland race Falco c. subaesalon.

KESTREL. Falco tinnunculus. 3 on Sept 12th and Oct. 4th; etherwise one, occasionally 2, on many days.

WATER RAIL. Rallus aquaticus. Numbers were hard to assess but single birds were noted irregularly in Sept. and from one to 4 on most days in Oct.-Nov.

TURNSTONE. Arenaria interpres. Though numbers were constantly highest in mid-November there were peaks on Sept. 29th (50), Oct. 22nd (51) and Oct. 31st (54).

WOODCOCK. Scolopax rusticola. One on Nov. 11th.

SNIPE. Capella gallinago. One or 2 irregularly in Sept.-October. One Jack Snipe Lymnocryptes minimus on Oct. 7th and 2 next day.

WHIMBREL. Numerius phaeopus. One or 2 most days, Sept. 12th to Oct. 7th; singly Nov. 7th and 12th.

PURPLE SANDPIPER. Calidris maritima. One on Oct. 24th and 7 on 29th; then daily to Nov. 15th with a maximum of 13 on 12th.

LAPWING. Vanellus vanellus. Very small numbers with a maximum of 13 on Nov. 6th.

GOLDEN PLOVER. Charadrius apricarius. Singly, Sept. 12th, 13th and 24th; 3 from Oct. 4th to 6th.

Other waders included COMMON SANDPIPER Tringa hypoleucos from Oct. 31st to Nov. 5th; GREENSHANK T. nebularia singly and very irregularly from Oct. 8th; and single DUNLINS Calidris alpina on Oct. 9th and 20th.

BRITISH LESSER BLACKBACK. Larus fuscus graellsii We noted passage on 5 days between Sept. 12th (5) and 27th (3), also daily from Oct. 3rd-9th with most on 5th and 6th (4). Last seen Oct. 12th.

COMMON / ARCTIC TERN. Sterna sp. One to 4 on several days from Sept. 19th-27th. There were one or 2 SANDWICH TERNS S. sandwicensis Sept. 18th-19th & 24th.

TURTLE DOVE. Streptopelia turtur. Singly, Sept. 14th and Oct. 3rd.

SKYLARK. Alauda arvensis. Less than 10 birds noted daily from Sept. 15th to Oct. 2nd. On Oct. 3rd migration became noticeable and except on 5 days was in the same volume with a peak on Oct. 25th (400), after

which there was a marked increase (one only on 26th) to the end of the month. Noted daily from Nov. 3rd (3) to 9th (10), with most on 6th (13). Migration terminated on 9th. Total numbers were far below those of other years, but the pattern of two-way movement previously observed was maintained.

SWALLOW. Hirundo rustica. Continuous passage, Sept. 12th to Oct. 8th. Peak dates were Sept. 17th (43) 24th (500), Oct. 4th (150) and 7th (500). There were 75 on Oct. 12th, then none till 15th (21), and a lone straggler on 18th. R.F.R. saw a single bird at Kilmore Quay on Nov. 4th. An amazing number of the records between Sept. 12th and Oct. 7th were of birds flying NE. or E.NE. in all conditions of weather. Other directions taken, but far less frequently, were SW. and W.SW., and to SE. on Oct. 15th. Flocks on the later dates were composed mainly of juveniles.

HOUSE MARTIN. Delichon urbica. Recorded on 3 days in September: 24th (30), 25th (10), 28th (3), and in October on 4th (9) and 12th (2).

SAND MARTIN. Riparia riparia. On 5 days in the second half of September with a maximum of 5 birds on one day. One on Oct. 5th.

HOODED CROW. Corvus c. cornix. One or 2 daily from Oct. 3rd-13th, with 6 on 4th, 3 on 5th, and again 3 on Nov. 3rd.

WREN. Troglodytes troglodytes. Some increases and corresponding decreases in Sept.-Oct. but numbers very difficult to assess.

MISTLE THRUSH. Turdus viscivorus. Singly on September 23rd and November 6th.

FIELDFARE. Turdus pilaris. First noted Oct. 16th (16). Peak on 20th (26), then one to 3 irregularly till the end of the month. One Nov. 2nd and 93 next day with a decline to a single bird on 10th.

SONG THRUSH. T. ericetorum. In September only on 25th (3) and 26th (1). Regularly from Oct. 3rd (except 4th and 10th) in numbers which reached 10 only between 27th-29th. Numbers higher in November with peaks of 10 each day on 4th, 6th and 10th. Of 5 trapped on this last date one was clearly intermediate between Turdus e. ericetorum and philomelos on comparison with skins, the others being referable to the former race. J.W. found that some handled at the end of October were also of an intermediate stock having either a greyish or greenish tinge on upper-parts and in some cases a white chin.

REDWING. T. musicus. Almost daily from Oct. 5th-Nov. 7th; peaks on Oct. 12th (60), 15th (160). Numbers negligible during the last week of October and in Nov. except on 3rd (15). Ten trapped were referable to the typical race Turdus m. musicus. There was one RING OUSEL T. torquatus on Oct. 18th.

BLACKBIRD. T. merula. Numbers fluctuated slightly in September. Constant passage was in progress from early October to mid-November. Marked increases took place on Oct. 5th, 9th, 15th, 19th and 24th (50 on the last two days) and on Nov. 11th and 16th. Corresponding decreases followed in each case.

WHEATEAR. Oe. oenanthe. Small numbers throughout September, with a peak on 17th (12). Movement of 4 to 1 Oct. 4th - 9th and a single bird Oct. 16th.

STONECHAT. Saxicola torquata. Evidence of passage, in small numbers, from end-Sept. to mid-Oct., with

most on Oct. 7th (10) and 8th (12). From mid-October the 3 or 4 seen appeared to be winter residents.

WHINCHAT. S. rubetra. Irregular passage from Sept. 15th - Oct. 2nd of up to 4 birds. One Oct. 20th.

REDSTART. Ph. phoenicurus. Single & on Sept. 13th and Nov. 1st, the latter a very late date.

BLACK REDSTART. Ph. ochrurus. Singly Oct. 19th, 29th and Nov. 6th, 7th, and 9th. At least 4 were present on Oct. 21st, and at least 6 next day with a southerly airstream from a central European high entering the S. Irish Sea from the NW. coast of France.

ROBIN. Erithacus rubecula. Fluctuating numbers of up to 20 in September and October, thereafter more constant and those seen were probably wintering.

SEDGE WARBLER. Acrocephalus schoenobaenus. Two on Sept. 15th and 17th and 4 on 19th.

MELODIOUS WARBLER. Hippolais polyglotta. One which was trapped and carefully examined on Oct. 2nd remained in the vicinity of the old farmhouse till 4th. There are only 2 or 3 previous Irish occurrences. There was a high over central Europe at this time with east winds on the NW. coast of France and a sudden veer of wind to SW. in the southern part of the Irish Sea.

BLACKCAP. Sylvia atricapilla. One on Sept. 27th.

WHITETHROAT. S. communis. 7 on Sept. 15th, 5 the two next days and 2 on 18th; thereafter singly on six days including Oct. 1st.

WILLOW WARBLER. Phylloscopus trochilus. Passage had almost terminated when the first observers reached the island. Single birds were recorded on 4 days between Sept. 16th and Oct. 1st.

CHIFFCHAFF. Ph. collybita. Noted on all except 3 days from Sept. 12th to 25th, - usually only one or 2 but 60 on 16th and 7 next day. In October one or 2 were recorded on 6 days up to 11th. One ringed on Nov. 8th was present on the following day, and there was another 16th. A bird whose call-note was strikingly different from that of summering birds was trapped on Oct. 4th: its plumage in the field was indistinguishable from Ph. c. collybita, and this was confirmed in the hand. wing-length was 64 mm. and weight 10.25 gm. The call was definitely the "distressed chicken" one described in "The Handbook of Brit. Bds." as characteristic of There was a second bird uttering identically abietinus. the same call. A bird trapped on Octs 25th had rather similar plumage to that mentioned above but the underparts were more buff and the belly slightly whiter. In both field and laboratory the loud call-note was quite distinctive and Mrs. Hall-Watt, G.W. Rayner and R.F.R. were all struck by its similarity to that of a chicken in distress. G.W.R. and R.F.R., unknown to one another, were independently stalking this bird in the garden. having been attracted by the peculiar note.

YELLOW-BROWED WARBLER. Ph. inornatus. One J.W. trapped on Oct. 12th forms the third record for Ireland. Again the meteorological situation is of a vast anticyclonic system over central and south Europe, with a SE. airstream from the NW. corner of France to the Irish Sea.

GOLDCREST. R. regulus. One or two on nine days from Sept. 12th to 29th. Daily in October except on 3rd, until 15th, with 4 birds on 8th. A single bird was present on Oct. 21st - 22nd.

FLYCATCHERS. Spotted Muscicapa striata singly Sept. 12th, 17th-18th and 27th, and 2 on 15th-16th. Pied M. hypoleuca singly Sept. 17th-18th, 23rd-24th and 26th, with 3 birds on 25th.

MEADOW PIPIT. Anthus pratensis. Migration was in progress on Sept. 12th (50-100) and in fluctuating numbers on most days until Nov. 5th (15). From 6th-12th, when movement virtually ceased, one to 3 or 4 birds were seen daily. There were stragglers on 14th and 16th. Peaks during September were on 17th (150) and 23rd-25th (100); in October on 4th (500) after 150 on the previous day, and 5th (200); 15th (200) and 25th (200).

TREE PIPIT. A. trivialis. Though not seen on the island this autumn, one was identified by its call-note at Kilmore Quay on August 18th.

ROCK PIPIT. A. spinoletta petrosus. There was some evidence of passage. This species is the subject of a special study by means of colour-rings and no conclusions as to its movements can be drawn as yet.

GREY WAGTAIL. Motacilla cinerea. Singly on Sept. 15th, 16th, Oct. 3rd, 6th and 9th.

WHITE WAGTAIL. Motacilla a. alba. Subspecifically identified on Sept. 13th (3), 14th (2) and 23rd & 25th. "Alba" wagtails noted almost daily from Sept. 12th (10) to October 9th (6) and on Oct. 15th (5) were most likely of this form.

PIED WAGTAIL. M. a. yarrellii. One was fully identified on Sept. 15th; also on 22nd-23rd, and in October on 7 days between 7th and 19th in numbers up to 3.

STARLING. Sturnus vulgaris. One Oct. 1st, 11 on 13th, then from 18th to Nov. 16th on most days, peaking

on Oct. 31st (58), Nov. 3rd (170) and 16th (3,000). Departures from the island early in November were to N.NE., NW. and W., but on 16th birds arrived from NE. and E. and left towards N., NW., and occasionally W. On Nov. 5th flocks were first noticed coming to roost in the cliffs and these attained a maximum of ca. 2000 on 11th.

GREENFINCH. C. chloris. Three, Sept. 24th; and singly Oct. 7th, 18th, 29th and Nov. 10th-11th. A & was present from Nov. 6th-8th; there were 5 on Nov. 13th and 14th and 9 on 16th.

GOLDFINCH. C. carduelis. Five on the first 2 days of October and on 30th; at least 6 on 29th. One or 2 birds on ten days between Oct. 3rd and Nov. 16th.

LINNET. C. cannabina. Sept. 15th (6). Daily Sept. 24th-28th and Oct. 2nd-23rd on all but 6 days in numbers over 20. Peak on Oct. 7th (400) following a big increase on 5th and 6th (200 each day). After Oct. 12th (100) numbers dwindled slowly to Oct. 23rd (10) and 30th (5) though minor peaks took place on 15th (65) and 18th (44). Noted Nov. 4th to 13th except on 7th and 11th, a peak in this period numbering 25 birds on 8th. Migration continues to be puzzling, but as a result of special watches in early October movement of small numbers was detected across the island, arrivals coming from the N. and departing southwards. At the same time there was a small movement in the reverse direction. On Nove 5th & party of 7 departed on a northerly course towards the mainland

LESSER REDPOLL. C. flammea cabaret. A Q was trapped on Nov. 6th.

CHAFFINCH. Fringilla coelebs. First observed, Q Oct. 4th. Numbers reached double figures on 14th (19)

and exceeded 10 birds daily until Nov. 7th (5). There was a major peak on Oct. 22nd (400) and a minor on 29th (89). Numbers were very small from Nov. 8th-14th. No 3 was noticed before Oct. 27th and QQ predominated up to Nov. 15th, a flock of 13 on the latter date containing 3 38. A 3 trapped on Nov. 7th, when compared with a series of skins, had affinities with the typical race, and another taken on 15th was undoubtedly F. c. coelebs. Numbers increased on 15th-16th and reached a peak on the latter day (200), when there was a great preponderance of & Four handled on 16th were clearly referable to Fo c. gengleri, the British race.

BRAMBLING. F. montifringilla. A Q on Oct. 22nd, 3 birds on Nov. 6th, one on 7th, 2 on 9th, and one or more on 16th.

LITTLE BUNTING. Emberiza pusilla. One was identified by G.C. Johnson on September 17th. The bird was very confiding and allowed a close approach to just over 2 ft. Three other observers watched it at a distance of about 8 ft. G.C.J. made two excellent field sketches and these, together with a detailed description, are in the Observatory's record-books. They leave no doubt as to the correctness of the identification. This is the 5th record for Ireland.

REED BUNTING. E. schoeniclus. Q, Oct. 24th. A SNOW BUNTING Plectrophenax nivalis was observed on Oct. 30th-31st.

Trapping and Ringing.
The total number of birds trapped and ringed in the year was 889 (45 species). This falls *below the 1952 total mainly because the rush period of August and early September was missed. WILLOW WARBLERS again were top of the list with 223, and WHITETHROATS totalled 144.

Ringing Recoveries.

Since those enumerated in Bull. no.9, para.111, a Q Blackbird in its 1st year, ringed on Oct. 30th 1951, was found dead in south Norway in "spring 1952." A Wren ringed on Oct. 3rd 1951 was recaptured on the same date in 1953 and a Hedge Sparrow ringed on Oct. 3rd 1950 was re-trapped on the isle on Sept. 23rd 1953. A Robin of Sept. 11th 1952 was again trapped on Sept. 15th 1953, and another ringed on Sept. 23rd 1951 was found dead in Co. Dublin on May 1st 1953.

Acknowledgments.

Dr. J.M. Harrison most kindly lent a valuable series of Chaffinch skins, including some of his key specimens. They were invaluable, but unfortunately the volume of Chaffinch migration in autumn was below that hoped for.

33. Shetland Migrants, Autumn 1953.

"There were a lot of waders about during our visit to Papa Stour, from August 13th-18th. Sanderling, Curlew, Redshank, Ringed Plover and Cyster-catcher were abundant; Dunlin and Turnstone common; Knot and Lapwing few; and a Greenshank was seen. There was one Swift on August 16th and White Wagtail Motacilla a. alba movement began next day." - L.S.V. and U.M. VENABLES. The first White Wagtail influx at Fair Isle was of 2 on 18th increasing on 19th.

Migrants at Spiggie included a Brambling on Sept. 14th; a Redstart on 15th; 2 Pied Flycatchers, a Sparrow-hawk and 5 Chaffinches on 16th. Next day there was a Turtle Dove, and Andrew T. Macmillan saw 12 Goldcrests. On 18th a Whinchat was seen and Tom Henderson heard a Fieldfare. An influx of Chaffinches took place at Fair Isle at this time (as is usual with a drift from the Low Countries) and Fieldfare and Turtle Dove were seen on 14th. John Peterson saw his first Whooper Swans of autumn on 24th

PIED WOODPECKER. Dendrocopos m. major. Mr. L. Bruce, the R.S.P.B. watcher, saw 2 at Haroldswick, Unst, in the 3rd week of September, and Mr. E. Balfour records one at Rendall, Orkney, on 24th. A very early bird was seen at Mid-Yell, Shetland, by C.J. Inkster from August 31st to September 2nd. One was trying to find food on logs of wind-blown timber imported from the south at Freefield, Lerwick, on September 19th, according to G.T. Kay. A bird was also found dead at Helendale, Lerwick, on October 12th. One seen on the NW. cliffs of Fair Is. on 17th was perhaps the same as the bird caught by hand on Brae of Lerness next day; another was trapped in Vandal on 23rd and remained on the isle until 28th.

WAXWING. Bombycilla garrulus. There was one near Lerwick on October 19th, and others were present, feeding on rose hips, on November 3rd and 6th, according to G.T. and W. Kay. Only one was seen at Fair Isle, for several days following October 23rd.

34. An Interesting Black Redstart Recovery.

There was a considerable drift of migrants into the Forth area on April 6th 1953, Robins preponderating, but Black Redstarts being also involved. One or 2 were recorded daily from 6th till 18th and a single bird was there till 22nd. Three were ringed, and one of these, marked on 12th, was caught in the glass veranda of a house in the Hartz Mountains, central GERMANY, on June 27th. It seems likely that this bird, on its return migration through Europe, had been deflected to westward of its breeding area in an easterly airstream then prevailing in the southern sector of a mid-European high. It is most interesting that the bird should have successfully re-orientated its migration following a short period "off passage" on this side of the North Sea.

35. Late Autumn Migration from Pembrokeshire to Ireland.

R.S.R. FITTER.

The object of the present note is to call attention to an apparently little-known movement from Pembrokeshire to Ireland in late autumn. My interest was first aroused when I was at Nash Point, Glamorgan, about noon on November 8th 1952, and saw small parties of Starlings, Chaffinches and Skylarks flying westward. I saw something of the receiving-end, in company with R.F. Ruttledge during the following week, at Kilmore Quay and Carnsore Point, Co. Wexford. Mainly in the early mornings of November 11th-14th we saw Rooks, Jackdaws, Starlings, Chaffinches and Wood Pigeons in some numbers flying in from the south-east. The timing of the movements suggested that the larger birds at any rate had left the Welsh coast soon after daybreak.

On returning to Pembrokeshire on November 15th I went out to Strumble Head at 0730 hrs. and had the good fortune to see substantial flocks of Starlings, totalling about 3,000, fly up the coast from the south and take off in a north-westerly direction towards Ireland, against a strong NW. wind. A small minority continued north-east up the coast, perhaps intending to take off farther north, and two small flocks of Chaffinches also flew in this direction. The following morning, with P.J. Conder, I went to St. David's Head, where for an hour from 0845 hrs. with a light NW. wind, we failed to see any sign of migration whatsoever.

P.J. Conder kindly provided me with details of observations made by him at or near Dale Fort during the first half of November in 1952, and these showed large numbers of Starlings flying west on several days, but

very few Chaffinches. Starlings flying west from Dale, unless they changed course, would strike the south Irish coast much farther west. They could not have been the origin of the birds I saw at Strumble Head unless they swung right round and flew north-east. The Strumble Head birds might have struck the Irish coast at any point from Carnsore northwards.

I am also grateful to P.W.P. Browne, who supplied me with records of observations made in Dublin Bay at the same period. Here many Starlings and Chaffinches, and also other birds (but not Rooks, Jackdaws or Ringdoves) were seen flying in, but mainly on a westerly rather than a north-westerly course, suggesting that they had come straight across from Anglesey or Caernarvonshire, rather than coasted northwards after having struck the Irish coast in Wexford and Wicklow after a crossing from Pembrokeshire.

An attempt to correlate the observations in Pembrokeshire, Wexford and Dublin during the period November 8th-15th yielded so little positive result that it did not seem worth while giving it in detail here. All that can be said is that throughout the period there was some movement of both Starlings and Chaffinches at all three stations, but to what extent the same streams of birds were involved is obscure.

In 1953 I made a further attempt to watch this migration, choosing Commaes Head, north Pembrokeshire, which I judged to be about as far north as any coasting Starlings could possibly go before taking off for Eire. However, the weather was against me, and on the only morning I was able to watch - November 2nd - I saw no sign of migration, except a tendency for Chaffinches to drift south-westwards along the coast.

However, Conder kindly placed at my disposal his records of observations at Dale, and these showed on most days between October 27th and November 12th some movement of Starlings, Chaffinches and Skylarks in a west, north-west or northerly direction. North-west bound birds would strike the Irish coast at about Carnsore Point; north-bound birds would probably follow the Pembrokeshire coast round and take off at some favourable point east of St. David's Head. On November 3rd, 4th and 6th Goldfinches were seen flying NW. On no day were Rooks, Jackdaws or Wood Pigeons seen.

On the Irish side, Ruttledge tells me that only small numbers of migrants were observed between November 1st and 15th, arriving mainly from east and horth-east; but on 16th large numbers of Starlings, Chaffinches, Greenfinches and Goldfinches appeared on or over Saltee going north, north-west or west.

On my mentioning migration in Pembrokeshire to R.M. Lockley, he kindly placed some of his notes at my disposal, and referred me to the discussion of the subject in "The Birds of Pembrokeshire" (1949). remarkable thing about this discussion is the complete absence of any mention of this north-westward migration in autumn. Both notes and book deal in Some detail with a south-eastward migration into Pembrokeshire from Eire and a south-westward migration down the Pembrokeshire coast from across Cardigan Bay. Evidence of these two inward migrations also appears in the Dale Fort observations in 1952-3. Lockley's notes, for three typical good migration days at Wooltack Point, opposite Skomer, in October 1933, do show a few birds going north-west or west (Starlings, Chaffinches, Lapwings), but the overwhelming bulk of migration is to east or north-east.

This inevitably raises the question whether the north-westerly migration from Pembrokeshire has been largely overlooked hitherto, or whether it has substantially increased in recent years. © It is possible that it increases in volume in November, by which time the easterly migration - which is at its height in October - has died down, so that the former is more conspicuous. Seen from the Irish side it is certainly an impressive migration in volume, but again its seems possible that the arrival at or near Carnsore Point is concentrated, because that it the nearest point of land to Wales, while the departure from Pembrokeshire is dispersed over a number of headlands and so is less conspicuous.

Now that there are three Bird Observatories around the shores of the Irish Sea, - Skokholm, Great Saltee and Bardsey, - it seems very desirable that concerted observations should be made on this interesting late migration. If at all possible, some observers should be located at sea in mid-Channel to provide a link between the three land observatories; and a Manx Bird Observatory (which we hear may soon be established) might be expected to throw some further light on the problem.

I am indebted to P.J. Conder, R.M. Lockley and R.F. Ruttledge for reading and commenting on this note before publication.

Lockley draws my attention to the fact that in the first list of the birds of Skokholm (Brit. Bds. 29:230) he recorded under STARLING, "Large armies move towards Ireland and also south-west to the open sea during late autumn and winter."

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

