

FAIR ISLE BIRD OBSERVATORY

BULLETIN



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E D I T O R I A L

The autumn migration of 1951 was perhaps the most phenomenal within living memory, not only for the rarities recorded at various points, but also for the quite incredible numbers of commoner birds, such as Robin, Blackbird, Redwing and Fieldfare, which entered this country at the beginning and end of October. It is not, therefore remarkable that the preparation of this Bulletin has taken much longer than usual, and that a number of items which we had hoped to include have had to be held over for lack of space.

It is our policy to give Friends of Fair Isle as much news as we can from points other than the one with which we are most intimately concerned and I am very grateful to a number of friends and colleagues for going to some trouble to make this present account of the autumn 1951 migration as representative as it is. It is hoped that the next Bulletin will continue the story (for it is not yet complete) with reports from Dr. K.B. Rooke on observations at Portland Bill, Dorset, and from Niels Fr. Petersen at Botni on the drift-migrants reaching Nolsoy in the Faeroe Islands, and with an analysis of our own Wheatear passage in late August. Meanwhile there is sufficient material between the present covers to show that co-ordinated watchers at even widely separated points can go far towards elucidating some of the minor problems of bird-migration.

Compiled by the Director, Kenneth Williamson,
for the Fair Isle Bird Observatory Trust,
December, 1951.

45. Black-eared Wheatear at Fair Isle

A 1st-year male of the black-throated form of Oenanthe hispanica was seen on the Swey moor by James Wilson on November 8th, and was found by James A. Stout at the head of Homisdale next day. Wilson again saw the bird on the hill on 13th. Stout, who watched it through binoculars at 15 yds range, sent the following account:-

"Over the eye, and extending well behind, is a well-defined whitish streak, and from that stripe downwards under the throat and up to the base of the bill is sooty black. The bill and feet are black. The upper breast is a light buffy colour, getting lighter downwards. The centre of the tail is brownish-black, and several of the outer feathers are light-coloured with dark outer ends. The rump is dirty white. All the back is a uniform greyish-fawn colour, but the wings are darker, and the wing-coverts fairly dark with light-coloured marks".

The dark brown rather than black of the centre tail-feathers and wing-coverts indicates an immature male, and the presence of white in the outer tail-feathers precludes confusion with the otherwise rather similar Desert Wheatear, Oenanthe deserti, which has the distal two-thirds of the tail entirely black. There has been one previous record of the western form of this species, Oenanthe h. hispanica, at Fair Isle, collected by Dr. Wm. Eagle Clarke from among "scattered examples of Common and Greater Wheatears" on September 25th 1907. There is no previous November record of the species in the British Isles, the latest given in "The Handbook of British Birds" being for October 30th 1915.

46. Autumn Migration 1951 at Fair Isle and in South Shetland

The record of the autumn migration at Fair Isle has already been taken to mid-September in Bull. No. 4, 34. The present article continues the record to the end of November and combines observations made in Dunrossness, Shetland, and at Fair Isle. L.S.V. Venables is responsible for the latter area; and since the closing of the Observatory on October 30th James A. Stout has been responsible for Fair Isle. Unless otherwise indicated, all notes refer to the island.

STARLING. Sturnus vulgaris. Large number at the South Lighthouse on the night of October 28/29th, obviously Continental immigrants. Several were killed at the lantern and are preserved in the Royal Scottish Museum. A few were seen at the lantern on 29/30th. Two-way diurnal movement of flocks of between 6 and 20 birds was observed by James Stout over Sumburgh Roost on Oct. 31st. "Seven flocks flying SW. to Fair Isle, and about 5 going the NE. course to Shetland: all flying hard and keeping a very straight course at heights ranging from 40 to 100 ft. above the sea. Wind light N. to NE. with good visibility".

TWITE. Carduelis flavirostris. Very few on the island in November, the most seen in one day being 17. This indicates an emigration of the breeding stock. When returning to the isle from Sumburgh in "The Good Shepherd" on Nov. 20th Stout noted: "One Fieldfare and 5 Twites flying SW. about 20 ft. above the sea about half an hour before sundown, the Fieldfare a few feet above the Twites. Light winds SE. to SW. by S.

4.

BULLFINCH. Pyrrhula pyrrhula. Two, Nov. 8th. Two females, 12th, and 2 at Spiggie same day. There was a female in Lerwick, 3rd week Nov. (per G.T. Kay). See para. 50.

SCARLET GROSBEAK. Carpodacus erythrinus. One, Sept. 22nd; 3 together on stooks, 23-24th. Singly Sept. 26th, 30th and Oct. 2nd.

CHAFFINCH. Fringilla coelebs hortensis. (All trapped males belonged to this mid-European race). First at Dunrossness, Sept. 19th; Fair Isle, male 24th and female 27th. Very few during early Oct. but 10 on 11th and over 20 on 13th with bigger influxes 16th and 20th. Small scale passage continued into Nov., with over 20 on 1st and 18th. See para. 47.

BRAMBLING. F. montifringilla. Male, Sept. 30th; 3 males, 5 females, Oct. 1st. More than 30 arrived 13th and a big number, well over 200, were at Fair Isle and Dunrossness 15th, increasing 16th. A few 17th and 20th and a small influx Nov. 12th. See para. 50.

YELLOW HAMMER. Emberiza citrinella. Two, Nov. 2nd; 2 on 12th; singly on other days.

RUSTIC BUNTING. E. rustica. Dunrossness, singly Sept. 15th, Oct. 31st and Nov. 13th.

REED BUNTING. E. schoeniclus. First, Oct. 2nd. Small movement from 11th, with 12 on 15th, an unusually large number. Minor wave on 18th peaked with 5 on 20th. Singly, Nov. 10-16th and 20-23rd. See para. 47.

LAPP BUNTING. Calcarius lapponicus. One or 2 daily, Oct. 3-8th; one, 30th; one, Nov. 23rd.

SNOW BUNTING. Plectrophenax nivalis. About 17, Oct. 2; over 30 next day, and new movement of over 60 on 6th. Small wave at Spiggie 22nd and 30 or so Fair Isle 29th. Flocks of 150, 100 and lesser numbers for one day, Nov. 1st, and arrivals on 9th, 17th (some 250) and 23rd.

WOODLARK. Lullula arborea. One, Oct. 11th, and 2 next day. Another on 16th, two 20th, singly from 31st to Nov. 2 and on 12th.

RICHARD'S PIPIT. Anthus richardi. James Stout found one with an injured wing on Nov. 14th and saw at least 4 others on the isle that day. He skinned the injured bird and it is now in the Royal Scottish Museum. Weight 32 g., wing 97 mm., bill from skull 16 mm., tarsus 31 mm., hind claw 15 mm. "Legs dull flesh colour tinged brown on the front. Upper mandible pale yellowish-brown with a darker tip". In Autumn 1908 Dr. Eagle Clarke shot one or two and saw others, but only single examples have been recorded since.

TREE PIPIT. A. trivialis. Five, Sept. 24th; one, 26th; 6 on Oct. 1st; 8 on 3rd, and one or 2 daily to 10th. The last was trapped 15th.

PETCHORA PIPIT. A. gustavi. James Wilson, who has previous experience of this species at Fair Isle, reported one Oct. 2nd.

YELLOW WAGTAIL. Motacilla flava. Two came Sept. 24th and stayed some days, being joined by another on 26th. There were no fewer than 7 in the crofting area next day, being reduced to 5 on 28th and 2 on 29th, - an unusually big passage. Two stayed from Oct. 2-5th.

WHITE WAGTAIL. M. a. alba. After mid-Sept. a few only each day, 8 on 21st being the most. Small increase, Oct. 1st, but only one remained on 4th. Last at Dunrossness Oct. 5th; at Fair Isle a 1st winter female (trapped) from 18-20th.

GREAT GREY SHRIKE. Lanius excubitor. One at Scousburgh, Oct. 2nd; one trapped Fair Isle, 6th, and one observed 13th. See para. 47.

RED-BACKED SHRIKE. L. collurio. Young birds, Sept. 26th and Oct. 3rd.

WAXWING. Bombycilla garrulus. First, Oct. 29-31st. One, Nov. 8th; 3 on 12th (one at Spiggie next day); and one 21st. Three in Lerwick on 21st (per G.T. Kay). See paras. 50, 51.

SPOTTED FLYCATCHER. Muscicapa striata. One, Sept. 23rd, 5 next day, then 4 each day to 28th. Two, Oct. 2-4th and one on 5th.

PIED FLYCATCHER. M. hypoleuca. Venables had a few most days Aug. 26-31st, a "rush" on Sept. 1st, and one or two for some days afterwards: these records agree with Fair Isle observations in Bull. No. 4, 34. There were 5 in Dunrossness Sept. 18th but no re-appearance at Fair Isle until 21st and no real movement until 9 passed on 24th. Single birds, 30th, Oct. 2-3rd, 5th and 7th. Last at Dunrossness, Oct. 3rd and 30th.

RED-BREASTED FLYCATCHER. M. parva. Sept. 26th.

GOLDCREST. Regulus r. regulus. (All thirty trapped were Continental race). First few, Fair Isle and Dunrossness, Sept. 24th. Big

invasion of well over 200, Oct. 1st; about 20 remaining next day. Some 15 birds on 3rd and 4th almost certainly represent fresh arrivals, and these had decreased to 5 on 5-6th. Small invasion of 50 plus Oct. 12th, 6 remaining 13th and one only 14th (see para. 55). At Scousburgh and in Fair Isle an immense movement on 31st, with a few only next day but apparently a smaller influx on 2nd, when many birds were scattered all over the isle, and were numerous in Kergord Plantation, Shetland. Three Nov. 9th and odd birds on 14th and from 17th-19th.

CHIFFCHAFF. Phylloscopus collybita. There was one at Dunrossness, as at Fair Isle, Aug. 31st-Sept. 3rd; also another at Dunrossness 29-30th, and at Fair Isle 27th. Four came in Oct. 1st and one trapped at the Haa could not be separated from skins of the typical race. However, 4 others trapped during the first few days of October were nearer Ph. c. abietinus, the Scandinavian race; and it is possible that two very drab-looking birds, noticeably duller in plumage than these in the field, were near Ph. c. tristis. Neither could be caught, and in view of the variation among these late autumn Chiffchaffs (see Brit. Birds 43, pp. 48-9 and 44, pp. 96-7) a subspecific name is best withheld. This movement peaked with 16 birds on Oct. 2nd, fell to 9 on 3rd, and remained at 3 or 4 daily until 6th. Chiffchaffs appeared at the Isle of May at this time, over a dozen being trapped between 1st and 5th; they were present in Shetland, and at Little Ross Light and Great Saltee (see para. 55). Two were at Fair Isle from 8-10th and single birds were seen 13th and 15th. At Scousburgh there was renewed passage Oct. 28th and we watched one 31st. Late bird at Fair Isle, Nov. 16th.

WILLOW WARBLER. Ph. trochilus. One or two from Sept. 20th onwards, 5 on 28th. A dozen arrived Oct. 1st and a few on 5th. Last 8-9th.

WOOD-WARBLER. Ph. sibilatrix. The Venables watched one in an ash-sycamore plantation at Weisdale on Sept. 19th. There was one at Isle of May Sept. 13th. See Bull. No. 4, 40.

YELLOW-BROWED WARBLER. Ph. inornatus. First at Dunrossness, Sept. 26th. One at Fair Isle, 28th, and 2 on 30th. There was one Oct. 1st and 2nd, then 4 each day to 5th (not always the same birds, since 2 ringed individuals were not seen again), one remaining 6th. No record at Isle of May till 11th. See para. 55.

REED WARBLER. Acrocephalus scirpaceus. One Fair Isle, Sept. 24th; one at Noss, Oct. 5th.

SEDGE WARBLER. A. schoenobaenus. One, Sept. 13th; one, Oct. 4-5th.

BARRED WARBLER. Sylvia nisoria. One at Noss, Scousburgh, Oct. 1-2nd; one trapped Isle of May, Oct. 6th.

GARDEN WARBLER. S. borin. Singly, Sept. 18th and 21st, but no movements until 5 on 24th and 4 on 26th. Two Dunrossness 27th and 2 Fair Isle 28th. Few Oct. 1st, some remaining till 5th.

BLACKCAP. S. atricapilla. Female, Sept. 13th. Male, 23rd, and male and 2 females next day. Pair 26th, and a few Dunrossness and Fair Isle 27-28th. Male at Fair Isle 30th and several each day Oct. 3-5th, with one 6th, the sexes being in equal strength over this period. Three males and a female on 10th and odd birds

12th, 16th, 26th and 28th, with 3 on 29th and 31st. Two Nov. 2nd and a late bird on 16th.

LESSER WHITETHROAT. S. curruca. Singly Sept. 22nd and 26th, 2 on 24th; 3 on Oct. 1st, 4 next day, one or two from 4-8th. See para. 55.

FIELDFARE. Turdus pilaris. First 3 on Sept. 24th, 2 remaining till 28th; few Dunrossness 26th. Four arrived Sept. 30th and more than 20 on Oct. 1st, whilst 100 plus were recorded from 2-6th, decreasing afterwards. Over 100 arrived 13th but fell to few only after 18th. Venables noted a big influx 19th and increase from 27th. Well over 500 arrived Fair Isle 29-30th and there was a further influx Nov. 2nd. Big movements Nov. 8th and 18th, lesser ones 15-16th and 20th; practically none remained 26th.

SONG THRUSH. T. ericetorum philomelus. (All trapped were Continental race). One, Sept. 24-25th, one 29th, four 30th. Movements of 20-30 birds on Oct. 1st, 3rd and 4th, decreasing slowly. A dozen on 13th and 30 next day. Small increase 17th and some movement 27-30th, several being killed at the South Light (Royal Scottish Museum collection). About 20 on Nov. 2nd and a new influx on 12th.

REDWING. T. m. musicus. (Only two Iceland coburni were captured this autumn, Oct. 20th and 25th). Flock of 13 Sept. 24th; 4 on 28th and 25 on 30th. Over 500 arrived Oct. 1st and again 3rd, these remaining till 6th. Small influx 10th, over 100 on 12th and some 300 next day. Increased to 500 on 15th, small increase 20th and immense movement 27-30th, many being killed at the South Light. Some 300 arrived Nov. 2nd, 150 on 6th, numbers being small. afterwards, the only movement being 50 on 21st.

RING OUSEL. T. torquatus. Two at Walls, Sept. 12-13th (per J. Peterson). Six at F.I. 24-25th and one 29th. Two males Oct. 1st, 3 on 3rd, one on 6th, male 14th, males 19-20th at F.I. and Dunrossness, and a male on 28th.

BLACKBIRD. T. merula. Slight increase Sept. 13-15th and 24th suggests early passage. Few Oct. 1st increasing daily to 40 on 4th. No further rises until 14th (30) 16th (200 plus) and 20th (300), numbers decreasing afterwards. Immense passage, unparallelled within living memory at Fair Isle, took place Oct. 28-30th. Further passage Nov. 2nd, 5th, 14-15th and 21st. For additional observations on Turdidae see paras 47, 50 and 51.

WHINCHAT. Saxicola rubetra. Singly during mid-Sept., small movement 21st, increases 24th, 26th, 28th. Two on 30th increased to 6, Oct. 1st, and there were a few each day till 6th, then 2 on 8-9th and 3 on 11th. Late birds Oct. 19th, 31st and Nov. 3rd.

REDSTART. Ph. phoenicurus. Few Dunrossness and 20 Fair Isle Sept. 24th, decreasing to 7 next day. Venables noted a "rush" 26-27th, during which a dozen were seen at Fair Isle. Increase Oct. 1st and again 3rd, slight passage 6th. One Oct. 12th and 2 on 16th Dunrossness.

BLACK REDSTART. Ph. ochrurus. At Scousburgh - female or young, Sept. 28th, Oct. 30-31st, and Nov. 12th, 16th, 20th. Two adult males in Venables' garden together, Oct. 29th.

RED-SPOTTED BLUETHROAT. Luscinia s. svecica. Male at Fair Isle, Sept. 23-28th.

ROBIN. Erithacus r. rubecula. (All trapped birds matched Continental skins). The first 3 arrived Sept. 24th but only one remained by 26th. One or 2 daily from 27th at Dunrossness and 2 at Fair Isle 29th. Over 30 came in on Oct. 1st, increasing to over 50 next day and 75 plus on 3-4th. Gradual decrease during next 3 days, small influx on 8th and more on 12-13th. Few thence until the end of the month, and no big movement until Nov. 2-4th. Small numbers arrived on 9th and 16th.

HEDGE SPARROW. Prunella m. modularis. (All trapped birds belonged to Continental race). Five, Oct. 2nd, and 9 next day, then a gradual decline until a few arrived on 6th. Two, Oct. 9th, one or two 11-12th, singly 16th and 18th.

BLACK-BELLIED DIPPER. Cinclus c. cinclus. James Anderson had close views of one, which he tried unsuccessfully to trap, in the Gully on Nov. 18th. It was not seen again, despite a regular watch, until 25th and 27th. This is the seventh record for Scotland.

SWALLOW. Hirundo rustica. Two, Sept. 24th, one most days to end of the month. Three, Oct. 1st, 8 next day, and 3 or 4 daily to 5th.

GREATER SPOTTED WOODPECKER. Dendrocopos major. One at Fair Isle, Oct. 2nd and 3rd.

BEE-EATER. Merops apiaster. One was at Lerwick from Oct. 4-5th, the third record for Shetland. It fed much like a Swift, but at 30-50 feet up, with a considerable amount of gliding in its flight. (per G.T. Kay).

LONG-EARED OWL. Asio otus. The first was trapped Oct. 28th; others seen Nov. 5th and 7th.

SHORT-EARED OWL. A. flammeus. One, Oct. 9th
One Nov. 1st, and one or more on most days
between 7th and 14th at Fair Isle and also at
Scousburgh. Two Nov. 20th.

MERLIN. Falco columbarius. Last one Oct. 19th.

KESTREL. F. tinnunculus. Two, Sept. 23rd,
remaining until 28th. Female, Oct. 1st, pair
3-4th, and singly to 13th. One, Nov. 11th.

COMMON BUZZARD. B. buteo. One, Oct. 3rd
and 7th, on the hill ground.

SPARROW HAWK. Accipiter nisus. Females on
Oct. 6th and 14-15th.

HERON. Ardea cinerea. Biggest numbers, 8 on
Sept. 22nd and 24th, 7 on 26th and 30th. Flock
of 9, and others, Oct. 2nd; similar flocks each
day 4-9th. Increase on Nov. 8th.

WHOOPEE SWAN. C. cygnus. Seven adults Loch
Spiggie Oct. 6th; no young until 18th and 104
gathered by 21st. Flock of 11 making SW. from
Sumburgh, 17th. At Fair Isle parties of 4 on
9th and 11th, and 5 and 4 on 22nd.

GEESE. Skeins of up to 20 grey geese were
passing Fair Isle Oct. 21-22nd. Seven Grey
Lags Anser anser 26th. Skein of 11 on Nov.
5th. Fluctuating numbers of Grey Lag Geese
frequented Spiggie-Brow Marsh, late October to
mid-November. A dozen Pink-feet Anser arven-
sis brachyrhynchus at Fair Isle Nov. 1-2nd,
six from 7-13th. Skeins 9-18 and smaller lots
Nov. 21st, and 10 Grey Lags on 23rd.

MALLARD. Anas platyrhynchos. Few during Sept.-

Oct., 7 on Oct. 5th and 8 on 16th being the most. Forty on Nov. 7th and more next day. Up to 20 on 12th and a further increase 13th.

TEAL. A. crecca. Few each day from mid-Sept. then 10 and 14 on 24-25th. Very few early Oct. Last were 3 at Fair Isle 14th, 3 at Dunrossness 16th, and one 20th Fair Isle.

WIGEON. A. penelope. Best movements were 7, Sept. 14th, 7 on 16th, 5 or 6 on 23-24th, with 10 over the next 3 days; 15 on Oct. 3rd; flock of 11 and others on 8th, and 30 on Nov. 13th.

PINTAIL. A. acuta. One at Spiggie, Sept. 14th; 7 at Fair Isle, Nov. 24th.

SHOVELLER. Spatula clypeata. Three at Spiggie Sept. 28th.

LONG-TAILED DUCK. Clangula hyemalis. First at Spiggie, Oct. 12th. Two males and three females Fair Isle 15th. A juvenile, unable to fly, and with strands of Enteromorpha intestinalis streaming from its bill, was on a small pool at Skaddan, 26th. "The Good Shepherd" passed several small flocks between Lerwick and Sumburgh on 31st, and on Nov. 13th no fewer than 38 were seen at Fair Isle.

VELVET SCOTER. Melanitta fusca. One at Spiggie, Sept. 27th; two at Fair Isle, 28th.

GOOSANDER. Mergus merganser. One at Spiggie, Nov. 12-20th. See para. 50.

RED-NECKED GREBE. Podiceps griseigena. Two at Spiggie on Oct. 5th.

WOOD-PIGEON. Columba palumbus. One Dunrossness and one Fair Isle, Oct. 1st; and 4 at Fair Isle from 2-5th. Two on 7th and singly at both places 17-20th. One, Nov. 4th.

TURTLE DOVE. Streptopelia turtur. Singly, Sept. 22nd and 29th. See para. 50.

WOODCOCK. Scolopax rusticola. Singly, Oct. 3rd, 13th, 26th. About 10 on 28th and over 300 next day, with another 100 on 31st. Some 50 on Nov. 5th and over 200 on 7th, decreasing daily till 12th, when 50 were recorded. Another influx on 15th. See paras. 47, 51.

COMMON SNIPE. C. gallinago. Increases on Sept. 19th, 22nd, 24th; Oct. 1st, 4th, 6th; Nov. 7-8th, 12th and 28th.

GREAT SNIPE: Capella media. One, Nov. 7th.

JACK SNIPE. Limnocryptes minimus. One on Sept. 19th. One or 2, 24-25th. Small movement, Oct. 2-4th, renewed 6th. Few on Nov. 17th.

RUFF. Philomachus pugnax. Singly, Sept. 24-25th and Nov. 16th.

COMMON SANDPIPER. Actitis hypoleucos. Two on Sept. 29th were the last.

GREEN SANDPIPER. Tringa ochropus. Oct. 2-3rd.

GOLDEN PLOVER. Charadrius apricaria. Increases south Shetland Sept. 15th, 22nd, 24th, Oct. 6th 11th, 17th, 26th. See para. 51.

GREY PLOVER. Ch. squatarola. Three, Virkie, Oct. 6th. One, without a head, was found at Fair Isle Oct. 29th.

LAPWING. V. vanellus. Increases at Dunrossness and arrivals Fair Isle coincided Sept. 15th and 24th. Eight on Oct. 2nd, up to 12 on 4th. Increase both places 6-7th, 18th and 26th. Dozen or so at Fair Isle from Nov. 9th and 21 on 16th.

BLACK-HEADED GULL. Larus ridibundus. Few on most days. Flock of 100, Oct. 6th. Some passage Nov. 8th and 16th.

COMMON GULL. L. canus. Some 50 adults 30 juvs Sept. 24th, otherwise between 20-50 most days. Over 200 Oct. 1st, 150 on 4th, 200 again on 6th. About 150 on 15-16th.

SCANDINAVIAN LESSER BLACKBACK. L. f. fuscus. One was recognised on Sept. 25th.

GLAUCOUS GULL. L. hyperboreus. One, Spiggie Oct. 23rd, three at Fair Isle 25th. Few afterwards, with 5 on Nov. 3rd and 7 on 5th.

ICELAND GULL. L. glaucoides. One, Nov. 3rd; over 40 on 8th; one 16-17th.

WATER RAIL. Rallus aquaticus. First on Sept. 12th. One 25th, 2 next day; one 29th. Four Oct. 2nd, 3 on 4th, 2 on 31st. Two, Nov. 12th and 7 on 15th. Singly on other days.

MOORHEN. Gallinula chloropus. One, Oct. 2nd.

COOT. Fulica atra. One, Nov. 4th. First wintering bird at Spiggie, Nov. 8th.

QUAIL. C. coturnix. J. Wilson saw one on the hill, Oct. 12th.

K. WILLIAMSON
L.S.V. VENABLES.

47. October 1951 at the Isle of May

The Isle of May enjoyed very little bird-migration until the great invasion of early October, which was experienced all along the east coast of Britain. The dominant species, as at Spurn Point, was the ROBIN; these are said to have been entered in the Spurn schedule at 20,000 birds at the height of the rush, and although they were not nearly so abundant as this at the May, the island's 600 plus greatly outstrips Fair Isle's 30 on Oct. 1st and 75 plus on the next two days. It is obvious that the main drift of Robins took place across the middle reaches of the North Sea from the German coast, which runs in a W.SW. direction, to the shores of Yorkshire and farther south.

Some species occurred more numerously at Fair Isle than Isle of May, and all these seem to be birds of a more northerly origin. They included GOLDCREST (35 at the May), FIELDFARE and REDWING. About equally common at the two Observatories were SONG THRUSH and BLACKBIRD, though the arrival of 100 of the latter at the May on Oct. 6th far exceeds the number at Fair Isle on this date. An increase in WRENS at the Isle of May, and the occurrence at Fair Isle of one which was definitely not a local bird, Troglodytes t. fridariensis, indicate that this species also took part in the invasion. A few RING OUSELS and WOOD PIGEONS were seen at both places, and HEDGE SPARROWS were rather more in evidence at Fair Isle. SNOW BUNTINGS arrived only in the north.

The above were the numerically superior species which, by virtue of having a "standard

direction" SW. to wintering-grounds in France and SW. Europe, formed the bulk of the migrants at this time. It is noteworthy that they are all night-migrants, and therefore more subject to trans North Sea drift than diurnal migrants; and it is significant in this respect that whereas vast numbers of CHAFFINCHES and many BRAMBLINGS were on the move in daylight through Lista (Norway) at the beginning of this period, very few indeed reached the British shores.

A few departing summer visitors were seen at Fair Isle or in the north, but were not seen at Isle of May, and most important of these was the WILLOW WARBLER. Common to both islands, but in small numbers only, were TREE PIPIT, PIED and SPOTTED FLYCATCHERS, SEDGE WARBLER (3 on 3rd at the May), GARDEN WARBLER, BLACKCAP, and LESSER WHITETHROAT (one from 1st-7th at the May), WHINCHAT, REDSTART and SWALLOW. The last, present in the north from 1st, did not appear at the May until 5th. The more southerly station had WHITETHROAT and SHORT-EARED OWL, unrecorded at Fair Isle.

With regard to "rare stragglers" whose route lies in a SE. direction through Europe and Asia, the Isle of May had two species which were not noted at this period farther north. They were SHORE LARK (one on 2nd, two on 3rd; one on 6th, two on 7th) and RED-BREASTED FLYCATCHER (three on Oct. 1st, one remaining till 7th. There was also a BARRED WARBLER on 6th and a movement of CHIFFCHAFFS (see para. 55) which peaked on 2nd

There was a good deal of immigration of Continental birds in mid-October, including HOODED CROW (7 on 13th, 14 on 15th and 10 next

day), a few LINNETS and CHAFFINCHES (25 on 13th), BRAMBLING (over 100 on 12-13th and about 150 on 15th, corresponding with peaks in the North). REED BUNTING (10 on 13th), GOLDCREST (30 on 12th and 40 next day), and a few FIELDFARES and ROBINS. From 30 or 40 on 11th SONG THRUSHES and REDWINGS rose to over 500 next day, and BLACKBIRDS were only slightly fewer, but showed increments on 15th and 17th. There were seven HEDGE-SPARROWS on 13th and a slight increase in WRENS next day.

There was a late COMMON SANDPIPER on the May at this time and other interesting species present, either singly or a few only, were an ORTOLAN (14th), SHORE LARK (15th), WOODLARK (12th and 14th), GREAT GREY SHRIKE (12-13th), CHIFF-CHAFF (13-16th), YELLOW-BROWED WARBLER (11th), BLACKCAP, MISSEL THRUSH (two on 16th), RING OUSEL (12-13th), REDSTART (12-16th), SHORT-EARED OWL (16-19th), MERLIN (from 14th), KESTREL (12th) WOODCOCK and JACK SNIPES (13-15th). A party of ten LONG-TAILED TITS Aegithalos caudatus on 10th were perhaps local birds.

At the close of the month big numbers of Turdidae came in at the May, as in the North. The first big influx of FIELDFARES was seen on 27th and 29th, and over 600 REDWINGS on 27th were followed by some 2,000 on 29th. BLACKBIRDS were in similar strength, and there were some ROBINS and SONG THRUSHES. Fifty GOLDCRESTS on 27th were succeeded by twice as many from 28-30th. Other features of this late movement were the last WHEATEAR (28th) and REDSTART (29th) a small influx of WOODCOCK on 29th (corresponding with the big "fall" at Fair Isle), odd BLACKCAPS and CHIFFCHAFFS, further CHAFFINCHES and BRAMBLINGS, and a few HOODED CROWS.

48. Cambridge University Ornithological Expedition to Norway, 1951.

The object of this expedition was to study migration in SW. Norway. A preliminary visit in 1950 had established the possibilities of the Lista peninsula as a suitable area and 5 observers stayed here from Sept.12th to Oct.1st.

Their activities may be divided into two main spheres:- (i) the direct observation of diurnal migration, and (ii) the day to day assessment of the status and distribution of species, and especially migrants, in the whole area. Apart from one or two days of showers and one of continuous rain the local weather was on the whole favourable. The gradual build-up of anticyclonic conditions over a great deal of NW. Europe in the latter part of September, succeeding a prolonged period of low barometric pressure, produced conditions such that a mass-migration took place at the end of that month. Many interesting species were recorded at that time and it is hoped that it may prove possible to correlate this large movement in Scandinavia with passage in other parts of Europe.

The work of the expedition may be considered under two headings:- that undertaken at a lighthouse in a comparatively isolated situation at the extreme west point of the peninsula, and the coastal watches and general observations undertaken in the hills to the north and on the plain to the east and SE. With two members of the party at the lighthouse, the other three were able to cover an area extending up to 15 km, to the SE. and 10 km. to the north, using motor cycles.

An attempt was made to set up at Lista Lighthouse a small observatory on the lines of those in the British Isles. A Heligoland trap was built in the only area providing any cover the garden of the lighthouse keeper with whom two members of the party were staying. Other methods of catching birds were also employed, namely Chardonneret traps, clap and drop-nets, and loose nets in the root crops. Many birds were also taken at the lighthouse at night, although on no occasion when migration was in progress was it at all foggy.

The watches of diurnal migration were the chief features of every day's activities. One point was covered every day from soon after dawn until the passage of birds ceased or became insignificant. This was at the extreme SE. tip of Lista, where birds became concentrated into a fairly narrow migratory front by geographical features. Much data was collected here of migratory behaviour, influence of weather, and number and species of birds passing through. Watches were also undertaken at other points on the coast in an attempt to determine the standard direction of the birds. These included a two day visit by two members of the party to Lindesnes, which lies 20 km. SE. of Lista.

An attempt was made to cover the three main divisions of bird habitat, - the hills, which had considerable woodland cover; plain, consisting of open fields (stubble, root-crops etc.), marshland and lakes; and coast.

Ringling. 150 birds of 23 species were ringed. Of these 58 were caught in the Heligoland trap between Sept. 24th and Oct. 1st. Two Dunlin and a Grey Plover were caught in a

clapnet. All birds caught in the lighthouse area were weighed and measured. Apart from one bird retrapped by us a few days after we had ringed it no recoveries have yet been recorded. Comparison of weights of migrating birds at Lista and Fair Isle gives statistically sound support to the theory that birds lose a significant amount of weight on their trans-oceanic migrations. (See next Bulletin).

Observations. The results of the daily watches show that two peaks occurred, - one about Sept. 20th, and a very much larger one, involving over 20 species, right at the end of the month. There is evidence that a smaller peak also occurred Sept. 10th to 12th when we were travelling down to Lista. It seems likely that all these waves were reflected by the arrival of birds at Fair Isle a day or two later, but it is difficult to be certain about this as birds arriving at Fair Isle have not necessarily come from the Continent. In the earliest movement birds of prey were prominent in Norway and an increase of Raptors was noted at Fair Isle on Sept. 13th and 14th. Flava wagtails and Blue-throats were also seen in Norway and at one, at least, observatory in this country. The only time we saw Ortolans at Lista was following this period when they were also seen on the east coast of Britain. The peak of 20th was small in south Norway, involving pipits and larks in the main. It continued until Sept. 22nd at Lista and on Sept. 23rd and 24th many birds arrived at Fair Isle, notably Turdidae and also warblers, Scarlet Grosbeaks and Tree-Pipits.

On Sept. 23rd, the wind went round to the east and remained in that quarter for the rest of our stay. There was little migration till

till 27th but the easterly winds brought in most interesting birds. On the 23rd we saw an immature BARRED WARBLER, on the 24th a BROWN FLYCATCHER Muscicapa latirostris (the first for Norway), a MARSH HARRIER Circus aeruginosus on the 25th (the fourth recorded in Norway), TAWNY PIPIT Anthus campestris on Sept. 26th and a female YELLOW-BREASTED BUNTING Emberiza aureola (also the first recorded in Norway) on the 28th. These east winds brought Ortolan Bunting, Red-breasted Flycatcher, and Yellow-browed Warbler to Fair Isle to name a few of the more interesting birds.

The last peak of migration may be considered to have begun on Sept. 27th. For several days there had been little in the lighthouse garden but on this wet Thursday morning there were many birds; the first drive caught a Song thrush, a Pied Flycatcher, a Blackcap and a Garden Warbler and in all we secured 9 birds in the Heligoland and 2 Redstarts at the light. Several species of passerines were on the move and we also saw a Greenshank. It was wet again on the morning of the 28th and there was little passage until the evening when the first Redwings, together with several other night migrants, were on the move. On the 29th migration of many species was in progress on a grand scale, both at the lighthouse and also at the eastern end of Lista. The passage on this day and the next had to be seen to be believed. Literally thousands of diurnal migrants, including Chaffinches, were counted flying past the observation posts and this memorable sight alone made the expedition worth while.

Several species showed peaks of passage through the Shetland Isles on Sept. 27th, not-

Warblers, Wheatears and Redstarts were also present in larger numbers than previously. With Fair Isle, however, the 24th seems to have been an important date. This raises the question of the origin of the birds migrating through these northern islands and it would be unwise to draw too much comparison at this stage. A point relevant in this connection is that the first large rush at Lista occurred 48 hours before it reached Britain generally. One wonders where the birds which came to England left the continent. Many other problems arise and it is hoped that it may be possible to publish a more detailed paper at a later date.

However, there can be little doubt that the large rush observed in Fair Isle and also by Mr. Venables in Shetland consisted mainly of Continental birds. The same species, in similar large or larger numbers, were recorded at many other places on the east coast of Great Britain. Although many species were involved principle among them were Redwings, Goldcrests, Robins and Song-Thrushes. It is of great interest that these species are all night-migrants (although they may arrive at British shores in the day-time) and that no significant number of diurnal migrants, e.g. Chaffinches, was recorded in Scotland at this time. Similar observations are reported from Cley by Mr. R.A. Richardson and the fact that only certain species crossed the North Sea when all were exposed to the same weather conditions presents yet another problem for solution in the analysis of the early October rush. The factors precipitating the mass migration are also being investigated and the whole event is proving a most interesting study.

An account of the Lista expedition would be incomplete without acknowledgements of the help received from a number of sources. The visit to Norway would not have been possible without financial assistance from the trustees of funds in Cambridge University. Much help was received from Herr Holger Holg rsen, Curator of Stavanger Museum, who gave us advice, supplied us with rings for use in Norway and also permitted us to visit the Ornithological Station at Revtingen, which is famous throughout the world for its success with trapping waders. We were treated with great hospitality by the lighthouse keepers at both Lista and Lindesnes, and especial mention should be made of Herr Fyremeister R sstad in whose garden we were permitted to build a Heligoland trap. Our subsequent activities did not improve his garden! Finally we should like to record appreciation of the help and encouragement given us from the start by Mr. Kenneth Williamson, without whose advice and active assistance the expedition would have been neither so ambitious nor so successful.

DAVID JENKINS.

49. Bird Migration at Noss Head, Caithness

Noss Head, Caithness, lies 12 miles S. of Ducansby Head and about 15 miles SSE. of the Pentland Skerries. The Lighthouse is 175 feet above sea level and is open to NNE., E., SE., and SSE., flashing red to the area west of Ducansby Head and white to seaward. Most of the headland is under cultivation, the farmhouse at Noss being about a mile from the lighthouse; but there is a broad margin of

rough grassland and patches of whins through which run several ditches bordered with whins, providing cover in an otherwise very bare land.

The occurrence of migrants at Noss Head was first recorded by John Bain who was stationed at the lighthouse from 1918 to 1921 and from 1933 to 1937. Many of his observations are published in the Reports on Scottish Ornithology in the Scottish Naturalist, and among the most noteworthy are Tree Pipit, Pied Flycatcher, Blackcap, Whitethroat, Icterine Warbler, Garden Warbler, Black Redstart, Wryneck and Red-backed Shrike.

Through the kindness of Mr. George Clyne of Noss, who not only gave access to the whole farm but also provided accommodation, it was possible to arrange for a party of observers to maintain a full-time watch from September 17th to 26th. The party consisted of James Gunn, John Nelder and Ian Pennie. Weather conditions were on the whole pleasant for outdoor observation, but for the first three days the wind remained obstinately in the NW. and N., backing on 20th to S. where it remained for three more days, and finally from 23rd onwards varying between SSE. and SE.

On 17th one Snow Bunting, 7 Wheatears, a Whinchat, a Stonechat and 2 Swallows were seen, also a small bird near the farmhouse which was later identified as a Goldcrest, and which remained until 20th. The Wheatears dwindled to two by 21st and the Snow Bunting and chats were not seen again.

The next few days produced nothing beyond the usual few Twites, Meadow and Rock Pipits,

Corn Buntings, Skylarks and Blackbirds, though 2 Teal were seen on 18th and 3 next day, 2 Swifts on 20th and a Song Thrush on 21st. On 22nd 6 Sand Martins appeared and a Robin was seen at the lighthouse, and a single Knot among the Redshanks on the shore. That evening the wind backed almost to SE. but there was no great change in the birds next day apart from the appearance of 40 Turnstones and 8 Velvet Scoters.

The 24th was the best day. A female Redstart was trapped in the garden in the morning and there were also in the garden 3 Chaffinches (the only ones seen) and a Pied Flycatcher. A second Pied Flycatcher was seen on the cliffs on the NE. side of the head later in the day, and on the shore on the north side 18 Teal, a Dunlin and 24 Lapwings. The crowning achievement was the trapping of a female Blackcap in the whins just at dusk. The 25th began with the trapping of a Whitethroat from the same patch of whins. A Bar-tailed Godwit and 5 Ringed Plover were seen on the shore, and - most unexpectedly - 5 Terns, probably Arctic, flying south along the shore.

It is difficult to assess from one visit the possibilities of Noss Head as a point for observing migrants, and unfortunately there is now no reliable observer living in the locality. The general impression is that there is too little cover on the headland and that although many interesting species have been recorded there, the passage is not sufficiently regular to warrant the establishment of a trapping station in the absence of an enthusiastic local worker.

IAN D. PENNIE

50. Autumn Migration on the North coasts of Sutherland and Caithness

BULLFINCH. Nov. 13th, a female the only one I.D.P. has ever seen at Tongue and almost certainly a migrant.

CHAFFINCH. Nov. 13th, flocks at Tongue, thought to be F. c. hortensis.

BRAMBLING. Oct. 14th, about 30 Sandside Wood, Reay. Oct. 16th, about 60 east side of Kyle of Tongue, first seen there since 1947, and few at Reay next day. Oct. 27th, about 30 east side of Kyle, a dozen in Forres Wood, Reay. Oct. 30th, small flock north of Lairg. Nov. 13th, 20-30 Tongue village. Nov. 20th few among Chaffinches, Tongue. Nov. 24th, few.

SNOW BUNTING. Nov. 1st, one, Reay. Nov. 2nd, small flock, Tongue. Nov. 12th, flock of 50 flying SE., Reay. Nov. 14th, 9 at Reay.

GREY WAGTAIL. Motacilla cinerea. Nov. 17th, one, Reay. Early Dec., one, Tongue.

WAXWING. Nov. 13th, 2, Reay. Nov. 14th, 4, Reay. Nov. 15th, 10, Tongue. (First reports in Aberdeen area Nov. 14th, - per Prof. V.C. Wynne-Edwards).

GOLDCREST. Nov. 13th, six in I.D.P.'s garden, Tongue.

MISSEL THRUSH. Turdus viscivorus. Oct. 3rd, two 7 m. south of Altnahara on open moor, with small flock of MEADOW PIPITS.

OTHER TURDIDAE. Oct. 2nd, first Fieldfare Reay. Oct. 3rd, 5 Fieldfares, Reay, and 2 at Altnaharra, 16 m. south of Tongue. Oct. 12th, Redwings flying into SE. wind during afternoon, Reay.

Oct. 13th. Huge flocks of Redwings all day at Reay. At Tongue at 1100 hrs. flocks on east side of Kyle were flying south. Many Blackbirds at Melness, 1700 hrs., also several hundred Redwings, with a few Fieldfares and Song-thrushes flying south on west side of Kyle. Many were resting on the heather: as I.D.P. left his car and walked off the road Redwings rose in flocks all round him.

Oct. 14th. Flocks of Redwings flying into a south wind, largest being seen between noon and 1300 hrs., numbers falling off at 1500 hrs. About 60 in largest flocks. Blackbirds in Sandside Wood and all round the coast, and a few Redwings and Song-thrushes in the geos. Redwings also seen flying over SE. Caithness.

Oct. 27th. Renewed passage of large mixed flocks of Redwings and Fieldfares, Tongue and Reay. Oct. 28th. Both species flying due south, Reay, including one flock of over 200. Many Blackbirds and a few Song-thrushes round the coast, and Redwings heard passing at night. Oct. 30th. I.D.P. went by car to Dornoch and saw flocks of Redwings and Fieldfares along the roadside all the way. Donald McDonald, Dornoch, reported more Fieldfares this year than ever before.

Nov. 5th. 26 Blackbirds in I.D.P.'s garden in morning and hundreds all the way from Tongue to Melness. Blackbirds everywhere, -

flying out of roadside ditches every few yards, and all over the heather. Renewed Redwing and Fieldfare passage. A few Turdidae at Reay but no continuous passage, and no Blackbirds. Nov. 6th. A few Blackbirds, east side of Tongue.

Nov. 13th. Fresh influx, more Redwings than Fieldfares, and many Blackbirds, Tongue. Nov. 14th. 40 Redwings and about 3,000 Fieldfares, Reay; hundreds of mixed thrushes roosting in larch trees, Achvarasdal. Nov. 22-24th. Still many, Tongue and Reay, increase in Blackbirds 22nd. Nov. 25th, about a dozen definite T.m. musicus, Tongue village. Nov. 25-30th, parties of Fieldfares and a few Redwings about.

WHEATEAR. Nov. 12th, one on Reay shore.

SWALLOW. Oct. 6th, 6; Oct. 8th, 8, Reay.

SAND-MARTIN. Riparia riparia. Nov. 17th, one hawking flies over Tongue all afternoon.

SWIFT. Apus apus. Oct. 3rd, 2, Reay. Oct. 7th, 2, Melness (west side of Kyle of Tongue). Oct. 9th and 14th, one at Reay.

GREENLAND FALCON. Falco rusticolus (?) candicans. Nov. 8th, Gyrfalcon, probably this race, at Reay.

GOOSANDER. Nov. 14th, 3, Tongue, the first I.D.P. has seen there.

TURTLE DOVE. Oct. 5-7th, juv. at Reay.

JACK SNIPER. Nov. 25th, 2 at Reay.

IAN D. PENNIE, Tongue.
JAMES GUNN, Reay.

51. Autumn Notes from the Flannan Isles

D.G. Andrew and G.L. Sandeman visited the Flannan Isles in late July, mainly to see the Leach's Fork-tailed Petrel colony, and whilst there they arranged with Mr. Alexander Tulloch, one of the Lighthouse Keepers, to forward notes on the autumn migration. Mr. Tulloch and a colleague have sent some detailed and interesting observations, - particularly interesting since there are definite links with Fair Isle and North of Scotland observations reported elsewhere in the Bulletin.

Mid-September was a time of little movement on the isles, Wheatears being present daily, and an occasional bird of prey. A Song-thrush (back "olive-brown") on Sept. 16th, Starlings on 17th and 3 Snow Buntings on 18th are noteworthy, Fair Isle showing an increase in the latter on this day. Late in the month flocks of Golden Plover appeared, - 7 on 24th (increase in South Shetland), 2 on 25th, 15 on 27-30th, with an increase to 30 on Oct. 1-2nd. The first Fieldfare was seen on 25th (first at Fair Isle, 3 on 24th) and on that day and 27th a few White Wagtails and Wheatears passed.

Birds which seem to have been a part of the great influx of early Oct. were at the Flannans for one day only on 2nd, and included large flocks of Starlings, 7 Fieldfares, 2 probable Song-thrushes, 5 Wheatears and a House Martin. A young Leach's Petrel was at the lantern that night and a young Storm Petrel was caught on 4th. The wind was light southerly on 2nd, veering to N. on 4th; there was a passage of Pipits (probably Meadow) that night, with 2 alba Wagtails and 9 Wheatears. From Oct. 6-9th a

southerly gale was blowing and only Golden Plover, up to 30, were seen. Venables noted an increase in Shetland on 6th. Strong southerly winds blew again from 11-16th, delaying the relief boat; a few Snow Buntings were at the Isles from 11th, and a Redwing and 3 Wheatears appeared on 15th, a day of increase in both species at Fair Isle. On relief-day, 17th, 60-70 geese and 5 Turnstones arrived, the former passing on.

Redwings, 9 on 18th and 30 next day, (coinciding with an increase in Shetland) remained about this strength to 23rd. They seem likely to have hailed from Iceland, where winds had been very light although a secondary depression was developing rapidly on 18th, with strong westerly winds towards the British Isles; at Fair Isle, we trapped a T. m. coburni on 20th. There were a few Wheatears and Turnstones and 5 Snow Buntings in this period, the last Wheatear being seen on 22nd. A large flock of geese flew SE. on 20th, and 200 Barnacles Branta leucopsis alighted on Eilean Tigh about 0725 hrs. next day, - wind N.NW., fresh, with hail. They had gone by 22nd, when another big flock, species unknown, was seen passing SE., but between 200-230 Barnacles came down on Eilean Tigh at 0730 hrs. on 23rd, leaving again at 0915 hrs. The wind was light westerly, passing showers, good visibility.

With the wind falling light SW. on 24th the "Island was very bare of strange birds"; but it freshened on 25th and 6-7 Redwings and 7 Golden Plovers appeared, and over 100 Barnacles landed on Eilean Tigh but left for SE. after a short stay. About 80 landed next day, leaving in the afternoon. Oct. 27th was "a

record day for birds; a flock of 60-80 Redwing came in from NW. at 1030 hrs; flock of 80-90 Fieldfares came in from same direction, 1100 hrs.; flock of 160-180 Barnacle Geese landed on Eilean Tigh from NW. in afternoon and later left SE.; flock of 60 Starlings came in from E. in the evening. Also seen, 2 Song-thrushes, 7 Blackbirds, 2 Robins, 3 Snipe, 3 Turnstones, 15 Golden Plovers. Wind fresh S., dropping to light 1100 hrs., visibility moderate to good".

There were well over 100 each of Fieldfare and Redwing on 28th, 10 Blackbirds, 2 Robins, a Snipe and 3 Golden Plovers, but no sign of the Starlings. Many Redwings and Fieldfares were at the lantern that night, as was the case at Fair Isle, where dozens were killed. They were in similar strength on 29th, and 20 Blackbirds, 5 Golden Plovers, a Lapwing and a Glaucous Gull were also present. About 80 Barnacles rested on Tigh and Soray. "Large numbers of Redwing and Fieldfare reported from Sule Skerry and North Ronaldshay lights, also a young Swan at Sule Skerry for several days. Large numbers of birds at light, 9 p.m.". This, of course, was the day on which the Blackbird-Redwing-Fieldfare invasion at Fair Isle surpassed anything yet seen, and these three species were in considerable numbers at the South Light that night.

Large numbers - about 200 - of Fieldfares and Redwings remained next day, also 40-50 Blackbirds, 5 Woodcock (there had been a rush at Fair Isle on 29th), a Snipe and 3 Golden Plovers. Barnacle Geese on Eilean Tigh and Soray were nearly 500. With the wind light variable on the nights of Oct. 31st and Nov. 1st many birds, except the geese, departed. On

Nov. 3rd 7 Twites arrived and some 30 each of Redwing, Fieldfare and Blackbird remained. Evidently many had been severely overtaxed by their overseas' flight and a large number were lying dead on the island. SE. gales precluded bird watching on 4-5th, and on 6th Twites had increased to 16. The thrush species showed no change, and a Waxwing, Lapwing and 5 Golden Plovers were seen. A flock of 30 Twites came in from NW. at 1410 hrs. on 7th with the wind light variable, E. to S. Two Rooks stayed from 7-12th, Barnacle Geese increased to nearly 800 on 8th, and the three thrush species were much as on Nov. 3rd. New birds on 9th were 2 Robins, a Mallard, an immature Iceland Gull and a Kittiwake. There were 2 Iceland Gulls on 11th and an unidentified falcon, and a single Brambling next day.

From Notes by ALEXANDER TULLOCH

52. Notes from Little Ross Lighthouse,
Kirkcudbrightshire.

Movement in early September was probably due in the main to British birds moving south. On 6th a GOLDCREST was at the light and 10 were ringed on 11th. There was a big movement of ROBINS (26 ringed) the same night, and also on passage at this period were PIED FLYCATCHERS (2 on 8th, 1 on 11th), SPOTTED FLYCATCHER (1 on 11th), WILLOW-WARBLER (8 on 11th), SEDGE WARBLER (2 on 11th) and a few WHEATEARS.

There was considerable passage at the beginning of October, the most important species being GOLDCREST (13 on 4th, 7 on 5th, 23 on 6th) and CHIFFCHAFF (4 on 4th, singly on 3rd and 5th).

Two GRASSHOPPER WARBLERS Locustella naevia were handled 1st and 4th, and on the latter date a YELLOW-BROWED WARBLER was ringed. Other species were REDSTART (2 on 4th, 3 on 6th), ROBIN (2 on 4th, 3 on 6th) and SKYLARK, most numerous on 6th. REDWINGS were caught on 3rd and 7th and PIED FLYCATCHERS on 3rd, 4th and 7th.

A WREN was caught on Oct. 4th and another on 11th. BLACKCAP, ROBIN and GARDEN WARBLER occurred on the last date, when the most numerous species were SONG THRUSH (6) and GOLDCREST (5). There were several of the latter at the lantern on 14th also.

At the end of the month STARLINGS were more numerous than any other species, 15 being ringed and several "casualties" saved for skins on 28th. Two of these had measurements of Sturnus vulgaris zetlandicus, and their identification as such was confirmed by Mr. R. Wagstaffe of the Liverpool Public Museums. It is possible they were on passage from the outer Hebrides, where this is the breeding bird. There were 3 SONG THRUSHES, 2 GOLDCRESTS and a REDWING on this night; and on Nov. 6th BLACKBIRD and FIELDFARE were first seen and 4 REDWINGS were caught.

The best night for ringing was Sept. 11/12th, when 61 birds of 9 species were taken at the light. The season's total of 290 birds includes 62 Goldcrests, 42 Skylarks (29 of them on Feb. 14th), 31 Robins, 26 Song-thrushes (12 from March 3-5th), 24 Starlings, 19 Willow-warblers, 13 Chiffchaffs and two 1st winter male KESTRELS found fighting under a boulder on the beach.

From Notes by IAN WALKER

53. Arrival of Greenland White-fronts in Ireland in 1951.

The first occurrence at Fair Isle and Shetland of the Greenland subspecies of the White-fronted Goose Anser Albifrons flavirostris (on Sept. 15th, 1951), was recorded in Bull. No. 4, para. 38; and in commenting on the meteorological situation at the time I wrote: "The conditions for such a journey seem so entirely favourable that it would be of great interest to know if arrivals of Greenland Whitefronts took place in Ireland and West Scotland at that time". Accordingly, I asked Major R.F. Rutledge if he would ascertain whether or not arrivals did take place at the Irish wintering-grounds of this goose in mid-September, and he reports:-

"There is a consensus of opinion among widespread informants that wild geese arrived abnormally early this autumn. A feature remarked by some is that geese were first seen flying in a northerly direction: this was thought strange, as the flight is normally to south'ard. Lord Ashtown heard White-fronted Geese near the southern end of Lough Derg on either Sept. 12th or one or two days later: the birds were at a tremendous height, and were not picked up against the blue sky, but judging by the calls appeared to be flying W.NW. There were two reports of first birds on the evening of Sept. 13th from Renvyle, Connemara, Co. Galway, and one of these records is mentioned as the earliest within memory".

"On Sept. 15th, the day the Fair Isle bird arrived, about 100 Whitefronts were seen by the

River Shannon, west of Longford. There were 80 at this locality on 18th and about 300 on 20th. An immature Whitefront was shot on the east side of the River Lee on Sept. 16th, and in "mid-September" seven geese were observed flying over Slievenamon, Co. Tipperary. At the North Slob, Co. Wexford, 14 Whitefronts were seen on Sept. 22-23rd, but these may have been there before. There are later records for Sept. 28th, 30th and Oct. 2nd from Cos. Tipperary, Roscommon and Galway.. Other letters give no dates, but merely state that the geese were abnormally early this year".

Comdr. G. Hughes-Onslow informs me that 17 geese which appeared to his informants to be darker than the Grey Lag Geese which normally visit the area in winter, were observed on an Ayrshire reservoir for one day only on Sept. 26th or 27th. He writes: "I realise this information is of no scientific value but it is suggestive (in view of what you have told me) of Greenland White-fronts. The earliest previous records I have for geese of any kind here are Oct. 9th 1949 for Barnacles and Oct. 20th 1947 for Grey Lags.

It is worth mentioning that although the depression described on p. 27 of the last Bulletin was not in a position to assist migrants from Greenland until early on Sept. 14th since it was a secondary low which moved north from the British Isles, its parent low had held a similar and equally favourable position to the south of the Greenland anticyclone since Sept. 12th.

K. W.

54. Autumn Migration 1951 at Great Saltee, SE. Ireland

A last minute cancellation by those booked for the period Sept. 1-16th left no time for replacement, - particularly unfortunate, for during this fortnight easterly weather prevailed and very heavy migration was reported at Tuskar Lighthouse, which is within sight of Saltee. R.F. Rutledge and P.W.P. Browne landed on Sept. 17th, the former spending three days only, the latter remaining until Oct. 13th, - a lone vigil which was well rewarded by several outstanding records. From Oct. 13th until Nov. 9th, R.F. Rutledge and John Weaving were present.

During the autumn a daily record of local weather and a schedule of migrants were maintained. Owing to the limitations of space it is not possible to include the first, and it is necessary to be very selective in regard to the latter.

1. Migration Observations

HOODED CROW. Six, Sept. 28th, and 2 on 30th. Occasional in October.

STARLING. A little movement in early Oct. Big movement at end of month, - 24th (12), 25th (300), 30th (over 1000) and Nov. 1st (400). Additional big passage Nov. 4th (600), 7th (2000) and 8th (over 5000).

Direction very definite: from Oct. 1-12th small numbers moved to E. or SE., but after 12th flight was in the opposite direction towards mainland and N. Arrivals Nov. 7-9th were from SW. and departures N., NW. and NE. Passage was chiefly in early morning and evening.

GREENFINCH. Oct. 12th (1), 19th (6), 25-26th (1), 28th (12), and smaller numbers till Nov. 7-8th (8).

GOLDFINCH. Carduelis carduelis. Few most days, Oct. 9th-Nov. 1st, with peaks 17th (35), 19th (15), 30th (13). Also Nov. 8th (12).

SISKIN. C. spinus. One ringed Oct. 18th stayed till 21st, feeding on thistle seeds. One Oct. 26-29th, ate seeds of umbelliferous plants.

LINNET. C. cannabina. Few daily, except Nov. 2-4th, from Sept. 24th-Nov. 9th. Chief Oct. movements were 5th (100) and 23rd (70).

CHAFFINCH. Two or 3 daily Sept. 18th-Oct. 6th (8 on Oct. 1st). Numbers fluctuated from Oct. 6th-Nov. 9th but were often over 50. Big increases Oct. 15th (120) and 30th (200); Nov. 6th (70), 7th (1000), 8th (250), 9th (270).

Direction: Up to Oct. 13th the few seen were moving N.-S.; thereafter movement was generally to NE., though sometimes to N. or W. On Oct. 26th birds arrived all morning from NW. heading into ESE. gale. Nov. 7-9th arrivals were from SW., leaving to NE., some to N. passage was most marked from sunrise to 1100 hrs. but continued throughout the day.

Sexes: on some days males preponderated, on others females. The latter were as a rule more numerous Oct. 14-25th. Males were numerous Oct. 31st-Nov. 9th.

Taxonomic. From Nov. 7th it was apparent that the males were of a different stock from those previously seen. The earlier birds were extensively coloured terra-cotta on underparts, whereas those seen and handled on Nov. 7th and following days had breast and flanks rosy salmon pink without any brownish tinge (F. c. hortensis?). Many had only a very pale pink suffusion on the breast. No skins were avail-

able for comparison. A male trapped Oct. 31st at 1445 hrs. weighed 28.67 g., an unusually high weight which strongly suggests a local bird.

BRAMBLING. Male, Oct. 11th; one or two almost daily 18-31st. Also Nov. 1st (2), 6th (2), 7th (13) and 8th (6).

WOODLARK. Singly Oct. 15th and 26-28th, the only occurrence noted in Ireland since 1927. See paras. 46 and 47.

SKYLARK. Numbers very small, Sept. 18th (1) to 26th (30); thereafter daily passage to Nov. 9th, with peaks Oct. 4th (250), 11th (350), 14th (200) and 19th (200). Little or no movement Oct. 20-22nd but from 23rd a daily increase up to and including 29th; decreasing after 30th (50) to few daily.

Direction. Movements are most confusing. It is possible there are two main movements, one from between N. and NE., birds departing to S., another of birds flying to the mainland between NW. and ENE.

TREE PIPIT. Singly, Sept. 28th and Oct. 5th; one also struck at Tuskar Lighthouse first week Oct.

MEADOW PIPIT. Movement daily Sept. 18th-Oct. 19th in numbers fluctuating from about 50 to peaks on Sept. 19th (200) and 20th (150); also 26th (250) and 27th (150); and 28th (250). During first week Oct. between 100-150 daily, then fewer, rising to 150 on 10th. Numbers gradually decreased and from 21st onwards were small.

Direction. Definite from Sept. 18th-Oct. 2nd, from NNE.-NE. Little seen of departure but some took place between W. by S. and S. by W.

Northward movement first noticed Oct. 2nd and on 5th a two-way passage was very pronounced, birds coming from N. and also departing N. In the latter instance they came in low over the sea from between W.-SSW. On Oct. 10th there was a large-scale movement to E.; on 18th birds came from S. and left NE.

YELLOW WAGTAIL. From 1-4 daily, Sept. 21st-Oct. 1st (but 5 or more 23rd and none 29th). Those seen arriving came from NE. These were M. f. flavissima; other flava wagtails were seen Oct. 1st-3rd (2). See para. 46.

GREY WAGTAIL. Sept. 25th (2), 26th (3), 28th (3), Oct. 4-5th (1) and 9-10th (1).

PIED WAGTAIL. Motacilla alba yarrellii. Singly on Sept. 28th and four days in October. Two, Oct. 14th. **WHITE WAGTAIL** M. a. alba. From 3-5 daily from Sept. 18-28th, with 11 on 19th and 7 on 22nd. Birds not subspecifically identified passed intermittently Sept. 18th - Oct. 23rd, chiefly in first week Oct.

SPOTTED FLYCATCHER. Intermittent passage Sept. 20th-Oct. 4th with four on Oct. 1st.

PIED FLYCATCHER. Three, Sept. 20th and Oct. 3rd, intermittently to Oct. 9th. The number seen (15) is noteworthy, as there are only some 40 Irish records.

GOLDCREST. One to 3 daily, Oct. 4-13th; 3 on 19th, 2 on 20th, 2 on Nov. 7th and 2 new arrivals on 8th. A female trapped on 7th was distinctly Continental type, grey-tinged on cheeks, ear-coverts and nape, and greyer on upper-parts than a Regulus r. anglorum captured at the same time.

UNIDENTIFIED WARBLERS. Phylloscopus.
 Sept. 19th (3), Oct. 17th (3). Singly Sept.
 21st and 23rd; Oct. 16th, 20th and 30th;
 Nov. 8th (the last two almost certainly CHIFF-
 CHAFFS). Acrocephalus Sept. 19th (2), 20th
 and 23rd (1), 26th (2), Oct. 1-2nd and 7th (1).
Hippolais. Sept. 21st (1).

CHIFFCHAFF. 5 on Sept. 20th, 1 next day,
 and one or two to the end of the month. From
 Oct. 1st-19th there were one or 2 each day, with
 5 on 4th, over 12 on 6th, and 4 on 14th. One
 Oct. 29th (possibly 30th) and Nov. 8th. A
 Northern bird was trapped Oct. 18th and on that
 day and the next single ones were identified in
 the field.

WILLOW-WARBLER. Passage had almost ceased
 by mid-Sept. Two Oct. 3rd, singly 12-13th.

GRASSHOPPER WARBLER. One, Oct. 2nd, was
 probably this species.

REED WARBLER. One, Oct. 3rd, clearly
 identified by P.W.P.B.

SEDGE WARBLER. Sept. 18th (1), 21st (3).

GARDEN WARBLER. Singly Oct. 1st, 2nd,
 5th, 8th. Three Oct. 3rd and 2 next day.

BLACKCAP. Males singly on eight days
 from Sept. 21st-Nov. 7th. Females singly Oct.
 28-29th and Nov. 7th.

WHITETHROAT. Singly Sept. 21-22nd, 24th,
 30th. From one to 3 daily first week Oct.,
 one 16-17th, one 20th.

LESSER WHITETHROAT. The fifth for Ireland
 was seen in the garden by P.W.P.B. on Oct. 7th.

FIELDFARE. First on Oct. 22nd (3), then from one to 8 on most days to Nov. 3rd. Influx Nov. 5th (35), 6th (55), 7th (200), 8th (50), 9th (20).

MISTLE THRUSH. Singly, Nov. 1-2nd

SONG THRUSH. A thin movement, Oct. 1st to Nov. 8th, except between Oct. 14-17th. Ten on Oct. 23rd. All handled, and compared with skins, were Turdus e. ericetorum.

REDWING. Four, Oct. 3rd, increasing to 9 on 4th. Less than 10 daily until first influx, Oct. 18th (30), 19th (60), 25th (35). Some 20 per day thence until Nov. 2nd (1). Second influx Nov. 5th (15), 6th (50), 7th (200), fewer afterwards.

RING OUSEL. Two to 7 daily, Oct. 2-11th. Male, Oct. 19th; one, Nov. 9th.

BLACKBIRD. Almost continuous passage over the whole period. Heaviest movement from mid-Oct. with peaks Oct. 25th (120), 30th (100), Nov. 7th (100) and 8th (120).

Sexes. Results of trapping 62 birds show 62½% 1st winter, 37½% adult. No indication of separate passage of age or sex groups. High proportion of adult males present Oct. 16th; but only 3 or 4 ad. males were seen in about 30 birds on Oct. 23rd, whilst 5% of 100 or so on 25th were in this category.

WHEATEAR. Thin movement second half Sept. and to Oct. 10th. Most were Sept. 19-20th (6) and Oct. 3rd (5).

WHINCHAT. One or 2 most days Sept. 22nd-Oct. 13th, with 3 on Sept. 26th.

STONECHAT. Daily in small, fluctuating numbers Sept. 20th-Nov. 9th.

REDSTART. Female, Sept. 30th; probably another Oct. 3rd. Male, Oct. 7th; females on 8th, 10-11th.

BLACK REDSTART. Intermittent passage. First 2 on Oct. 7th. Maximum 6 on Oct. 22nd, one an ad. male. Four, Nov. 7th.

Departure from Saltee appeared to be diurnal, for birds were found at roost many hours after sunset, and of 5 found one night at least 4 had departed by one hour after sunrise next morning.

ROBIN. Variable numbers: maximum of 9 on Sept. 19-20th and Oct. 1st. Passage most noticeable Oct. 19-21st and again Nov. 1-4th. All trapped and compared with skins were Erithacus r. melophilus.

SWALLOW. Migration in full swing Sept. 18th, increasing 19th, but 2 only 24th. Passage of 112 on 28th, and of 500 on Oct. 2nd, followed by a regular decline to 17th. Singly Oct. 24th, 28th (2), Nov. 2nd.

Direction. Generally southwards, but at times to W. or E. A puzzling movement occurred Sept. 29th: while many were moving S. there was also a determined movement to NE. and NNE. On Oct. 2nd there was a great movement, in which House-martins were also involved, between NNW. and ENE.

HOUSE MARTIN. Sept. 18th (18) then only 3 birds till Oct. 1st (10) and 2nd (over 200). Stragglers Oct. 11th, 14th, 30th.

SAND MARTIN. Small numbers on 5 days in late Sept. (19 on 21st). Stragglers Oct. 1-2nd. and 11th.

SHORT-EARED OWL. One, Oct. 27-28th.

MERLIN, KESTREL, SPARROW-HAWK. Singly, occasionally 2, on most days. A probable HEN HARRIER Oct. 19th and 23rd.

HERON. Four out of 6 on Sept. 22nd came in from NNW. A BITTERN Botaurus stellaris on Sept. 25th.

BARNACLE GOOSE. Branta leucopsis. Three flying SW., Oct. 22nd. See para. 51.

MALLARD. About 45, Oct. 1st, and 55, Oct. 21st, otherwise a dozen or so most days. TEAL occasionally end Oct. and early Nov., with 14 on Oct. 21st. Five RED-BREASTED MERGANSERS Oct. 30th, singly Oct. 4th and Nov. 2nd.

TURTLE DOVE. Singly, Sept. 21st, 23-25th, 29-30th, Oct. 11-12th.

WHIMBREL. Two or 3 daily Sept. 18th-Oct. 6th, and one or 2 most days from 7th. Four on Nov. 4th.

WOODCOCK. Singly Oct. 30th, Nov. 4th and 7-8th, but many more may have been lying in the bracken. JACK SNIPe on Oct. 12th.

TURNSTONE. Numbers highest during last week Sept. and marked movements Oct. 7-9th and Nov. 5-8th.

WADERS. Dunlin, Oct. 1st and 7th. One Common Sandpiper, Oct. 10th. Greenshank, Oct.

28th. Purple Sandpipers from Oct. 21st (3) and 26th (10). LAPWING movement in early Oct. peaked at 42 on 6th; minor peak 24th (23).

CORNCRAKE. One, Sept. 20-22nd; one Oct. 11th. WATER RAILS were seen and heard daily.

2. Notable Occurrences

The three species mentioned below constitute additions to the list of Irish birds. They are fully substantiated by careful field-notes by P.W.P.B. in the Observatory's "Field Record Book" and I am fully satisfied as to their validity. A full account of them will be published later in British Birds.

RED-HEADED BUNTING. Emberiza bruniceps. A male in fine plumage was seen on Sept. 22-23rd the 7th record for the species in the British Isles (see Bulls. No. 3, 30, and No. 4, 34).

AMERICAN WATER-PIBIT. Anthus spinoletta rubescens. One frequented the beach at the landing-place from Oct. 8-16th. It is the second record for the British Isles, the first being collected by Dr. W. Eagle Clarke at St. Kilda on Sept. 30th 1910. P.W.P.B. first saw it among Rock Pipits, its much buff coloration immediately catching his eye. During six days he made very full notes of field-characters and on trapping it ascertained that it was a 1st winter bird. J.W. and R.F.R. had excellent views from Oct. 13-16th and were able to confirm P.W.P.B.'s observations.

When one had become only slightly familiar with the bird it was very easy to pick it out from the nearby Meadow and Rock Pipits. The most striking characters were the very buff

coloration and the persistent wagtail-like movement of the tail. On one occasion the tail was oscillated continuously for just under a minute. The broad buff edging to the wing-feathers made a most pronounced pattern on the upper-parts, and the pure white of the outer tail-feathers was especially noticeable in flight and during preening.

Study of the Atlantic weather charts during the days preceding Oct. 8th shows anticyclonic winds favourable to a west-to-east passage as far as the Azores, with cyclonic winds from that point eastwards to the Irish Sea on Oct. 6-7th.

BROWN-BACKED WARBLER. Agrobates galactotes syriacus. One, first identified by P.W.P.B., Sept. 22nd, and seen subsequently on 23rd, 30th and Oct. 4th, is the 5th record for the British Isles and the first in autumn. It is a species which was well-known to P.W.P.B. in Arabia. The bird did not skulk, and seemed to perch for preference on rocks when these were available. If disturbed it flew into cover, but soon reappeared. In flight, which was low and rapid, the bird looked the size of a Hedge-sparrow. It appeared greyish above, with a long, dark chestnut tail tipped with white spots. The tail was kept closed for the most part, was constantly flicked, and the bird then looked very chat-like. The sharp contrast between chestnut rump and greyish-brown back was very marked.

The Bird fed in the open with thrush-like actions, - a "listen", a look, then a downward dart to secure some insect. When feeding, the tail was frequently jerked to the vertical, and the wings were usually held in a drooping position, so that it looked most unwarblerlike.

SHORT-TOED LARK. Calandrella brachydactyla. One, Sept. 23-26th, the 2nd occurrence recorded for Ireland. P.W.P.B.'s attention was first arrested by its unfamiliar note; although it proved difficult to approach, especially when feeding with Meadow Pipits, some excellent views were obtained. It would have been difficult to pick out from the pipits had it not been for its much paler appearance. In flight, its upper-parts looked uniformly pale, almost grey: but when seen at close quarters the colouring of the upper-parts generally was much richer than is shown in the Handbook plates. The almost white underparts were obvious at a distance. A very pale buff superciliary stripe was not particularly conspicuous, and there were pale brown markings on the sides of the breast. Feeding behaviour and flight were much like Skylark, than which it was noticeably smaller and the wing-beat faster. The note was a rippling twitter, decidedly louder than Skylark, perhaps resembling more the note of the Linnet. This may have been the bird seen on Sept. 20th, when R.F.R. and P.W.P.B. got only a fleeting glance of a pipit-sized bird with pale upper-parts and a somewhat lark-like note.

K.W., who has consulted the weather-maps for the Red-headed Bunting, Brown-backed Warbler and Short-toed Lark period writes: "An extensive high covered the whole of south and central Europe at that time, with the easterlies on its southern side becoming SE. over the Channel and approach to the Irish Sea. Of all the stations in Britain you were best placed to collect what drift the anticyclone had to offer".

Thanks are due to Mr. R. Wagstaffe for the loan of skins which were of great assistance in laboratory work.

ROBERT F. RUTTLEDGE.

55. West Coast Passage through Britain

Many of the foregoing observations, when compared, point strongly to the existence of a west-coast passage of birds leaving Fair Isle. This was strongly marked in the case of the CHIFFCHAFFS which peaked at Fair Isle on Oct. 2nd, and at Little Ross 350 miles south on the night of 4/5th. They were commonest at Great Saltee, and also at Portland Bill, Dorset (300 miles south of Solway) on 6th, and both R.F.R. and Dr. K.B. Rooke identified Northern birds among those they trapped at these points. This suggests that about 5 days are needed to travel nearly 800 miles. Chiffchaffs entering Scotland at the Isle of May, where they also peaked on 2nd, and elsewhere along the east coast, may of course have crossed the country to the Solway, but this seems unlikely. No WILLOW WARBLERS were seen at the May at this time, though there was passage at Fair Isle and Great Saltee; and no YELLOW-BROWED WARBLER was observed, although one was caught at Little Ross on 4th. Moreover, very few ROBINS appear to have got across to Solway or Ireland despite the immense numbers arriving on the east coast.

There would seem to be further support in the fact that the big GOLDCREST invasion of Fair Isle on Oct. 1st is reflected in the passage at Little Ross from 4th-6th. Another, smaller rush at Fair Isle on 12th was followed by renewed passage at Little Ross on 14th. GOLDCRESTS occurred at Great Saltee from 4th, and on 7th the fifth record of the LESSER WHITETHROAT for Ireland was obtained, 5 days after the peak at Fair Isle. A TREE PIPIT was at Great Saltee on 5th and one was killed at the Tuskar Light in the same week; the species, very rare in Ireland, passed Fair Isle from Oct. 1st-3rd.

K.W.

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.

FAIR ISLE BIRD OBSERVATORY

