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FAIR ISLE BIRD OBSERVATORY

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FIRST REPORT, 1948

PART I-DETAILED NOTES ON SPECIES

Compiled by

KENNETH WILLIAMSON, Director

THE ornithological work of the Fair Isle Bird Observatory will be published annually in two parts, Part I dealing with general field observations abstracted from the station's "Notes on Species" record-book, and Part II a report on the migration abstracted from the "Migration Schedule." Additional reports on special field studies will be issued as and when occasion arises.

Unless otherwise indicated by initials, a key to which is given on page 20, the observations are those of the Director.

None of the many notes on bonxie, *Stercorarius s. skua*, and arctic skua, *Stercorarius parasiticus*, is included, as these species are to be the subjects of special field work in 1949 and subsequent seasons.

The following analysis of the notes is given for convenient reference:—

- Call Notes: See Raven, Little and Snow Buntings, Yellow-browed Warbler, Wren, Sanderling, Ruff, Oyster-catcher.
- Behaviour: Wheatear, Swallow, Merlin, Eider Duck, Fulmar, Sanderling, Ringed Plover, Western Oystercatcher.
- Duration of Stay of Passage Migrants: Greenland Redpoll, White Wagtail.
- Field Characters: Greenland Redpoll, Scarlet Grosbeak, Great Grey Shrike, Yellow-browed Warbler.
- Food and Feeding Habits: Rosy Pastor, Snow Bunting, Great Grey Shrike, Red-backed Shrike, Wheatear, Water-rail.

Parasites: Rosy Pastor, House Sparrow, Great Grey Shrike, Continental Song Thrush, Merlin, Western Razorbill.

Roosting: Shetland Starling, Common Redstart, House Martin, Long-eared Owl.

Taxonomic: Shetland Starling, Northern Guillemot.

Weights: Greenland Redpoll, Continental Goldcrest, Great Grey Shrike.

References to *The Handbook of British Birds* (H. F. Witherby, et al., 1938-41) are given as *The Handbook*, with the appropriate volume and page number in parentheses.

OBSERVERS

The following are the names of the observers: RC., Dr Robert Carrick, Aberdeen; RSRF., Mr R. S. R. Fitter, Oxford; GTK., Mr G. Theo Kay, Lerwick; IRP., Mr Ian R. Pitman, Edinburgh; RAR., Mr R. A. Richardson, Norwich; PR., Mr Pat Robertson, F.I.B.O.; GS., Mr George Stout, jun., Fair Isle; JS., Mr James Stout, F.I.B.O.; LSVV., Mr L. S. V. Venables, Scousborough; GW., Mr George Waterston, Edinburgh; JW., Mr James Wilson, Fair Isle.

Identification of parasites was undertaken or arranged by Mr Eugene O'Mahony, National Museum of Ireland. Our thanks are due to him and to other specialists named in the text for their services.

COMMON RAVEN, Corvus c. corax L.

Call Notes.—A party of 5 birds indulging in air-play over the Observatory buildings on 15th August used a variety of notes in addition to the normal, far-carrying guttural croak. Two much-used calls which are not noted in *The Handbook* (vol. 1, p. 8) were a regularly repeated "ek, ek, ek" very like the greeting call of the bonxie, and a deep, sonorous "mee-oo" with a rising inflection.

SHETLAND STARLING, Sturnus vulgaris zetlandicus Hartert

Taxonomic.—All birds trapped and examined (over 80) showed affinity in shape and structure of the bill with Sturnus v. zetlandicus. Wing-measurement, 27 males 126-134 (mostly

130-133), 18 females 123-131 (one 117). There may be a small error in the sexing, as the characters used were presence or absence of a light eye-ring and the shape of the throat feathers.

Roosting.—Large numbers roosted from mid-July onwards in a sea-cave in Swartz Gio on the south-east coast, the great majority gathering beforehand on the ruined croft of Kennaby or the nearby fields. A much smaller roost existed in the bomb-shattered ruin of the Skaddan Lighthouse dwellings.

ROSY PASTOR, Pastor roseus (L.)

Food.—The stomach contents of an example brought in by GS. on 6th August were examined by Mr R. Willis, North of Scotland College of Agriculture, and contained remains of weevils (Otiorhynchids), earwigs (Forficula), ground-beetles (Carabids)—the last two in some quantity—and a chelate claw (Crustacea).

Ectoparasite.—A single specimen of the tick Hyalomma marginatum var. balcanicum Schulze and Schloltke, a nymph, was taken from the bird. According to Dr F. A. Turk, who made the determination, this tick is new to the British list of Ixodoidea; its distribution appears to be mid and west Asiatic, and the adult is unknown.

GREENLAND REDPOLL, Carduelis flammea rostrata (Coues)

Field Characters.—One arrived at North Haven on 18th September, and was watched at close quarters by KW. and RAR., who made a detailed plumage description. The bird was sketched by RAR. The diagnostic characters were the warm buffish-brown mantle and greyish-brown rump striated with dark brown, and the heavy blackish-brown streaks on the flanks. The bill appeared large and thick, brownish horn, and the tarsi and toes black. It was a most confiding bird, permitting very close approach. It fed alone (on one occasion only it was seen with a small party of twites) or in company with a second Greenland redpoll which arrived some days later. Feeding was mainly on the ground, with a hopping gait, but on occasion it perched on top of thistle clumps to take the seeds. It was seen to bathe in the overflow from a water-pipe, and on one occasion, when disturbed, alighted for a few moments on

the back of a sheep. A characteristic upright stance with outstretched neck was adopted when the bird was suspicious.

Duration of Stay .- This bird, "A," stayed at North Haven for the 9 days 18th to 26th September. A second bird, "B." which appeared on 23rd, had the crimson of the crown darker and less extensive, and the edgings of the mantle feathers much greyer. "B" was caught whilst roosting on a projection below the eaves of a hut on 25th, and was ringed; "A," which had gone to roost on an identical projection a yard away, had later changed position and was not found. "B" remained in the neighbourhood for 8 days, 23rd to 30th September. Two redpolls were reported seen about the Shirva croft, 2 miles south of the Observatory, between 4th to 7th October, and one of these, "B," was killed by a cat early on 7th and was brought to KW. The second was examined by KW. at close quarters on 8th and the plumage details were identical with those of "A": assuming it was the same, then "A" had been on the island 22 days, and "B" 16 days. A brief but good view of a Greenland redpoll, possibly "A," was had at a croft 250 yards from Shirva on 14th October.

Fat Storage.—" B" weighed 18 g. (dead) and was very fat, a good deal of fat having been laid down between the folds of the large intestine. RC. determined the fat weight as 1.5 g. (For comparison, the average fat weight of a Shetland starling—weighing 80 g.—is generally below 1.5 g.) Wing 80 mm., bill (along culmen from feathers) 7.5 mm., tarsus 17 mm. It was an immature male (skull incompletely ossified).

SCARLET GROSBEAK, Carpodacus e. erythrinus (Pallas)

Field Characters.—The following notes were made on a female or immature bird seen on 30th September. Upper parts yellowish brown, with not very obvious dark mesial streaks; rump paler, unstreaked, but providing no marked contrast with the back. Sides of head inclined to rufous, contrasting well with the crown, which was a little darker than the mantle; this rufous extended to the throat, providing a contrast with the greyish-white breast and belly. There were dark striations on the throat, breast, belly, and flanks, most marked on the breast, but not nearly so pronounced as in

The Handbook plate. The under tail coverts were yellowish brown. The primaries and secondaries were dark brown, the latter with broad white edgings. There was a double buffish wing-bar; and the median coverts were a darker brown than the rest of the wing. Tail dark brown. Bill large and conical, brown. Tarsi and toes pale brown. The observation of LSVV. (vide The Handbook, vol. 1, p. 88) of a bird perching "with characteristic dumpy stance," head retracted, was seen, especially when the bird perched for a few minutes on an oat stook and fed there. It was at first in company with sparrows, later alone.

LITTLE BUNTING, Emberiza pusilla Pallas

Call Notes.—A quiet "tip, tip" heard from a bird at Shirva on 20th October appeared to be a mild anxiety note: it is probably the same as the "high, quiet 'pwick'" noted by LSVV. and the low "tick, tick" of E. R. Alston and J. A. Harvie-Brown (vide The Handbook, vol. 1, p. 138). The same bird, and an earlier one watched at Kennaby by RAR., LSVV., and KW., also had a strong, musical "see-oo."

SNOW BUNTING, Plectrophenax nivalis (L.)

Call Notes.—Birds in flock had a much-used call "chirrre," used in flight, on the ground, and when perching together on buildings. The more familiar call, described in *The Handbook* (vol. 1, p. 149) as "a musical, rather rippling twitter," was also used frequently. This "chirrre" is probably the same as the "rippling, yet rather harsh, 'stirrrp" which *The Handbook* says is used on the breeding-ground. Odd birds which flew over often used a high pitched and rather musical note, "chay-ip."

Castings.—Four birds were taken in the Ward Hill trap on 2nd October and were colour-ringed red on the right legs. They were the first of this species to be trapped and ringed in Britain. They were brought down from the trap in linen bags for examination and ringing, and when these bags were examined afterwards a number of small, hard castings, about the size of a pea, were found in them.

HOUSE SPARROW, Passer d. domesticus (L.)

Parasite.—Specimens of the flat-fly, Ornithomyia fringillina. Curt., were found on trapped house sparrows, the species proving to be a new host for the fly.

WHITE WAGTAIL, Motacilla a. alba L.

Duration of Stay.—An adult female remained for some days from 23rd September at the Observatory, was trapped and colour-ringed there on the 27th, and was reported at Shirva 2 miles to the south on 1st October. The minimum period of its stay on Fair Isle was 9 days, and for 7 of these it was the only white wagtail recorded.

GREAT GREY SHRIKE, Lanius e. excubitor L.

Field Characters.—An immature male was trapped and ringed on 11th October. In the field the head and tail looked disproportionately large for the size of the body; a restless upwards flicking of the tail was noted whenever the bird alighted, and the wings when at rest were carried with their points drooping below the tail. The whitish eye-stripe was continued as a narrow line across the forehead, and the white speculum was clearly visible in the middle of the trapezoid area of black formed by the loosely held primaries and secondaries. Iris dark brown, tarsi and toes black, soles of the latter yellowish-brown. Wing 111 mm., weight 48 g.

Parasite.—A flea, Ceratophyllus borealis Rothschild, female, was taken from this bird, which is a new host for the species.

Food.—One seen by PR. at the Observatory on 6th November was carrying a wren in its bill.

RED-BACKED SHRIKE, Lanius c. collurio L.

Feeding Habits.—A young bird was trapped and ringed at the Haa by RAR., RSRF., and KW. on 1st September, and it was seen there the following day. On the 1st, RAR. found four specimens of the bee, Bombus smithianus, impaled on the points of a barbed-wire fence 50 yards from the trap mouth. The bird presumably returned to its larder and ate the bees, as these had gone by the following day. J. H. Owen (Brit. Birds, vol. 1, pp. 200-203, 1948) records the setting-up of larders

by birds of passage, adding that the captured insects, etc., "are wasted and dry up or rot." W. Eagle Clark (Studies in Bird Migration, vol. 2, pp. 124-125) records adult migrants in spring capturing this species of bee and forming larders, but has no mention of juveniles making and using such larders on autumn passage. The use of barbed wire by a juvenile in the absence of thorns is an interesting commentary on the deeply inherited nature of this behaviour pattern.

CONTINENTAL GOLDCREST, Regulus r. regulus (L.)

Weight.—Four females weighed from 5 to $5\frac{1}{2}$ g. each. (Cf. weight of 2 wrens, probably resident, 12 and $12\frac{1}{2}$ g.) A tired migrant goldcrest entered the house at Busta and slept for several hours on the window-sill.

YELLOW-BROWED WARBLER, Phylloscopus inornatus (Blyth)

Field Characters.—Good views were had by KW., RAR., and LSVV. of a single bird in roots at Lower Leogh on 26th and 27th September. It was a neat, compact little bird, slimmer and slightly larger than a goldcrest, and giving a general impression of a tiny and very active chiffchaff. Olive-green upper parts, conspicuous white superciliary stripe and double wing-bars (the one formed by the tips of the greater coverts being the wider and more obvious) were the main features. The under parts were whitish, washed yellowish green. The bird varied its mouse-like running among the drills by leaping up from the ground to two or three feet, fly-catching: once, as it took a fly, there was an audible snap of the bill. It was a great skulker, never perching in the open for more than a second or two.

Call Note.—C. B. Ticehurst (A Systematic Review of the Genus "Phylloscopus," pp. 103, 105) says the call note of the nominate race was well rendered by Brooks as "weest." Our bird had a distinctly disyllabic note, a sweet, high pitched, and rather loud "tu-ee."

CONTINENTAL SONG THRUSH, Turdus ericetorum philomelus
Brehm

Parasite.—A bird which struck the lighthouse on 9th October and was skinned had a specimen of the tapeworm,

Porrocaecum ensicaudatum (Zeder), female, in the large intestine. It was determined by Dr S. Prudhoe at the British Museum (Natural History).

WHEATEAR, Oenanthe oenanthe (L.)

Feeding Habits.—In deep twilight on 9th August a large number of migrants were active among the tidal wrack of South Haven, catching the flies (Fucomyia sp.?) which were flying thickly even at that late hour.

Behaviour. — A juvenile was observed chasing an expostulating redshank over South Haven on 28th July. On occasion small parties of migrants, apparently for the most part Oenanthe oe. leucorhoa (Gm.), gathered together in the vicinity of piles of stones on the moorland, chasing each other in and out of the holes—an example, perhaps, of that resurgence of breeding-season activities which sometimes accompanies autumn migration.

Hovering Flight.—KW. watched male wheatears persistently indulging in a beautiful hovering flight on Bu Ness on 7th and 15th June. The hovering was sustained for 5 to 10 seconds at a height of 10 feet or less, and was followed by a downwards swoop, a short flight low over the grass, and a steep climb to a hovering position once more. The body was held at an angle of about 45 degrees from the horizontal, and the tail was depressed. In neither case was any reason for the hovering (other than sheer exuberance) apparent. quently similar behaviour was seen in other birds, of both sexes (but most frequently in males), and in many cases it was obvious that the hovering was practised as an aid to hunting, the birds swooping quickly to the ground to pick up food. An alternative "look-out" system adopted by many wheatears whose feeding-grounds were suitably placed was to perch for several seconds on the 20-foot high telephone wires.

There appear to be two previous records of male wheatears using this picturesque hovering flight as a means of procuring food, one from the Isle of Skye (Seton Gordon, *Brit. Birds*, vol. 36, pp. 73-74, 1942) and the other from Central Wales (Hubert E. Pounds, *Brit. Birds*., vol. 36, p. 94, 1942). W. Griffiths, however, has recorded a male performing this flight

in mid-May near Coniston under circumstances which suggest that it was a form of courtship display: the bird repeatedly rose from and returned to a certain rock, and a female was present nearby (*North-west. Nat.*, vol. 18, pp. 317-318, 1943). It seems likely that although this habit may have originated—and chiefly survives—as a means of locating food, it has become a behaviour pattern used in the general expression of exuberance and perhaps also in courtship display.

COMMON REDSTART, Phoenicurus ph. phoenicurus (L.)

Roosting.—There were two cases of adult female migrants roosting in buildings, a hut at the Observatory (4th September, RAR. and RSRF.) and a byre at one of the crofts (third week of October, GS.).

WREN, Troglodytes troglodytes (L.)

Breeding.—An adult was watched feeding a fledged youngster on 3rd September. The food-call of the young, a single husky "cheep" with considerable carrying power, was heard each day till 7th September (RAR.).

SWALLOW, Hirundo r. rustica L.

Behaviour.—A pair spent the greater part of 8th June flying in and out of a shed at the Observatory, and singing on overhead wires nearby. The weather was fine and warm and probably stimulated this nest-prospecting behaviour, but the birds were migrants only and had passed on by the 10th.

House Martin, Delichon u. urbica (L.)

Roosting.—At dusk one evening during the autumn migration some years before the war JW. saw some house martins entering a crevice in the rocks. On investigating he found the crevice packed with birds—about three dozen in all—roosting one layer on top of another.

LONG-EARED OWL, Asio o. otus (L.)

Roosting.—A migrant was captured at roost in an outhouse on 31st October (JS. and PR.) and was ringed.

MERLIN, Falco columbarius L.

Behaviour.—IRP. and KW. watched a male and female indulging in air-play with 2 and sometimes 3 hooded crows on 29th August, the performance continuing for about 20 minutes. Between aerial "bouts" the birds rested on telephone poles and wires spanning the moorland, and after a brief rest either hoodies or merlins would stoop at their opponents and drive them from their perch, and the game would continue. The merlins kept up an intermittent "keening" and the hoodies croaked protestingly at intervals, but it was quite obvious from their movements and the way in which sometimes one species, sometimes the other, initiated the "attacks" that the enjoyment was mutual. GW. and RSRF. had watched a similar display on the previous day.

Parasites.—Specimens of the flat-fly, Ornithomyia fringillina Curt., were taken from an adult female which was found in the catching-box of the Haa trap on 30th September, having entered presumably in pursuit of a small bird. The merlin is a new host for this fly.

COMMON EIDER DUCK, Somateria m. mollissima (L.)

Breeding.—Four ducklings were seen walking across the moor with an adult on 27th June. The first was seen on the water on 30th June.

Behaviour (Distraction Display).—A bird flushed from a nest among heather on the moor on 2nd July, and in the skuas' nesting area, stumbled away with the wings partly open and flapping feebly in an incipient lure display, similar in its essentials to the more emphatic display I recorded (Ibis, vol. 90, pp. 142-143, 1948) for the Faeroe eider, Somateria m. faeroeensis Brehm. A duck flushed from a c/4 on Bu Ness on 7th June covered her eggs with a stream of green, slimy, and evilsmelling excreta on leaving and flying away low; and another bird behaved similarly when disturbed from a c/4 on the shore of Mavers Gio on 20th June. This behaviour, which is not uncommon among eiders in Britain, and (according to Prof. V. C. Wynne-Edwards) is very frequent in colonies of Somateria m. dresseri (Sharpe) in the Gulf of St Lawrence, must be

regarded as a form of distraction display, and provides a rare example of a behaviour pattern which has evolved from a purely reflex action, defæcation.

FULMAR, Fulmarus g. glacialis (L.)

Behaviour.—Birds were going through courtship behaviour, in some places 5 or 6 together on one ledge, right up to the time of desertion of the cliffs, which took place during a severe south-west gale on 17th September (KW., RAR.). On 10th September RAR. observed a party of fulmars on the sea clustered round the floating carcase of a sheep that had fallen from the cliffs.

SANDERLING, Crocethia alba (Pallas).

Behaviour.—Seven adults, much advanced into winter dress, were feeding along the tide's edge at North Haven on the morning of 20th August. There was a good deal of chasing among the birds, and they kept up a continual sweet twittering, very passerine in character. This twittering comprised a rapid series of notes, "swee-swee-swee-swee," etc., with sometimes a more modulated "twee-oo, twee-oo" ending. They were also engaged in this lively behaviour, on the same part of the shore, in mid-afternoon 6 hours later. Their behaviour must probably be regarded as an example of the exuberance, recalling sexual activities, which is not infrequent among migrant flocks in autumn. A. L. V. Manniche ("The Terrestrial Animals and Birds of N.E. Greenland," Meddelelser om Gronland, Bd. 45, p. 147, 1910) records a "sanderling song" which he compares with that of Sylvia curruca (L.), from females gathering together their chicks following disturbance.

RUFF, Philomachus pugnax (L.)

Call Note.—A juvenile disturbed on the shore on 11th August flew off with a loud, clear call, "pee-up."

RINGED PLOVER, Charadrius hiaticula L.

Behaviour.—Among a few birds present on North Haven shore on 11th August some sexual chasing, particularly chasing

of birds of the year by adults, was going on. In chasing a youngster, one of the adults used the peculiar run which occurs in courtship, and is also a component of the lure display; the head is carried low, the back arched, and the feathers of mantle and scapulars raised, and the beautiful cinnamon-coloured tail is spread and depressed. One of the young birds also adopted this posture later, with fanned and depressed tail and lowered head, but there was no raising of the feathers and the display (which did not appear to have an object) was brief.

WESTERN OYSTERCATCHER, Haematopus ostralegus occidentalis Neumann

Behaviour.—G. F. Makkink ("Contribution to the Know-ledge of the Behaviour of the Oystercatcher," Ardea, vol. 31, 1942) says: "The attitude in which the parent birds with food walk to their young ones was strongly reminiscent of that of the male prior to copulation ('stealthy walk'). It is quite possible that this is one of the many cases in which an attitude belonging elsewhere in the ethological repertory is being used as an introduction to copulation" (p. 50).

In amplification of this may be given the following observation, made whilst watching an adult and juvenile on the North Haven shore on 18th June. The young one persistently moved about its parent at very close quarters, sometimes almost touching as it passed in front or behind, with the same "stealthy walk" as described and figured by Makkink. The adult remained still most of the time, or moved only a few steps. The young one's movements were interrupted by probing with the bill in the wet sand, or by picking up food, but the attitude did not change. Once the parent picked at the sand with the bill, and the young one immediately came up and did the same at exactly the same spot, appearing to procure some food (see Makkink, p. 50, for a similar observation). Identical behaviour in the same two birds was watched on the shore on 20th June, when the adult again invited the attention of the juvenile to some item of food (which the latter took) by a deliberate picking action at the water's edge.

From these observations it would appear likely that the "stealthy attitude" of the male prior to copulation is one of

the many examples in birds of adult posturing which has its origin in the actions of the young bird. The young one had a short, quiet trill which might in the same way be the origin of the characteristic "twee-twee-twee" mentioned by Makkink (p. 25) as accompanying copulation.

WESTERN RAZORBILL, Alca torda islandica Brehm

Ectoparasite.—Several specimens of the tick Ixodes uriae White (I. putus P.-Cam. et al.) were taken from an adult razorbill on 17th June.

WATER-RAIL, Rallus a. aquaticus L.

Feeding Habits.—In the catching-box of the Gulley trap on the morning of 2nd October KW. found a water-rail and 3 twites. One of the twites had been partially eaten; another had been quite recently killed, having a hole in the breast obviously made by a spear-thrust of the water-rail's bill: and the third was alive and quite uninjured. There does not appear to be a record of the water-rail killing and eating small birds, but such predation is known in other members of the Rallidae, and it is possible that, being mainly a nocturnal feeder, the species may be in the habit of taking small groundroosting birds. GTK. confirms the existence of the habit: a bird which he introduced to his large outdoor aviary killed and ate a waxbill, a greenfinch, and a Chinese quail. discovered the rail making a meal of the quail, but did not witness the actual killing. He caught and released the water-rail, after which there were no more deaths.

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FIRST REPORT, 1948

PART II - MIGRATION

COMPILED BY

KENNETH WILLIAMSON DIRECTOR

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FIRST REPORT, 1948

PART II-MIGRATION

Compiled by KENNETH WILLIAMSON, Director

THE Fair Isle Bird Observatory was open to visiting ornithologists from 25th August to the end of October in 1948, and during that period daily observations on the autumn passage were maintained. The following report summarises the "Migration Schedule" entries during that period. The notes for November and December are abstracted from the log kept by the Warden, Mr Pat Robertson.

OBSERVERS

The following observers—visitors and members of the Fair Isle community—contributed notes: Dr and Mrs R. Carrick; Messrs James Fisher, R. S. R. Fitter, Tom Hopkinson, W. Humphreys; Lt.-Col. E. G. H. Goodwin; Messrs G. Theo Kay, Ian Pitman; Mrs J. B. Priestley; Messrs James Rae, R. A. Richardson, Pat Robertson, Alex. Stout, Jun., George Stout, George Stout, Jun., James A. Stout, Jerome Stout, L. S. V. Venables, George Waterston, Kenneth Williamson, and James Wilson.

WEATHER SUMMARY

On the whole, the weather during the autumn of 1948 was not favourable to the observation of migrants at Fair Isle, and there was no volume of bird movement until the second week in October. The season began promisingly enough with fair weather and moderate south-east wind on several days in late August and early September, bringing small numbers of summer visitors returning from Scandinavia. This movement was at its best between the 9th and 11th, but conditions deteriorated and there followed a spell of westerly weather (with a full gale on the 17th which took the island's fulmars out to sea) until the 24th to 26th. These three days of bright weather, with light south-east breezes, were succeeded by a four-days' gale with the wind between south and west, which brought migration temporarily to a standstill.

The wind continued in this quarter until 8th October, when a south-east gale brought a rush of redwings and a number of goldcrests, blackbirds, and other late autumn immigrants to the British Isles. From then on, apart from the 24th and the 28th to 30th (when fresh south-east winds brought in woodcocks and blackbirds), the wind varied between south-west and north-west, frequently reaching gale force. An especially severe north-west gale, gusting at nearly 100 m.p.h., destroyed the Ward Hill "Heligoland" trap on 25th October. There was another change to south-east at the beginning of November, bringing in a further "rush" of blackbirds.

MIGRATION

CARRION CROW Corvus corone.

One kept company with a hoodie for several days in late July. Single birds on dates between 10th September and 16th October. One on 22nd September had the belly dark slate and may have been a hybrid *Corvus corone* × *cornix*.

ROOK Corvus frugilegus.

Two on 16th October; 3 from 25th November for a fortnight.

JACKDAW Corvus monedula.

Singly in stubble, 10th, 11th and 13th October. One of two

examined at close quarters on 14th October had the dark underparts and obscure collar of *Corvus m. spermologus*.

STARLING Sturnus vulgaris.

Two caught at Skaddan Lighthouse on the nights of 9th-10th and 11th-12th October were considered, on the form of the bill, to be migrants of the typical race. A local Sturnus v. zetlandicus ringed on Fair Isle on 24th October was found dead at Cairnbulg, near Fraserburgh, Aberdeenshire, on 24th March 1949.

ROSY PASTOR Pastor roseus.

Adult male in worn breeding plumage, 6th August (see Part I).

GREENFINCH Chloris chloris.

Five in stubble, 28th October.

REDPOLL Carduelis flammea.

One which arrived 18th September, and another 23rd September, were *Carduelis f. rostrata*—see Part I. Redpolls were seen among twites on several dates between 21st September and 13th October, and flocks of 15 and 11 were associating with twites on 7th and 14th October. Those examined at close quarters were *Carduelis f. flammea*.

TWITE Carduelis flavirostris.

Fluctuating numbers during October suggested frequent passage movement.

BULLFINCH Pyrrhula p. pyrrhula.

The remains of an adult male, killed by a hawk or falcon, were found at the Gully trap on 29th October.

SCARLET GROSBEAK Carpodacus erythrinus.

Two immature birds or females in roots, 26th August, and a single bird, 30th September (see Part I).

CHAFFINCH Fringilla coelebs.

A male, 25th September, 7 on 27th, increasing to 15-20 on following day. A few daily to 10th October and an influx of over 50 on 11th. Most of these passed through quickly,

leaving few only until 26th, when about 70 were recorded. A few only after 29th. Several small flocks in the village area on 14th November for a few days.

BRAMBLING Fringilla montifringilla.

Singly, 26th and 30th September; flock of 22 on 9th October and influx of about 200 on 11th. These passed on and only single or very few birds were noted until 12 were seen on 19th, with further parties of 10 or so on 24th and 26th.

CORN and YELLOW BUNTINGS Emberiza calandra and E. citrinella.

Single birds on 10th October.

LITTLE BUNTING Emberiza pusilla.

Two in roots, 27th to 30th September; 2, 11th and 12th October; and 1 from 20th to 24th October (see Part I).

ORTOLAN BUNTING *Emberiza hortulana*. Singly, 12th and 14th September.

REED BUNTING Emberiza schoeniclus.

Single bird, 4th September, and 2 from 10th to 14th October.

LAPLAND BUNTING Calcarius lapponicus.

Singly, 18th and 20th September and 15th October.

SNOW BUNTING Plectrophenax nivalis.

Six were seen to arrive, flying north-north-east to south-south-west over Ward Hill, 6th September. Small numbers (up to 16 on 22nd) were on the hill up to 28th, when about 30 were seen for a few days. About 50 arrived 23rd October, and there was a flock of 400 to 500 (which had decreased by half on the following day) in stubble at the South End on 26th. A flock of about 200 arrived 4th November, and there were additional large increases on 5th and 6th; they were reduced to about 60 by 8th and a few only on 10th and 11th. About 150 were in the fields, 16th November, but all had gone by 23rd. Two small lots were seen 29th November and about 100 on 1st December, with occasional birds afterwards.

SKYLARK Alauda arvensis.

Abundant passage-migrant in latter half of September and October.

WOODLARK Lullula arborea.

A flock of 15 in the village area, 11th October, and 2 on 26th.

TREE PIPIT Anthus trivialis.

Single bird, 25th August; a few daily from 3rd to 15th September, the most being 6 on 14th.

MEADOW PIPIT Anthus pratensis.

Abundant passage-migrant, August to September, dwindling to a few in early October.

ROCK PIPIT Anthus spinoletta.

An apparent influx was noticed on 16th September, the bird being numerous in the cropped area; a decrease was noted on 26th. Again unusually common, 15th November.

BLUE-HEADED WAGTAIL Motacilla f. flava.

Spring migrant reported 1st June. In autumn, single birds were seen 15th and 19th September.

WHITE WAGTAIL Motacilla a. alba.

Autumn passage began with 3 juveniles, 14th August, and became marked following 26th, with increases 2nd and 3rd September and a notable decrease on 9th. Few only each day subsequently until 23rd, then a single bird until 1st October (see Part I).

GREAT GREY SHRIKE Lanius excubitor.

One, 3rd September; 2 on 11th October, 1 of which remained and was found slain by a falcon on 14th. One, carrying a wren, 6th November (see Part I).

RED-BACKED SHRIKE Lanius collurio.

Two young birds trapped and ringed, 30th August and 1st September (see Part I).

SPOTTED FLYCATCHER Muscicapa striata.

Singly, 28th to 30th August; 3, 14th September.

PIED FLYCATCHER Muscicapa hypoleuca.

A few, 26th August, and 2 on 28th. About 12 on 3rd September, 7 on 4th, and one or two on 5th and 6th. None seen subsequently until 10th (3) and 11th (8) September; singly, 14th and 15th, and 2 on 25th.

GOLDCREST Regulus regulus.

A number arrived 9th October and a few remained next day. Two on 18th October and 2 in-roots, 20th and 21st. One on 12th November.

CHIFFCHAFF Phylloscopus collybita.

Definitely identified: 13th August (2), 20th (3), 26th (3), 31st and 3rd September (3), 28th (2). The 3rd September birds were dark brownish above without olive tinge and whitish below with buff-washed breast and flanks, suggesting *Phylloscopus c. tristis* or *Phylloscopus c. abietinus-tristis* intergrades.

WILLOW WARBLER Phylloscopus trochilus.

Definitely identified; 26th August, 27th (6), and 4 each day to 30th. Singly on most days to 15th September.

LEAF WARBLERS, not certainly identified as to species, were recorded 11th August—the first of the season—and from 26th August (12) to 6th September (4), singly 8th and 23rd, and 3 on 28th.

YELLOW-BROWED WARBLER Phylloscopus inornatus.

Single bird in roots 27th and 28th September (see Part I).

GARDEN WARBLER Sylvia borin.

One trapped 26th August; noted 3rd September (3), 4th (2), and singly 9th to 11th and 13th.

BLACKCAP Sylvia atricapilla.

Female, 16th September; adult male trapped 6th October; male seen at a cabbage plot 12th to 15th October.

WHITETHROAT Sylvia communis.

Late spring migrant, 8th June. One or two, 28th to 30th August; singly 2nd, 3rd, and 13th September.

LESSER WHITETHROAT Sylvia curruca.

One, 28th August; one or two, 2nd to 6th September, a bird trapped on the last date being typical race. Singly, 9th and 10th September, and again, 25th to 28th.

FIELDFARE Turdus pilaris.

Twenty on Ward Hill, 25th October; influx of about 60 on 29th; about 20 on hill, 12th November, and 60 on 13th, and a few on 12th December.

Pat Robertson's notes contain an account of an exceptional immigration of fieldfares in late December. The wind was south-south-west (force 4) on the night of 24th-25th, and on the morning of Christmas Day flocks were scattered over the whole island, varying in strength from a few birds to over 200. Most left during that night on a south wind (5-6), and only a few small parties of half a dozen or so were seen on 26th. A further influx came during the following night (wind south by south-south-west, 8), and on 27th there was one lot of over 300 and numerous smaller flocks. Most of these departed on the night of 27th-28th (south-south-west, 8-10) and a few only were seen on 28th. The wind had veered to west by the morning of 29th, when again large numbers were about in the crofting area, and more than 500 in the vicinity of North Haven. About 100 remained in this part on the 30th (west-south-west, 8), but there were fewer than previously over the rest of the isle. There were still some numbers on 31st and on to 2nd January 1949, but these had declined by 4th January.

SONG THRUSH Turdus ericetorum.

One, 28th August; one or two, 22nd September to 3rd October; 7 on 13th October; 2 on 14th to 16th. Two killed at Skaddan Lighthouse were preserved and were referred by Mr A. B. Duncan to *Turdus e. philomelus*. Two trapped and ringed 29th October and compared with these skins, were greyer-olive above, especially on the rump. One or two most days from late November.

REDWING Turdus musicus.

A single bird, the forerunner of many hundreds which arrived on the night of 8th-9th October, was seen on 7th.

They remained abundant until the 11th, but had decreased by the following day. Additional flocks came on 21st and 25th, and a further decrease was apparent on 30th. Small numbers, 8th November, again 15th November. Of 4 caught in the Ward Hill trap at the same drive on the morning of the 9th, 2 had wings measuring 115 mm. and 120 mm. and appeared to be typical race, whilst a third had wing of 125 mm. and the clouded breast markings of *Turdus m. coburni*.

BLACKBIRD Turdus merula.

From one to three seen on many dates in August and September (one, perhaps two, pairs are believed to have bred in 1948). Probable early immigrants at North Haven, 23rd July and 24th August. Some arrived with redwings on 9th October; there was a steady increase on subsequent days to 20 on 13th and 30 on 16th. Birds were then few until a new influx on 25th October, with a further considerable increase on 29th and in early November. Small increase on 15th November.

RING OUZEL Turdus torquatus.

Singly, 18th and 29th October; 4 on 25th October.

WHEATEAR Oenanthe oenanthe.

Considerable movement in late July and throughout August (very marked, 23rd and 24th) and September, with no noticeable hiatus between exodus of local population and commencement of passage of northern birds. Owing to the impossibility of clearly differentiating the three intergrading forms—Oenanthe oe. oenanthe, schiöleri, and leucorhoa—in the field, no definite dates for passage of "Greenland Wheatear" can be given. Large birds were especially noticeable, however, on 26th August, decreasing next day, 3rd, and 15th September. Wheatears declined rapidly after the last date, and after 21st not more than 6 were counted on any day. Between 1st and 16th October only one or two were seen daily.

WHINCHAT Saxicola rubetra.

Eight birds, 26th August, and 7 on 27th, with a few each day until 8th September. Three on 12th September and singly on several days to 28th to 30th (2), also on 1st and 2nd October.

REDSTART Phoenicurus phoenicurus.

One, 27th August, 2 on 29th, and a few each day from 3rd to 9th September. Single female in roots, 13th to 15th October, later found dead in a byre. An immature male flew into wheel of a motor cycle, 31st October.

BLACK REDSTART Phoenicurus ochrurus.

Female trapped and ringed, 29th October. One in village area, 13th November.

BLUETHROAT Luscinia svecica.

Singly, 17th, 18th, 22nd, and 25th September.

ROBIN Erithacus rubecula.

One, 9th and 10th September, and another on 16th. One or two daily from 9th to 19th October, and from 26th on into November.

SWALLOW Hirundo rustica.

Spring passage continued during first week of June.

HOUSE MARTIN Delichon urbica.

Several at South Harbour, 7th June, and considerable north-bound passage, including two lots of 30 to 40 each, 9th June.

SWIFT Apus apus.

More than 50 hawking over the fields on 25th July, and a number, 26th to 28th July. Singly, 30th August, 2nd September, and 14th to 16th September.

WRYNECK Jynx torquilla.

Two, 26th August; singly, 4th and 25th September.

LONG-EARED OWL Asio otus.

One caught in an outhouse and ringed, 31st October.

SHORT-EARED OWL Asio flammeus.

One seen alternate days, 23rd to 30th September; 1 on Ward Hill, 9th to 15th October.

MERLIN Falco columbarius.

First seen 19th August, and present—sometimes 3 or 4—until 31st October (see Part I).

KESTREL Falco tinnunculus.

One seen alternate days, 24th to 30th August, and others on 4th, 7th and 8th, 10th (2), and 11th September. A female was seen 5th October and a single bird on 9th.

BUZZARD Buteo buteo.

One circling over Ward Hill, 24th June.

HERON Ardea cinerea:

Singly on 29th June and 1st July, and on occasions in July and August (5 on 7th August). One or more on most days in September (8 on 23rd), and singly on occasional dates in October and November.

WHOOPER SWAN Cygnus cygnus.

Parties of from 3 to 10 birds seen on several dates from 11th to 28th October, and 2 on 14th November.

WHITE-FRONTED GOOSE Anser albifrons.

A skein of about 50 was observed, 14th October, and 14 were seen on following day.

Skeins of unidentified grey geese were seen between 19th and 24th October, and a grey-lag *Anser anser* was shot on 25th.

MALLARD Anas platyrhynchos.

Seen regularly in small numbers (up to 12 on 30th October) throughout the autumn. Four, 30th December.

TEAL Anas crecca.

From one to three on occasions from late August to early October, and a drake, 25th October. One, 8th November.

WIGEON Anas penelope.

Five, 3rd September; singly on occasions during the month and 7 on 27th. Up to 6 present for several days in mid-October. Four flying south, 15th November.

GOLDENEYE Bucephala clangula.

Two (females or immatures), 27th October, and one on 31st.

LONG-TAILED DUCK Clangula hyemalis.

A single female, 11th October, joined by a second on 15th.

Two, 18th to 23rd October. Three small flocks were seen flying south-east between Fair Isle and Sumburgh Head (Shetland) on 29th September. Three on 3rd December.

RED-BREASTED MERGANSER Mergus serrator.

Odd birds, June and July, I on 18th September and 6 on 20th. Singly, 27th and 28th September, 13th and 19th October.

CORMORANT Phalacrocorax carbo.

First arrivals from 10th October, with 3 on 14th and 7 on 15th.

SLAVONIAN GREBE Podiceps auritus.

Two in North Haven, 28th October, and 1 on 29th and 31st.

GREAT NORTHERN DIVER Colymbus immer.

Two immature birds in South Haven, 9th July.

RED-THROATED DIVER Colymbus stellatus.

Adult and immature bird in South Haven, 21st September; one off North End, 29th September.

WOOD PIGEON Columba palumbus.

Singly, 10th and 26th October; 2 adults and 1 immature, 27th; single bird, 29th and 30th. A dozen, 15th December, 7 on 17th, and fewer on following days to 24th.

TURTLE DOVE Streptopelia turtur.

One in roots, 24th August, 1 at North Haven, 13th to 16th September, and 1 in village area on 17th. Singly, 23rd, 26th and 27th September.

BAR-TAILED GODWIT Limosa lapponica.

Despite a heavy autumn passage of this species in the south of Mainland, observed by L.S.V.V., only a single bird was recorded on Fair Isle, on 17th September.

Curlew Numenius arquata.

Some movement on 1st and 27th July; sporadic passage from 19th August, most noticeable 26th August to 12th September. Little migration in October, until 15th, then a few on most days to 24th. Singly, 21st November and 9th December.

WHIMBREL Numenius phaeopus.

Late spring passage continued until mid-June, being strong on some days in first week. Return movement slight—a few, 5th August, and from 26th to 30th; singly, 23rd and 25th September.

WOODCOCK Scolopax rusticola.

The earliest were 3 on 11th October. A big movement of about 300 occurred on night of 24th-25th October, and there was a further considerable passage on 29th and 30th. A dozen on Ward Hill, 12th November, about 20 on 13th, 10 on 15th, and 3 on 27th.

SNIPE Capella gallinago.

Three flew in from south-east at dusk, 24th August. Occasional throughout September, with 6 on 30th. Three or four most days, 10th to 16th October, and occasional birds afterwards.

JACK SNIPE Limnocryptes minimus.

Singly, 6th September and 29th October.

TURNSTONE Arenaria interpres.

Two, 11th August (adult in tortoiseshell plumage and a young bird); 10 young birds, 19th; a few adults, 23rd, and small parties of up to 25 throughout the autumn and winter.

Knot Calidris canutus.

Two juveniles, 14th August; 3 juveniles, 15th; a red bird, 23rd. Singly on three dates in early September and again on 27th.

DUNLIN Calidris alpina.

Three, 7th June; 2 in summer dress, 10th; 2 adults, 21st July; 8 or 10 on 9th August and a few on most days from 11th, with 15 on 27th. Rather common, early September, with a few only after 12th. Singly, 8th and 10th October and 28th December.

CURLEW SANDPIPER Calidris testacea.

Three with dunlins, 26th September.

SANDERLING Crocethia alba.

Party of 5 (including 2 juveniles), 20th July; 11, 21st, and a few juveniles on most days up to end of August. Occasional throughout September until last seen on 15th (4).

RUFF Philomachus pugnax.

Juvenile, 11th August; adults, 26th August and 4th. September.

COMMON SANDPIPER Actitis hypoleucos.

A few daily, 26th August to 6th September, with 5 on 3rd, then occasional up to 15th.

PURPLE SANDPIPER Calidris maritima.

Two, 17th September, and again 2nd October. One, 16th October, and 2 on 23rd to 25th. A dozen on South Haven beach, 21st November, and odd birds or small parties throughout the winter.

WOOD SANDPIPER Tringa glareola.

Two, 26th August and 3rd September; 1, 6th September.

REDSHANK Tringa totanus.

One, 5th July; a few almost daily in late July and August (8 on 13th and 27th); up to 6 on several occasions in September. Noticeable increase, 25th October; 9 on 6th November, 7 on 23rd, and 9 on 1st December.

GREENSHANK Tringa nebularia.

First heard, 12th August, and 2 on 26th.

RINGED PLOVER Charadrius hiaticula.

A few on most days from 21st July to end September, adults and young (see Part I), with 20 on 13th August and 15 on 27th. Singly, 3rd and 15th October.

GOLDEN PLOVER Pluvialis apricaria.

Four on Ward Hill, 10th July. One or two, 26th and 27th August, and again, 6th to 9th September. A dozen, 12th to 14th September, and 17 on 15th. A few in late September; 12 on 1st October and occasional birds up to 12th.

LAPWING Vanellus vanellus.

Eight on 20th August; 24 from 27th to 30th, and a few, 1st September. Four, 10th September and single or few birds occasionally during September and October. Thirteen on 5th November, 6 on 12th.

OYSTER-CATCHER Haematopus ostralegus.

After departure of breeding population in early September a single slightly injured bird remained. Occasionally there were one or more additional birds during the winter.

COMMON or ARCTIC TERN Sterna hirundo or S. macrura.

Two of one or the other species in North Haven, 29th and 30th July and 26th August; a single bird at the South Lighthouse, 4th and 5th September. Common tern in North Haven, 8th September.

BLACK-HEADED GULL Larus ridibundus.

Pair in North Haven, end of June and 6th July. Juvenile on Ward Hill, 20th July; adult with moulting wings, 21st. Singly 14th August and 15th September; 2, 18th to 22nd September; and 8 flying past south-west coast, 16th October.

COMMON GULL Larus canus.

Two, 27th August, increasing to 14 by 29th; fewer until 3rd September, when 21 were counted. Common for several days, then few only during middle of month until a large influx of over a hundred occurred on 27th. These had gone by end of the month and another hundred or so arrived 11th October but had passed on by 13th. Single bird, 27th October.

HERRING GULL Larus argentatus.

Unusually large number (550 on Bu Ness and similar flocks at South End and in village area) on 12th December, with decrease 13th and normal numbers only by 15th. Another influx, with many glaucous gulls, 29th December.

LESSER BLACKBACK Larus fuscus.

Seven (perhaps immigrants), 11th September, after departure of breeding birds. Occasional birds only afterwards, the last on 22nd September and 8th October.

GREATER BLACKBACK Larus marinus.

Five adults in South Haven, 2nd August. Fifty adults and immature birds on Meo Ness, 12th August, were probably on passage. Flocks of 60 to 80 noted 26th and 27th September. A large party of migrants with glaucous gulls (over 50 in all) on Bu Ness, 19th October, had gone by following day.

GLAUCOUS GULL Larus hyperboreus.

A single immature, 22nd September. At least 10 (9 adults, 1 immature counted) on Bu Ness with greater blackbacks, evening of 19th October, but only 1 immature seen on island next day. A number, 12th and 29th December.

LITTLE AUK Plautus alle.

Large numbers reported by crew of the *Good Shepherd* off Sumburgh Head in mid-December. Remains of many birds (killed and eaten by greater blackbacks?) were scattered over Bu Ness and found even on top of Ward Hill.

MOORHEN Gallinula chloropus.

Singly, 28th and 31st August, also on 8th, 11th, and 13th October and 8th November.

WATER RAIL Rallus aquaticus.

One, 2nd October (see Part I). Others, 6th, 10th to 12th, and 25th. Three were caught and ringed on dates in early and mid-November.

QUAIL Coturnix coturnix.

One reported 11th September.

CORRECTION

Our attention has been called to an error in the note on the continental song thrush in the First Report of the Fair Isle Bird Observatory (Vol. 61, p. 25). The parasitic worm *Porrocaecum ensicaudatum* is a nematode and not a tapeworm as stated.—Editors.