

8

FAIR ISLE BIRD OBSERVATORY BULLETIN



Edited by
KENNETH WILLIAMSON
Director

Issued to the Friends of Fair Isle

Subscription, £1, 1s. per year

E D I T O R I A L

The present bulletin is largely in the nature of a "progress report" on our studies of some of the breeding birds of Fair Isle. The year 1952 may have been a disappointing one in some respects, particularly in its rough weather and the poor quality of the migration in both spring and autumn, but it is a consolation that the summer months were busier, more interesting and more profitable than in any previous year.

This, of course, is only to be expected insofar as our long-term research into the breeding biology and behaviour of the Arctic and Great Skuas is concerned, for it is natural that each succeeding season should prove more rewarding than the last, throwing new light on old problems, and opening up new possibilities for examination. As will be seen from para. 86, the Arctic Skuas enjoyed a very fine year, and gave us some useful additional data on the major problem, which is that of the inheritance of the various colour-phases. Nevertheless, it is clear - and in a sense gratifying, for the "Scootie Alin" has become to us a fascinating subject - that this work must go on for many more years before we can hope to reach anything approaching finality in our study. One of the satisfactory features of 1952 was that several colour-ringed birds, believed to be young of previous years, returned to the isle with the non-breeders in mid-July: only two or three of these were satisfactorily identified, owing to

the difficulty of reading colour-ring combinations in the field. It is an exasperating fact that colour-ringed birds almost always stand where their legs are completely obscured by clumps of heather!

In the early part of the breeding season we were able to take advantage of a golden opportunity to learn something of the incubation-rhythm of the Fulmar, and a preliminary account of this is given in para. 90. A paper on the subject will appear shortly in The Scottish Naturalist. We hope to be able to carry this investigation a stage further next year if the same individuals oblige by returning to the same cliff. During the period of the Summer Courses, in which valuable assistance was given by Mr. A.R. Edwards and Mr. Alec Butterfield, two "teams" of observers watched events and behaviour at nests of the Twite (see para. 93), - not an easy creature to study because the great majority repair to the cliffs for breeding, and these are the only moorland nests we have found in the past three years. Work on the local population of the Wheatear was carried on as usual (para. 87), and again a thorough investigation was made into the infestation of this and other resident species by Ornithomyia flies.

The Chairman of the Trust, Mr. A.B. Duncan, spent the week July 16th-23rd at the hostel, and gave enthusiastic assistance in the "round-up" of the young skuas for colour-ringing, colour-photography, weighing etc. Three other Trustees, Professor V.C. Wynne-Edwards, Mr. A.G.S. Bryson and Mr. George Waterston - the Laird of Fair Isle - paid visits during the autumn migration period.

86. The Arctic Skua Study 1952.

At the close of the 1952 season 18 out of the colony of 33 pairs had nested in all four seasons 1949-52. Out of a possible maximum of eight young each in this period none of these pairs had succeeded in rearing more than six. There were five pairs with six young to their credit, and eight pairs with four young apiece. One, the isolated Vaasetter pair, had reared only two young in the four years.

These 18 old-established pairs have laid from 33-36 eggs in each of the four seasons, and produced a total of 14 young in 1949, 23 in 1950, 18 in 1951, and 29 (twice the 1949 yield) in the present season.

Three pairs were newcomers in the 1950 season and have nested since: together they have shown a yield of nine young in the three seasons from 18 eggs laid. (But one of these, at Furse Hillside, had 4 eggs in 1951, laying a replacement clutch). There were three newcomers in 1951 and one of these, at Jarms Cup, has now reared four young in the two years.

In 1952 eight new pairs settled in the colony, double the influx of any previous year, but it remains to be seen how many of these will become "established" pairs. In 1950 and also in the following year four new pairs entered the colony but only three claimed their territories in the succeeding seasons.

A new pair may or may not nest in their first season at the colony: sometimes the first year is spent in establishing territory and no eggs are laid. In 1952 one pair established a

territory at the Breidpiece (western side of the Airstrip, on the edge of Sukka Moor) and they alone of the eight new pairs did not nest. Two of these new pairs contained individuals which were colour-ringed as non-breeders at the pool on Byerwil in 1950: they were then in adult plumage, and probably at least three years old. They were present at the colony last season, when they found mates and territories, but they did not breed. Five other pairs appeared here for the first time in 1952 and not only took territories but also nested. As is usual with new pairs, the clutch comprised a single egg (with one exception) laid rather late in the season. Only two of these pairs were unsuccessful.

1952 was by far the best season the skuas have enjoyed. Not only was there a substantial rise in the rate of increase of the colony, but a remarkably high breeding success was shown. The average clutch-size was actually below that of any previous season, due to the influx of new single-egg pairs, but 82 per cent of the eggs laid were reared to the fledging stage. The low chick mortality was entirely against expectation, since the summer was easily the coldest and wettest we have known, and we have always believed that the poor weather was the chief factor in the failure of the 1948 breeding season. The remarkably high success may be due to the operation of the so-called Fraser-Darling effect, - a reflection of the increased efficiency of the growing colony, - but several more seasons' work will be required to test this possibility.

The breeding success of the colony in the four seasons is compared in the following tables,

for the preparation of which I am grateful to Mr. John E. Willé.

ARCTIC SKUAS: Breeding Success.

1. Actual Data.

	<u>1949</u>	<u>1950</u>	<u>1951</u>	<u>1952</u>
Number of breeding prs	20	22	26	32
" eggs laid	36	42	49	55
" " hatched	30	34	35	49
" fledglings	14	25	23	45

2. Figures based on 100 eggs laid.

	<u>1949</u>	<u>1950</u>	<u>1951</u>	<u>1952</u>
Number of eggs laid	100	100	100	100
" " hatched	83	81	71	89
" fledglings	39	60	47	82

3. Pairs rearing full broods.

	<u>1949</u>	<u>1950</u>	<u>1951</u>	<u>1952</u>
Actual number	3	8	11	22
Percentage of colony	15	36	42	69

4. Average duration of fledging.

	<u>1949</u>	<u>1950</u>	<u>1951</u>	<u>1952</u>
Number of days	-	31.74	29.2	28.66

1952 also witnessed a rather remarkable rise in the percentage of pale phase birds in the breeding population. This percentage stood at 10 in 1949, and was 13.5 in 1950-51, whilst in the present season it was as high as 22. More pale phase juveniles were reared than in former years (13, or nearly 29%, of the total or 45), and several of these came from matings which did not include a pale adult. Such juveniles, which are easily recognisable by their chestnut heads and napes, abundant rufous bars on the mantle and wing-coverts, and white underparts barely concealed by pale brown tips to the feathers, were reared as follows:

At Eas Brecks East. A dark x rather dark intermediate mating, the latter believed to be the female. Even in down-plumage on the first day the two chicks were very distinct, one being brownish with a white belly patch, the other a blacker specimen with the belly-patch sooty. The first of these developed into the most beautiful Arctic Skua youngster we have yet seen on the island, and the other was of intermediate type with the head and nape dark brown, the rufous tips and edges to the feathers of upper-parts much reduced, and the belly feathers white at the base only. The two were colour-photographed together when nearly fully fledged.

At Burn of Furse North. Again a dark X rather dark intermediate mating, the latter believed to be the female. She is a partial albino, with patches of white on the lower belly, chin and carpalia, and white marks under the eyes. In previous years, except 1951, there have been one normal intermediate type youngster and one with the same albinistic markings as the female parent. In 1951 both youngsters

resembled the female except (in one case) for the spots under the eyes. This year the one youngster reared proved to be unmistakably pale phase; the other died in the shell during a day of heavy rain, and when examined showed the albinistic markings.

At Vatstrass South. An intermediate X darker intermediate mating, the former thought to be the female. One of the two eggs was lost to a predator, and the other produced a markedly pale phase youngster.

At Jarms Cup. Two intermediate type parents, both colour-ringed birds. Last year, their first season, they had two intermediate chicks, and this year produced one pale phase and one intermediate.

There are now two double-pale matings at the colony. A very white-bellied bird, mated with a dusky-breasted pale phase bird, nested unsuccessfully on the Mire of Vatnagard in 1950 and reared a pale chick there in 1951. This year they hatched and reared two chicks and it is the first time we have seen two pale phase juveniles in one brood. In 1952 a couple of almost identical pale phase birds took a territory in Homisdale and laid one egg, rearing a pale chick.

As in previous years, all pale X intermediate matings (irrespective of sex) gave one pale and one intermediate juveniles. Only one double-dark mating, at Homisdale East, is known: this gave one dark youngster and one apparently intermediate one. The darkest youngsters to fly in 1952 were once again the progeny of the Eas Brecks N.W. and Swey East dark X intermediate matings.

Two colour-ringed young of previous years were present at the colony as non-breeders in mid July, a time when the non-breeders are most in evidence. The dark youngster reared by Eas Brecks N.W. pair in 1951 was recognised by his colour-rings when sporting with other birds in the neighbourhood of the Airstrip on dates between July 11th and 23rd. An apparently dark phase bird with the red ring of the 1949 season on his left leg flew around with a newly-fledged youngster at Airstrip East on July 31st. An immature dark intermediate bird was playing with the Eas Brecks East fledglings on the afternoon of July 26th: it had white patches on the belly and lesser wing coverts, and although its colour-rings were not seen it seems likely to have been the partial albino youngster reared at Brae of Restingsgec East in 1950.

One of the two youngsters reared in the present season at the Brae East site was seen on the shore at Bridlington, Yorkshire, on August 26th 1952. The bird was found by Mr. K.D. Mason, who sent a description and a note of the colour-rings to Miss E.P. Leach, the Hon. Sec. of the Bird Ringing Committee. It is probable, from Mr. Mason's description that the bird concerned was the paler of the two youngsters, which were dark and intermediate types. They were ringed on July 17th and flew about July 27th-28th, so the Bridlington bird (which was apparently in good condition) had been about a month on the wing.

This is the second of our skuas to have travelled south via the North Sea: the Brae of Restingsgec West youngster of 1949 was recovered at La Panne, West Flanders, in November of that year.

K.W.

87. The Nesting of Wheatears in 1952.

These preliminary notes on the breeding of Wheatears Oenanthe oenanthe should be read in conjunction with the note on the same subject in Bull. No. 3, para. 28. This year's observations were confined to the north-eastern part of the island. The area in question is bounded roughly by the more westerly of the roads running up the Ward Hill, from its junction with the main road near Vaadal, taking in Swey, Wirvie Brecks and the Brae of Restingsgeo (see map on cover). We estimate that this covers about one-third of the area suitable for Wheatears breeding on the isle. In all 30 nests were investigated. Of these, 18 were in burrows (mostly disused rabbit burrows), 10 under rocks or stones or in dry walling, and 2 were situated beneath clumps of heather.

Most of the young were old enough for ringing between June 21st-23rd, the same time as in 1951. It was not possible to ring the complete brood in all cases but the following data were obtained:

4	nests	contained	6	young
11	"	"	5	"
9	"	"	4	"
4	"	"	3	"

The last brood (3 young) was ringed on July 11th. A young bird from this nest, with the body-moult to 1st winter still incomplete, was re-trapped as late as October 10th.

The type of mating was noted at 22 nests. This year there were 14 cases in which the male was fully adult and 8 in which a 1st summer male was concerned. The difference in the proportion of adult to 1st summer males from 1951 is not significant.

Of the 135 birds ringed as nestlings 20 were re-trapped during the period July 7th to August 20th. As might be expected, birds from nests in the immediate neighbourhood of a trap figured prominently in these recaptures. Thus 3 members of a brood ringed 20 yds. from North Haven Shore Trap were taken there, two of them within a fortnight of fledging. A similar state of affairs was found with a brood from a nest adjacent to the Double Dyke Trap. The most surprising returns came from a brood reared on the Wirvie coast nearly a mile north of the main trapping area: of the 6 nestlings, one was taken twice in the Double-Dyke, one entered the Observatory Trap, and a third was taken in the trap on the shore. The overall picture given by the recaptures is one of general dispersal very soon after the young become independent.

During the same period (July 7th - August 20th) there were 200 trappings of Wheatears in juvenile or 1st winter plumage comprising:

- A. 161 initial trappings
- B. 19 recaptures of birds in group A.
- C. 20 " of nestling birds.

Tentative calculations suggest that the total number of young reared in the study area in 1952 is of the order of 1200, giving 3600 as a probable figure for the island as a whole. The average brood size for the season works out at 4.63 per pair, which gives a Fair Isle population in the region of 800 pairs.

It may be noted that a population of this size should yield about 33 re-trappings during the study period: 39 were in fact obtained. In view of the uncertainties in the calculation this is a reasonable agreement between expectation and realisation.

ALEC BUTTERFIELD.

88. Weights of a Brood of Tystie Chicks

The two chicks of a pair of Tysties - or Black Guillemots - Cepphus grylle atlantis, were found under a boulder on the South Haven beach on July 15th 1951, when the youngest chick was thought to be not more than a day old. Its weight on that morning was 43 gm. The chicks were weighed each day at about 0900 hrs. with the following results.

The elder chick was not weighed on July 15th, but next morning was found to be nearly twice as heavy as its nest-mate - 81 gm., to the younger chick's 48 gm. The latter had thus put on 5gm. since the previous morning, and on July 17th and 18th it showed increases of 13 gm. and 15 gm., which were almost double the gains recorded for the elder youngster. For some reason unknown the younger chick afterwards failed rapidly, losing 14 gm. by 19th and a further 2 gm. next day. On the morning of July 21st it was dead.

After gaining only 8 gm. a day to July 18th the elder chick suddenly put on 23 gm. to 19th and a further 19 gm. next day: one wonders if it was monopolising the parents' attentions, to the detriment of the smaller chick, at this time. After the death of its nest-mate it averaged only 5 gm. a day to 23rd, but when weighed on the morning of 24th showed a gain of 32 gm., which it repeated next day. There was no increase at all between 25th-26th, and then a gain of 56 gm. over the next two days. It was not weighed again until August 2nd, 309 gm., and on both 6th and 10th was found to be steady at 360 gm. It would appear to have attained its top weight, therefore, in about 16-17 days.

Three adult Tysties caught on their nests on July 12th and 14th in the same season scaled 370 gm. (two cases) and 380 gm. In 1952 four young Tysties, occupying different nests in the same area, were weighed on August 7th when they appeared to be almost fully fledged. The figures obtained were 330 gm., 360 gm., 380 gm. and 440 gm. With such birds the differences noted might well be due to the time that had elapsed since their last meal.

From observations by J. PATERSON
W. ROSS and K.W.

89. Gannets in Shetland.

Mr. and Mrs. Venables did not see the paragraph (Bull. No. 7, para. 76) concerning the Gannets on the Ramna Stacks after I had drafted it. They wish me to state that owing to heavy seas the Soldian party on July 16th 1952 was unable to see whether the 20 or more Gannets were actually sitting on nests, so it is impossible to claim definitely that they were nesting. The fact that Gannets have been sitting on the top of this stack (Scorda) all and every summer since 1947 makes breeding highly probable but this can only be confirmed on a calm day.

My apologies are due to Mr. and Mrs. Venables for having misrepresented their views in this matter. It is to be hoped that next summer will bring weather suitable for a closer approach to, and examination of, the stack of Scorda.
K.W.

90. Incubation Log of Three Pairs of Fulmars.

During the latter half of May, June and early July thrice-daily observations were made on three pairs of Fulmars Fulmarus glacialis nesting on the north coast of Vaasetter, at a place known locally as Johnny's Peats. As there is no readily discernible sexual dimorphism in the Fulmar it is only rarely that one finds a pair whose partners can be distinguished apart, so that the existence of three such pairs with nests only a few feet apart presented an unusually good opportunity for studying the birds' behaviour during the incubation period. There is room here for a brief summary only of events at the nests: it is hoped that an extended account of the observations will appear in a future issue of The Scottish Naturalist.

PAIR "A"

The uppermost on the cliff, a Fulmar of the blue phase mated with a normal bird. The mutant was a uniform blue-grey colour on head, neck and whole of upper-parts, slightly paler on the breast. When flying it completely lacked the sharp contrast between white head and underparts, and grey wings and tail which is usual in this species. It is thought that this bird was the female, since it took the initial spell of incubation, and proved to be more assiduous in its attentions to the egg than the normal bird. There was no egg at this site (both birds present and courting) on the morning of May 17th, but the blue was sitting on a single egg on the morning of 19th.

Summarising events at this nest, we may say that the incubation spells averaged about

3 days in the case of the blue partner, but only about 2 days with the normal bird. If we assign an arbitrary period of one-third of a day to each of the three daily observations, then the blue sat for 32 days and the other for 20 days. The longest spells on the egg were during the first six weeks of the incubation period (when blue averaged 4 days) and the shortest coincided with the pre-hatching phase.

The egg was seen to be chipped on July 6th and the chick was first seen in dry down on 9th, having in all probability completed hatching the previous day. If we take May 18th as the probable date of laying, the incubation period lasted about 52 days.

PAIR "B"

Nesting immediately below "A" and about six feet from them. An "intermediate blue" bird mated with a normal one. The mutant in this case was dusky rather than dark, more whitish on the head and underparts than Upper Blue, but nevertheless quite distinct from the normal type. It is not known when the egg was laid, - incubation was in progress when the presence of a darker bird at this site was first appreciated early on May 19th, and it is likely that the normal bird had already completed one spell.

From early on May 19th the dusky bird sat for 6 days, being relieved overnight on 24/25th. The partner then sat for 6 days. These are longer sittings than any recorded for Pair "A". Both birds were together at the ledge all day 31st, and although the early morning observation on June 1st showed that blue had replaced her mate on the egg, the latter was sitting alongside, and was again in charge of the egg at the

midday and evening visits. It continued to sit until midday June 2nd: thus, except for a few hours on the morning of 31st, the normal partner sat for over 8 days. The dusky bird had come in by the first visit on June 2nd, but the change over did not take place until later: this bird was "on" at midday, and continued to sit until mid-morning of June 9th, a full week's session. The normal bird then took the egg for 5½ days, the blue returning late on 13th and staying at the cliff all next day, changing over during the night of 14th/15th. Blue's spell was 5 days, then the normal bird sat for close on 6 days, the blue being present all day 25th and taking the egg in mid-afternoon. This bird then sat for 3 days, being relieved on the afternoon of 28th, when the normal partner began a 3 day spell. An overnight change followed on July 1st/2nd, blue sitting for 2½ days followed by the normal bird for just over a day.

Short sittings and frequent changes, as with Pair "A", were the rule from the beginning of July, and the changed rhythm continued till regular watching ceased on July 14th. When no change was apparent in the condition of the egg on July 9th we feared that it must be infertile. From 10th onwards a different bird had the egg at each visit, and there was so much changing-over that thrice-daily visiting was insufficient to keep pace with events. Late on 14th both birds left the ledge for some time, - the only occasion on which we saw an egg left unattended on this cliff. It would appear that the brooding urge was already weakening, and although one or other of the pair continued to incubate, the egg had vanished from the ledge by July 17th.

To summarise, this pair differed from "A" in the greater length of their incubation spells,

and the fact that the partners took an equal share. Reckoning on the basis of one-third of a day to each observation the blue bird sat for 27 days and the normal bird 26 days up to July 9th (but the latter had had one spell of unknown duration prior to May 19th). Again, the longest sittings were in the early part of the period, each bird averaging over 5 days at that time, and they became noticeably shorter at the beginning of July.

PAIR "C"

Both were normal birds, occupying an inner ledge of the same cliff: date of laying unknown but certainly before May 19th. At midday on 20th, when both birds were at the nest together, it was seen that they could be distinguished on the colour of the bill, - a uniformly greenish bill in one case ("Greenbill") and a yellowish-green bill with a dark brown nostril tube in the other ("Darkbill").

The longest sitting we recorded was at this nest. Greenbill was on for 5 days from the night of May 25th/26th, and then Darkbill followed with a record session of 9 days, being relieved on the afternoon of June 8th. The spells which followed varied in length from 3 to 5 days, but, as in the case of the other two pairs, sittings became shorter from the beginning of July. The chick, in dry down, was first seen on the evening of July 6th.

In this pair Darkbill took the greater share of the duties of incubation. Calculating the shares on the same basis as for the other two pairs, Darkbill totalled $29\frac{1}{2}$ days and Greenbill $22\frac{1}{2}$. If Darkbill's first spell on the egg, before observations on this pair began, was of

average duration, then the total time on the egg would be much the same as recorded for Upper Blue. Spells "on" averaged longer than in the case of Pair "A" and were more in line with those at "B".

It is interesting that in all three pairs change-overs became more frequent and spells "on" reduced to little more than a day, or even less, during the last week or ten days of the incubation period. At this time too there was a greater tendency for the unoccupied partner to stay at the nest, sitting alongside its mate. This state of affairs continued down to July 14th, when regular visits were discontinued, and there can be little doubt that this modification of the incubation rhythm is due to some physiological change which anticipates the hatching of the chick. That it cannot be a direct response to some observed difference in the condition of the egg, resulting from the early activity of the chick inside the shell, seems clear, since with Pair "B" - whose egg was apparently infertile - the behaviour did not differ materially from that of the other two pairs.

Change-overs may take place at any time of the day or night. Of 40 changes noted during the pre-hatching phase 60% took place between 2000 hrs. and 0700 hrs. GMT, 20% later in the morning, and 20% during the afternoon. In a few observed cases the change-over was accompanied by a brief spasm of head-rolling and cackling on the part of one or other (or both) parents, or there was no ceremony at all.

The chick at "A", an apparently normal Fulmar, was still on the nest on the morning of August 26th but had flown by the following afternoon, giving a fledging period of about

50 days. Two older youngsters, the Darkbill/Greenbill chick and another first seen in dry down-plumage on July 6th, left the ledges in the evening when about 54 and 56 days old respectively. An adult bird had been seen sitting alongside the latter a few minutes before its departure from the ledge.

K.W.

91. University of Glasgow Algological Expedition to Fair Isle 1952.

That the isolated island of Fair Isle has long interested botanists is evident from the records published in earlier Annals of Scottish Natural History. The first collection of the island's flowering plants was made in 1905 by Eagle Clarke at intervals during bird-watching activities. But it was not until June 25th in 1952 that the first party of algologists landed on the island, and for the following week the camp was disturbed at all hours of the day and night by the party's attempts to catch the low tides.

Collections of seaweeds were made in the North and South Havens, at the North Gavel area of Bunes, at Mavers Geo, at Funniequoy and on the south-west rocks below the Skaddan braes. More detailed surveys were made of the sheltered shore of North Haven and of the exposed cliffs east of North Gavel.

As the expedition took place in the early part of the summer the number of species found was not high, for summer annuals probably develop late in such northern waters. It was, however,

interesting to find the sub-arctic fucoids Fucus inflatus forma distichus and forma edentatus; also Fucus spiralis forma nana. F. inflatus f. edentatus has previously been reported from Iceland, Norway, Sweden, the Faeroes, Shetland, and, recently, Denmark, but it is not recorded from Orkney or from the north coast of Scotland.

In a comparative survey of the sheltered shore of North Haven and the exposed cliffs of Bunness special attention was given to the distribution of the seaweeds with regard to tidal levels. Since Fair Isle stands isolated from any land-mass the tidal range is small, varying from about five-and-a-half feet at spring tides to three feet at neap tides. An offshoot of the Gulf Stream runs northwards past the island. but these currents mix with others from the North Sea; as a result, swiftly running, swirling tidal races are found round the island. The effect of these conditions on the distribution of the seaweeds was clearly seen.

In the sheltered waters of North Haven the intertidal algae were found growing only in a narrow belt, some five feet in vertical height, thus showing the small tidal range; whilst at North Gavel, where swirling waters buffet the very steep exposed rocks, the zone of living seaweeds exposed at low tide extended more than seventeen feet in vertical height, - i.e. about twelve feet above actual high water, spring tide level. Many of these weeds are never totally submerged but are kept continuously moist by periodic inundations of spray under climatic conditions in which mists and fog are prevalent and hot sunshine relatively rare. Such an extended zonation has been described for exposed coasts in Sweden and Faeroe, but is infrequently met in Great Britain.

This brief account of the expedition to Fair Isle would be incomplete without a record of appreciation and gratitude to the Trustees of the Fair Isle Bird Observatory for permission to visit the island, and to Mr. and Mrs. Williamson and their staff for the many kindnesses received. The facilities placed at the expedition's disposal and the comfortable living-quarters went beyond all expectations. The whole week was both memorable and rewarding.

The members of the expedition were: Dr. Elsie Burrows, Department of Botany, Liverpool University; Dr. Elsie Conway, Department of Botany, Glasgow University (Leader); Dr. Sheila Lodge, Marine Biological Station, Port Erin, Isle of Man; Mr. H.T. Powell, Marine Biological Sta., Millport, Isle of Cumbrae; and Mr. R.G. Conway, Clare College, Cambridge University.

ELSIE CONWAY.

92. Bird Ringing at Fair Isle.

This bulletin "goes to press" with only 10 days or a fortnight of the active season left, and the year's ringing total is considerably behind last year's. This is due largely to the failure of the early autumn migration, and in particular the passage of Faeroe-Iceland Wheatears. The grand total at October 23rd comprised 1,851 birds of 74 different species, - one species better than in 1951. The best individual totals were WHEATEAR 376, BLACKBIRL 284, STARLING 236, MEADOW PIPIT 193, ROCK PIPIT 136, TWITE 115 and REDWING 75. Interesting subspecies ringed are 4 "Northern" Chiffchaffs, 3 Greater and 1 Mealy Redpolls, 2 Eastern Lesser Whitethroats and a Shetland (as distinct from a Fair Isle) Wren.

93. Observations at a Twite's Nest.

A Twite's nest containing four young was kept under observation from a hide for a total of approximately 70 hours from about the sixth to the thirteenth day after hatching, July 22nd to 30th 1952.

The most interesting point that emerged from this study was that, contrary to the statement in The Handbook of British Birds, 1, p. 77, the cock took no part in the feeding of the young. (But see Additional Note below). The cock was seen on only four occasions, on each of which there was a very brief courtship display, culminating in copulation, after the hen had fed the young birds.

Feeding took place at remarkably regular intervals, averaging just under 30 minutes between visits. The duration of each feed varied considerably (between 10 and 160 secs.) but the majority of feeds lasted for 30 - 60 secs. On the two mornings when observation was begun sufficiently early, it was ascertained that feeding began at 0315 hrs. and 0330 hrs. GMT. respectively, the hen then removing the faecal sacs deposited overnight on the nest-rin. On four evenings the final feed was given between 2035 hrs. and 2057 hrs. GMT.

The faecal sacs, which were produced at the rate of approximately three per hour, were removed regularly after each feed. On the sixth day most of the sacs had to be removed from inside the nest but by the tenth day all the sacs were being deposited over the edge of the nest. At first (approximately sixth day) about 25% of the sacs were swallowed by the

Table: DEVELOPMENT OF FOUR NESTLING TWITES

DATE	ML 548		ML 549		ML 550		ML 551		AVERAGE	
	Weight	Wing	Weight	Wing	Weight	Wing	Weight	Wing	Weight	Wing
22nd/2015	15.9	32	14.2	33	11.2	26	14.5	27	14.0	29.5
23rd/2055	16.3	38	15.5*	34	13.2	30	15.7	32	15.2	33.5
24th/2100	17.0	42	15.5	37	15.0	35	16.7	37	16.1	37.8
25th/2010	17.4	45	16.2	41	14.5	38	17.0	42	16.3	41.5
26th/2010	17.6	49	16.0	46	16.8	42	18.6*	44	17.3	45.2
27th/2030	17.9	54	16.3	30	17.2	47	18.4	49	17.5	50.0
28th/2100	18.8	55	15.8	51	17.3	50	18.0	52	17.5	52.0
29th/2100	18.8	58			17.4*	51			18.1	54.5

TIME in GMT.

WEIGHT in GMS.

WING in MMS.

* Bird defaecated immediately before weighing: weight of sac included.

hen, the rest being carried well away from the nest; but this proportion rapidly decreased until, by the eleventh day, no attempt was made to swallow any of the capsules.

A noteworthy incidental point was the interest shown in the nest by at least two juvenile Wheatears (one a ringed bird). On several occasions one of these birds, in the absence of the hen, inspected the nest at close quarters and several times seemed to be on the point of putting its head right inside! On two occasions when a juvenile Wheatear approached to within a few feet whilst feeding was in progress it was driven off by the hen with a good deal of vigour, being pursued until 25-30 yards from the nest. Although adult Wheatears, Meadow Pipits and Skylarks were also moving about in the vicinity of the nest none of them displayed any particular interest in it.

The nestlings were weighed and the wing-growth recorded every 24 hrs., usually immediately following a feed. The results are tabulated on p. 22. With the exception of the "runt" of the family, ML 550, the young had attained average adult weight by the sixth (ML 548) and seventh (ML 549, 551) days. With the exception of ML 549, the chicks surpassed average adult weight several days before leaving the nest. ML 549 and 551 had left the nest, and could not be found, by 1915 hrs. July 29th. The other two left early next morning. Mr. A.R. Edwards, who spent a short time in the hide after their departure, saw the female return, examine the nest in something akin to perplexity, and finally fly off with the last of the faecal sacs left lying on the rim.

ANNE C. LITTLEJOHN.

94. Nesting of Meadow Pipits at Fair Isle in 1952.

Eight nests of the Meadow Pipit Anthus pratensis were found, all underneath clumps of heather on the moor. The two July nests most probably represent second broods.

Nest No.	Eggs.	Brood.	Fledged.	Approx. Date.
1.	?	4	4	June 4th
2.	?	5	5	" 12th
3.	5	5	5	" 15th
4.	5	5	5	" 21st
5.	4	3	2	" 23rd
6.	6	6	6	" 28th
7.	5	5	5	July 22nd
8.	5	3	3	" 24th

One of the young in nest 2 was a sandy-buff coloured "sport", one of two such mutants reared on the isle in June, and seen occasionally up to late August. The parent at nest 3 gave a good "injury-feigning" display from eggs on May 23rd and 29th. Two infertile eggs were found in nest no. 8 when the young were ringed on July 20th.

Nest No. 5 was found with 4 eggs on May 27th. On June 9th, after a night and morning of torrential rain, the nest was found to be flooded with half-an-inch of water. I raised it, packing heather underneath, and had to fetch two large stones from a nearby dyke to give the raised entrance some concealment. The bird accepted the re-built nest and hatched three young on June 14th. The addled egg, and a chick which died on 15th, were ejected from the nest by the parent bird.

K.W.

95. The Great Skua at Fair Isle.

There is traditional evidence that the Bonxie Catharacta s. skua nested on Fair Isle at the beginning of the nineteenth century (Patrick O'Neill, Tour, 1806), but it is not known to have bred in the present century until 1921. George Waterston recorded (Brit. Birds, 1945) that there were three pairs in 1936 but one only in 1943-44.

Four pairs produced a total of four young in the seasons 1948-49, and five young were bred by six pairs in 1950. The following season witnessed a drop to five pairs, which hatched four young: in addition, six pairs held territories but did not nest, a larger non-breeding population than in any year since our field-work began in 1948.

Five of these six pairs returned to their territories in the present season and nested, so that the total breeding population was doubled to ten pairs. One pair returned to their 1951 ground but again did not nest. In contrast with the Arctic Skuas the Bonxies had a very poor season. All the nesting pairs laid a full clutch - a total of 20 eggs - but at least six eggs were infertile and others disappeared during the incubation period. Ten eggs hatched, and eight youngsters were reared to the fledging stage, - a breeding success of only 40 per cent against the Arctic Skuas' 82 per cent.

Up to 1952 the Eas Brecks Bonxies, which are always the first to return and usually the first to lay, had reared two young in each of the four seasons: but in 1952, when they were first seen over the nesting-ground on April 8th and had two eggs by May 9th, they were entirely

unsuccessful. One egg vanished from the nest in late May, and the birds sat on the other, which was addled, until late June. Another of the original pairs, at Wester Lother, made the big mistake of nesting in the middle of a sheep-track, with the result that their eggs were broken. Vaasetter East reared two young, as also did the new pair on the Byerwil moor, and a mating which first nested on the N.E. side of Ward Hill in 1949. Vaasetter West, also a 1949 mating, and a new pair at the Dronga reared single youngsters.

Incubation and fledging data were obtained at the Byerwil and Vaasetter sites. The first pair completed their clutch between 2000 hrs. May 19th and 0600 hrs. next day, and the chicks were born on June 17th and 18th, giving a period of 30 days. On July 28th the elder chick attempted to escape from me by flying, but he was unable to get a sufficient lift until he tried to take off from a hilltop into a force 5 wind. He managed to stay up about a quarter of a minute but showed very poor control: his wing measured 285 mm. and this was his 41st day. Both young were flying well by August 3rd.

The Vaasetter East nest had one egg at 1900 hrs. May 21st and the second egg was laid some time after 2000 hrs. 23rd. One youngster was just out of the shell at 1000 hrs. June 21st and the other followed next day, again a period of about 30 days. The second-hatched chick was flying on August 6th, but not well enough to avoid being "run down" and caught. The wing measured 312 mm., and it was his 46th day. The nest at Vaasetter West had one egg at 0500 hrs. May 19th and the clutch was completed during the day. The first-laid egg

was slightly fractured, with the chick piping inside, early on June 14th, and hatching took place late on 16th or early next morning, so that the period again was about 30 days.

The nests at Byerwil, the Gowans and Vaasetter East were flooded by heavy rain in mid-June. An Arctic Skua which shared the same alarming experience moved both her eggs but was unable to roll them together over the uneven ground, so that when we came on the scene she was brooding one only and the other was lying cold a few inches away. We placed the eggs together in a dryer situation and she eventually hatched them both. The Bonxies showed no such enterprise, continuing to sit in what bore a marked resemblance to a plate of soup! In each case we moved the eggs several feet to dryer ground and the birds not only accepted the change but made new nesting-hollows, into which they brought heather and moss, beneath the eggs.

The Gowans pair had the misfortune to hatch a blind chick, - the one and only occasion on which I have seen this condition in a nidifugous youngster. Being sightless, the chick was unable to respond to the regurgitation act with which adult Bonxies invite their young to take food. The adults were quite unable to modify their behaviour to cope with the unique situation, with the result that the feeding pattern was never consummated and the youngster died of starvation on its fourth day. It was a revealing though pathetic instance of the close integration of stimulus and releaser, of action and appropriate response, in the construction of avian behaviour patterns.

K.W.

96. Ringed Bird Recoveries.

MEADOW PIPIT. Anthus pratensis. One of the two surviving young in a nest near the Gully (see para. 94), ringed June 20th. Recovered at BORDEAUX, France, about 1,000 miles due south, on September 25th 1952.

ICELAND MERLIN. Falco columbarius sub-aesalon. One of the birds discussed in para. 98, a female trapped on September 16th, was found dead at Ocumster, near Wick, CAITHNESS, on October 3rd 1952.

SPARROW-HAWK. Accipiter nisus. A first-winter female taken in the Gully Trap, October 6th 1951, was shot by a keeper at Holbeach St. Matthew, near the LINCOLNSHIRE / NORFOLK border at the end of August 1952.

OYSTER-CATCHER. Haematopus ostralegus. A chick hatched in a nest on the Gowans on, June 18th was killed at Plaine-sur-Mer, near ST. NAZAIRE, France, on September 9th (about 850 miles due south). This is our second recovery of a Fair Isle Oyster-catcher, both rather unexpectedly from France (see Bull. No. 6, para. 67).

LESSER BLACKBACK. Larus fuscus graellsii. One ringed as young on Luness on July 7th 1950 was found dead at Etang de Than, HERAULT, on the Mediterranean shore of FRANCE, May 10th 1952 (about 1,150 miles south).

CORNCRAKE. Crex crex. One caught in the Double-Dyke Trap on 4th June was found dead at Cuminestown, near Turrif, ABERDEENSHIRE, 140 miles south, on August 17th 1952.

97. August at Fair Isle.

Compared with 1951, August at Fair Isle was a disappointing month, both for the lack of migrants and for the gales which dominated the weather of the last ten days.

Evidence that autumn migration had begun came earlier than usual when a few passerines appeared, and young Willow-warbler, Garden Warbler and Whitethroat were trapped, between 8th and 10th. L.S.V. Venables saw Willow-wrens in Shetland on 7th and 8th, Swifts on 7th and 10th, and a young Cuckoo "with a white patch on the nape" at the Burn of Sandibanks, Scalloway, on 8th. The latter may not have been a migrant, however, - see Bull. No. 7, para. 76.

Spotted Flycatchers Muscicapa striata must have been present in Shetland in unusual numbers at this time, as G.T. Kay told me that one which came to his garden in Lerwick on 9th was the fore-runner of half-a-dozen next day. We had one at Fair Isle as early as August 3rd, and one was seen in Dunrossness on 13th. There was a marked increase in Curlew and Whimbrel passage on 10th, and Herons and Common and Wood Sandpipers were on the move.

The slight waves of immigration at this period were due to drift from the Skaggerak ahead of the fronts of depressions centred west of Ireland. Arrivals of parties of Turnstones and Purple Sandpipers, the latter unusually early, took place on 12th.

A Spotted Crake Porzana porzana was found in a very dazed condition underneath telephone wires in Dunrossness on 11th and was brought to

L.S.V. Venables, who gave it "assisted passage" into Fair Isle on 13th in charge of The Good Shepherd's crew. The bird had made a good recovery and seemed lively enough, so we ringed and weighed it (66 gm.) and let it go beside the Gilsetter Burn. L.S.V.V. wrote to me a week later, "probably this treatment - complete calm and seclusion for 48 hours - would cure many present-day ills!" W.A. Butterfield, who colour-photographed it on its release, spoke of its slow and deliberate movements, with head and neck held low, until it entered a ditch, along which it moved very quickly, pecking at the bank at intervals as if feeding. It left the drain after going some 15 yards and went in among some fairly tall grass, where it appeared to be quite at home.

This species has been seen here only once previously, when two of our visitors caught one inside the Laa House on August 8th 1949. These are the earliest autumn records known for the Shetland area.

White Wagtails Motacilla alba alba were late in appearing in 1952. A single bird came with the small drift of August 8th, but no more were seen until one arrived on 15th, followed by 5 next day, building up to a peak of 40 plus on 19th. Venables writes, of south Shetland, "migration started with a minor rush on 17-18 August." It is difficult to decide their origin: they could equally well have reached our area by direct immigration from an anti-cyclone centred in Iceland, or travelled from Norway in the north-easterly airstream on the southern perimeter of this same high. As other Continental migrants were absent, and Iceland ones present at this period, the first of these suggestions is the more likely.

The first Merlins, apart from an isolated record for August 7th, appeared at this time, and two were trapped, - a tiercel on 19th and falcon on 20th. These birds we believe to be Icelandic - see para. 98. A Greenshank came in on 20th, and three each of Knot and Wood Sandpiper were seen next day. The most interesting passerine caught at this time was a 1st-winter Barred Warbler Sylvia nisoria: the prevailing weather and the bird's high weight of 23.3 gm. strongly suggest diurnal passage from Shetland.

In the case of one species, the Wheatear, it was quite clear that diurnal movement was proceeding on 20th. Very few were to be seen along the usual dykes and on the North Haven shore in the early morning, but later they were more in evidence and ten new birds were trapped during the day, at weights normal for local and Shetland birds.

The anticipated rush of more northerly Wheatears, the longer-winged and heavier Oenanthe oe.schiøleri of the Faeroes and south Iceland, about which we wrote in Bull. No. 6, did not come our way this year. This was a great disappointment, for from mid-August onwards we were "standing by" with everything in readiness for a busy time in the lab., and our visitors were hopefully and cheerfully sharing the dawn rising. It was not until the weather-maps for the week 17th-24th arrived, and we realised that the Wheatears' "D-day" was past, that the order was given to "stand down".

There was only one short spell of about 30 hours during which there was any noticeable movement of birds which could confidently be assigned to schiøleri stock. We captured ten birds in this period, as follows:

WHEATEARS: August 23rd-25th

Date/Time	Age/Sex	Wing	Bill	Tarsus	Tail	Weight
1. 23rd 1900	Ad. male	102	16	30	60	26.68
2. 24th	"	99	16	29	59	33.04
3. 0430	"	98	16	29	57	28.68
4. 0500	Ad. f.	90	16	29	52	27.10
5.	1st. w.	95	16	27	53	26.88
6. 0730	"	95	16	30	54	31.12
7. "	"	99	15	30	55	27.22
8. 1150	"	97	14	28	55	23.56
9. 1800	"	97	15	29	53	25.23
10. 25th 0630	Ad. male	96	16	28	57	27.20

Of these, it is highly probable that all are Faeroe-Iceland passage migrants with the exceptions of nos. 8 and 9, which seem too light. At first doubts were entertained about the adult female, no. 4, on account of the very short wing: but it was seen that she had not yet completed growth of the 2nd and 3rd primaries, - a rare circumstance in a migrant Wheatear. Typical col conditions, with the weather calm and fairly clear, existed in Faeroe and Shetland at this time.

The presence of so many adults among the Wheatears trapped then and subsequently is strong evidence that the main migration, which is largely composed of 1st-winter birds, had passed by. This exodus may have taken place at any time during the week August 13th-20th, when Faeroe was at the centre of an anticyclone and enjoying beautiful weather. During the whole of this period we were having a moderate north-easterly airstream which no doubt bore the migration away to westwards of Shetland.

For consolation there is the thought and the hope that the big Wheatear rush will come our way in some future year. Evidence that it is a fairly regular event - and that 1952 is probably exceptional - continues to accrue. My wife, reading through the first year's "Log Book" of events at Fair Isle, drew my attention to the following entry:

August 24th 1948. Yesterday and today the men reported large numbers of migrant Wheatears along the roadside dykes, and I have myself noticed that they seem to be in larger numbers than usual in the cropped area. George and Alec (Stout) say there have been more Wheatears this year than they can remember in any previous season."

This, of course, was before our traps were built and before any organised bird-watching was done. When browsing through Tom Henderson's library the day after leaving Fair Isle, Alec Butterfield found a reference in T.E. Buckley and A.H. Evans' Fauna of the Shetland Islands (Edinburgh 1897) to a big rush of Wheatears between August 22nd and 28th 1881. He writes, "It looks as if we have stumbled on something of very long standing. I am rather glad that we had not discovered that quotation earlier as it adds corroboration to our work."

A final drift of Continental migrants reached us on August 30th when a shallow low had a brief and inauspicious career off the south-west coast of Norway. It was a very light drift (the depression had gone from the midnight map, although its south-east winds remained) but a surprisingly varied one. We trapped five of the 15 Willow-warblers seen, mostly at good weights of 8 - 9 gm., and all juveniles.

Sheltering among the ruins of the war-time Radar Station at the very top of Ward Hill were several Pied Flycatchers; passage of Curlews and Whimbrel was renewed; there were increases in Ringed Plover and other waders; over 200 Common Gulls came in, and passerine species seen included Grasshopper and Garden Warblers, Whinchat, Ring Ousel and Robin (there had been one on 25th, an astonishingly early occurrence). Sand Martin, Wryneck, a Buzzard of sorts, a female Sparrow-hawk and two remarkably early Grey Lag Geese were also recorded. Four Herons on 30th increased to 9 next day, and a Spotted Flycatcher and Ortolan Bunting (the latter in the company of a Lapland Bunting) were seen on 31st.

Of this period in the south of Shetland L.S.V. Venables writes that there was a marked influx of Curlew flocks, and considerable flocks of Lapwings on August 30th. Of the rarer waders, there was a party of 6 Temminck's Stints at Spiggie on 27th, and 4 Black-tailed Godwits on 30th.

K.W.

Additional Note to the Nesting of
Twites *Carduelis flavirostris* (para. 93)

Another nest of the Twite, containing 5 young certainly not more than a day old, was found on August 2nd. This offered an excellent opportunity to fill in the gaps left from our study of the earlier nest, so a hide was put up at once, and a good many hours of watching followed. I have not yet had time to analyse the notes, but a very important difference in behaviour from the first pair should be noted, - the male took just as active a part in feeding the young as his mate, throughout the whole period.

98. Icelandic Merlins at Fair Isle.

For the first time here we trapped three Merlins in one day, September 4th. Details of these birds, together with other trappings, are:

Date	Sex	Wing	Bill	Tarsus	Tail	Weight
Aug. 19th	m.	205	12	38	138	-
" 20th	f.	228	14	40	154	192 g.
Sept. 4th	m.	206	12	41	115	170 g.
" 4th	f.	232	14.5	40	140	220 g.
" 4th	m.	210	12	40	127	185 g.
" 16th	f.	228	14.5	38	143	210 g.
" 20th	m.	210	12.5	40	130	185 g.

Three of these birds were self-caught in the Double-Dyke Trap, three were taken in Vaadal and one in the Gully.

We believe these birds to be of Iceland stock. According to Dr. F. Salomonsen ("Zoology of the Faroes", Aves, pp. 122-3) the Icelandic Merlin Falco columbarius subaeson Brehm, is distinguished from the Continental race Falco c. aesalon Tunstall by having darker and broader streaks on the underparts in young birds and females, and by darker yellow or buffish edges to these feathers, as compared with whitish or creamy edges in Falco c. aesalon. "The darker aspect of the underparts usually very distinct, especially in freshly moulted autumn specimens." The birds trapped agreed with this description and also had wing-length beyond the upper limit of the measurements given by Salomonsen for a long series of 102 Scandinavian specimens, - viz. males, 193 - 202 mm., females 199 - 222 mm. His measurements for 17 Iceland birds are: males, 207-213 mm., females, 222 - 239 mm. Faeroese

Merlins are intermediate in wing-measurement, and nearer Falco c. subaesalon in plumage. British breeding birds, though similar to the Continental in coloration, are generally longer in the wing; so there would appear to be a cline from the Continent westwards through Britain and north-westwards through Faeroe to Iceland.

Because of the overlap in measurements H.F. Witherby, The Handbook of British Birds, 3, p. 25, did not accept the separation of an Icelandic race. But nothing is said about the provenance of the material measured for comparison. France is the type-locality of Falco c. aesalon, and we might expect, on the basis of Bergmann's Rule of increasing size in higher latitudes, that French birds would average slightly smaller than the Scandinavian series measured by Salomonsen. On measurements alone the Icelandic Merlin would appear to constitute a very distinct race.

British Merlins are sedentary, if we can accept the evidence of the ringing returns (The Handbook, 3, p.23). Faeroe Merlins are said to be resident, but there is no such evidence in support of this view. Passage-migrants at Fair Isle, therefore, fall into one or other of two categories, - direct immigrants from Iceland and possibly Faeroe, or drift-migrants from Scandinavia. According to the above authority, passage-migration through the northern and western isles of Britain is drawn from the Continent, but this statement needs qualification. So far only one female out of 15 Merlins (6 m. 9 f.) trapped here could be confidently assigned to the European race (October 11th 1950, wing 218 mm., weight 198 g.). Another female taken

September 18th 1951, with wing 223 mm. and the same weight, might also belong to this race. K.W.

99. Weights of Migrant Chaffinches.

In Bull. No. 6, para 60, we drew attention to the difference in mean weight between birds of several species caught at Lista (Norway) and Fair Isle. Thanks to the co-operation of Dr. Perdeck and Major R.F. Ruttledge we have been able to make a more satisfactory comparison in the case of the Chaffinch Fringilla coelebs.

By taking only the first weight of birds which have been caught more than once we have determined what we believe to be the arrival weights of the birds at Fair Isle, the Hague, and Great Saltee. Our data show a significant difference in mean weight between the two sexes but we are unable to detect any significant difference between 1st-winter birds or between birds presumed to belong to different geographical races (Fringilla c. coelebs and hortensis). For the present, therefore, we have grouped the age and race groups together, and obtained the following results:

Place.	Males.		Females.	
	No.	Mean Wt.	No.	Mean Wt.
Fair Isle	29	21.52 g.	20	19.50 g.
Great Saltee	16	23.56 g.	38	20.98 g.
The Hague	204	23.94 g.	125	21.81 g.

Our own records of retrapped birds show that they attain weights comparable with those taken at the Hague. e.g.

Arrival	Weight	Females.	
		Highest	After 12 days.
	17.7 g.	23.6 g.	" 18 "
"	19.4 g.	22.0 g.	" 18 "

		<u>Males</u>		
Arrival	20.7 g.	Highest	28.3 g.	After 9 days.
"	20.0 g.	"	28.0 g.	" 9 "
"	21.0 g.	"	26.9 g.	" 11 "
"	19.2 g.	"	25.9 g.	" 25 "
"	20.0 g.	"	23.5 g.	" 11 "

In view of this we may assume that the weights of the birds taken at The Hague represent the normal weights for this species, and that the differences between weights recorded there and at Fair Isle and Great Saltee are in all probability due to the length of the respective oversea flights, the Fair Isle birds having undergone a long drift across the North Sea, whilst the Irish birds have made a much shorter journey after a leisurely passage across England, during which they made good the losses occasioned by the North Sea crossing. In this connection it is interesting to note that the peak trapping period at Saltee is late October, whilst the east coast observatories get their peak early in the month.

AIEC BUTTERFIELD.

100. Manx Field Club Notes.

Interesting information concerning spring migrants and the early nesting of native birds is contained in the Manx Field Club bulletin issued in April. CHIFFCHAFF and WHEATEAR were exceptionally early, March 9th. The first SWALLOW was seen April 6th, HOUSE MARTIN 11th, CUCKOO 13th and 17th, COMMON SANDPIPER 16-17th, BLACKCAP 16th, SWIFT May 1st. A HOOPOE Upupa epops was at Port St. Mary on April 27th, the fifth Manx record since 1949. A HERON ringed in southern Norway was found dead at Ballavelt, Maughold, on March 3rd.

From Notes by WILL S. COWIN.

101. A New Bird Observatory at Dungeness

The present Dungeness Bird Observatory Committee was set up at a conference held at Dungeness on March 30th 1952. On it are members of the Hastings Natural History Society, Kent Ornithological Society and the London Nat. Hist. Society, thus including those bodies which are nearest to and most interested in the area.

Most of us who know the place have been trying to work up something there for quite a long time, but have been faced with the difficulty of finding accommodation, at all seasons and at reasonable terms. In June we found the Coastguard Station there was closing and the Watch House was empty. This we leased, entering into possession on July 1st.

Since then a lot of work has been done, particularly by some of the junior members of the K.O.S. The R.S.P.B. lent us the Warden from their reserve on the Lydd Ranges for a short time at the beginning of August. All this meant that a trap was started and though not finished was sufficiently forward to trap a few of the Whitethroats and Willow-warblers which came through in the early August rush.

We regard the first trap and this first season's work as mainly experimental, but in the seven weeks since we started nearly 500 birds have been trapped and 113 species identified in the area.

The trapping area is an old ballast pit stretching about a mile north-west from the lighthouse, and from it the old Southern Railway must have taken thousands of tons of ballast.

Three Heligoland Traps would be the minimum to take advantage of the best clumps of bushes which have become well established there. The results so far are exciting and very encouraging, and we can now go forward to extend our operations and ask for support from ornithologists who so far have not heard of our foundation. We shall shortly be holding a conference to widen the scope of the Committee and draw up a constitution and rules.

Of the species trapped (up to September 14th) the most interesting are a Red-spotted Bluethroat, two Lapland Buntings, Wryneck, Corn-crake, Pied Flycatcher and Nightingales.

During the week-end August 30th/31st Mr. W.B. and Mr. H.G. Alexander visited the site. As a result we shall be sending a delegate to the next B.T.O. Bird Observatories Committee meeting at Monkshouse this autumn. We had previously been recognised by Miss E.P. Leach as a ringing station.

A. DENBY WILKINSON.

Fair Isle Bird Observatory, October 23rd 1952.

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

0 100yds. 440yds. 880yds. 1mile
 Roads == Bird Trap ← TRAP Boundaries

