

FAIR ISLE BIRD OBSERVATORY ANNUAL REPORT 1954



KENNETH WILLIAMSON Director

Printed by George Waterston & Sons Ltd., Edinburgh for the Fair Isle Bird Observatory Trust

Price 5/-

(Issued free to Friends of Fair Isle)

FAIR ISLE BIRD OBSERVATORY TRUST

Trustees:

Dr. James W. Campbell
*Dr. John Berry
*Mr A. G. S. Bryson
The Marquess of Bute
Dr. F. Fraser Darling
Mr James Fisher
*Col. W. M. Logan Home
Cmdr. G. Hughes-Onslow, R.N.
(Retd.)
Mr G. Theo Kay

Sir Norman B. Kinnear
Sir John Stirling Maxwell
*Professor M. F. M. Meiklejohn
Col. R. Meinertzhagen
Mr E. M. Nicholson
Professor James Ritchie
Mr Peter Scott
Dr. A. C. Stephen
Sir Landsborough Thomson
Professor V. C. Wynne-Edwards

Chairman: -- ARTHUR B. DUNCAN.

Hon. Secretary:—George Waterston, 5 Charlotte Square, Edinburgh, 2.

Hon. Treasurer: -- IAN PITMAN, 48 Castle Street, Edinburgh, 2.

Director: - KENNETH WILLIAMSON.

April to October—Fair Isle Bird Observatory, by Lerwick, Shetland. November to March—17 India Street, Edinburgh, 3.

* Member of Executive Committee.

Solicitors:—J. & F. Anderson, W.S., 48 Castle Street, Edinburgh, 2. Auditors:—LINDSAY, JAMIESON & HALDANE, C.A., St. Andrew Square, Edinburgh, 2.

Bankers:--Union Bank of Scotland Ltd., 64 George Street, Edinburgh, 2.

Annual Subscription ("Friend of Fair Isle") One Guinea.

Please support by Donation or Legacy

The Fair Isle Bird Observatory Endowment Fund

With the generous help of the Pilgrim Trust, the Observatory Trustees have established an Endowment Fund for Ornithology and Bird Preservation in Scotland. The objects are:—To establish the Fair Isle Bird Observatory on a permanent financial basis; to extend Fair Isle research methods to other stations in Scotland; and, finally, to develop Bird Sanctuaries and Bird Preservation in general.

Capital subscribed to the fund will be held as a permanent Endowment Fund by the Trustees and cannot be spent. Income from the Fund will be carefully used by the Bird Observatory Executive Committee in keeping with the above objects.

Write to the Hon. Secretary for particulars.

FOREWORD

The delayed publication of this year's annual report, for which I apologise, is due not so much to those familiar and doubtless occasionally valid reasons that are so frequently given for tardiness as to a deliberate holding up of the report to coincide with a fresh drive for funds to enable our work on Fair Isle to be secured firmly for the future and to allow of its expansion elsewhere.

The year on Fair Isle has been a most eventful one. The island is now safe for ever in the hands of The National Trust for Scotland. On the scientific side, the work at the Observatory has once more yielded memorable results and confirms our belief that the dividend of knowledge yielded by the work is cumulative. The Director's exposition of the theory of drift has nearly reached the last of the three phases through which fresh ideas are in the habit of passing. The first phase is marked by sheer incredulity, the second by doubts as to its possibility, while in the third phase the critic's attitude may be summed up as "Why all this fuss? We knew that all the time!"

On the island itself the firm establishment of the Observatory seems now to have made it far more unlikely that Fair Isle will share the fate of so many of our Scottish islands and become deserted and forlorn.

Whatever light "drift" throws on migrational affairs, it is certainly a fatal policy in financial matters, therefore I hope that all who receive this report will turn to the Treasurer's statement, read it with care, ponder over it, and act on it in such a way that we may be assured that our work both on the island and else-where in Scotland may not only be maintained but extended.

ARTHUR B. DUNCAN.

Chairman.

FAIR ISLE BIRD OBSERVATORY TRUST

ANNUAL REPORT OF THE DIRECTOR 1954

General

Once again we were at Fair Isle from the beginning of May until mid-November, and were visited by more gales and more students than in any previous season. The total of "student-weeks" was 158, and although the average during the five weeks of the spring migration was rather low, the hostel was full for most of the autumn migration, from mid-July to the end of September. Two Trustees, Mr. George Waterston and Colonel W. Logan Home, made visits, and visitors from abroad included two American ladies and 5 U.S. Air Force personnel, as well as bird-watchers on leave from Africa and India.

Teams from the British Broadcasting Corporation stayed during July and several broadcasts, including two full-length documentaries, resulted. The first, describing the work of the Bird Observatory, was scripted by Gavin Catto and produced by Miss Elizabeth Adair in the Home Service on September 5th. second, dealing with the story of the island, its folk-lore and present-day conditions and problems, was produced by Archie P. Lee from a script by Jerry Eunson, - a Fair Islander now "exiled" in Glasgow, and was on the air in the same service on November Miss Adair also took the opportunity of pre-recording an "In the Country" discussion on the cliff-top of the South Haven, with Gavin Catto as Chairman and James A. Stout, Tom Henderson, George Waterston and the Director as speakers, and the local gulls and Oyster-catchers supplying the A short programme based on the incidental music! material collected at Fair Isle was also broadcast in the Children's Hour, and Archie P. Lee's "Utra Jerry", - which might be called a sound-portrait

of a busy islander, - has already had two performances. The fortnight July 14th-28th was certainly a busy one for all concerned, but islanders and visitors enjoyed every minute of it.

The special programme on the Bird Observatory and its work was nicely timed to coincide with the important announcements that the Pilgrim Trustees had made a very generous grant to the Bird Observatory to assist in establishing an Endowment Fund, and that the island itself had been handed over by Mr. Waterston to the National Trust for Scotland, this having been made possible by a further grant from the Dulverton Trust. A special note concerning these matters and their significance for the island and ourselves appears Also synchronized with elsewhere in this report. these announcements was the appearance of a "rara avis" not previously on the Fair Isle list, - a "Sunday Express" helicopter which dropped in with George Waterston, making his second visit of the season in the smoothest and swiftest crossing on record. The helicopter flew to Sumburgh Airport and "roosted" there overnight, but returned next morning and made facile landings beside the Observatory huts and among the crofts before departing for Wick.

In the late autumn a "Picture Post" writer and photographer visited the Observatory and a short article by Kenneth Allsop appeared in that magazine on November 27th. So by and large, 1954 was a most successful year from the publicity point of view.

Once more we had the services of Misses Willa and Mary Wishart, joined at exceptionally busy periods by their sister Mima, and are grateful for their loyalty and hard work in helping to maintain the high standard of comfort we like to offer our visitors. General duties were efficiently carried out as usual by Mr. William S. Euncon, and although

this year he did not catch a Grey-cheeked Thrush as he went about his daily chores his services were no less valuable on that account. The lighting plant was overhauled by the G.P.O. Engineers in the spring and tended thereafter by Mr. Jerome Stout. Although not officially "on the strength" during the year. Messrs. James A. Stout and James Wilson and other islanders kept us well posted with observations and assisted our work in other ways. We are grateful to all the island families for their kind co-operation and permission to wander at will in search of birds on their land. We thank Mrs. A. W. Thom once more for her voluntary secretarial work, particularly in the winter at our Edinburgh headquarters, and Dr. A.C. Stephen of the Royal Scottish Museum for the loan of a collection of bird-skins for taxonomic work.

It is no exaggeration to say that the first winter's successful operation of the power-winch at the North Haven. - part of the cost of which was met by the islanders and by donations from Friends. - and the strengthening of the slipway in the early summer, have been responsible for a tremendous uplifting of island morale. We are all looking forward to the day (and hope it will not be far distant) when a new pier at the North Haven will give the island a good, safe harbour in any weather; and there is already talk in the wheelhouse of "The Good Shepherd" of fitting a new and faster engine which will reduce the crossing of the Sumburgh Roost by half-an-hour. The new spirit shows itself to advantage in the "Coronation Hall" on those evenings. - now a regular feature of Fair Isle's summer life, - when islanders and visitors gather together for social occasions as guests of the hostel staff.

Bird Migration

In 1954, as in previous years, the main emphasis of our studies was on the correlation between migration and its meteorological environment. The conclusions we have published as a result of work in this field are gaining a wider acceptance, not only in this country but also abroad. These conclusions were summarised in a paper entitled "Migrational Drift" which was read for the Director by one of the Trustees, Mr. James Fisher, at the Xlth International Ornithological Congress at Basle, Switzerland, in May. The Director has also taken part in several broadcast Discussions on the subject of bird-migration.

The spring migration of 1954 was analysed in Bulletin No. 4 and the autumn movements are dealt with There was no outstanding feature about in Nos. 5-7. the spring season, apart from the occurrence of rarities such as Goldfinch (May 11th-13th), Red-throated Pipit (May 8th-11th) and Icterine Warbler (May 30th), but the autumn migration was memorable on several counts. on there were unusually heavy passages of Willow Warbler and White Wagtail, to say nothing of Barred Warbler, of which we trapped 8 out of 16 seen. More species of a north-eastern origin reached Fair Isle than in any previous autumn, and two visitors from this quarter were birds new to the British List. Young Yellow-headed Wagtails (Motacilla citreola) were trapped on September 20th and October 1st, and at the time of the latter occurrence a o Baikal Teal (Anas formosa) was at the Other birds which probably had a similar origin were a number of Scarlet Grosbeaks, three Eastern Lesser Whitethroats, two Eversmann's Warblers, a Yellow-browed Warbler, two Eastern Short-toed Larks and two Little Buntings.

The Merlin migration was studied once again and is reported in <u>Bulletin No:</u> 6 as in previous years, the main passage came from Iceland, but 5 Continental

birds were recognised in 1954 and two of these have since been recovered, one in France. In contrast with the autumn of 1953 the Lapland Bunting passage was exceedingly poor, but Greenland Redpolls were above their usual strength.

For the first time in an autumn season the various Redwing, and to a less extent Blackbird, influxes in October and November were well segregated, and it may be possible to use the weight-records of trapped samples to advantage in analysing the nature of the several movements. A paper on the Redwing passage-migration is in preparation.

Trapping and Ringing

We suffered a severe blow in the late autumn when a violent gale completely wrecked the Double Dyke Trap. Since its completion in autumn of 1951 this trap, specially designed to catch birds as they moved along the dry-stone dyke at Vatstrass, had been of the utmost value to our migration studies. It has taken us a long way in our research into the local and passage Wheatear populations, and it was primarily due to captures there that we were able to elucidate the pattern of Merlin migration. Unless we can quickly replace this invaluable trap we shall have some 500 fewer birds through the laboratory in 1955.

The Gully Trap remains sound, but others are now showing the effects of several seasons exposure to winter gales. Vaadal has suffered badly and it is proposed to rebuild this trap, with a larger and more efficient funnel, some 30 yards downstream: the site is an excellent one, and the proposed new structure should greatly increase our catches here. Considerable planting of trees was done in a small protected enclosure at the mouth of the glen in May, by Mr. R.K. Martin.

We made much use of small traps on the Heligoland pattern, some of a temporary nature, others of a more permanent pattern. The former enabled us to get a record catch of Meadow and Rock Pipits during July and August, when these birds were most needed to assist Mr. Corbet with his research on the Ornithomyia flat-fly infestation. The latter, three in number, were put up specially for Blackbird-trapping in the autumn, and occupied positions over the deep, dry ditch between the main road and the Gilsetter field dyke. In view of their success in late October and November we have decided to give them a full season's trial with other migrants in 1955.

The season's ringing total, 2,367 birds of 75 species, was above the average. Top scorers as usual were Blackbird (358) and Wheatear (354). For the second year in succession over 100 Redwings were ringed, one fifth of them belonging to the Iceland race, and we had a record "bag" of 33 in one day, on October 8th. As mentioned above, we ringed a greater number of the two breeding pipits than in any previous season, 247 Rock and 216 Meadow, and of course had numerous recaptures of these and other resident birds. Of the 16 Merlins trapped in 1955, 11 were Icelandic. We ringed 96 Arctic Skuas. Novelties included 2 Green Sandpipers, a "blue" Fulmar caught in the Faeroese "fleyg". 6 adult Oyster-catchers taken on their nests in a giant "Potter" trap, a young Whooper Swan caught in the Gully. and a Q Goldeneye which walked into the hostel kitchen on a wild October morning. Rarities and sub-rarities included 8 Barred Warblers, 4 Greenland Redpolls, 3 Eastern Lesser Whitethroats, 2 each of Bluethroat, Icterine Warbler and Yellow-headed Wagtail, and single Eversmann's and Yellow-browed Warblers.

Ringing recoveries have been or will be published in the Bulletins. Those reported in 1954 include several Blackbirds, 2 Song-thrushes and a Redwing, Meadow Pipits from Cadiz and Casablanca, Oyster-catchers

from Fife, Dumfriesshire and Eire, and our first returns of Bonxie, Long-eared Owl, Water Rail, White and Grey Wagtails, and Swallow. The ringed bird recoveries since 1948, classified as to countries, are shown in Table 2.

Table 1.

Bird Ringing at Fair Isle.

1	948	1949	1950	1951	1952	1953	1954	Total
Slavonian Grebe			•			1		1
Storm Petrel =	1	1	•	•		1	· · ·	3
Fulmar ±	ī	26	13	77	19	14	13	163
Gannet		1	_					1
Shag 📤 "		19	14	26	3	1	1	6 4
Heron			2 1					2
Teal			1	1			_	2 2 2 5 1
Goldeneye				•		1	1	2
Eider ±			3			2	_	.5
Whooper Swan							1	1
Sparrow Hawk	_	2 1	- 3	. 3	_4	6	. 3	22 - 50
Merlin	1	1	3 5 1	. 3	11	13		- 50
Kestrel	-		7 T		1 5 1 2 3 17	,	1 3	3
Water Rail	1	. 9	15	9	5	6	3	48
Spotted Crake		1	-		Ţ	-		2
Corncrake ±	-		Τ.		2	1	٠,	2 5 11
Moorhen	 	1 21	2	3 26	<u>ک</u> 1.7	51.	1	. <u>i</u> l
Oyster-catcher	=12	21	7	20		34	29	151 14
Lapwing # Ringed Plover #			2		3 10	3 12	7	27
Turnstone	•		- 2		10	-1.2	3 13 2	37 3
			1 2 9 5 -2 1 5		-	7	2	ر 11
Snipe =			5	2	1 2 3	1	2	
Jack Snipe	2	2	4	4	2	1 2	1	3 18
Woodcock Curlew	. 2	۷	. 4	4	ر			
Whimbrel			3					ر و
Green Sandpiper			2		*		2	2
Common Sandpiper	**	1		1	2		<u> </u>	1,
Redshank	_			-	-	3	. 2	5
Greenshank				1	1-		- · · · ~	2
Knot		2	. 1			2	1	3 2 2 4 5 2 6
Dunlin		1	4		1	7	1	14
Sanderling		1	1	1		7 3	1	7

191	8 1949	1950	1951	1952	1953	1954	Total
	4 12	38	25	45	53	. 96	273
	4 4		5	8	8	11	49
Great Blackback ±	ī	9 2 7			9		13
Lesser Blackback =		7	4	1 2	9 2 9	1	26
Herring Gull ±	16	26	10	8	9	- 6	75
Common Gull		. 3			1		4
Glaucous Gull				2			2
Kittiwake ±	2						2 2 1 35
Common Tern				1			1
Arctic Tern						35	35
Razorbill ±		4	2				6 3 6
Little Auk		1	1	_	Ţ		· 3
Guillemot ±		1 3 8	. 1	ļ	1	,	
Tystie ±			8	4	4	6	30
Puffin ±	39	7	40	5 1	141	37	269
Wood Pigeon				, <u>T</u>			1
Turtle Dove		٠,	1		7	1.	12
Cuckoo	,	1 1	3 4	3 2	1	<u>4</u> 2	10
20126 2011 0 11	1 '	Т	4	2	٦	۷	
Swift					. 1 2 2	*	1 2
Pied Woodpecker		1	۲	1	2	. 3	12
Wryneck		Т.	5 1	+	. 2	,	1
Woodlark	1 12	45	24	2	14	1	99
Skylark ± Swallow	2		24	2 8	1	,· -	13
	.2 23		9-		13	13	109
Dipper		24	í		~		ĺ
Fieldfare	5	2	18	10	7	6	48
Song Thrush	5 11	. 7	25		12	24	97
Redwing 1	5 11 5 55		71	81	110	104	529
Blackbird ± 2	5 135	321	529		424	358	2125
Ring Ousel		_	3	1	1	2	7
Grey-cheeked Thrus	h				1		1
-	9 177	321	348	382	483	354	2104
Stonechat		1	- •	_	•	•	1
	1 2		. 10	5	15	19	59
		•		-			

	1948	19	49	1950	1951	1952	1953	1954	Total
	Redstart 3		7	15	23	43	15	19	125
	Redstart 3 Black Redstart 1		1	2	2	1	1		8
	Nightingale		1						1
	Bluethroat		1	3 56	3	2	4	2	15
	Robin 9		21	56	92	18	42	46	284
	Grasshopper Warbler			2				3	5.
	Reed Warbler		1	1	1				5 3 4
	Marsh Warbler			2		1	1		4
	Paddyfield Warbler						1		1
	Sedge Warbler		10) 3	1	9	5	16	1414
	Icterine Warbler				3	` •		2	5
	Blackcap 1		17	14	14	9 2	7	14	76
	Barred Warbler 1			1	2	2	2	8	16
	Garden Warbler 2		5 5 5	46	32	9 16	11		138
	Whitethroat		5	5	18	16		31	85
	Lesser Whitethroatl		5	11	11	5	4	11	48
	Subalpine Warbler				2				2
	Willow Warbler		6		26	11/1	15		185
	Chiffchaff		1			14	2	1	8
'	Greenish Warbler		1	. 1					2 2 1 5
	Wood Warbler		•	•	1			, l	2.
	Arctic Warbler							1	l
	Yellow-browed Warble	r	_	2	2			1	5
	Goldcrest 4		28		30	.14	11	2 6	90
	Spotted Flycatcherl		5		5	2	3 6	6	23
	Pied Flycatcher		10		20	10	6	5	85
	Red breasted Fly		2				2		. 6
	Hedge Sparrow		3		11	. 2	2	2	20
	Tawny Pipit				1				1
	Meadow Pipit ± 12		-	123	100	193	156	216	917
	Tree Pipit =		9		5	11	4	1	34
	Rock Pipit ± 6			169	91	138	198	246	982
	White Wagtail 1		27	133	6	6	8	19	80
	Grey Wagtail ±			3				1	7
	Yellow-Headed Wagtai	Ţ			,			2	2 1
	Blue-headed Wagtail					1	. •		1

1948	1949	1950	1951	1952	1953	1954	Total
Great Grey Shrike 1			1	1			3
Red-backed Shrike 2		1	7		1	1	12
Starling ± 88	195	404	211	233	249	258	1638
Goldfinch						1	1
Siskin		3		2	10	1	16
Linnet					1		1,
Twite ± 10		190	66	112	138	105	735
Redpoll 2				4		4	10
Bullfinch			1				1
Scarlet Grosbeak		1	2				3
Crossbill		_				110	110
Chaffinch 5	15	53	54	4	7	9	147
Brambling 1	. 3	•	36	6	. 33	10	89
Yellow-hammer	1	. 1					2
Red-headed Bunting		1					, 1
Little Bunting					1		1
Reed Bunting	4		3	3	1		11
Lapland Bunting	1				4		5.
Snow Bunting 4		6	10	2	6	5	33
House Sparrow ± 4	162	118	29	10	47	19	389

indicates that this species breeds on the island.

The list includes a small number of young waders (e.g. Curlew, Whimbrel) ringed on Unst, Shetland, in 1950; a brood of Merlins ringed in Shetland in 1952; and a small number of passerines and 35 Arctic Terns ringed on Bressay, Shetland, by Mr. Alex. Tulloch in 1953-54.

Table 2.

RECOVERIES of BIRDS RINGED

	Norway Sweden	Denmark	Germany	Holland	Belgium	France	Portugal	Spain	Morocco	Italy	Angola	U.S.S.R.	Newfoundland	Faeroe Is.	North Sea	England	Ireland	Scotland	TOTAL
SPARROW HAWK				1		1										1		1	4
MERLIN					1	1												4	6
KESTREL						1													1 7
OYSTER-CATCHER	l					2											2	3	7
GLAUCOUS GULL) A CUTZ		•			_				•				1	-				1
IESSER BLACK E KITTIWAKE	SAUK					1							,	•					1
BONXIE								7					Τ						1 1 1 5 5 40
ARCTIC SKUA					1			_			1					1		7	五
LONG-EARED OWI	٦٦			,	_						_					_		_	7
SONG THRUSH	_	1				1		2					,			1			5
REDWING	1			2	1		1						:						5
BLACKBIRD	15 3	3	1													2	7	9	40
WHEATEAR						1	2	1										1	5
MEADOW PIPIT				1	1	2		43	L										9
ROCK PIPIT																		2	9 2 1
WHITE WAGTAIL															1				
STARLING	2											1			1		1	9	14
TWITE										_					1	-		1	2
CROSSBILL										1						_			1
Other species							. . .									<u>ر</u>		_2_	_12
•							٠												123

Other species include single SHAG, FAEROE SNIPE and PUFFIN recovered in England; and single TEAL, CORNCRAKE, WATER RAIL, WOODCOCK, HERRING GULL, SKYLARK, SWALLOW, BLACKCAP and GREY WAGTAIL recovered in Scotland.

Breeding Birds.

Last year we became suspicious ARCTIC SKUA. that the normal butt-end No.3 rings issued by the British Trust for Ornithology were being lost by the young Arctic Skuas within 2 or 3 years. 1954 there was considerable confirmatory evidence that this is in fact happening, probably in the majority of cases. Several non-breeders (birds from 2 to 4 years old) and 3 nesting birds were found to be retaining only a single plastic colourring out of an original complement of 3 plastic and one aluminium ring. This discovery has naturally thrown our study of the inheritance of the phases and the age at which breeding first takes place somewhat out of gear, but a new start has been made by using double-erded No. 3 rings. and it is hoped that these will have a longer life.

In view of this set-back ar attempt has been made to speed up the study of pair-formation, settlement of young birds and social behaviour by trapping members of the breeding and non-breeding The birds were captured by means of a clapstocks. net operated from a hide, over a set of dummy-eggs in the case of the nesting-birds and at the communal bathing-pool in the case of the adolescents. and I succeeded in taking 50 adults by this means, representing more than half the breeding stock plus 16 non-breeders, and to these - all of which were colour-ringed for individual identification - were added 46 fledglings, making 96 Arctic Skuas in all. It is hoped to complete the marking of the nestingpairs in 1955 and add as many sub-adult birds as possible.

Further study was given to the question of competition for territories between the Arctic and the Great Skuas - of which 10 pairs nested at the isle in 1954 - and a short paper has been written on this subject. Interest in the "white-shouldered" mutation which occurs at Fair Isle, and which is found

in both phases, has been extended to include the examination of museum material, and it has been found that this variant has a considerably wider distribution than was suspected.

Study of the fledging-period of the young FUIMAR was continued. Last year's observations made us sceptical of the existence of a "starvation period", postulated by all recent authors, during which the young bird receives no food from its parents but survives the last 4 weeks or so of its life on the nest-ledge absorbing its store of body-fat. Observations in 1954 showed that this "starvation theory" is without any foundation in fact, a number of the youngsters being visited and fed by their parents from one to four days before taking their first flights. A preliminary account has been prepared for Bulletin no. 7, but it is hoped to make a fuller study of this and related problems in the life of the Fulmar in 1955.

The nesting of SNIPE, though suspected in previous years, was satisfactorily proved in 1954 by the finding of two well-fledged chicks with the plumage-pattern of the Faeroe race, Capella gallinago faeroeensis, and of the sucked eggs of a later nest on the Vaasetter moorland. LAPWING and RINGED PLOVER (two pairs) continue to breed at Thione and Buness respectively, but 1954 was the first season since the foundation of the Bird Observatory in 1948 without direct evidence of the nesting of either CORNCRAKE or PEREGRINE.

Study of Ectoparasites.

By arrangement with Professor Peacock of Dundee University College Mr. Gordon Corbet, an Honours student, spent two months at the Observatory continuing his study of the parasitic Hippoboscid fly Ornithomyia fringillina. Using a technique of marking and releasing flies on trapped birds Mr. Corbet has been

able to add considerably to knowledge of the habits of this imperfectly known insect, and he has given a report of his work in Bulletin no. 7. In all 582 marked flies were given hosts and 92 or 15.5% were subsequently recovered, 69 on the same individual Study of the seasonal change in infestation showed a double peak corresponding with the first and second brood young of the Starling and the two pipit species, but a single peak only in the case of the The only enemy of the fly appears to be the bird itself: flies with torn wings and damaged legs increased from 2% at the beginning of July to 40% at the end of August and by the end of September the great majority had been killed off by their hosts. So far as breeding is concerned, it seems likely that 99 can produce puparia in the absence of a d: one o produced two fully-developed puparia at an interval of 4 days 4 hrs. Mr. Corbet is making an anatomical study of the reproductive system.

Specimens of this fly taken from White and Yellow-headed Wagtails and Green Sandpiper constitute new host-records. Migrant Merlins were heavily infested and one had acquired a marked fly put on a passerine two weeks earlier.

Flea infestation was again closely studied throughout the season, employing the special delousing apparatus described in British Birds for the examination of individual birds, and a Berlese Furnel for extracting fleas from various nests. Reports on the fleas have been given in Bulletins nos. 4 and 7. The Hon. Miriam Rothschild continues to take a very keen and active interest in our collections, which are sent to her for identification and are deposited in the British Museum at Tring. We are grateful to Miss Theresa Clay of the British Museum for dealing with a large number of Mallophaga

sent to her. A number of tubes of specimens in this group have been sent to the Royal Scottish Museum. An interesting collection was of a number of thrips of a species new to Britain, Anaphothrips secticornis, made from a Siberian Lesser Whitethroat on September 22nd.

Publications.

ROLAND SVENSSON, the noted Swedish artist who visited us during the autumn of 1949, has now published a study of some of the remote islands of Britain, - St. Kilda, Fair Isle, Foula and Out Skerries. An English translation by Albert Read has appeared under the title "LONELY ISLES", handsomely printed and bound. Quite apart from the author's searching observations on the causes of decline in population on these remote islands, this beautifully produced volume is notable for the fine portraits of island-folk and the wonderful atmosphere which pervades the many drawings (some in colour) of island scenery in these stormy outposts of the north. The book is published by Raben and Sjögren of Stockholm.

Illustrated articles about Fair Isle have appeared in the Scottish Field, from the pen of JERRY EUNSON, Scotland's Magazine - a lively description by JACK PETERSON of the ascent of the Sheep Rock and its place in Fair Isle's economy, - and The Sphere ("Fair Isle for the Nation," 11th September 1954).

DR. ELSIE CONWAY of the Botany Department at Glasgow University, and a team of algologists comprising Dr. Elsie Burrows of Liverpool University, Dr. Sheila M. Lodge of the Marine Biological Station at Port Erin, and Mr. H.T. Powell of the Marine Station at Millport, came to Fair Isle in June 1952 to study the distribution and ecology of the seaweeds. Part of the results of this expedition has now appeared under the title of "The Raising of Intertidal Algal Zones on Fair Isle,"

in the Journal of Ecology, 42: 283-288 (July 1954).

A paper by R.K. CORNWALLIS on "The Pattern of Migration in 1953 at the East Coast Bird Observatories," in British Birds, 47: 423-431 (December 1954) is based partly on the season's observations at Fair Isle, and takes the place of the usual Bird Observatory Reports hitherto published in that journal.

ALEC BUTTERFIELD established the validity of the Icelandic race of the Merlin on the basis of taxonomic study by Fair Isle Bird Observatory in a paper entitled "Falco columbarius subaesalon Brehm: a valid race," in British Birds, 47: 342-347 (October 1954). As a follow-up, a paper by the Director on "The Migration of the Iceland Merlin" was published in British Birds, 47: 434-441 (December 1954). Both authors have written on the same subject in the Bulletin, 2: 29-33 and 264-268, the latter dealing with the Merlin migration at Fair Isle in 1954.

The DIRECTOR and Mr. BUTTERFIELD have also published an analytical study of "The Spring Migration of the Willow Warbler in 1952" in British Birds, 47: 177-197 (June 1954). A paper entitled "The Fledging of a Group of Young Fulmars," written by the Director in collaboration with NEIL MALCOLM, COLIN MacDOUGALL, DAVID NORMAN and GEOFFREY YATES, all members of the Joint Schools' Expedition which came to Fair Isle in late summer 1953, appeared in The Scottish Naturalist, 66: 1-12.

The DIRECTOR has also published two papers containing the results of his visit to the Faeroe Islands on leave in May 1953, and these and other items on bird-migration published during the year are listed below:

The Fair Isle Apparatus for collecting Bird Ecto-parasites. Brit. Birds, 47: 234-235 (pl.44).

A Chaffinch Invasion at Fair Isle Bird Notes, 26: 66-70.

Grey-cheeked Thrush at Fair Isle: a new British bird. Brit. Birds, 47: 266-267 (pls. 45-47 and frontispiece to vol. 48).

Paddyfield Warbler at Fair Isle. Brit. Birds, 47: 297-301.

Beretning om nogle faerske ynglefugle (English Summary: A report on some Faeroese breeding birds). Dansk Orn. Foren. Tidsskr., 18: 139-119.

Spring Migration (1953) in the Faeroe Islands (with Danish summary).

Dansk Orn. Foren. Tidsskr., 48: 221-234.

American Birds in Scotland in Autumn and Winter
1953-54. Scot. Nat., 66: 13-29 (pl.).

Two Yellow-headed Wagtails at Fair Isle:
a new British bird. Brit. Birds, 48: 26-29 (pl.8).

Treasurer's Report

This year may well mark a turning point in the finances of the Observatory Trust. In the first place, owing to the generosity of the Dulverton Trust, The National Trust for Scotland, has been able to acquire Fair Isle, which they could only do provided it was handed over free of debt and with a Fund to meet certain possible future liabilities towards the crofters on the Island. The acquisition of the Island by the National Trust for Scotland has ensured that it will remain permanently in the hands of a good landlord and has given security for the future both to the Islanders and the Observatory. Mr. George Waterston will continue to interest himself in both Island and Islanders as direct representative of the National Trust.

The financing and running of the Observatory has not been taken over by the National Trust for Scotland but remains in the hands of the Bird Observatory Trustees. The National Trust, however, made it a condition of their assuming ownership that a substantial Endowment Fund be started for the Observatory, so as to ensure its continuance. The Pilgrim Trustees, to whose generosity in the past we owe our present existence, came to our aid once more and made a further and most generous grant of £7,000, part of which was to be used in squaring up our balance sheet and the remainder to be put into the Endowment Fund.

Accordingly in October 1954, the Observatory
Trustees initiated the "Fair Isle Endowment Fund", the
Bank of Scotland being the present Trustees, the capital
of the Fund to be held in perpetuity for ornithological
research and bird preservation in Scotland and the
Islands, and the income alone paid over annually to
the Trustees of the Fair Isle Observatory, to be used
at their discretion. The Observatory Trustees started
the Fund with a nominal payment of £100 to which private
subscribers have added a further £182. To this has been
added £4,000 of the Pilgrim Trust donation, the remaining
£3,000 being held to cover past losses on Observatory
Trust account.

The Future of the Observatory, and any possible extension of its activities to the Mainland hangs on future donations and legacies to the Endowment Fund.

If you will look at our revenue account you will see what we are up against. The Director and Staff have to be paid. The Hostel regularly runs at a deficit of some £350 a year, which is only justified in that the visitors act as unpaid assistants to Kenneth Williamson whereas at least one paid assistant would be essential in their absence and would cost as much if not more. The bulletins which we issue and which we consider well worth while for keeping the ornithological world in touch with our work, cost at least a similar sum.

And we have been getting £750 a year towards wages from private contributions which might cease at any moment. This means in effect that our average expenditure is around £2,300 and our regular income from subscriptions, tax rebate, etcetera, under £1,300 - a deficit of £1,000 a year. To cover such a deficit we must either get our Endowment Fund up to £25,000 or take drastic action after December of this year to restrict expenditure, which would probably mean scrapping the Bulletins and reducing our standards at the Hostel to a rough and ready camping basis.

There is the problem. The answer lies with everyone interested in Scottish Ornithology and Bird Preservation. Given a large permanent Endowment Fund we can not only carry on at Fair Isle but can extend our activities elsewhere. We are introducing life membership of the Trust at £20. Two thousand life members would do the trick. Any subscription of £20 or more to the Endowment Fund will be a permanent contribution to Scottish Ornithology — only the income can be spent — and will entitle the Donor to life membership of the Trust. If you cannot do it yourself try to find someone else who can.

This is the critical year - not for Fair Isle alone, but for the future of Scottish Ornithology and Bird Preservation. We shall do our best - we hope that you will do yours. And remember that, failing all else, Endowment Funds thrive on legacies.

IAN R. PITMAN.

Hon. Treasurer.

FAIR ISLE BIRD OBSERVATORY TRUST

TRUST REVENUE ACCOUNT

For year ended 31st December, 1954

RECEIPTS

Α.	SUBSCRIPTIONS &C.	€ 859 5
Вy	Do. per Hostel Account	3 3
u u	INCOME TAX RECOVERED	370 15 10
11	RENT RECEIVED	10
"	INTEREST ON DEPOSIT RECEIPTS	8 8 2
277	→	. 2 8
1)	SUNDRIES	678 18 9
*1	DEFICIT for year	
	·	£1,930 13 6
	PAYMENTS	
To	WAGES	1,079
10	Less: Private contributions	750
	Less. 1717 des dente special de la constant de la c	329
		228 12 6
Ħ	SUPPLIES	
ij	RATES, TAXES, INSURANCE &c.	278 9 . 101 15 8
17	LANTERN SLIDES &c.	422 . []
11	BOOKS, STATIONERY &c.	21 4 11
	Do. per Hostel Account	124 15 8
11	TRAVELLING EXPENSES	
17	SUBSCRIPTION per Hostel Account	• • •
11	EXPENSES of ADMINISTRATION	-
11	LOSS on Hostel Account	335 4 8
		£1,930 13 6
	TRUST CAPITAL ACCOUNT	
Ву	SUM received from THE PILGRIN TRUST	7,000
II.	LEGACY RECEIVED	100
		£7,100 · ·
To	Transferred to ENDOWMENT ACCOUNT	100
n	SURPLUS for year	7,000
		£7,100 · ·

FAIR 1SLE BIRD OBSERVATORY TRUST

BALANCE SHEET

As at 31st December, 1954

LIABILITIES

ASSETS

BALANCE brought from			BUILDINGS, TRAPS &c.
CAPITAL ACCOUNT	£7,000 ·	• ,	as per last BALANCE
Add advance			SHEET £ 350
written off	968 15	•	FURNITURE, FURNISHINGS &c.
	£7,968 I5	•	at FAIR ISLE as per last
			BALANCE SHEET 600
Less Deficit on			FURNITURE, FURNISHINGS &c.
Revenue Account as			at 17 India Street as per
at 31st.Dec.1953.			last BALANCE SHEET 470
£ 509 17 9	•		SCIENTIFIC EQUIPMENT &c.
Add			as per last BALANCE
Deficit			SHEET 196
for year 678 18 9			INVESTMENT - £5,084.1.8.
678 18 9	1,188 16	6	3% Savings Bonds
•	£6,779 18	6	1960/1970, at cost 4,902 10 .
SUMS advanced as per			CONSUMABLE STORES:
last BALANCE SHEET			Food Stuffs £10
1,968 15 •			Livestock 38
SUMS advanced			Fuel <u>10</u> 58
written off and			CASH in BANK:
repaid 1,968.15 .	•	•	Hostel Account 325 19 4
PRICE of HUTS, as			Trust Account 38 1 4 364 10 8
per last BALANCE			SUNDRY DEBTORS:
SHEET	5 .	•	J. & F. Anderson W.S. 431 16 7
SUNDRY CREDITORS (Hoste	e1)		
Groceries			
£ 478			
Meat &c. 109 18 9	587 18	Q.	
100 10 3		<u>3</u>	£7,372 17 3
,	N. 90.2 11	=	
-	DOLL LOSE		MALANTO ANTO FOLIATO CORRECT
EDINBURGH. 13th AF	PRIL, 1955.	EXA	MINED AND FOUND CORRECT

LINDSAY, JAMIESON & HALDANE, C.A. AUDITORS.

FAIR ISLE BIRD OBSERVATORY TRUST

HOSTEL REVENUE ACCOUNT

For year ended 31st December, 1954

RECEIPTS

By to tr tr	BOOKING FEES BOARD MANAGER for SUPPLIES TELEPHONE BOX receipts SALE OF CIGARETTES MISCELLANEOUS RECEIPTS STORES at 31st December, 1954 LOSS for year PAYMENTS	***************************************	55 ,034 33 27 14 15 58 335	13 1 10	11 11	
To II II II II II	STORES at 31st December, 1953 FOOD STUFFS &c. HEATING, LIGHTING, CLEANING &c. FREIGHT, TRANSPORT &c. WAGES &c. REPAIRS, RENEWALS &c. TELEPHONE less outstanding at 31/12/53 LOSS on Exchange on U.S.A. Board SUNDRIES, BANK CHARGES &c.		58 837 131 5 368 126 24 14 6	-	9 4 2	
		£I,	573	17	- 7	

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.

The Hostel.—The Hostel has accommodation for ten observers. It is sited at the North Haven, the main landing-place, and consists of a group of well-constructed timber buildings formerly occupied by the Royal Navy.

Terms.—Full board, including service, is Seven Guineas per Head per week. Reduced terms are available for parties of students from schools and universities. These terms include use of bicycles, bird-rings, and other Bird Observatory equipment, but do not include hire of motor transport or small boats whilst staying on the island.

Catering.—Breakfast is served at 9 a.m., lunch at 1 p.m., and supper at 6.30 p.m. Facilities for early morning and late evening refreshments are provided in the hostel sitting-room.

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.—Giving details of transport to and from Fair Isle, and other information, will be sent on application.

Publications.—The Trust publishes an *Annual Report* which is sent to all subscribers. *Bulletins* are also published at regular intervals and are obtainable free by subscribers who indicate their wish to have them.

