

## WADER STUDY GROUP

Bulletin no. 4

OCTOBER 1971

edited by A. Prater and P. Stanley

### Contents

Ringling and Migration Conference  
Ageing Guide  
Data Collection Forms  
Appeal  
Ringling in Autumn 1971  
Recent Recoveries  
Morocco Expedition preliminary report  
Ageing Criteria of Ruff  
Moult Information  
Dunlin Bibliography  
Addresses, new and changed

### Ringling and Migration Conference, January 14-16th, 1972

During this conference there will be a strong emphasis on wader studies. The whole of the session between coffee and lunch on the Saturday will be devoted to a series of short talks on the investigations now being carried out. Talks will be given by John Wilson on the Dunlin populations of Morecambe Bay, by Tony Williams on computer analysis of Sanderling data, by Brian Stronach on Snipe in Ireland and by Mike Pienkowski on wing length changes in waders. I am sure that this will provide an extremely varied and interesting session so I hope as many W.S.G. members as possible will be able to attend.

On Saturday evening there will be the fourth meeting of the W.S.G. This will consist of two parts, a business meeting which will probably be quite short, and an open session on wader ageing.

For the business session we would like to have prior notice of subjects to be raised, to do this will anyone wishing to discuss any points please let Tony Prater have written notice by Monday 10th January in order to produce an agenda, which will be circulated to those attending on the evening of Friday 14th.

In order to make the open session on ageing criteria successful, we would hope that W.S.G. members will bring along skins, wings or slides which illustrate methods of, or problems in ageing.

Unfortunately we have been told that we can only have the early session on Saturday evening (we also had the early session last year) but as there is little we can do about this now we must press for a more reasonable timetable in future.

### Ageing Guide

All representatives who attended the June 1971 meeting have been circulated with a draft ageing guide. Would they please send any comments that they may have on it to Clive Minton by the 1st December 1971 so that due consideration can be made of them and the guide produced so as to be available at Swanwick, free to members.

### Data Collection Forms

There has unfortunately been a slight delay in the production of this form but it will be available very shortly. They will be sent to all W.S.G. members for the extraction of processing data on the less commonly ringed species which will be kept in a central store (the data will of course not be used in a publication without prior agreement of the ringers concerned). Forms will also be available for the private use of members (at cost price yet to be determined), and for extraction of data for special studies.

### Appeal for Wader Bodies

We have been asked by Dr. Peter Evans to circulate an appeal for whole bodies of freshly dead waders. He is engaged in a study of fat deposition and body constituent of them, work which should lead to an understanding of live weight changes. If anyone finds such a corpse would they please wrap it in a polythene bag and post it to him (postage will be refunded) at University Of Durham, Department of Biology, South Road, Durham.

### 2 Ringing in Autumn 1971

The autumn catching got off with a bang on Morecambe Bay with a catch of 1,100 Dunlin on July 25th, although poor weather reduced mist net catches at this time throughout the country. Also in late July and early August came the welcome news that the Ayr R.G. and the North Solway R.G. both had considerable success inland with the netting of Curlew, both catching over 50 in a single night. Catching continued well into August with a successful 'Wash week' netting some 5,000 waders, mostly Dunlin and Knot but also 260 Sanderling. Elsewhere the Merseyside R.G. with 169 Sanderling and 45 Ringed Plover, Farlington R.G. 20 Ringed Plover, Morecambe Bay W.G. with 160 Knot and 128 Curlew (probably the highest number ever cannon-netted), Cherry Cob group with Dunlin did well.

In general Septembers catches were poor and it was not until the second half of the month before they improved with 300 Turnstone (Morecambe Bay W.G.), a large mist-netted Knot catch on the Ribble by the Leigh R.G. (this catch included 2 Icelandic Knot, 9 British Knot, 2 Dunlin and 1 Ringed Plover controls) and continued success at Cherry Cob.

Initials not given before: PH = Philip Hall on Firth of Forth  
AB = Alan Bromby on Poole Harbour

The ringing totals for the period are set out below:

	MBWG	HRG	TRG	FRG	ARG	WWRG	PH	AB	MRG
Oystercatcher	188		3	3	18	319	4	29	37
Lapwing				8	92				12
Ringed Plover	115	1	7	30	6	26	2		52
Little Ringed Plover									7
Grey Plover						1			
Golden Plover			4		1		2		1
Turnstone	313	1	5			106	4		2
Common Snipe			1	2	22		1		6
Curlew	129	12	10		119			5	8
Whimbrel	2			2					1
Black-tailed Godwit		1		2					
Bar-tailed Godwit		10							3
Green Sandpiper				2					
Common Sandpiper			30	8	18			1	1
Redshank	6	32	29	22	28	22	33		24
Greenshank				14	1				1
Knot	146	10	1			1495	2		31
Dunlin	1680	796	10	207	31	2697	54	1	438
Sanderling	22					303			190
Ruff		6	2		1				4
Curlew Sandpiper		2				10			1
Purple Sandpiper	1								
<hr/>									
Total	2602	871	102	300	337	4879	102	36	819
<hr/>									

Recent Recoveries

Oystercatcher

Pull 25.6.64 Fair Isle x Ulverston, Morecambe Bay 2.2.71  
 Pull 28.6.70 Hepple (Northumb.)c Heysham, Morecambe Bay 9.5.71

There were fifteen foreign recoveries on breeding grounds of this species which were distributed thus:

Norway 13 (Wash 7, Burry Inlet 3, Morecambe Bay 3)  
 Iceland 2 (Burry Inlet and Dee)

and a further 3 in France, all from the Wash and ringed in late January 1971(2) and 1968 (1). The first two of these appear to show a shift in wintering grounds subsequent to a mild winter or perhaps indicate an early return to the north.

3 There were also 30 movements within Britain and Ireland as set out below:

	<u>Scotland</u>	<u>Shetland</u>	<u>Cumberland</u>	<u>other</u>	<u>Northern</u>
	Orkney	Anglesey	England	Ireland	
North Bull	1	-	-	-	-
Burry Inlet	4	2	1	1	-
Exe	1	-	-	-	-
Poole Harbour	-	-	1	-	-
Wash	-	-	-	1	-
Easter Ross	-	-	-	-	1
Fair Isle	-	-	-	1	-
Morecambe Bay	7	-	1	-	-
Dee	3	-	-	1	-
Conway Bay	1	-	-	1	-

It is perhaps worth pointing out the lack of recoveries within Britain of Wash ringed Oystercatchers and also that included in the table is an

FG 5.9.63 Whitford, Burry c Snettisham, Wash 12.8.71

Ringed Plover

FG 31.8.70 Harty, Swale + Carnoustie, Angus 26.5.71

Little Ringed Plover

Juv 21.7.70 Abberton R., Essex + Somme, France 8.8.70

Juv 15.7.65 Abingdon, Berks. c (breeding) Sandy, Beds. 24.7.71

Grey Plover

Ad 12.9.59 Holbeach, Wash + Jutland, Denmark 17.8.71

Snipe

PJ 9.9.69 Low Hauxley, Northumb. x Kuopio, Finland 18.7.71

Jack Snipe

FG 6.12.70 Leigh, Lancs. x Oulu, Finland 26.5.71

Curlew

PJ 4.2.70 Middleton, Morecambe + Jutland, Denmark 15.7.71

FG 3.4.62 Chetney, Medway + Jutland, Denmark 16.8.71

Whimbrel

FG 13.8.67 Skokholm, Pembs. x Lappi, Finland 0.6.69

PJ 12.7.69 Rochester, Kent + Somme, France 3.8.70

Redshank

Pull	14.6.69	Kilnsea, Yorks	+ Finistere, France	11.11.69
Juv	3.6.69	Pateley Bridge, Yorks.	+ Gronde, France	15.2.71
Ad	7.9.67	Dawsmere, Wash	c Shotton, Dee	7.3.71
Ad	8.1.70	Snnettisham, Wash	+ Jutland, Denmark	3.8.71

Knot

There were 7 foreign and 19 within Britain recoveries with the period.

Juv	28.8.69	Wolferton, Wash	+ Egedesminde, Greenland	3.6.71
Ad	22.12.68	Piel, Morecambe	+ Egedesminde, Greenland	5.6.71
Ad	27.3.71	Snnettisham, Wash	+ Christchurch, Barbados, W. Indies	
Juv	3.9.63	Holbeach, Wash	+ Jutland, Denmark	6.8.71 / 16.8.71
Ad	7.3.70	Heacham, Wash	+ Jutland, Denmark	7.8.71
Ad	27.3.71	Snnettisham, Wash	+ Jutland, Denmark	7.8.71
PJ	6.3.70	Hoyleake, Dee	c Revtingen, Norway	23.8.71

Thirteen of the British movements were in a single catch on 11.8.71 at North Wootton on the Wash, they were from the Dee 24.11.63 and 21.10.68 (both first winter birds) and Morecambe Bay 22.12.68 (4), 17.3.69, 16.4.69, 8.2.70, 21.2.70 (3 including two first winter birds) and 10.4.70.

The others were:

4

PJ	13.1.67	West Kirby, Dee	c Heacham, Wash	7.3.70
Ad	17.2.69	Middleton, Morecambe	c Heacham, Wash	7.3.70
Ad	18.4.69	Hest Bank, Morecambe	c Hoyleake, Dee	24.2.71
Ad	2.1.71	Point of Air, Dee	c Hest Bank, Morecambe	27.4.71
Ad	17.8.62	Holbeach, Wash	c Pilling, Morecambe	20.8.71
PJ	23.11.68	Hilbre, Dee	x Solway	20.8.71

The recovery in Barbados is quite remarkable being only the second European ringed wader recovery in the West Indies, the first was a Belgian Curlew Sandpiper in 1969, and may imply some mixing of the American and Greenland races of the Knot.

Dunlin

The 24 Foreign and 20 British recoveries are tabulated below:

<u>Ringed</u>	<u>Sweden</u>	<u>Estonia</u>	<u>France</u>	<u>Netherlands</u>	<u>Finland</u>	<u>Denmark</u>	<u>Germany</u>
Forth	1	-	-	-	-	-	-
N.E.England	-	-	2	-	-	-	-
Wash	9	-	-	-	-	2	1
Essex/Suffolk	-	1	-	-	1	-	-
Kent	-	-	-	1	-	2	-
Severn	1	-	-	-	-	-	-
Conway	1	-	-	-	-	-	-
Dee	1	-	-	-	-	-	-
Morecambe	1	-	-	-	-	-	-

	<u>North Sea</u>	<u>Wash</u>	<u>Conway</u>	<u>Dee</u>	<u>Morecambe</u>
N.E.England	-	-	-	1	1
Humber	1	1	-	-	-
Wash	1	-	1	-	1
Essex/Suffolk	-	3	-	1	-
Kent	-	2	-	-	-
Severn	-	1	-	-	-
Dee	-	2	-	-	1
Morecambe	-	2	-	1	-

In addition one of the two Icelandic Dunlin controlled on Foulney, Morecambe Bay on 25.7.71 had been ringed at Eyjofjordar on 14.6.65. Many foreign ringed Dunlin have been controlled already and details of these will appear in later bulletins.

### Sanderling

FG	7.9.59	Beadnall, Northumb.	+ Somme, France	6.9.70
Ad	18.5.69	Snettisham, Wash	+ Manche, France	27.7.71
Juv	28.9.69	Heacham, Wash	c Point of Air, Dee	24.5.71

In addition the details of the South African ringed Sanderling controlled on the Wash are now at hand.

14.3.71 Kommetjie, nr. Cape Town c Heacham 15.5.71

### Ruff

Ad.M.	30.8.64	Abberton, Essex	+ Pesaro, Italy	5.3.71
Ad.M.	23.8.69	Wisbech, S.F.Cambs.	c Shotton, Dee	6.3.71

### Avocet

Pull	18.7.71	Minsmere, Suffolk	x Zuid Flevoland, IJsselmeerpolder Netherlands	24.9.71
------	---------	-------------------	---	---------

This is the second British ringed Avocet to be recovered abroad and shows an interesting movement slightly north of east.

## UNIVERSITY OF EAST ANGLIA EXPEDITION TO MOROCCO 1971

by Mike Pienkowski

5 Some time ago, it became apparent that for many species of waders, breeding and wintering in remote areas, the pattern of recoveries reflected more the distribution of literate humans than that of birds. Hence it seemed that the best way to study migration routes of the birds is to visit likely sites oneself. Counts in January 1966 showed Morocco to be a considerable wintering area and it seemed likely that the Atlantic coast could be equally or more important as a migration staging post for many species. Accordingly, an expedition to Morocco to catch and count waders on autumn migration has been in planning for the last two years and took place in August and September this year. The value of the work has been enhanced by the two complementary expeditions to Iceland which have been

organised in the intervening period.

The expedition was organised from the University of East Anglia, the team of eleven coming from there and the Wash Wader Ringing Group, together with Olivier Fournier of the French Vendee Wader research team. A project of this magnitude would not be possible without considerable financial assistance and we are grateful to the Universities of East Anglia, London and Oxford, the B.T.O. and several firms and Charitable Trusts who supplied grants. The Administration des Eaux et Forets of Morocco gave permission to work and the Institut Scientifique Cherifien supplied French rings. Our policy was to be as flexible as possible and to this end we were equipped with cannon-nets supplied by the W.W.R.G. as well as mist nets and even gonging nets.

Our journey to Morocco was made interesting by the impounding of our vehicles for a day by French customs, a petrol stove explosion and four tyres on our 5-ton cross-country truck bursting at regular intervals through France, Spain and Morocco. The initial aim was to travel south along the 1,000 miles of Atlantic coast in August to recce all major wetlands and catch on the return during September. Our first call was to the large tidal lagoon of Merja Zerga in the north. This site was large enough to keep several thousand waders on it well scattered and with no particularly promising catching site we headed south to the salt-pan area between El Jadida and Oualidia. The pans stretch intermitently for about 30 miles along the coast, the area being up to one mile wide. In two places the sea breaks through the sand dune to form long tidal lagoons winding back into salt marsh and eventually to the pans. We stayed a few days on one of these lagoons to cannon-net. Despite problems with a Lanner Falcon scaring birds away and sitting frustratingly near to the catching area, about 150 waders were caught. Most of these were Ringed Plover including one Icelandic control and many birds in suspended primary moult.

Our next stop was just south of the Atlas Mountains to view the Oued (River) Sous and Oued Massa estuaries near Agadir. While repairing a rear half-shaft of the Land Rover which had broken in soft sand (fortunately during the neap tide series) we gonged a few Dunlin and cannon-netted a small sample (5) of juvenile Knot. The migration was by this time (25th August) building up and we hurried south into the Sahara to our next site, the Oued Chebeika estuary which is a small green patch in a barren stony desert. Ten days were spent here trying to catch the flocks of waders, particularly Sanderling, Dunlin, Ringed, Kentish and Grey Plovers and Redshank which were continually arriving to moult and pass on. Unfortunately the gods were not with us and a string of bad luck prevented a big cannon-net catch. However 60 birds including one Dutch ringed juvenile Common Tern were caught with a good deal of effort. Our hopes of reaching the lagoon of Puerto Cansado further south into the desert were dashed by lack of time and the shaking apart of the Land Rover steering on a 50 mile survey of the route across trackless boulder desert.

With one high tide series left we pulled out of the Chebeika and moved rapidly back to the Oualidia salt pans, passing en route only to get a meal which did not consist of dried stew and Ryvita and to watch Eleanor's Falcons at Mogodor Island. Back at Oualidia for a week, cannon-netting was again plagued by birds of prey but mist-netting on the salt pans produced an average of well over 100 birds per night. After a week using every tide the total had increased by about 850 including numerous retraps, one Redshank control (Local),

one Danish ringed Dunlin and one Icelandic ringed juvenile Dunlin. This latter proved to be one of 8 birds ringed by James Wilson at Gardskagi, Iceland exactly 3 weeks earlier (31st August).

The Expedition was completed with a few days spent in Vendee on the West Coast of France. The combination of magnificent wader flocks, French cooking and wine and the superb hospitality of Francois Spitz and Olivier and Sylvian Fournier restored our energy sufficiently to make the first (albeit small) cannon-net catch in France. We would like to think that not the least of our achievements is the introduction of this technique to the country as a team is now being organised to obtain and operate this type of net. A total of 1,101 new birds and controls were handled in Morocco and the totals are given below. The results are currently being prepared for a full Report. The present expedition has surveyed the Atlantic Coast of Morocco for autumn wader sites - some of the southern ones never having been visited at this time of year - and it is very important to continue this level of activity: Two smaller expeditions are at present being organised for next year: one by Derek Stanyard to revisit the excellent mist-netting sites of Oualidia and one by myself to Tarfaya Province (Oued Chebeika and Puerto Cansado) where the flocks of Sanderling and Knot are particularly tempting, as is the flock of Dunlin on the Chebeika which was seen to be carrying a high density of rings.

6 Total of new birds and controls caught by the Expedition.

Night Heron	1	Ruff	9
Water Rail	1	Redshank	171
Oystercatcher	8	Greenshank	9
Ringed Plover	143	Common Sandpiper	10
Little Ringed Plover	1	Black-tailed Godwit	5
Kentish Plover	65	Bar-tailed Godwit	2
Grey Plover	13	Curlew	1
Turnstone	13	Snipe	1
Little Stint	75	Black-winged Stilt	3
Dunlin	366	Black Tern	107
Curlew Sandpiper	12	Common Tern	14
Knot	28	Little Tern	10
Sanderling	11	Assorted passerines (8 spp)	20
			<hr/>
		TOTAL	1101 (34 spp)
			<hr/>



An Ageing Character of the Ruff

by Tony Tree

Tony Tree is ringing a large number of waders at Grahamstown, near Port Elizabeth, South Africa. In the course of ringing he has handled a large number of waders which are not frequently ringed in Britain. Among the many aspects which he is studying are moult and ageing. This short account is of a possible method of ageing Ruff which needs to be looked at by many more ringers before definitely coming to a conclusion. In case ringers are surprised at the low percentage of adult Ruff handled it should be added that Tony Tree believes that most adults winter much further north than South Africa but many immatures go down to the south. (Eds.)

Juvenile and first winter birds have greenish/grey-green/yellow-green legs. In April, or so, the leg colour starts to change in some birds; sometimes this change does not start until October. The legs take on a mottled appearance of greenish and the final colour in the orange/vermillion/pink range. How long this transition period covers I do not know as Ruff are very rarely retrapped. However, some birds have completed the transition by about January or February (when 1 year and 7 or 8 months old - very approximately). Others may still be changing colour when 2 years old and may be for two or three months over that time. By the time they are 2½ years old they should have the complete adult leg colouring.

My own records of three retrapped birds are

Ringed 29.9.68	2Y f. Green with less than 50% pink.
8.12.68	Pink with only a trace of green.
Ringed 29.9.68	2Y f. Flesh with less than 50% green.
16.12.68	Flesh with very little green.
Ringed 14.12.67	2Y f. Flesh with less than 50% green.
16.12.68	Completely flesh.

From this very small sample it looks as though the transition period could be from 6 to 8 months.

Using this method of rough ageing I then find that the percentage of birds with full adult leg colouring is 15.4% (out of 345 ringed). Of these many could be in their 3rd year as appears to be the case with the last of the retraps mentioned above. Only one male caught showed the other adult characteristic of pink on the basal portion of the bill. I have handled a fair spread of birds in each month of the year with the exception of May.

So I would suggest that all ringers handling Ruff should take note of leg colours, in detail, giving the percentages of the colours in the transition period. This is a problem that needs to be untangled.

## 7 Moult Information

by Howard Ginn

Many wader ringers are probably unaware of the great lack of information on moult in this group. There may be two main reasons for this. Firstly, but not necessarily most important is the fact that waders are frequently of necessity caught by mist net under poor light conditions and therefore moult studies are even more difficult than usual and secondly waders caught by cannon nets are frequently in such large numbers that time is at a premium so it is often only possible to count the old primaries. However it is hoped that as more ringers become aware of the value of their results in the field, they will make the extra effort to record moult more fully. I am therefore presenting the grand totals of moult cards (of those species for which 10 or more cards have been submitted from Britain or Ireland) which ought to act as a spur.

Oystercatcher	107	Bar-tailed Godwit	14
Lapwing	15	Green Sandpiper	23
Ringed Plover	22	Redshank	23
Golden Plover	11	Knot	25
Turnstone	83	Dunlin	149
Snipe	30	Ruff	12
Curlew	18		

May I appeal first to all those who work individually or in small groups to try and find some time to examine the birds they catch, at least for primary moult. Secondly I appeal to those working in large groups to complete cards for the less-often-caught species and to consider doing cards for representative samples of large catches, for example on all birds in one compartment of a keeping cage.

To those who are doing their own projects on moult and do not feel it concerns the B.T.O. it may be worth stressing that people in the future, long after you have lost interest, may need your moult details for some aspect other than the one you have examined. If the details are on a card at the B.T.O. they will always be available for reference; in contrast, if yours find their way eventually into an attic, they will be rather less readily available to such workers and hence in the long term your data are less valuable in total. It should perhaps be stressed that the persons collecting data have prior claim to publishing the results and therefore workers can be assured that their findings will not be published without due consultation.

### Dunlin Bibliography

We would like to thank Miss Clare Lloyd for producing this reference list.

BOYD, H. (1962) Mortality and fertility of European Charadrii.  
Ibis 104, 368-387

BROWN, R.H. (1938) Breeding habits of the Dunlin. Brit. Birds. 31, 362

- BUTURLIN, S.A. (1932) Sur les races du Becasseau cincte (ou Variable) et du Te'tras a bec noir. 1. Le Becasseau cincte (ou variable) Erolia alpina Alauda 4, 261-266
- CABOT, D. Ringing research on the Exe estuary.  
(1961) Devon Birds 14, 34-44  
(1963) " " 16, 2-8  
(1964) " " 17, 42-48
- DEWAR, J.M. (1909) Notes on the feeding behaviour of the Dunlin. The Zoologist 13, 1-14
- DUFFEY, E. et al. (1950) The 'rodent-run' distraction behaviour of certain waders. Ibis 92, 27-33
- EVANS, P.R. (1964) Wader measurement and wader migration. Bird Study 11, 23-38
- GOSS-CUSTARD, J.D. (1965) The food relations of waders on the Ythan estuary reserve at Culterty Field Station. Scot. Birds 3, 227-228
- 8 GROTE, S von H. (1937) Zur fortpflanzungsbiologie einiger Strandlauferarten (Calidris) Sanderdruck aus Beitrage zur fortpflanzungsbiologie der Vogel. 13, 127-132 (Breeding biology of some waders).
- HELDT, R. (1966) Zur Brutbiologie des Alpenstrandlaufers, Calidris alpina schinzii Corax 17, 173-188. (Breeding biology of southern Dunlin).
- HOLMES, R.T. (1964) Food overlap in breeding Sandpipers in northern Alaska. Proc. 4th Alaskan Sci. Conf. (Anchorage, Alaska. aug. 27-30 1963)
- HOLMES, R.T. (1966) The feeding ecology of the Red-backed Sandpiper (Calidris alpina) in Arctic Alaska. Ecology 47, 32-45
- HOLMES, R.T. (1966) The moult cycle of the Red-backed Sandpiper Calidris alpina in western North America. Auk 83, 517-531
- HOLMES, R.T. (1966) The breeding ecology and annual cycle adaptations of the Red-backed Sandpiper Calidris alpina in Northern Alaska. Condor 68, 3-46
- HOLMES, R.T. (1971) Latitudinal differences in the breeding and moult schedules of Alaskan Red-backed Sandpipers. Condor 73, 93-99
- HOLMES, R.T. and PITELKA, F.A. (1968) The food overlap among coexisting sandpipers on the North Alaskan Tundra. Systematic Zool. 17, 305-318
- HORVATH, L. and KEVE, A. (1956) The subspecies of Dunlin in Hungary. Ann. Historico-Naturales Musei Nationalis Hungarici 7, 469-476
- JACKSON, A.C. (1917) The moults and sequence of plumage of the British Waders pt V Genus Erolia. Brit. Birds 11, 228-230
- KLEMOLA, T. (1950) Calidris alpina schinzii migrating through Yyteri (in Finnish) Orn. Fenn. 27, 124-126
- KONIG, D. (1956) The Dunlin as a breeding bird of Schleswig Holstein west coast. (in German) Vogelwelt 77, 108-114
- LILJA, I. (1964) The migration of Calidris, Crocethia and Limicola on the coast of Pori in the years 1951-60 (in Finnish, German summary) Orn. Fenn. 41, 81-93

This page intentionally left blank.

Herber, K. 22 Rusham Park Avenue, Egham, Surrey  
Lloyd, Miss C. E.G.I. South Parks Road, Oxford  
MacDonald, M.A. An Creagan, Drummond Road, Evanton, Ross-shire  
Mead, C.J. 4 Beaconsfield Road, Tring, Herts  
Murton, Sqd. Ldr. P.G. 27 Northern Avenue, R.A.F. Henlow, Beds.  
Parkinson, J. 5 Rake Way, Saughall, Chester  
Ramsay, A.D.K. Stanley Lodge, 4 Peniwick Road, Roslin, Midlothian  
Sales, D.I. B.T.O., Beech Grove, Tring, Herts.  
Wilson, G. 3 Perth Road, Observatory, Cape Toan, South Africa.

CHANGES OF ADDRESS

Backhurst, G.C. P.O.Box 29003, Kabete, Kenya  
Birch, R.R. 12 Rake Way, Saughall, Chester  
Bircher, R.K. 23 Bathleaze, King Stanley, Nr. Stonehouse, Glos.  
Challinor, P.W. Plot 12, Trussell Close, Acton Trussell, nr. Stafford  
Corris, Sgt. W. Sgts. Mess, R.A.F. Akrotiri, B.F.P.O. 53, Cyprus  
Follows, G. c/o 41 Marine Parade, Saltburn-by-the-sea, Yorks.  
Macalpine, Leny, I. Dept. of Zoology, University College, P.O. 78,  
Cardiff, Glam.  
Peart, R. Eagle View, 4 Higher Barn Close, Cann Common,  
Shaftesbury, Dorset  
Smith, R. 11 Larchcroft, Walderslade, Chatham, Kent  
Stanley, P. 436A Ewell Road, Tolworth, Surbiton, Surrey  
Steventon, D.J. 72 Ophir Road, North End, Portsmouth, Hants  
Trust, F R. "Easterly", Thorpe Road, Weeley, Essex  
Walker, I. 245 Burton Road, West Didsbury, Manchester 20.