WADER STUDY GROUP

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edited by A.J.Prater and P.Stanley

Contents

Although it is only just one year since the first meeting of the W.S.G., much has happened to further the cause of ringing research into waders in Britain. Firstly the high degree of co-operation amongst existing ringing groups has expanded and secondly the realisation that it is vital to analyse the data is now universal amongst ringers. These two trends will result in a tremendous increase in our knowledge of wader populations, ecology and migrations in the next few years.

The Swale Wader Ringing Group

Recently a meeting was held of members of the MKRG and the NKRG at which it was unanimously decided to reform a specialist wader ringing group based on the Swale in North Kent. An application for recognition has been made and the three officials appointed were Chris Wheeler (Chairman), Rodney Smith (Secretary) and Billy Buck (representative to WSG). We wish them every success in the coming season and so we can look forward to even more effort being put into ringing in this extremely interesting area.

Wader Ringing in Spring 1971

It is very encouraging to hear of the continuing successes of cannon-netting visits. Two of these were at the previously proven site of the Point of Air on the Dee, one of which made an excellent catch of Godwit and Curlew and the other of Sanderling and Ringed Plover. The other success was at Conway, and owes much to the perseverence of the Shropshire R.G. and local ringers, where a good catch of Dunlin was made. These apart, Three other catchers provided the cream, two of these were of Ringed Plover at Priory Point, Morecambe Bay and the other was the capture of a South-African ringed Sanderling at Heacham on the Wash.

The ringing totals for the spring are set out below.

Abbreviations not used before, ARG: Ayrshire R.G. and HRG includes birds ringed at Cherry Cob and by Spurn B.O. on the Humber.

	ARG	FRG	HRGs	MRG	MBWG	WWRG	TRG
Oystercatcher	7	-	-	2	22	80	31
Lapwing	106	8	-	43	-	-	93
Ringed Plover	2	11	2	49	189	1	-
Grey Plover	-	-	-	-	-	18	-
Golden Plover	-	-	-	-	-	-	3
Snipe	-	1	-	-	-	-	-
Curlew	-	1	5	37	-	-	4
Whimbrel	-	1	-	-	-	-	-
Black-tailed Godwit	-	-	-	1	-	-	-
Bar-tailed Godwit	-	-	-	71	-	-	-
Redshank	-	32	-	33	6	-	66
Greenshank	-	1	-	-	-	-	-
Knot	-	-	-	-	211	377	-
Dunlin	-	71	142	129	496	705	16
Sanderling	-	-	1	667	305	175	-
Turnstone	-		-	2	43	43	-
	115	126	150	1034	1272	1409	213

2 Recent Recoveries

Oystercatcher

Recovered in winter

FG	17.8.62	Holbeach, Wash	x E.Frisian Isls. Germany	10.1.71
Juv	28.12.62	Hilbre, Dee	x Llanfairfechan, Caerns	3.3.71
Juv	11.1.63	Hilbre, Dee	x Faeroes	8.12.70
Ad	12.8.67	Snettisham, Wash	c Harty, Kent	13.2.71
Ad	21.8.67	Snettisham. Wash	c Harty, Kent	13.2.71
Ad	29.12.67	Point of Air, Dee	x Garlieston, Wigtown	5.1.71
Ad	29.6.68	Snettisham, Wash	c Harty, Kent	13.2.71

Recovered in spring

Ad	6.10.64	Flookburgh, Morecambe Bay	x Hoylake, Dee	8.4.71
PJ	23.10.68	Donna Nook, Lincs	c Heacham, Wash	27.3.71
Ad	30.1.71	Heacham	x Donna Nook	7.3.71

Recovered on probable breeding ground

Ad	8.3.70	Heacham	x Larvik, Norway	6.7.70
Ad	26.3.70	Aldingham, Morecambe	x Kyrping, Norway	0.7.70
Ad	17.8.66	Whitford, Burry	x Fort William, Inverness	21.4.71
Imm	17.8.66	Whitford, Burry	x Ffestiniog, Merioneth	1.5.71
1Y	12.11.66	Whitford, Burry	x L. Ederline, Argyll	20.4.71

Ad	12.11.66	Whitford, Burry	x	Methlick, Aberdeen	1.5.71
Ad	11.8.67	Snettisham	x	More and Romsdal, Norway	8.4.71
Ad	7.9.68	Whitford, Burry	x	Deern. ess, Orkney	5.4.71
Ad	7.9.68	Whitford, Burry	x	Jura, Argyll	29.3.71
Imm	7.9.68	Whitford, Burry	x	Sutherland	19.4.71
2Y	3.11.68	Piel Isl., Morecambe	x	Sanday, Orkney	26.4.71
Ad	19.1.69	Walney, Morecambe	x	Kirriomuir, Angus	27.3.71
Ad	25.10.69	Walney, Morecambe	x	Gigha, Argyll	6.4.71
Ad	23.11.69	Piel Isl., Morecambe	x	Turriff, Aberdeen	10.3.71

Ringed as pullus

ringed	1964	Fair Isle	x	Bardsea, Morecambe Bay	2.2.70
	1965	Hamford Water, Essex	c	Harty, Kent	13.2.71
	1970	Deerness, Orkney	x	Walney, Morecambe	30.12.70

Lapwing

Ad	8.8.64	Holbeach, Norfolk	+	Oviedo, Spain	1.1.71
PJ	10.2.67	Sittingbourne, Kent	+	Ciudad Real, Spain	17.1.71
FG	31.8.67	Blythburgh, Suffolk	+	Oviedo, Spain	0.1.71
Juv	12.9.67	Wisbech, Cambs.	+	Gironde, France	13.3.71
1Y	14.10.69	Lydney, Glos.	+	Beira Litoral, Portugal	3.1.71

In addition there were 11 recoveries of birds ringed as pulli, in Herefordshire (1), France (4), Spain (4) and Portugal (2).

Ringed Plover

Ad	29.8.64	Wisbech, Cambs.	c	Bardsea, Morecambe	29.5.71

Turnstone

PJ	2.3.68	Caldey, Dee	x	Eskmeals, Cumb.	26.4.71

Snipe

Juv	6.8.66	Wisbech, Cambs	+	Finistere, France	3.1.71
PJ	9.9.69	Low Hauxley, North.	+	Sleaford, Lincs.	12.1.71
FG	27.9.69	Cheltenham, Glos.	+	Bourne, Lincs.	16.1.71
FG	17.10.70	Leigh, Lancs.	+	Newport, Mayo	25.1.71
FG	9.8.69	Staveley, Derby	X	Camelford, Cornwall	7.4.71

Curlew

FG	17.9.66	Snettisham, Wash	x	Denmark	13.1.71
PJ	26.10.68	Heast Bank, Morecambe	x	Schleswig, Holstein, Germany	12.4.71
PJ	5.10.67	Brownsea Isl. Poole Harbour	c	Nordrhein Westfalen Germany	2.5.71

The last of these birds was controlled on the nest.

3 Black-tailed Godwit

PJ	11.1.69	North Slob, Wexford	+	R.Boyne, Meath	31.1.71

Redshank

Pullus	18.6.70	Terregles, Kirckudb.	x	R.Boyne, Meath	22.12.70
PJ	20.8.70	Farlington, Langstone Harbour	x	Morbihan, France	Dec. 70

Knot

Ad	13.9.69	Heacham, Wash	+ Vendee, France	21.1.71

There were 12 recoveries of Knot showing movement between British and Irish estuaries.

Ringed in autumn

Juv	6.9.63	Dawsmere, Wash	c Hoylake, Dee	30.11.70
Ad	27.8.68	N.Wootton, Wash	x Cleethorpes, Humber	11.3.71
Ad	27.8.68	N.Wootton, Wash	c Aldingham, Morecambe Bay	25.3.71
Ad	27.8.68	N.Wootton, Wash	c Hest Bank, Morecambe Bay	27.4.71
Ad	11.9.69	Pilling, Morecambe Bay	x Carsethorn, Solway	17.3.71
Ad	13.9.69	Heacham, Wash	x Cleethorpes, Humber	15.2.71
4	3.8.70	Hoylake, Dee	c Aldingham, Morecambe Bay	25.3.71

Ringed in Winter

Ad	22.12. 68	Piel Isl. Morecambe Bay	x Cleethorpes, Humber	5.2.70
Ad	8.2.70	Middleton, Morecambe Bay	c Snettisham, Wash	27.3.71
Ad	9.12.69	Hest Bank, Morecambe Bay	c Snettisham, Wash	27.3.71
4	14.2.71	Southerness, Solway	c Hest Bank, Morecambe Bay	27.4.71

Ringed in spring

PJ	16.4.69	Hest Bank, Morecambe Bay	+ R.Boyne, Meath	28.1.71

Of these the bird ringed at Pilling and recovered at Carsethorn was observed to be taken and killed by a female Sparrowhawk.

Dunlin

Juv	8.9.68	Snettisham	x Sjaelland, Denmark	10.8.70
1Y	15.1.69	Holme Isl. Morecambe	x Sjaelland, Denmark	4.8.69
Ad	30.3.69	E.Tilbury, Essex	c Mikoszewo, Poland	29.7.70
Ad	31.7.69	Snettisham	x Mikoszewo, Poland	30.7.70
Ad	3.8.69	N.Wootton, Wash	c Mikoszewo, Poland	30.7.70
Ad	13.12.69	piel Isl. Morecambec	Mikoszewo, Poland	22.7.70
Ad	13.12.69	Piel Isl. Morecamvex	Jylland, Denmark	31.3.71
PJ	4.5.70	Hest Bank, Morecambe	+ Cadiz, Spain	15.2.71
Ad	7.9.63	Dawsmere, Wash	x Flookburgh, Morecambe	14.1.71
FG	8.4.66	Point of Air, Dee	x Banks Marsh, Ribble	6.2.71
Ad	15.5.69	Point of Air, Dee	c Conway Bay, Caerns	14.3.71
Ad	31.8.69	Terrington, Wash	c Hest Bank, Morecambe	27.4.71
1Y	6.10.69	Sittingbourne, Kentc	Snettisham	27.3.71
FG	10.10.70	Butley Creek, Suffolk	c (1Y) Farlington, Lanstone Harbour	8.12.70
FG	9.9.70	Boulmer, Northumberland	c Bardsea, Morecambe	29.5.71

Of these the bird ringed at Dawsmere and recovered at Flookburgh was found in a Short-eared Owl Pellet.

Sanderling

Ad	17.5.69	Heacham, Wash	x El. Aiun, Spanish W.Africa	22.5.70
Ad	18.5.69	Snettisham, Wash	c Hoylake, Dee	5.8.70
Ad	31.7.69	Snettisham, Wash	c Hoylake, Dee	3.8.70
Ad	25.8.69	Snettisham, Wash	c Middleton, Morecambe Bay	12.5.71
Ad	6.8.67	Hoylake, Dee	c Pilling, Morecambe Bay	23.5.71
PJ	22.5.70	Hoylake, Dee	c Middleton, Morecambe Bay	26.5.71
FG	6.5.70	Hilbre, Dee	St. Annes, Ribble	1.4.71

In addition to these recoveries and controls, as mentioned earlier, there was the remarkable occurrence of a South-African ringed Sanderling at Heacham in mid-May. Unfortunately the ringing details have not yet arrived at Beech Grove but the ring appeared to be new. This is the first African ringed wader to be reported from Britain and to date no British ringed wader has been reported south of the Equator.

4 Foreign ringed waders reported in Britain and Ireland in 1970

Oystercatcher, all recoveries were of birds ringed as pulli.

ringed 1964	Noord Holland	x	Pambrey, Carmarthen	10.1.70
ringed 1965	Vest Agder, Norway	c	Snettisham, Wash	14.11.70
ringed 1968	Friesland, Holland	c	Snettisham, Wash	26.7.70
ringed 1969	More e Romsdal, Norway	x	Fleetwood, Morecambe Bay	14.8.7
ringed 1969	Rogaland, Norway	c	Snettisham, Wash	18.7.70
ringed 1969	Rogaland, Norway	c	Snettisham, Wash	1.3.70

Lapwing, all recoveries were of birds ringed as pulli.

ringed 1962	Malmohus, Sweden	x	Cley, Norfolk	15.9.70
ringed 1966	Malmohus, Sweden	x	Wellington, Somerset	6.1.70
ringed 1968	Jutland, Denmark	x	Ipswich, Suffolk	8.11.70
ringed 1970	Brecht, Belgium	x	Ashford, Kent	24.9.70

Ringed Plover

Juv 30.8.70	More e Romsdal, Norway	c	Low Hauxley, Northumberland	22.9.70

Turnstone

Pullus 1.7.66	Turku e Pori, Finland	c	Heacham, Wash	9.5.70

Snipe

Pullus 29.7.69	Iceland	x	Cavan, Ireland	24.1.70
FG 14.7.68	Skanor, Sweden	+	Malton, Yorks	31.1.70
19.7.69	Uppland, Sweden	x	Montgomeryshire	26.9.70
25.7.66	Tampere, Finland	+	Co. Clare	27.1.70
1.9.68	Hame, Finland	+	Co. Galway	4.12.70
22.8.69	Uusimaa, Finland	x	Melton Mowbrey, Leics.	25.2.70
9.9.69	Hame, Finland	x	Darlington, Dewham	30.10.70
31.8.70	Armager, Denmark	x	St. Davids, Pembs.	12.12.70
16.8.70	Mikoszewo, Poland	x	Shetlands	20.11.70
22.8.65	Sachsen Anhalt, Germany	x	Norwich, Norfolk	22.7.70
13.10.64	Gelderland, Holland	+	CO. Waterford	29.1.70
10.9.67	Zuid, Holland	+	Co. Limerick	27.12.70

Jack Snipe

13.9.70	Hamburg, Germany	+	Co. Mayo	26.12.70

Curlew, all but the first bird were ringed as pulli.

FG 7.9.63	Vlieland, Holland	+	Bridgewater Bay, Somerset	15.1.7
ringed 1963	Noord Nolland, Holland	+	Wells, Somerset	28.8.70
ringed 1967	Gelderland, Holland	+	Leigh-on-Sea, Essex	10.1.70
ringed 1970	Terschelling, Holland	+	Frampton, Glos.	6.9.70
ringed 1970	Troms, Norway	x	Cleethorpes, Lincs.	19.9.70
ringed 1970	Sweden	x	Lincoln	11.11.70
ringed 1970	Norrbotten, Sweden	c	Hest Bank, Morecambe	28.12.70
ringed 1964	Vaasa, Finland	x	Ipswich, Suffolk	3.12.70
ringed 1968	Pori, Finland	+	Solway Firth	30.3.70

Green Sandpiper

27.8.70	E.Frisian Isl. Germany	x	Brentwood, Essex	9.11.70

Redshank

FG 10.9.64	Vlieland, Holland	x	Low Hauxley, Northumberland	3.5.70
Pull 19.6.69	Kelflavik, Iceland	x	Co. Down	3.1.70

Dunlin The 63 recoveries of foreign ringed Dunlin reported in 1970 are set out in the table below.

5 ringed in	Sweden	Norway	Denmark	Finland	Germany	Poland
recovered in						
Dee	4	3	-	3	2	1
Morecambe Bay	9	3	4	-	-	2
Wash	10	3	-	1	1	2
Firth of Forth	1	1	-	-	-	-
Langstone Harbour	1	-	-	-	1	-
Thames	1	1	-	-	-	-
Co. Clare	-	1	-	-	-	-
Conway Bay	1	-	-	-	-	-
Blackwater	-	1	-	-	-	-
East coast	-	1	-	-	-	-
Eden	1	-	-	-	-	-
Midlands	-	-	-	1	-	-
Solway	-	1	-	-	-	-
Teesmouth	1	-	-	-	-	-
Teign	-	-	1	-	-	-

Knot

FG	16.9.59	Revtangen, Norway	c Heacham, Wash	8.3.70
FG	1.9.66	Revtangen, Norway	c Heacham, Wash	7.3.70
FG	14.9.66	Revtangen, Norway	c Thornham, Wash	15.11.70
FG	5.9.69	Revtangen, Norway	c Heacham, Wash	4.4.70
FG	29.8.63	Halland, Sweden	c Heacham, Wash	7.3.70
FG	27.7.67	Jonkoping, Sweden	c Heacham, Wash	8.3.70
FG	20.4.66	Schleswig Holstein, Germany	c Heacham, Wash	7.3.70
FG	14.9.68	Frisian Isl. Holland	c Thornham, Wash	15.11.70

Sanderling

FG	7.5.70	Bouches du Rhone, France	c Hoylake, Dee	3.8.70

Ruff

FG male 17.9.69 More e romsdal, Norway x Skinflats, Forth 3.1.70

WEIGHTS AND MEASUREMENTS OF WADERS WINTERING IN THE TRUCIAL STATES, ARABIA

by Brian Etheridge

Between November 1970 and January 1971 while stationed at Sharjah (25°21'N, 55°22'E), one of the Trucial States on the southern shore of the Persian Gulf, I trapped and ringed, with B.T.O. rings, 114 waders wintering at a small tidal inlet close to the camp.

Mist-netting was carried out during darkness from 1800-2300 hours. Unfortunately catches were small, usually about five birds in an evening, probably due to my inexperience in the techniques of wader trapping.

Although all birds trapped were examined carefully none were found to be undergoing wing moult and most were in fresh plumage especially during November.

The results are given below, with a few brief comments. All measurements are given in millimetres, and weight in grammes. The wing length was obtained by the maximum chord and the bill measured from the feather.

Kentish Plover (Charadrius alexandrinus)

A very common wader during winter with a maximum count of over 300. Also a fairly common breeding species from April-June. All birds in Arabia refer to the nominate race, C.a.alexandrius (Meinertzhagen 1954) 12 birds were caught, November - January.

WING	: 102-113	(average 108)
BILL	: 14.5-17	
TAIL	: 42-48	
TARSUS	: 26-30	
WEIGHT	: 33-42	(average 38)

Greater Sand Plover (Charadrius leschanaultii)

A fairly common winter visitor with up to 50 present. Eleven birds were ringed and processed, from November - January.

6

WING	: 139-150	(146)
BILL	: 25-27	
TAIL	: 59-65	
TARSUS	: 37-41	
WEIGHT	: 78-117	(92)

Mongolian Sand Plover (Charadrius mongolus)

A very common winter visitor with counts of several hundreds. The two races likely to occur are C.m.atrifons from S.Russia with wing 118-128, and the slightly larger and paler C.m.pamirensis from W.Tibet, Ladak and Transham with wing 125-134 (Meinertzhagen 19

Of the 22 birds measured half fall in the area of overlap (125-128). 6 are the smaller "Artifons" and the remaining 5 are "pamirensis". However racial determination based on such a small sample of birds on the wintering grounds, is very unsatisfactory. 22 birds trapped November - January.

WING	: 120-130	(126)
BILL	: 16.5-19	
TAIL	: 46-52	
TARSUS	: 33-36	
WEIGHT	: 51-68	(59)

Little Stint (Calidris minuta)

Fairly common passage migrant and winter visitor. About 30 birds wintered. 7 birds ringed and processed during late December.

WING	: 93-99	(95.5)
BILL	: 17-19	
TAIL	: 36-40	
TARSUS	: 21-23	
WEIGHT	: 16-24	(21)

Dunlin (Calidris alpina)

One of the commonest wintering shore birds. The maximum count for the Sharjah inlet was 250.

The race in Arabia is C.a.alpina (Meinertzhagen 1954), and the majority of my measurements fit into the range from this race. 33 birds were processed, from November - January.

WING	: 112-124	(118) mostly 115-120
BILL	: 27.5-39	(34.25) mostly 32-37
TAIL	: 45-56	
TARSUS	: 25-29	
WEIGHT	: 36-56	(47)

The criteria given in the Handbook for the race C.a.sakhalina (NE Siberia, N.America) concerning white extending to the rhachis o the exposed portion of the outer web of the 6th, 7th and 8th primaries was checked for in all birds. Twelve birds (36%) clearly showed this character, and in several others the white almost r ched the rhachis. C.a.sakhalina is larger than "alpina",

but the 12 birds showing the character were no bigger than typical "alpina" handled, in fact one of the smallest birds trapped (wing 112, bill 28.5) a 1st.W. would fit well into the size range for males of the British race, yet showed extensive white as described above on the 7th and 8th primaries!

Clearly a lot of the birds wintering in Arabia can not be racially determined.

Broad-billed Sandpiper (Limicola falcinellus)

Winter visitors arriving August - September. The numbers were difficult to be certain of as this is a very inconspicuous species and much overlooked. It is always met with singularly. The maximum daily count was only five. Twelve birds were ringed and processed, during late December.

WING	: 104-111	(107)
BILL	: 29-35	(32.5)
TAIL	: 36-40	
TARSUS	: 22-25	
WEIGHT	: 31-41	(38)

7 Redshank (Tringa totanus)

A fairly common winter visitor, with up to 30 birds present. Meinertzhagen (1954) admits three races in Arabia, T.t.totanus (Europe), T.t.eurhinus (Ladak, Turkestan) and T.t.terrignotae Koko Nor, China) of which the latter two are the usual wintering forms. T.t.eurhinus differs from T.t.totanus in being slightly larger and sometimes paler in winter, but there is a great deal of overlap in measurements between these two races. T.t.terrignotae is decidedly paler in winter than the previous two and is slightly larger again.

In the field the birds on the inlet did appear a lot paler on the upper parts than Redshanks I recall from U.K. However my measurements are inconclusive. 11 birds were trapped late November - early December.

WING	;150-163	(157)
BILL	: 41-49	(45.5)
TAIL	: 62-67	
TARSUS	: 51-56	(53.5)
WEIGHT	: 106-145	(121)

Attention should be drawn to the very long tarsus measurements. The tarsus was very thick (in all birds). Averaging 4.5mm. and therefore requiring a 'D-monel' size ring.

Terek Sandpiper (Xenus cinereus)

A fairly common passage migrant and winter visitor in flocks up to 25. Five birds trapped late November - late December.

WING	: 125-142	(135)
BILL	: 47-51	(49)
TAIL	: 48-57	
TARSUS	: 27-31	
WEIGHT	: 71-77	(74)

Other wader species wintering on the inlet, but not trapped were, in order of abundance, Bar-tailed Godwit (100+), Grey Plover (50), Curlew (15) and Oystercatcher and Greenshank (a few).

References

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Witherby,H.F. et al. 1938. "The Handbook of British Birds",London Vol. IV.

The Use of Wing Length for Separating Populations

by Mike pienkowski

For many years the wing lengths of birds have been measured by ringers to give information of the separation of different populations. However, there are two prerequisites for this method to be reliable:-

1. A standard system of measurement is used, giving consistent results
   a) for an individual measurer and
   b) between different measurers
2. A knowledge that the wing length of an individual bird does not change over a period of time or, alternatively, a means of estimating and correcting for any changes that do occur.

Many of the problems concerned with the standard measuring system were solved by the general adoption of the maximum chord method. A check was made on the constancy of method of the usual measuerer on the Wash by feeding 40 birds through the processing system twice (and the measurers did not know this). The apparent changes in wing belt length are shown in Fig.1, and these form a tight normal distribution about zero as would be expected. 31 birds stayed within 1mm. of their earlier wing length. Using a chi-squared test there was no significant difference between birds increasing in length and those decreasing in length.

9 A check between the "standard" Wash measurer and a second Wash measu was made by comparing the wing lengths of about 200 birds measured by one with 200 measured by the other out of a catch of 400. Using a d-test to compare normal distributions, again there was no significant difference.

On the second prerequisite, some points have been obvious for some time - e.g. birds of some species have longer wings when adult than when juvenile and consequently these are normally analysed separate It is often assumed that, once it reaches the adult stage, a bird has a constant wing length. However, measurements of 56 Knot caught and measured twice in the period between two consecutive moults show that this is not the case. Fig. 2 shows these wing length changes; each bird is represented by a line. It is at once apparent that most are decreasing in wing length during the period and also that many of the lines are roughly parallel, suggesting that the loss of wing length is linear. 10 birds increased wing length, 3 stayed the same and 43 decreased wing length. A chi-squared test comparing the number increasing with the number decreasing showed the difference to be highly significant (P 0.001). The mean

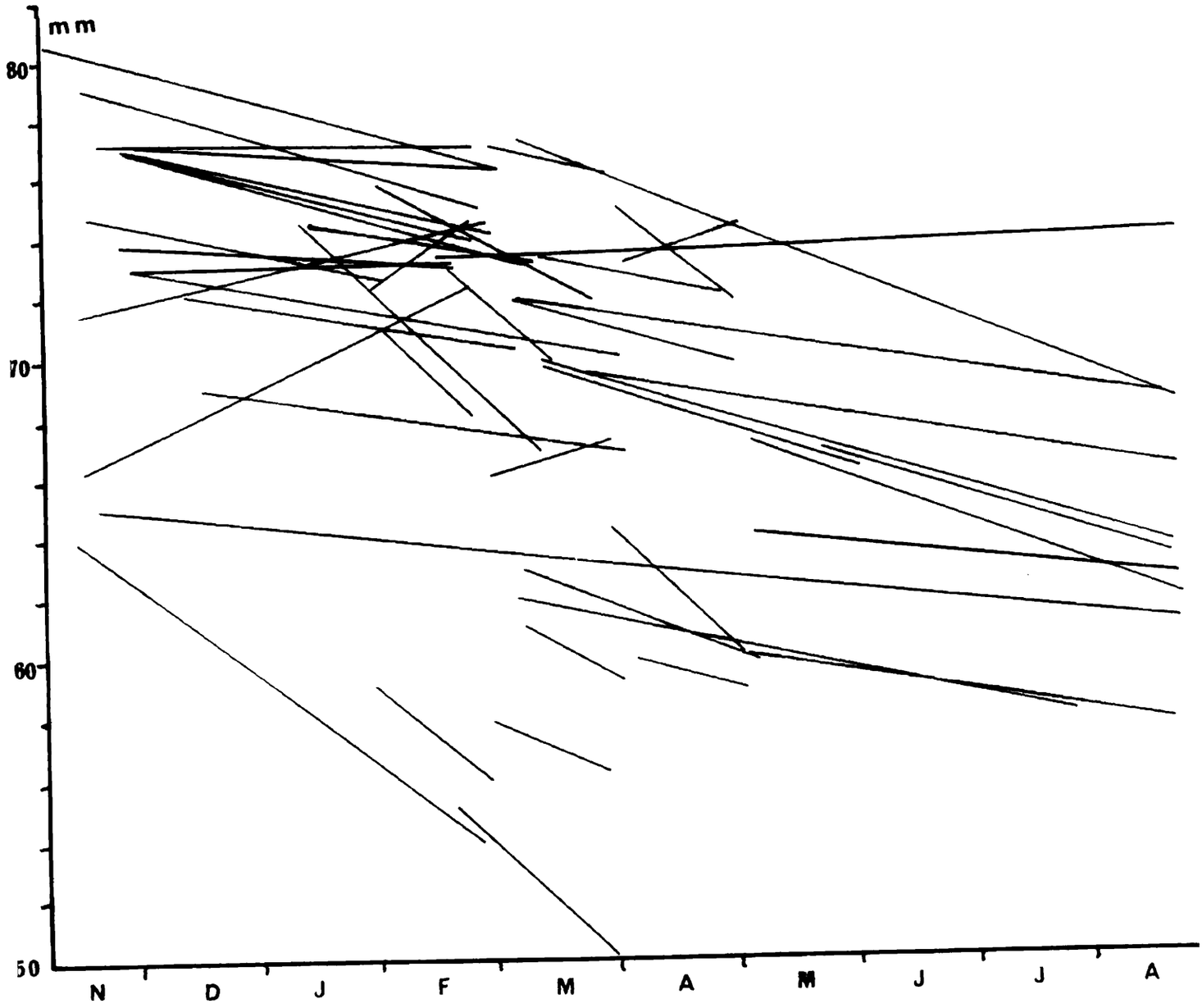

Fig 2 Change in wing length in same moult period

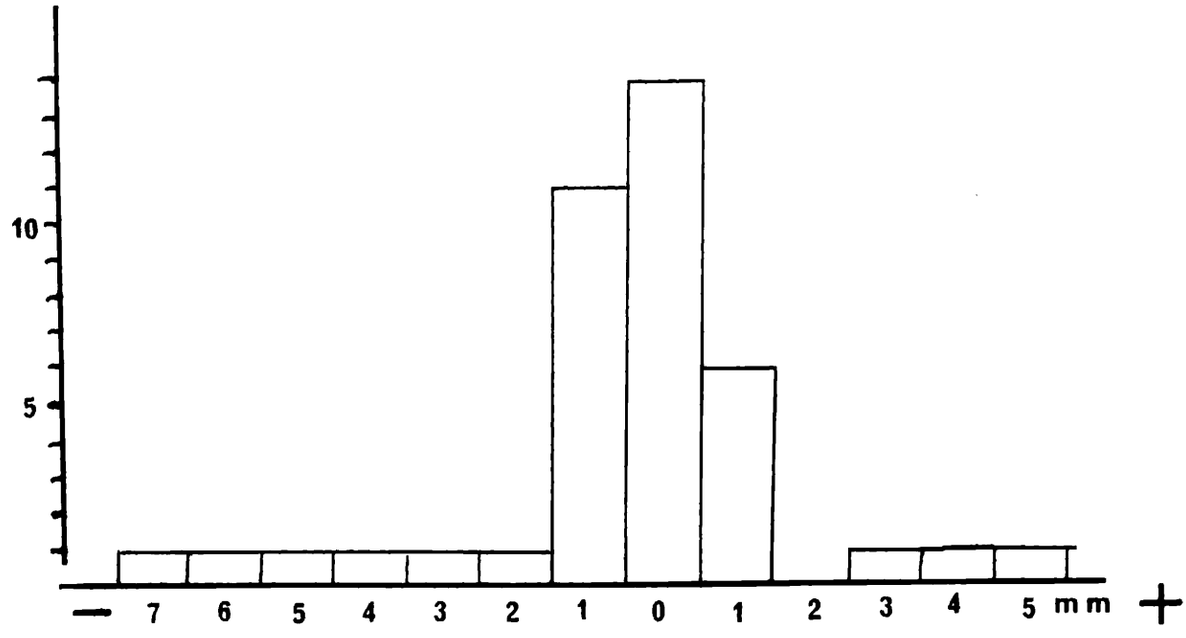

Fig 1 Apparent change in wing length on remeasuring

change was a decrease of 0.8mm. per month from October to August/ September, i.e. 8-9mm. per year, this being about 5% of the total wing length.

Possible causes for the change are

1. Abrasion
2. Drying of the feather after growth
3. Physical and/or chemical changes to the feather structure
4. Stretching which would oppose the decrease.

Subjective judgement of the feather shape through the year suggests that not all could be accounted for by abrasion and some possible evidence for structural changes has been given by a few birds caught in November and January, these obviously having failed to moult. The feathers of these were rapidly abrading and disintergrati In addition feather keratin is an extremely complex protein and there are suggestions that it may be capable of shrinking.

Not all data has yet been extracted for retraps after a moult period but what evidence there is suggests that feather length is regained and the wing lengths from corresponding months in different years are comparable.

In summary:-

1. Knot wing lengths decrease on average 8-9mm (5%) between moults.
2. This is fairly linear and it may be possible to correct the figur for the mean wing length of a catch to give the corresponding length for birds in fresh plumage.
3. The wing length is probably returned to its level of a year previously by the new feathers at moult.
4. Shortening is probably due to a combination of abrasion and shrinking, the letter possibly being due to drying and/or changes to the keratin structure.
5. It is important to process all controls and as many new birds as possible, particularly for the lesser-ringed species, so as to give data allowing possible correction.

I would be pleased to receive any information on retraps measured on both occasions of capture for any species, so that an attempt can be made to calculate corrections.

CAMBRIDGE ICELAND EXPEDITION 1971

by Guy Morrison

Following the success of the Cambridge/London Iceland Expedition last year, when over one thousand Knot were ringed on passage to and from their breeding grounds in Greenland, a further expedition, the Cambridge Iceland Expedition 1971, was organised this summer to continue the work, and, in particular, to extend it to other species of waders. Iceland was originally selected as a suitable location for catching, since the birds are found in large flocks and may be presumed to be part of the population breeding in Greenland: both ringing and measurements data may thus be particularly useful in separating populations of waders found in Britain in areas where birds from both the Greenland and Siberian breeding grounds may be present.

10 The personnel of the expedition were all members of the Wash Wader Ringing Group, which loaned two cannon net sets. Cannon netting has been found to be a most suitable technique for the coastal sites discovered in Iceland; mist netting is almost completely ruled out as there is no darkness in Iceland during the summer from mid-May onwards, though single-shelf mist nets set over tide wrack on beach sites were found to be of some use early in the expedition. The expedition was granted a research permit by the National Research Council of Iceland to carry out the work in consultation with Dr. Finnur Gudmundsson, Director of the Museum of Natural History, which supplied the rings.

The expedition was in Iceland from 7th May until 7th June and a total of 651 birds was caught during this time (Table 1), including 9 British control Knot (see Table 2). Data obtained on the expedition will be analysed fully in conjunction with that available in Britain, and it is hoped to publish a full report of the expedition within the next few months. The expedition was successful in catching further samples of Knot, allowing a fuller statistical analysis of measurement data to be made, as well as in extending the work to other species of waders, particularly Turnstone. A preliminary account of some of these results is given below.

Early reconnaissance established that flocks of up to several hundred Knot were common around the south west peninsula,and three days at Gardskagi resulted in 272 waders being caught. Netting was only semi-dependent on the tide, as the waders spent much of the day feeding on large beds of wrack on the beaches, and catches of 50-70 could be made with some regularity in this manner. Several days were then spent at Eyri in Hvalfjordur, where last year's large catch (885) was made, and where we had seen about 4-5,000 Knot arrive on 9th May. On the first anniversary of this catch, an extensive twinkling operation brought the birds in front of the nets, which were fired by a "volunteer" who had spent four hours a few yards away hidden under some covering material in the bottom of an old rowing boat. It was most disappointing that the nets did not extend fully and only eleven Knot were caught, though it was some consolation that one of these had been ringed on the expedition the previous summer!

The bay systems to the south and north of the Snaefells peninsula formed the most important areas for waders on passage, and the largest catch of Knot was made near Grundarfjordur where 5-10,000 Knot were in residence. A most exciting catch was engineered on a rather dark and wet night on the mud flats, and produced five British controls. A further 200 birds, including a Merlin and two Arctic Terns, were caught during return visits to Gardskagi and Stokkseyri on the south coast.

Data from catches throughout the expedition showed clearly how both Knot and Turnstone were rapidly putting on weight for further migration. The average weight of Knot catches at Gardskagi rose from about 165 grams to 208 grams over a two week period, the highest weight recorded being one of 229 grams! (Average weights of catches on the Wash in autumn are around 140grams). The average weight of Turnstone rose similarly from about 140 to 180 grams over the same period of time. Six Turnstones, ringed originally on 11th and 12th May, were retrapped on 25th May, and one of these had increased in weight from 115 to 180 grams!

Measurements of the 63 Dunlin caught indicated that two populations were present, corresponding to those notes in catches of adults and juveniles made in Iceland in August last year. Smaller catches of Ringed Plover and Purple Sandpiper were also made, and the measurements will serve as a basis for comparison with data obtained in Britain. Although a special effort was put into looking for and catching Sanderling, no flocks larger than about 30 were seen at any one time.

Having made the ornithological pilgrimmage to Myvatn and examined the northern fjords for waders, we returned south on 1st. June. In the next few days favourable winds and good weather saw an almost complete exodus of passage waders, and a tour around the Snaefells peninsula on 5-6th June revealed a grand total of 2 Turnstone and a few Dunlin. We were interested to see several hundred Knot flying high in a 'V' formation "towards Greenland" on 31st May.

During catching operations, an extensive reconnaissance of the western fjords was made and considerable information has now been built up about suitable catching sites. A further expedition is being planned for next year to continue and extend the work. With over 1,200 Knot having been ringed in Iceland during the past two summers, and certain measurement data still needing clarification, further efforts to catch Knot in Britain during the autumn and
11 winter will be of great value. Similar efforts to catch Turnstone should also prove rewarding, as this species will be one of the targets for the expedition next summer.

It can hardly be stressed how much the value of any wader caught wil be increased if its wing, bill and weight are measured.

Further information about the expedition, and copies of the Report of the Cambridge/Iceland Expedition in 1970 (price 60p including postage; Report includes all processing data) may be obtained from R.I.G. Morrison at the address shown below.

TABLE 1 TOTALS OF BIRDS CAUGHT ON THE CAMBRIDGE ICELAND EXPEDITION 1971.

Species	Newly ringed	Retraps	Controls	Total
Merlin	1	-	-	1
Ringed Plover	24	-	-	24
Turnstone	288	9	-	297
Redshank	2	-	-	2
Knot	201	-	10	211
Purple Sandpiper	38	-	-	38
Dunlin	63	-	-	63
Sanderling	13	-	-	13
Arctic Tern	2	-	-	2
				651

TABLE 2 DETAILS OF KNOT CONTROLLED IN ICELAND IN SPRING 1971

Juv	6.9.63	Dawsmere, Wash	c Midnes	11.5.71
PJ	23.11.68	Hilbre, Dee	c Grundarfjordur	19.5.71
PJ	16.4.69	Hest Bank, Morecambe	c Grundarfjordur	19.5.71
Ad	10.1.70	Heacham, Wash	c Stokkseyri	23.5.71
Ad	21.2.70	Bardsea, Morecambe	c Grundarfjordur	19.5.71
Ad	7.3.70	Heacham, Wash	c Grundarfjordur	19.5.71
Ad	7.3.70	Heacham, Wash	c Gardskagi	25.5.71
Ad	2.1.71	Point of Air, Dee	c Grundarfjordur	19.5.71
Ad	11.1.71	Aldingham, Morecambe	c Midnes	11.5.71
Ad	15.5.70	Hvaleyn, Hvalfjordur	c Eyri, Hvalfjordur	15.5.71

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