FINAL COMMENTS ON THE SPRING MIGRATION OF WADERS THROUGH BRITAIN IN 1979

(Results of the WSG Project on the Spring Passage of Dunlins, Sanderlings, Ringed Plovers and Turnstones through Britain - Part 5)

by P.N. Ferns

Species other than Dunlin *Calidris alpina*, Sanderling *C.alba*, Ringed Plover *Charadrius hiaticula* and Turnstone *Arenaria interpres*.

No specific request was made for contributors to the Project to count birds other than the four selected for detailed study, but some counts were sent in and they are of sufficient interest to be worth reporting.

Shelduck Tadorna tadorna numbers at Collister Pill in the Severn Estuary (Fig. 1) showed a complex series of changes against the background of an increasing overall trend. Sites in the upper part of the Severn normally show a gradual build up of numbers throughout the winter and spring, possibly as a result of the dispersal of the large autumn concentration in Bridgwater Bay. The series of small peaks which occurred at intervals of 15-20 days are particularly interesting. They are not the result of tidal factors since they are not consistently associated with either spring or neap tides (c.f. Jenkins, Murray & Hall 1975). The only real alternative is that they represent genuine waves of migrants passing through the area. Boase (1951) noted peaks in the Tay Estuary in late April, mid-May and early July, during the years 1934 to 1950, and likewise attributed these to passage. Numbers in the Menai Straits in 1979, although less convincing, show signs of peaks at more or less the same times as Collister Pill. These transient birds could have consisted of individuals from the west of Britain and Ireland moving to sites further east, though some of them passed through rather late for them to have been potential breeders.

There were clear signs of Grey Plover Pluvialis squatarola passage at Collister Pill in early April (Fig. 2). During the same period at Sandwich & Pegwell Bays in Kent, numbers were declining. The Grey Plover is of course a species in which European wintering birds breed only to the east.

Large numbers of nearctic Knot Calidris canutus are known to gather in estuaries in north-west England prior to their onward migration to Iceland, Greenland and Canada (e.g. Wilson 1973). In 1979, the peak count consisted of 19,600 birds at Crossen's Marsh in the Ribble on 29 April. This site was not counted regularly, but some idea of the general trend in numbers can be obtained from counts in the Ainsdale-Southport Pier section of the same estuary (Fig. 3). In this area, the peak count was obtained on 22 April. Although heading for breeding areas in the far north, these birds leave Britain relatively early because, like the Turnstone, large numbers stop off in Iceland to undertake inter-migratory fattening (Morrison 1975, Dick et al.1976). Collister Pill and Sandwich & Pegwell Bays showed some passage of Knots in early to mid-April (Fig. 3), and it seems quite likely that these were nearctic birds heading for the Irish Sea estuaries. Both these sites also show some signs of a later wave of passage (mid-May in the Severn, and late May in Kent). These latter birds fit in quite well with the observed pattern of migration of Siberian Knot in 1979 (Dick 1979). If this is the case, the peak passage periods of westerly and easterly breeding Knots through southern Britain are separated by a period of almost a month, though the actual number of easterly breeding birds involved is probably very small.

The only site where substantial numbers of Purple Sandpipers Calidris maritima were recorded was Largo Bay in the Firth of Forth. These reached a peak of 145 birds on 29 April 1979.

The Bar-tailed Godwit Limosa lapponica is a species which showed a particularly well-defined spring passage at both Collister Pill and Sandwich & Pegwell Bays in 1979 (Fig. 4). At the former site this occurred during the last ten days of April, and at the latter in the last few days of April and the first two weeks of May. Fourteen Bar-tailed Godwits were seen departing on migration from Pegwell Bay towards the NNE on 29 April. These birds were most likely to have come from wintering areas well to the South since British and Irish Bar-tailed Godwits leave their winter haunts in February and March.

Whimbrel Numenius phaeopus passage at Collister Pill in previous years has reached a single peak at the end of April or the beginning of May (Ferns, Green & Round 1979), but in 1979 there were two distinct peaks (Fig. 5), the second of which was much later than usual. Most of these birds were probably from breeding areas in Iceland. Passage at Sandwich & Pegwell Bays covered more or less the same range of dates, but the highest counts were obtained rather later and may have included birds of more easterly breeding origin. There were no clear signs of Curlew Numenius arquata passage at either of the above sites (Fig. 6) and counts did not start early enough to ascertain whether

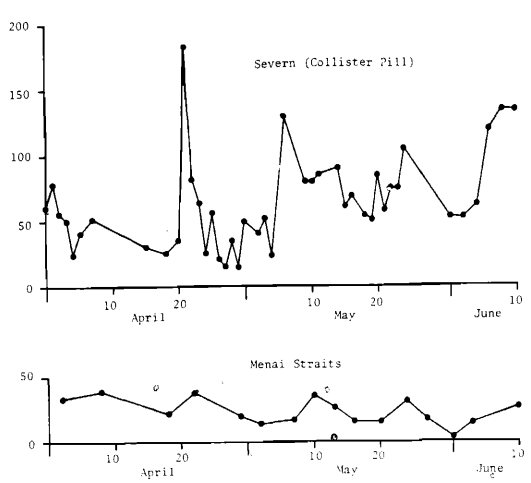

Figure 1. Counts of Shelduck in spring 1979.

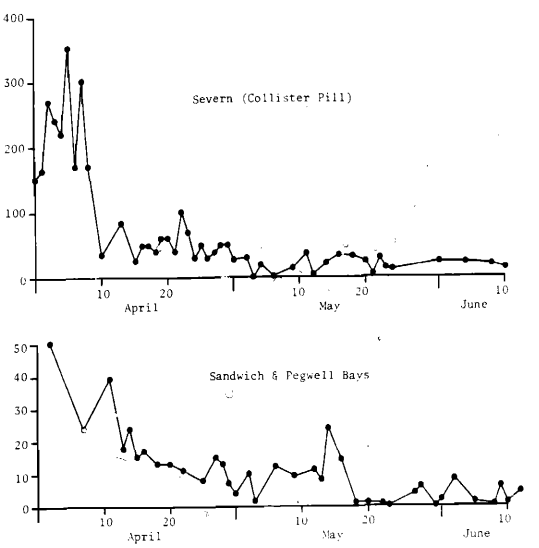

Figure 2. Counts of Grey Plover in spring 1979.

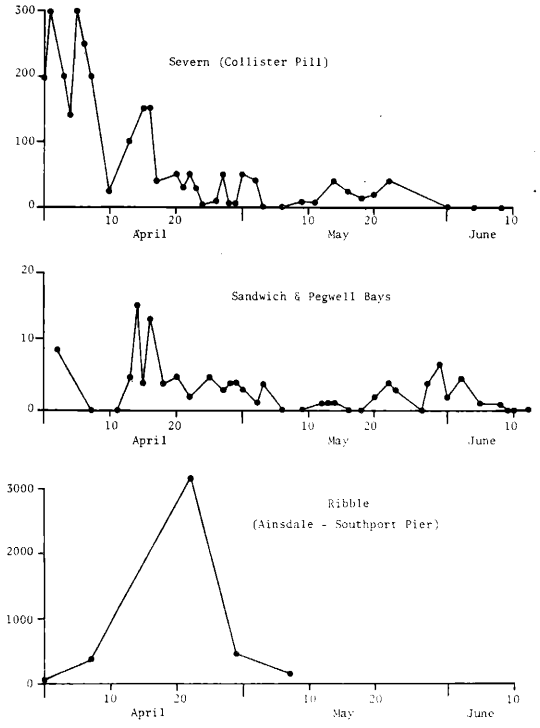

Figure 3. Counts of Knot in spring 1979.

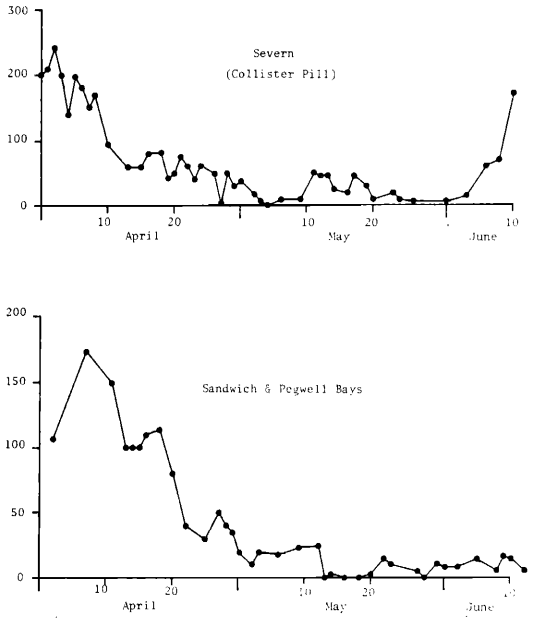

Figure 6. Counts of Curlew in spring 1979.

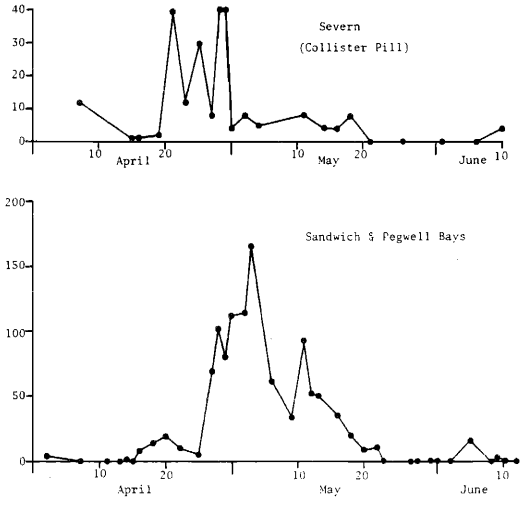

Figure 4. Counts of Bar-tailed Godwit in spring 1979.

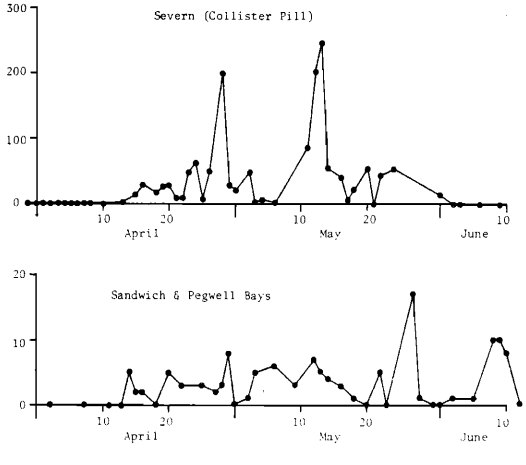

Figure 5. Counts of Whimbrel in spring 1979.

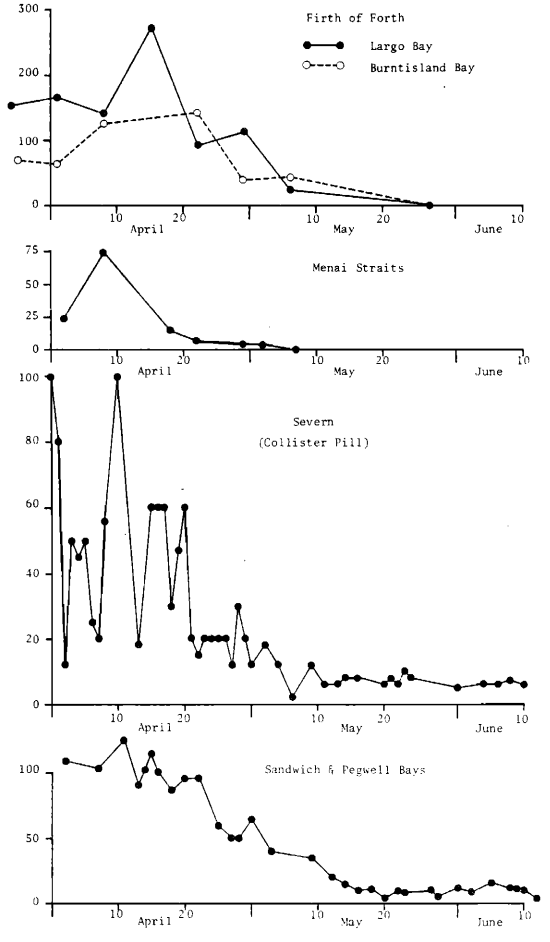

Figure 7. Counts of Redshank in spring 1979.

the high numbers of birds present at the beginning of April represented any significant change from the overwintering population levels. At Collister Pill, the number of Curlews was beginning to build up again in June. Redshank Tringa totanus showed a similar kind of declining trend at Sandwich & Pegwell Bays, but at Collister Pill, the Menai Straits and in the Firth of Forth there was evidence of passage in early to mid-April (Fig. 7). At Collister Pill, several distinct waves were apparent, and observations of the direction of departure of Redshanks at this time of year suggest that these birds were of Icelandic origin.

How successful was the project as a whole?

There is no doubt that an efficient and capable observer network can be set up relatively easily through the Wader Study Group in order to undertake specific projects of this sort. This is most encouraging from the point of view of undertaking future work of a similar nature. However, it is important that people should not be asked to take on too much and the number of projects in operation at any one time needs to be carefully controlled. This particular project was most successful at those sites, such as Collister Pill and Sandwich & Pegwell Bays, where it was possible to conduct counts very frequently. Most people simply did not have enough time to conduct counts at sufficiently frequent intervals to be able to detect very short-term changes in numbers. Furthermore, some sites were difficult to count consistently on both spring and neap tides. It might be better in future to aim for a smaller number of suitable sites, at well scattered localities, which can be counted frequently, rather than going for the very comprehensive but relatively infrequent coverage obtained in 1979. This will inevitably depend upon the availability of willing volunteers. The counts made in 1979 will certainly help to indicate those sites which could be most useful in future.

There is no doubt that the catches obtained in 1979 were of the greatest value in helping to identify the various waves of migrants, and with so many cannon-netting groups now in existence, coordinated attempts at catching waders at specific times of year should certainly be encouraged. Mid-winter weights and the timing of moult at different sites are two areas of study which could benefit from catches obtained at the same time of year in different parts of the country. The new WSG data forms will make the analysis of this kind of information much easier.

Taking the counts and catches together, this project represents the first attempt to identify origins of the various waves of migrant Dunlins, Sanderlings, Ringed Plovers and Turnstones which pass through Britain in spring. Even though some of the conclusions have had to be tentative, the results as a whole represent a considerable success, since they have provisionally identified the movement of populations which one certainly might not have expected to detect at the outset. They also suggest a number of profitable lines for further investigation. Paramount amongst these, is the need to obtain more catches of birds in mid to late April, particularly in the west of Britain. This should help to establish whether or not the Ringed Plovers passing through at this time of year are of Icelandic origin, as well as showing up the suggested passage of British breeding Dunlins and southerly breeding nearctic Sanderlings.

One further thing needs to be done with the results obtained in 1979, and that is to compare the timing of the different waves of migration in the different species. It is hoped to make progress with this in the near future.

Acknowledgements

I would like to thank again all those who contributed to the project by counting or catching waders in spring 1979. A complete list of their names appears below. The idea that the spring passage might form a suitable topic for one of the first WSG projects originated with Harry Green. The following people helped considerably with organisation and liaison at particular sites - I.P. Bainbridge, C.S.Clapham, H. Insley, P. Ireland, S. Leach, J. McMeeking, R. Swinfen, B. Turner and E. Wiseman.

List of contributors

Shetland (counts)

Pool of Virkie - J.D. Okill. The Houb (Whalsay) - B. Marshall

Moray Firth (catches)

Alturlie (Inverness) - Highland Ringing Group (R.L. Swann).

Firth of Tay (counts)

Eden and Tentsmuir Point - (P. Kinnear).

Firth of Forth (counts - coordinated by S. Leach)

Burntisland Bay - S. Leach, J. Barrett, P. Taylor, B. Larking, R. Keymer, N. Easterbee and C. Sydes.
Largo Bay - S. Leach, B. Larking, R. Keymer, P. Taylor, P.A.R. Hockey, J. Crichton, N. Easterbee, J. Barrett and C.Sydes.
Aberlady Bay - M.W. Pienkowski

Cleveland and Durham Reservoirs (counts) - D. Clayton.

Teesmouth (counts)

Hartlepool to Saltburn - L.R. Goodyer and N.C. Davidson. Hartlepool (West Harbour) - R.T. McAndrew
South West Marshes - D. Clayton, R.T. McAndrew and B.E.E. counters.

Teesmouth (catches) - L.R. Goodyer, P.R. Evans & Durham University Shorebird Research Group.

Scarborough (counts)

Jackson's Bay - Mrs. J. Webb.

Wash (counts) (Wash Wader Ringing Group)

Hunstanton Cliffs to Holme Beach huts - H. Insley.
Snettisham - D. Norman, J. Kew and P. Ireland.
Thornham - P. Ireland.
Holme - D. Norman, J. Kew, N.J.B.A. Branson and J. Newton.
Heacham - D. Norman, J. Kew, J. Reynolds and P. Ireland.
Wolferton - P. Ireland and G. Appleton.

Wash (catches)

Holme and Heacham - Wash Wader Ringing Group.

Sandwich & Pegwell Bays (counts) - M.P. Sutherland and P.W.J. Findley (Sandwich Bay Bird Observatory).

Hampshire/Sussex Harbours (counts - mainly coordinated by E.J. Wiseman and H. Insley)

Portsmouth Harbour (Reclaim area) - D.J. Steventon and D.I. Bill.
Langstone Harbour (Little Binness Island, South Binness Island, Russell's Lake, Baker's Island, Farlington Marshes Lake) - R. Gomes and P.M. Potts.
Fawley - P. Fawkes.
Calshot - P. Fawkes.
Meon (Titchfield Haven) - B. Duffin.
Hamble (Warsash - Hook shore)- D.A. Christie.
Oxley Creek to Pennington Marsh - J. Jones, E.J. Wiseman, M. Terry, R. Dunn and D.B. Wooldridge.
Hayling Island (Sinah Common - East Winner) - B.W. Renyard.
Southampton Water (Western Dock Extension, Southampton Docks, Eling Marsh) - H. Insley, B. Dudley, G.C. Barrett, P. Rees and M.F. Gibbons (Lower Test Ringing Group).
Dibden Bay - H. Insley, G.C. Barrett and B. Dudley (Lower Test Ringing Group.

Poole Harbour (counts)

Sandbanks - C.M. Reynolds.
Brownsea Island - A.T. Bromby.

Devon (counts - coordinated by R. Swinfen)

Exe Estuary (Dawlish Warren) - P. Nicholson.
Wembury - J.F. and J.E.L. Jones.

Devon (catches)

Wembury - Devon and Cornwall Wader Ringing Group (R. Swinfen).

Severn Estuary (counts)

Berrow - N.A. Clark.
Sand Bay - H.E. Rose.
Clevedon - H.E. Rose and N.A. Clark.
Chittening Warth - R.G. Thomas, N.A. Clark and N.T. Lacy.
Collister Pill - D.H. Worrall, P.N. Ferns, W.A. Venables and Celtic Wader Research Group.

Severn Estuary (catches)

Clevedon and Chittening Warth - N.A. Clark.

Mid-Glamorgan (counts)

Kenfig Sands - S. Moon.

Menai Straits (counts)

Foryd Bay - D.J. Stanyard
Beaumaris to Penmon - A.J.M. and W.A. Walker, J. Kew, E.I.S. Rees and Miss P. Almada.
Bangor to Llanfairfechan - J. Kew and University College of North Wales Bird Group.

Dee Estuary (counts)

Point of Air, West Kirby and Bidston - R.A. Eades.

Dee Estuary (catches)

Point of Air - Merseyside Ringing Group.

Mersey Estuary (counts)

Seaforth - I. Wolfenden and L. Ater.

Ribble Estuary (counts)

Ainsdale to Southport Pier - I.P. and C.A. Bainbridge, J.D. Fletcher and P.H. Smith.
Southport to Marshside - I.P. and C.A. Bainbridge.
Crossen's Marsh - J.D. Fletcher.
Lytham St. Annes - P.H. Smith.

Ribble Estuary (catches)

Marshside - South West Lancashire Ringing Group (I.P. Bainbridge)

Morecambe Bay (counts - coordinated by C.S. Clapham)

Pilling - C.S. Clapham.
Sunderland Point to Middleton Sands - P. and M.P. Lennon, C. Brown and Mountain & Wildlife Venture Groups.

Morecambe Bay (catches)

Hest Bank, Biggar, Newbiggin and Conishead - Morecambe Bay Wader Group (C.S. Clapham).

Solway Firth (counts)

Southerness Point - M. Wright.

Solway Firth (catches)

Waterfoot Annan - North Solway Ringing Group and Wash Wader Ringing Group.

Isle of Rhum (counts)

Kilmory Burn - I.G. Black and Miss F. Guiness.

Outer Hebrides (counts)

Melrose Sands (Stornoway, Isle of Lewis) - N.E. Buxton and W.A.J. Cunningham.

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Dr P.N. Ferns, Department of Zoology, University College, P.O. Box 78, Cardiff CF1 1XL, GB

FOOD OF A JACK SNIPE

by Bernard Zonfrillo

On 18 Jan 1981 I found a dead Jack Snipe Lymnocryptes minimus killed by a car on a road to the north-east of Glasgow, Strathclyde. The bird was found after a heavy overnight snowfall had blanketed much of central Scotland. I dissected the bird which was a male weighing 72g, an average weight for this species at that time of year (I.P.Gibson pers. comm.). The stomach contents were removed and examined by Dr R.M.Dobson of Glasgow University Zoology Dept., who identified the undigested remains. These were mostly snail shells, badly smashed - Hydrobia jenkinsi: larva of Chironomid midge - possibly Prodiamesa olivacea; legs of Amphipod - possibly Gammarus sp.; spiracular plate of dipterus larvae - possibly tipulid; plus various odd insect mandibles.

The only other source of Jack Snipe food I can locate is in the Witherby "Handbook" which lists Annelids (earthworms), Molluscs (Succinea, Helix and Pisidium), Coleoptera (Laccobius), Diptera (Psychodidae larvae and Prionocera turcica), plants in the form of seeds of grasses, Juncacea, Polygonum, Rubus and fragments of algae.

Chance finds such as this are worth examining in view of the comparative lack of data on feeding of the less common waders. The preserved skin of this individual is in my possession.

Bernard Zonfrillo, 28 Brodie Road, Glasgow G21 3SB, Scotland.