

REPORT FOR 1970/71

BTO/RSPB BIRDS OF ESTUARIES ENQUIRY

## Addendum

- B.T.O./R.S.P.B. Birds of Estuaries Enquiry Report for 1970/71 by A.J. Prater
- Page 1, 2nd para. 5th line from end replace Wildfowl by Waterfowl
- Page 2, Divers 2nd line delete largest
- Page 4, last line of first para. Replace Lock by Loch
- Page 7, Waders: 3rd para. 5th line from end. Replace either table by both tables
- Page 9, 10th line. Replace First of Forth by Firth of Forth last line. Replace page 7 by page 2
- Page 12, 3rd para. 2nd line from end. Replace Wendraeth by Gwendraeth.

  Table 10, 3rd line from end replace Dwyrd by Dwyryd
- Page 24, Regional Organisers: Hampshire Dr. Pratt has handed over to D. Steventon, 72 Ophir Road, North End, Portsmouth.

  Replace exist. s/Lancs Cheshire by
  - ; S. Lancashire Dr. P.H. Smith, 3 Sycamore Grove, Trap Hill, Formby, Lancs.
  - : Dee R. Eades, 18 Woodlea Close, Brombcrough, Wirral, Cheshire
  - : Somerset/Gloucestershire Replace Plot 45, Queens Road, by 'Sandpipers', 8 Queens Road.
- Page 25, : E. Glamorganshire Replace Penyland by Penylan
  - : Moray/Cronarty etc. Neplace Curries by Currie
  - : North Solway Replace Benvannock by Benvannoch

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# B.T.O./R.S.P.B. BIRDS OF ESTUARIES ENQUIRY

# REPORT ON THE PERIOD AUGUST 1970 - MAY 1971

## INTRODUCTION

rangali bar all belia (-) it Emilia Area During this period the observer network built up during the pilot survey was expanded considerably and now it is true to say that all major estuaries and most minor estuaries are regularly counted, though there are a few which still need extra helpers. The most encouraging trend has been the much increased coverage in Northern Ireland, the Republic of Ireland, and Scotland. Such important estuaries as the Eden, Tay, Moray Firth Basin and Solway are now regularly covered. In Ireland there are counts being made on The Bull, Wexford Harbour, Waterford Harbour and Cork Harbour while in Northern Ireland counts have been started on Lough Foyle. The only major gap in Wales, on the Monmouthshire coast, is also filled. Even in England a considerable improvement has occurred with regular counts being submitted from Portsmouth Harbour, the Medway, Blackwater, the Wash and Lindisfarne. Of the areas needing much more attention there only remains in England, the north Norfolk coast, in Scotland, the north and northwest coasts (including the Hebridean Islands), and in Ireland, the west coast from the Shannon to Lough Foyle.

With the census cover continually improving in all areas we are already clearly demonstrating the considerable variations in the relative abundance of birds at different seasons. information is being used in two ways. First by documenting the migration and distribution of each species. Second, and most important, it is being collected together to form the most detailed ornithological account of each estuary that has so far been made. This information is being used in the consideration of many planned developments such as Morecambe Bay and Dee barrages, the Wash reservoir plans, the Foulness airport and the serious incursion of watersports in Langstone Harbour. The information is also being used by the Nature Conservancy and the International Wildfowl Research Bureau to provide the background planning for national and international conservation of important wetlands. We hope that the volume of information, and the obviously valuable variety of uses to which it is being put, serves as a just reward to the many observers taking part.

This report is arranged in a similar manner to that of the pilot survey report. This enables some direct comparisons to be made between each winter but because the 1970/71 figures are more complete comparisons must be made with caution. The counts of divers, grebes, ducks, geese, swans, and gulls are summarised under species of group headings. For waders the countries are divided as follows:

- 1. Scotland: including the north Solway.
- 2. Wales: Flintshire to Monmouthshire, excluding the west shore of the Dee.
- 3. North Irish Sea: the Dee south Solway.
- 4. Southwest England: Devon Gloucestershire.
- 5. Southern England: Dorset Sussex.
- 6. Eastern England: Kent Northumberland.
- 7. Northern Ireland.
- 8. Republic of Ireland.

The weak sount presented in tables listing the principal estuaries is obtained by summing the peak counts of each species, regardless of when that species peak occurred. This gives a good idea of the relative numerical importance of each estuary although the population figure is a minimum one. Also included in these tables are the highest count made in any one month and the month when this highest number of waders was present.

#### DIVES

Relatively few divers were recorded, with the largest highest maters being 12 Northern Divers at Courtmacsherry Ray (Co. Cork), 16 Red-throated Divers at Malahide (Co. Dublin) and 6 Elack-throated Divers on the Moray Firth.

#### GREBE

Convey May supported the largest concentration of Great-crested Grebes. After October, when 160 were counted in this area, the number rapidly dropped but rose again to another peak of 147 in March. The maximum number (120) in the Firth of Forth was also in autumn. Up to 8 Red-necked Grebes were recorded in this area. The largest numbers of the small grebes occurred in southern Britain with up to 17 Slavenian Grebes on the Blackwater and 10 in Poole Harbour. Black-necked Grebes were again most numerous in Langstone Harbour (19), while there were 8 at Loch Myan, Wigtown and 6 at the bury latet. Although primarily a freshwater species, many Little Grebes were noticed in estuaries, especially on the mast between Suffolk and Devon. The largest numbers were on the Deben, Suffolk (81), Strangford Lough (55), Southengton Water (47) and Chichester Harhour (40). These maxime occurred in mid winter.

#### HEROM

Interesting wintering records of southern species continue to be made with single Little Egrets wintering at Milford Haven (Feeds.) and Clonakility (Co. Cork) - and single Spoundills wintering in Poole Harbour (Dorset) and Ballymacoda Bay (Co. Cork). Occasional passage birds were noted elsewhere.

## DUCKS

With the increased coverage many more important areas for the were counted. Inevitably still these counts give a far from complete picture of most species, with the exception of Shellinck for which figures are probably quite good.

Mallard: The largest number recorded for any one estuary was on the Humber (4207) in November. Other major concentrations were on the Firth of Forth (2507), Beauly Firth (2184), Ribble (1903), Wash (1900) and Solway (1602). The only three large flocks recorded in the autumn were 2500 on the Medway in September, 2717 on the Dee in August and 1971 in Strangford Lough in September. Otherwise almost all estuaries recorded peak numbers in aid winter.

Teal: The main numbers noted all occurred between October and Jamary. Only six sites recorded over a thousand birds, they were the Mersey (3050), Medway (3160), the Bull (Co. Bublic 1750), Lough Foyle (1461), Strangford Lough (1266) and Poole Marbour (1150).

Wigeon: No fewer than eleven sites recorded a maximum count of Wigeon of 4000 or above (see table 1). All sites recorded their highest numbers between November and January with the exception of October peaks in the Montrose Basin and Cromarty Firth.

TABLE 1 est the terminal of the second of the

de on estuaries 1970/71
27,000
18,591
8,500
7,522
6,929
5,800
5,000
4,717
4,230
4,096
4,000

Pintail: By far the most important site was the Mersey, which during November 1970 held an enormous flock of 5450. This flock built up rapidly during October and early November to the mid November peak. During December and January it remained just above the 4000 level but built up to 5350 in February, perhaps with the return of passage birds, before dropping very sharply. Though no other area had a population which approached this, over 500 birds were recorded at the following sites:

Burry Inlet (1104), Medway (850), Strangford Lough (647), the Bull (635) and Poole Harbour (526). At most of these the highest number was reached in January.

Shoveler: Relatively few of this species were recorded from estuaries and at only five areas did the number exceed 150. They were Strangford Lough (252), North Kent Marshes (250), the Bull (216), Medway (170) and the Ore (Suffolk 150). Highest populations usually occurred in December or January.

Freshwater diving duck: These were recorded in relatively small numbers. The highest count of both Tufted Duck and Pochard was on the North Kent Marshes, where there were up to 500 of each species. Elsewhere 378 Tufted Duck were recorded in the Beauly Firth, 355 in Strangford Lough and 209 in Poole Harbour. Strangford Lough with 249 Pochard was the only site with over 200 of this species. A single Red-crested Pochard was noted on the Humber and a single Ferruginous Duck on the Coquet (Northumberland).

Marine diving duck: The much larger number of big flocks recorded reflects the better coverage in Scotland where nearly all major flocks occurred. Even so several concentrations were not counted. Scaup were only abundant on the Firth of Forth where over 5000 were seen in November; the largest flock south of Scotland was 463 on the south shore of the Solway. Two large flocks of Long-tailed Duck were noted on

the Moray First [14] and on the Dormoch First [700]. There were also flocks of 71 on the Ythan, 63 on Lindisfarme and 58 on the First of Warth. The largest flocks of Common Scoter (1069) and Velvet Scoter (741) were also recorded on the Moray Firth. Apart from this the only site to exceed 500 Common Scoters was Loch Fleet (Satherland), where there were 1007 birds; while the 63 Velvet Scoters at Lindisfarme was the only other concentration to exceed 50 of this species. The enormous flock of Eider off the mouth of the Firth of Tay was recorded this year, reaching a peak of 1200 in February. Other flocks exceeding a thousand were on the Ythan (3121), Lindisfarme (1600), the Eden (1500 and Lock Fleet (1070).

five esteries, although only six had more than 200 birds. They were First of Forth (692), Cromarty Firth (406), Firth of Clyde (359), Van (199), Moray Firth (272) and Chichester Harbour (225). Almost inscribly the main numbers did not occur until late winter (January-March).

The Savbilled ducks were also most numerous in Scotland. During Recember the Beauly Firth with 893 Goosanders supported by far the highest flock of that species. There were autum concentrations of Red-breasted Mergansers at Strangford Lough (196), Loch Linnhe (310), the Isle of Bute (175) and Consay Bay (139). The only large mid-winter flocks were on the Firth of Forth (618) and the Fleet, Dorset (174). Smew were recorded at only four sites, with only Chichester Harbour (3) busing more than a single bird.

Shelduck: The number of Shelduck recorded in Britain in 1970/71 and their ration of occurrence was similar to that of 1969/70 (see table 2). The highest populations, however, were recorded a little later, in February. This is perhaps indicative of the relatively wild winter elsewhere in Europe.

TABLE 2

Monthly totals of Shelduck recorded in Britain, 1970/71

August	3,758
September	4,452
Schober	6,853
Movember	14,435
Jecenber	19,109
January	29,568
Telmany	30,936
March	24,115
<b>April</b>	12,848

complete because figures for such important areas as the Bridgwater Bay, Medway, Morecambe Bay and the inner Thames were not available. Igain the vast majority, over 72%, were found on the east (17%) and south (27%) coasts of England. Counts made in the Republic of Ireland and Northern Ireland revealed 1466 and 1502 Shelduck respectively in January.

Shelduck were recorded. There are some noticeable differences from those in 1969/70 with Teesman and Langstone Harbour having many fewer in 1970/71 and the better coverage of the Wash revealed very large numbers of this species.

## TABLE 3

## Principal estuaries for Section in 1970/71

MAL SA SASSER RAIL

	Peak	Month of Peak
Wash	5.25	January
Chichester Harbour	3.50	February
Medway	2,900	December
Poole Harbour	2-502	January
Des	2.567	November
Bizekwater	2.130	February
Largstone Harbour	1.96	February
Stour Essex/Suffolk)	1,631	February
FOCUS CONTRACTOR	1-72	March
Porth.	1.509	January
Teesmouth	1-4%	January
Swale	i- <b>3</b> 5	January
Strangford Lough	1.236	January
Cork Harbour		January
Ribbie	1.489	January

#### (FEET REAL

The number of geese record in the 1970/71 winter again do not generally represent an accurate assessment of the total numbers present in each area and therefore do not warrant detailed comments on each species. The highest count of Greylag Geese (1100) was made on the south Solway. This area also recorded the highest number of Fink-footed Geese (6820) and Harracle (3432). Only small numbers of White-fronted Geese were noted away from the Wexford Sichs, which had about 6000 of the Greenland subspecies. Bean Geese were seen in two eastern areas.

Although the counts of Brest Gasse were not comprehensive, the estuarme nature of their habital resulted in a high percentage of their population being recorded. The principal estuaries for the Bark-bellied race are presented in table 4. During autumn 1970 exceptionally large numbers appeared in Britain with a massive build up occurring at Forlmess. Table 5 shows the monthly British population changes. It can be seen that although the numbers were well up on these of the pilot survey the population fluctuations were similar with an early winter peak (December in 1969. November in 1970) decline in numbers in mid-winter, a second influx in February. In the 1970/71 winter there as a steady decrease in the percentage of the population in Eastern England and a corresponding rise in the percentage in Southern England. Most of the May 1971 Brent were on the Wash.

comprehensive in Ireland the figures for the Pale-bellied Brent Geese are far from complete. The highest counts of this race which were sent in were from Strangford Lough (Co. Down: 7180), Lindisfame (1000), the Bull (Co. Bublin: 880), Rogerstown (Co. Dublin: 500) and Tacumshin (Co. Wexford: 410).

A flock of 301 Canada Geese was recorded in Poole Harbour while the moulting flock in the Beauly Firth was 285 strong in August.

Principal estuaries for Mark-bellied Brent Geese as recorded in 1970/71

<u>~</u> 	Peak Count	Month of Peak Count
Poulness	13,943	November
Hladisater	5,015	December
Largstone Harbour	4,079	February
Chichester Harbour	3,295	February
Vash	2,444	February
Swale/Medway	960	January
Stour (Essex/Suffolk)	430	January
Solent	350	February

TABLE 5
The monthly totals of Dark-bellied Brent Geese counted in 1970/71

		% in Southern England	% in Eastern England
August	<u> I</u>		· · · · · · · · · · · · · · · · · · ·
September	2	<del>-</del>	_
October	3-441		9%
November	19.341	<b>#</b>	95%
December	17:237	22/	77%
Jamazy	15,578	. 46%	53%
February	18,314	446	54%
March	9,162	65%	32%
April	1,179	77	23%
May	884		100%

## SWANS

Whooper Swans were more momerous on the coast than were Bewick's Swans. Flocks of over 250 Whoopers were noted on Strangford Lough (501), Lough Foyle (452), Lindisfarne (432), Cromarty Firth (308) and the Ythan (282), whilst only Bewick's Swans exceeded this figure on Lough Foyle (300). All of these

concentrations were in November and Besamber. Autumn peaks of Mute Swans were noted on the Fleet, Borset (792) and Strangford Lough (527) whilst high wid winter numbers occurred on the Stour, Essex/Suffolk (370) and the Cromarty Firth (337).

## WADERS

The much improved coverage during this counting season has led to more accurate total population estimates. The monthly totals for Britain are presented in table 6. This presents the figures that are sent in to me and the fact that each estimate is given to the nearest one does not imply that the figures are absolutely medise; certainly for most species they are underestimates due to lack of complete coverage and to the general under-estimation of the size of flocks of waders. The counts indicate that observers are consistent in their estimation of flock size. For example taking the means of the population of Oystercatcher (October-January), of Dunlin (November-February) and of Sanderling (November - March), the variations either side of these average figures are only 5%, 5% and 7% respectively. This remarkable consistency enables one to demonstrate that, at least in 1970/ 71, the population level was more or less static for the three species over those periods. It is of course possible that emigration is equalled by immigration but as there are almost no foreign recoveries of these species within the same winter period it does look as though most observed changes in their numbers only involve movement within British itself.

It must be remembered that these total figures refer only to England. Scotland and Wales because the estuaries in Ireland were not counted in every month. With the Irish totals the figures would be considerably higher and would have at least in December 1970 and January 1971, exceeded the one million mark. In fact during January 1971 114, 166 waders were counted in the Republic of Ireland and 51,589 in Northern Ireland. Thus even with these incomplete counts the grand total for Britain and Ireland was 1,084,281.

The estuaries which supported a peak count of over 15,000 waders are presented in table 7. There are some striking similarities between this table and the one presented in the report on the pilot survey. Most of the peak population estimates are slightly up, though those of the south and southwest are down. The Wash, with much better coverage, has taken its place as second only to Mcrecambe May in numerical importance. Several newly counted areas (Lindisfarme, Bull, Blackwater, Mersey, Eden, Montrose Basin, Portsmouth Harbour and Lough Foyle) have been included for the first time; whilst only Bridgwater Bay, with its single count, has not been included in either table. Two other changes have involved the splitting of the Ayr/Wigtown shore into more meaningful units, and the inclusion of the Monmouthshire coast in the Severn totals in 1970/71 thus raising its total number.

It is very encouraging to see that many observers made the extra effort to count in May. I would again ask all counters to try and make a count in May, preferably mid-May, to accurately document these spring passage birds. Despite the incomplete coverage it was discovered that considerably more Ringed Plover and Sanderling were counted in spring than in autumn, the latter being twice as moreous in spring. It is quite possible, however, that similar numbers are involved in each period, as the autumn passage is spread over two months whereas the spring passage is concentrated into a few weeks.

PABLE 6

waders in Britain 1970/71

Jo

The monthly population levels

148,948 20° 20° 24°0 24°0 May 579,147 331,553 17,916 April - 1 7 0 0 0 0 ト4 めかい いめい March February 820,412 32 343 4924 January 918,506 December 40,495 956,166 1,959 28,904 400,004 November 29,411 100 W 30,823 2,6 787,519 44 - www.v-00-- w-00-- w-53,894 678,863 1,746 October 45,61 September 25, 4, 00 0.01 187.48 108,108 108,448 586,025 0-uno 0-uno 0-uno 0-uno 0-1-0-0 0-1-0-0 54°951 122,660 44,444 408,273 2 - 5 am 40 am 40 am 100 000000 000000 000000 00000 00000 00000 w € w w August Bleck telled Godwit Bar-tailed Godwit Sendplas Sandpiper Common Sandplyer Spotted Redshank Green Sandpiper BRITAIN 1970/71 Wood Sandpiper Ringed Plover drey Plover Golden Plover Oystercatcher Little Stint Johns Salpa Sanderling Jack Ships Greenshank Turnstend Redshank Whimbrel. (Butward) Purple Curley Juniew Avocet Dun 14n Knot Ruff

other months, a result of less coverage the May figures are not comparable with those of AB

PARK 7

# The British and Irish estraries which supported a maximum + of over 15,000 waders in 1970/71.

Morecambe Bay	252,443
Vasi	161,009
Dec	121,425
Ribble	119,826
Solvay	79,876 *
Severm	49,116
Burry Inlet	46.653
Strangford Lough	45,090
Humber	44,064
First of Forth	37,568
Lindisfarne	33,320
Medway/Swade	33,058
Indion	31,146
Boll	26,676 **
Teemouth	25,127
Mackwater/Dengie	24,146
Cork Harbour	23,815 ***
Exe	20.975
Fourness	20,130
Kersey	19.710.
<b>套</b> 工士	18,559
Eden	17-705
Chichester Harbour	17,27
Firth of Clyde	17,026
Montrose Basin	16,928
Portsmouth Harbour	16,913
Consay Bay	16,850
Langstone Harbour	16,261
Lough Foyle	15,149

<sup>\*</sup> only a single December count of all Solway

<sup>\*\*</sup> based on three courts only

<sup>\*\*\*</sup> only a single January count of all of Cork Harbour

<sup>\*</sup> The derivation of these maxima is explained on page 7.

The anticipated increase in coverage in Scotland during the 1970/71 winter did in fact occur and so the figures obtained are much more accurate than earlier ones. All the areas mentioned as being without cover in 1969/70 were counted this winter, with regular cours being made on the Men, Montrose Basin and Firth of Tay (outer part). The north Solway was counted only during December 1970, although during the 1971/72 winter regular counts have been achieved. The other area with inadequate coverage in 1969/70 was the Moray Firth Basin (including the Moray Firth to Findhorn Bay, the Beauly Firth, the Cromarty Firth, the Dornoch Firth and Loch Fleet). It was covered by a very large team of counters three times during 1970/71. This immense undertaking was managed in Lagust and December 1970 and March 1971, and these counts represent the first comprehensive counts of the area. The peak counts for Scotlish estuaries are presented in table 8.

The population levels of each wader species is presented in table 9. With increased coverage the figures are well above those for 1969/10. The three species which were greatly under-recorded before were Oystercatcher, Bar-tailed Godwit and Knot and these counts put the high Scottish population levels of them more into perspective, the bar-tailed Godwit figure representing a significant percentage of the British and indeed European, population.

May counts were only made on three areas, The Firth of Forth, Men and the Tay, of which only that for the Eden was a complete count. However, even such a limited coverage resulted in almost 700 Ringed Plover being recorded. It would be extremely useful to have some counts made in May to try and establish the true scale of Mis passage which must be a considerable one.

Additional habitat/bird maps were received for the following sites: Almond estuary and Grangemouth Docks to the Kincardine Bridge (Firth of Forth), Deveron (Banff), Hunterston Sands (Myr) and Whiting Bay (Isle of Arran). In addition detailed maps are being made of the Moray Firth Basin and of the morth Solway.

TABLE 8
The principal estuaries for waders in Scotland 1970/71

	Peak Count	Highest Monthly Count	Month of Highest Count
Firth of Forth	77:568	30,161	- January
Solway - north	36,453	single count	December
Edem	17,705	14,811	November
Firth of Clyde	17.026	15,043	February
Montrese Basin	16,928	9,200	January
Crossety Firth	14.024	10,765	December
Moray Firth	II.313	8,257	December
Ayr sage	10,549	8,427	December
Firth of Tay	9,346	6,240	September
Wigtom Merse	8,498	5,329	October
Ythan	6,619	6,247	September
Piltanton & Lone	5,935	5,032	October
Loch Ryan	5,879	5.124	December
Dornoch Erth	<b>4.</b> 106	2,995	March
Islay	3.310	single count	January
Lock Meet	2,608	2,608	March
Beauly Firth	2,538	1,932	August

## Autumn, winter and peak counts of waders in Scotland, 1970/71

· * * * * * * * * * * * * * * * * * * *	September	January	Peak	Month of Peak
Oystercatcher	16,089	14,109	<b>28,</b> 448	December
Lapwing	4,138	6,942	<b>17,88</b> 2	December
Ringed Plover	1,047	852	1,547	August
Grey Plover	164	234	367	October
Golden Placer	5,057	3,475	9,171	December
Turnstone	1,247	1,412	1,412	January
Snipe	107	41	126	December
Jack Snipe			. 2	October
Curlew	6,865	5,745	7,331	December
Whimbrel	11	. · · -	51	August
Black-tailed Godwit	79	<del>-</del>	93	October
Bar-tailed Godwit	3,281	4,731	7,720	December
Green Sandwiper	4	· <u></u> .	4	September
Common Sandpiper	8	· <u>-</u>	1 <b>0</b> 5	August
Redshank	11,287	9,702	13,426	March
Spotted Redshank	. 4.	. 2	4	September
Greenskank	16	A	<b>6</b> 5	August
Knot	2,912	21,398	27,004	December
Dunlin	8,752	15,101	18,629	December
Sanderling	114	<u>1</u>	265	April
Ruff	4	15	<b>2</b> 3	December
Little Stime	19	_	19	September
Curlew Sandpiper	-51	-	51	September
Purple Sampiper	124	104	124	September
Total:	61,160	83,868	133,849	

#### WALES

Counts were made on all the estuaries censured in 1969/70. In addition there was better coverage of the Loughor (upper Burry Inlet: Glam/Carm), North Burry Inlet (Carm), and the Afon Ceint (Anglesey). The Clwyd estuary (Flints/Denbigh) and the Monmouthshire section of the Severn from the Rhymmey to the Wye, two areas not counted before, were covered in 1970/71. Unfortunately due to counters moving away the Tywi and Gwendraeth were only censured once each (in January and May respectively) but those apart, coverage was almost complete in every month.

Table 10 which lists the principal Welsh estuaries reflects both the increased numbers of several species and the better coverage. Very large numbers of Lapwing (12,000 in December) and Golden Plover (10,000 in January) and considerably to the 20,000 or so shore waders on the Monmouthshire coast, making it mmerically the second most important estuarine area in Wales. This table also presents the month during which the peak number of waders occurred. In almost every case it was

confirms the comment made in the pilot survey report that the peak numbers do not occur until mid or late winter, which is noticeably later than many other regions of Britain.

Table II presents the counts of each species of waders made in Wales. In general all species were recorded in larger numbers than previously, with perhaps the Dumlin showing the largest increase (this is in common with most other parts of Britain). The big movement of Lapwing in December over much of south Wales, and of Golden Plover in the Severm in January also made a significant contribution to the higher total wader figure for Wales.

May counts were made on the Monmouth coast, Taff, Swansea Bay, Burry Inlet, Gwendraeth, Taf, Sandyhaven Pill, Dyfi. Councy Bay and Clwyd estuaries. This excellent coverage added much to our knowledge and resulted in some excellent totals of waders. There were 2,336 Ringed Plover (including 1,500 on the Dyfi and 500 on the Monmouth coast), 749 Turnstone (no fewer than 700 of which were on the Monmouth coast). 10,500 Buntin (with 5,000 on the Monmouth coast, 3,500 on the Dyfi and 1,631 on the Burry) and 617 Sanderling (with 380 on the Byfi, 95 on the Burry and 67 on each of the Wendraeth and Swansea Bay).

Additional habitat/bird maps were received for the Teifi (Pemts/Card.). Angle Bay and Pembroke River (Pembs) and the Mormouth coast.

TABLE 10

The principal estuaries for waders in Wales 1970/71

¥ *		*	-
	Peak	Highest Monthly Count	Month of Highest Count
Burry Inlet	46,653	41,368	January
Monmouth coast	41,596	22,157	Jamary
Conway Day	16,850	15,880	December
Conway Eiver	9,421	5,982	February
Taff (Glam.)	9,046	8,245	November
Milford Haven	8,981	7,746	January
Dyfi	8,252	5,697	May
Lougher	6,499	6.472	November
Swansea Bay	5,580	4,175	February
Clwyd (Flimis)	5.464	4,449	January
Taf (Carm.)	4,197	2,968	January
Ceint (Anglesey)	2,984	2.350	October
North Borry	2.952	2,234	January
Glaslyn/Myrd	2.274	1,469	March
Neath Fiver	2.268	953	January
Twyi (Carm.)	1,445	single count	Jamary

TABLE 11
Autumn, Winter and Peak counts of waders in Wales, 1970/71

<i>2</i> ,	September	January	Peak	Month of Peak
Oystercatcher	22,369	35.876	35,576	January
Lapwing	2,599	6.392	19,767	December
Ringed Plover	1,352	606	2,336	May
Grey Plover	170	703	712	February
Golden Plover	90	11,402	11,402	January
Turnstone	877	557	877	September
Snipe	14	166	321	November
Jack Snipe	-	3	3	January
Curlew	4,828	3,521	5,289	December
Whimbrel	9	_	185	May
Black-tailed Codwit	129	36	363	August
Bar-tailed Codwit	587	1,456	1,456	January
Green Sandpiper	7	1	7	September
Common Sandpiper	4	نسد	A	August
Redshank	4,832	5,233	5,729	October
Spotted Redshank	20	8	66	August
Greenshank	53	6	5	September
Knot	667	11,747	11.747	January
Dunlin	2,469	30,155	观功	January
Sanderling	581	376	617	May
Ruff	3	<u>-</u> .	3	September
Little Stint	10	_	10	Aug. & Sept.
Curlew Sandpiper	30	-	<b>30</b>	September
Purple Sandpiper	_	-	2	May
	10-10-14-18	<u> </u>		
Total	41,700	108,244	127,082	
				•

## NORTH IRISH SEE

Again all estuaries in the region were counted by well co-ordinated teams. A much more thorough coverage was obtained for the Dee, Duddon and Ribble and the figures presented are probably a good estimation of the total number present.

The peak counts in each estuary are presented in table 12. With the exceptions of the Dee and the south Solway all areas recorded higher numbers than in the 1969/70 winter. The decline on the Dee is due to a great decrease in Knot numbers; there were 55,000 less than during the previous autumn although almost all other species there were noted in increased numbers. Similarly Knot were relatively scarce on the south Solway, but here there was also fewer Oystercatchers. With increased coverage the Mersey counts, are now much more meaningful although at no time was a complete count, especially of the east shore, undertaken.

A very large increase in Dunlin numbers was remarked upon in all areas. This and other population levels are summarised in table 13. Except for Knot all the principal species were more abundant than in 1969/70 and the vast autumn influx of Dunlin was remarkable. Although it is not very evident from table 13 the numbers rose from 40,000 in late October to the winter level of 125,000 by mid-November

May counts were undertaken on the Alt, Dee, Esk, Morecambe Bay, Ribble and Solway; these counts revealed the tremendous passage of Ringed Plover (almost 12.000) and Sanderling (over 26.000) which occurs in the Irish Sea at that time of year. These numbers represent 75% and 93% respectively of the British totals.

Habitat and/or bird maps were received from the Alt. together with more from the Solway. A detailed study is being made of the Dee in relation to water storage plans and the results of this will be available in the future.

Autumn, Winter and Peak counts of Waders in the North Irish Sea 1970/71

TABLE 13

zace committy want dor conto	Car Counts	Oi Wauers	TH GHC NO	T on TITISH Dea 17/
•	September	January	<u>Peak</u>	Month of Peak
Oystercatcher	64,736	67.718	83,645	October
Lapwing	21,972	14,735	21,972	September
Ringed Plover	3,749	965	11,742	May
Grey Plover	474	1,010	1,148	November
Golden Plover	4.413	9.870	9,870	January
Turnstone	1,904	2,252	2,471	February
Snipe	171	101	642	December
Jack Snipe	-	2	11	December
Curlew	21,743	8,605	27,826	August
Whimbrel	16	1	35	August
Black-tailed Godwit	306	609	700	November
Bar-tailed Godwit	7.025	21.942	21.942	January
Green Sandpiper	2	7	7	January
Wood Sandpiper	****	. <del>-</del>	1	August
Common Sandpiper	20		55	August
Redshank	19.285	10,276	20.425	October
Spotted Redshank	22	Take	32	October
Greenshank	69	6	69	September
Knot	110 994	94.430	120,807	February
Dunlin	37.054	124,577	125.253	November
Sanderling	3,840	1,201	26.047	May
Ruff	66	1	66	September
Little Stint	9	_	9	September
Curlew Sandpiper	43	<del></del>	43	September
Furple Sandpiper		6±	68	February
Avocet	<del>-</del>	-	Ţ	October
	<del></del>	~		

Total: 297.913 358.369 474.877

	Peak Count	Highest Monthly Count	Month of Highest Count
	ے مثلہ کی ضیف	·	mignes Count
Morecambe Bay	252,443	174,507	December
Dee	121,425	88,047	November
Ribble	119,826	82,378	September
Solway (south shore)	68,826	53,821	November
Dud <b>don</b>	31,146	27.556	January
Mersey	19,710	16,559	February
Alt	18,559	14,056	October
Esk	12,802	8,541	August

## SOUTH WEST ENGLAND

There was an encouraging increase in the number of observers in south-west England, with the result that more estuaries were well covered. Unfortunately Bridgwater Bay could only be counted on one occasion, in May.

The principal estuaries for waders in this region are listed in table 14 and the counts of each species in table 15. It is immediately apparent that, despite the increase of observers, there has been a noticeable decline of almost all species on almost all estuaries. The most dramatic decrease occurred on the Severn with a population of less than half that of 1969/70. This low number is probably a reflection of the mild winter because there were very large numbers of most species in the north and east of Britain.

May counts were made on the Exe. Otter, Bridgwater Bay, parts of the Severn, and the Hayle estuary. Although only a relatively few areas were counted the results were very interesting. The peak count of Sanderling occurred in May and there was also a high Ringed Plover figure. It is very important that more areas are counted in May to assess the true scale of the passage.

Additional bird/habitat maps were received from Brean Down and St. Georges Wharf (Severn), the Axe, Exe and Taw estuaries (Devon),

TABLE 14

Principal estuaries for waders in south-west England 1970/71

	Peak Count	Highest Monthly Count	Month of Highest Count
Exe	20,975	16,445	February
Severn	14.827	12,392	February
Camel	11.537	10,216	October
Taw	8,799	8,625	December
Tamar	4,451	3,778	December
Axe	3.I16	2,877	December
Bridgwater Bay	2,911	Single Count	May
Hayle	1,911	1,134	October
Tavy	1,139	939	December
		3.44	

	September	January	Peak	Month of Peak
Oysterczicher	3,366	2,491	3 <b>.49</b> 8	October
Lapwing	4.165	8,686	14,116	December
Ringed Fiver	971	293	971	September
Grey Placer	82	206	245	February
Golden Flower	62	1,129	3.637	December .
Turnstone	348	210	573	October
Snipe	3	289	289	January
Jack Snipe	· 1	4	Ą	January
Curlew	3-115	1,934	3,115	September
Whimbrel	11	-	24	August
Black-tailed Count	423	984	984	January
Bar-tailed Code	327	963	1.073	February
Green Sandpiper	7	1	19	February
Wood Sampiper	Hall-dy."		1	August
Common Sampine	30	3	65	August
Redshank	1.359	882	1,503	December
Spotted Persham	14	4	34	October
Greenshank	77	12	77	September
Knot	<b>4</b> 2	593	755	December
Dunlin	3,560	18,731	22,094	February
Sanderli	6	26	200	May
Ruff		56	129	February
Little Stat	3		8	<b>October</b>
Curlew Sampiger	15		15	September
Purple Sadpiper		1	5	April
Avocet	1	77	77	January
		<del></del>	<del></del> .	
Total:	17.988	<b>37</b> • 575	53,511	

#### SOUTHERN DELAW

Even the excellent coverage obtained in 1969/70 was bettered, with the first complete series of counts of Portsmouth Harbour and of the Solent. The figures so obtained probably give an excellent idea of the water populations of this interesting area.

With the full counts of Portsmouth Harbour that area has clearly emerged as one of the major southern estuaries for waders. Pred counts of this and the other estuaries are presented in table 16. In general the peak counts are slightly lower than in 1969/70 although the detailed counts of each species, table 17, are roughly the same (the only one substantially up is the Dunlin). Part of the reason for this low figure may well be the very mild winter in 1970/71 so it will be extremely interesting to see the 1971/72 figures when they are in.

May counts were only made on three areas, the Fleet, Beaulieu River and Langstone Harbour. Although the spring migration was pourly recorded it does seem that there is not the volume of passage on the south coast that there is in the north-west.

Additional habitat/bird maps were received from Calshott (Southampton Water: Hants.), Portsmouth Harbour (Hants.) and Pitts Deep (Solent: Hants.) and Wootton Creek and the Bembridge River (Isle of Wight).

Principal estuaries for waders in Southern Regland 1970/1971

	Peak Count	Highest Monthly Count	Month of Highest Count
Chichester Harbour	17,271	14.364	February
Portsmouth Harbour	16,913	15.606	February
Langstone Harbour	16,261	14,226	October
Poole Harbour	9.592	8.586	February
Southampton Water	9,547	6_695	December
Pagham Harbour	4,398	5-485	January
Solent	3,717	2,50	December
Beaulieu River	3 <sub>*</sub> 083	2,992	December
Newtown, Isle of Wight	3,,066 -	2.353	December
The Fleet. Dorset	2,510	S. 469	September
Christchurch Harbour	1,944	1.476	November

#### EASTERN ENGLAND

Almost all the major gaps mentioned in the pilot survey report were filled during the 1970/71 counts. Four very important areas, the Blackwater Lindisfarme. Medway and the Wash, not adequately counted earlier were well covered. The only major gap left is on the north Norfolk coast, a very difficult complex of saltmarshes and inlets. Unfortunately there were no counts sent in for the north Kent marshes or the inner Thames, although counts of the latter area are now being made.

Table 18 gives the peak count for the most important estuaries. With good coverage the true importance of the Wash can be clearly seen. The more detailed breakdown of the numbers of each species recorded is presented in table 19. The figures of almost all species are well above those obtained in 150/10, with about twice the number of Cystercatcher, Ringed Plover, Mack-tailed Godwit and Knot being recorded. There was also a substantial rise in the number of Curiew, Redshank and Dunlin. Although there was nowhere near the number of Curiew Sandpipers and Little Stants in autumn 1970 compared with autumn 1969, numbers were still reasonably high with a September passage of juveniles. The autumn peak of 150 Spotted Redshank on The Medway is particularly striking as it represents over 50% of the total number recorded of this species.

May founds were made on the Swale, Medway, at Bradwell on the Blackwater, eastern Hamford Water, Butley Greek, Breydon Water, the Wash, Teesmouth, Washington Ponds and Lindisfarme. Although not all estuaries were visited and only parts of others were counted, there was still a small passage of Ringed Plover and Sanderling observed. It is essential that the true scale of this spring passage should be assessed because there is some evidence that some of the Ringed Plover, Dunlin and Sanderling which move south on the east coast in autumn use the west coast in spring.

TABLE 17

Autumn, Winter and Peak counts of waders in Southern England 1970/71

	September	January	Peak	Month of Peak
Oystercatcher	2,811	2,510	2,993	October
Lapwing	2,039	3,526	5,210	December
Ringed Plover	1,119	663	1,119	September
Little Ringed Plover	<u></u>	-	4	August
Grey Plover	389	639	806	February
Golden Plover	59	541	844	December
Turnstone	732	454	732	September
Common Snipe	69	631	656	December
Jack Snipe	3	9	19	February
Curlew	3,115	2,726	3,867	February
Whimbrel	<b>4</b> 2	<b></b>	99	August
Black-tailed Godwit	851	757	1,191	February
Bar-tailed Godwit	<b>25</b> 6	649	862	December
Green Sandpiper	15	2	17	August
Wood Sandpijer	name:		4	August
Common Sandpiper	71	. 1	122	August
Redshank	5,700	2.559	5.700	September
Spotted Redshank	29	19	69	October
Greenshank	199	7	199	September
Knot	122	971	971	January
Dunlin	2.458	33,762	44,158	February
Sanderling	224	121	570	October
Ruff	28	227	227	January
Little Stint	7	<b>~~</b>	11	October
Curlew Sandpiper	26		2c	September
Purple Sandpiper	-	<del>-</del>	1	
Avocet	_	·6·	8	October
			·	
Total:	20,364	50,770	70.487	

Additional habitat and/or bird maps were received from Minnis Bay (Kent), Butley Creek and the River Blyth (Suffolk), Burnham Harbour (Norfolk), the Snettisham, Terrington, Holbeach and Witham areas of the Wash (Norfolk/Lincs), Cleethorpes - Saltfleet (Humber: Lincs.) and Teesmouth (Yorks./Durham). Also two Nature Conservancy reports have been prepared on the "Wildlife Conservation in the North Kent Marshes" and on the Essex coast. A detailed Nature Conservancy study is being made on the Wash.

TABLE 18

Principal estuaries for waders in Eastern England 1970/71

- " - " - " - " - " - " - " - " - " - "			
* 2 2	Peak Count	Highest Monthly Count	Month of Highest Count
Wash	161,009	152,781	January
Humber	44,064	34,983	January
Lindisfarme	33,320	30,456	December
Teesmouth	25,127	19,171	December
Blackwater	24.146	18.539	December
Foulness	20,130	17.099	February
Swale	19,652	16,147	February
Medway	13,406	<b>8,</b> 757	December
Coine	12,671	11.367	October
Stour (Essex/Suffolk)	11,966	11,568	February
Breydon Water	4.893	3.326	November
Deben	3,579	3-157	December
Blyth	2,230	1,225	March
Orwell	1,938	1,631	December
Coquet	1,598	1,270	January
Stour (Kent)	1.557	974	November
Butley Creek	1.300	940	February
Ore	1.237	812	December

#### NORTHERN IRELAND

During the 1970/71 winter a much more extensive coverage was obtained than in 1969/70. Three estuaries or estuarine complexes, the Bann and the Foyle (Co. Londonderry) and Strangford Lough (Co. Bown) and well co-ordinated teams covering them. The Route Naturalists Field Club and Ulster University Bird Club undertook the counts in the first two areas, but the Donegal coast of the Foyle was not counted. The wildfowl count team helped with Strangford Lough counts and the National Trust supplied the figures. The peak figures are given in table 20.

There appears to be an interesting difference in the species composition between the two major areas counted in Northern Ireland. At Strangford Lough there were large numbers of Knot (up to 15.600). Dunlin (5.300), Grey Plover (309), and Blacktailed Godwit (238) whereas at Lough Foyle the population maxima for these species were 42.560. 21 and 7 respectively. In fact the Foyle mainly supported the medium to large waders with Dystercatcher (1.600). Curlew (3.850). Bar-tailed Godwit (2.150) and Redshank (1.500) forming the high proportion of the birds.

TABLE 19

# Autumn, winter and Peak counts of waders in Eastern England 1970/71

·	September	January	Peak	Month of Peak
Oystercatter	13,298	30,165	<b>30,</b> 165	January
Lapwing	4,850	3,736	14,200	December
Ringed Ever	3,109	551	3,109	September
Little Enged Flover	-	_	9	August
Grey Pluer	2,335	2,782	2,858	February
Golden Pages	5,835	2,404	5,835	September
Turnston	1,504	1,574	1,639	March
Snipe	416	<b>30</b> 9	416	September
Jack Snige	5	7	14	October
Curlew	15,809	8,405	15,809	September
Whimbre ?	107	<del></del> -	275	August
Black-tales Codwit	204	157	378	October
Bar-tails Cowit	4.509	7,973	11,292	November
Green Sampler	30	2	39	August
Wood Saviner	2		27	August
Common Salviper	75	1 -	179	August
Redshark	12,518	7.815	13,771	October
Spotted ***	150	4	150	September
Greenshar	191	27	192	August
Knot	42,686	126.008	126,008	January
Dunlin	38,815	90,096	90,096	January
Sander	680	757	1,766	August
Ruff	63	. 2,	63	September
Little Sant	24	_	24	September
Curlew Salpiper	. 56		56	September
Purple Sampiper	2	14	42	December
Avocet	114		140	April
Total:	147,387	282,789	318,543	

## TABLE 20

# Peak cants of waders on the estuaries of Northern Ireland 1970/71

Strangford Lough	45,090
Lough Foyle	15,149
Beam	6,069
Bandrum Bay (Co. Down)	1,777
Millisle Bay (Co Down)	7E2 *
Carlingford Lough (Co. Down)	372 *

<sup>\*</sup> Figures obtained from a single count made in Semiamber 1970.

only Oystercatcher of these four species reached a higher number (2,250). The Bann showed a similar pattern to the Foyle in the species present.

## REPUBLIC OF IRELAND

The coverage of the highly indented coastline of the Republic of Ireland during the 1970/71 winter has exceeded expectation and the figures for many of the areas on the east and south coasts indicate the importance of these estuaries. Although much has been achieved, there is till much to do. The entire west coast is almost unknown in winter and may be important for some species. Visiting birdwatchers are beginning to produce autumn figures for some areas. If anyone visits the coast of western Ireland and counts the waders there, all such records are of considerable help in understanding what is happening, so please send in these casual records to C. Hutchinson who can then start to build up the picture.

Although only three estuaries, Ballycotton Bay and the Douglas Estuary (Co. Cork) and Rogerstown (Co. Dublin) were counted regularly a further five had several counts made on them and single counts were made on another 28 estuaries (12 in January and 16 in September).

The peak counts are presented in table 21. This shows that there are many important areas of waders in the Republic of Irelan and it is certain that if regular counts could be made on many of these areas the peak count would be considerably above that shown.

Although it is impossible to give figures for all Irish estuaries visited for a single month there were two series of visits made; the first during early September 1970 which involved counts of the north-western coastline. Although not all beaches and bays were visited most of the major areas were censured and table 22 gives these counts. The other visit was made in mid-January 1971 and covered the estuaries between Co. Dublin and Co. Cork. The results of this visit are included in table 22 (for a more detailed breakdown see A.J. Prater, Counts of Waders made in Ireland In January 1971, in the Irish Bird Report 1970 pp. 10-15.) These two series of counts give an insight into the considerable differences in the waders of different parts of the Irish coast. The September numbers include many passage birds, especially Ringed Plover and Sanderling. These species are usually less abundant in winter than in autumn and it would be very interesting to see just how many were left in midwinter. The January counts which included most of the major Irish estuaries indicate the high wader populations present. Of particular interest are the counts of the two Godwit species, of Golden Plover of Spotted Redshank and of Greenshank. The Black-tailed Godwit present on the south-west of Ireland were almost twice as numerous as in Britain in the same month.

# habitat/bird map has been received for Rogerstown (Co. Publin).

## GULLS AND TERNS

Again the information received on these species was inadequate to obtain coastal population figures. The counts of gulls from a very important aspect of the Estuaries Enquiry; the continuing threats of bird strikes and the continuing interest in possible contamination of water supplies emphasise the need to know more about their population levels and areas of abundance.

# Peak counts of waders of Irish Estuaries in 1970/71

Bull (Co. Dublin)	26,674 (a)
Cork Harbour	23,815 (b)
Waterford Harbour (Waterford)	12,142 (b)
Ballymacoda Bay (Cork)	9,897 (a)
Malahide (Dublin)	7,387 (a)
Wexford Harbour (Wexford)	7,042: (a)
Dungarven Harbour (Waterford)	6,934 (b)
Ballycotton Bay (Cork)	6,370
Bannow Bay (Wexford)	5,501 (b)
Tacumshin (Wexford)	4,779 (b)
Rogerstown (Dublin)	3 <b>,</b> 435
Tramore (Waterford)	3,046 (b)
Douglas (Cork)	2,573
Cortmacsherry (Cork)	2,406 (b)
Clonakilty (Cork)	2,288 (a)
Blacksod Bay (Mayo)	2 <sub>3</sub> 057 (c)
Baldoyle (Dublin)	1,687 (b)
Youghal Harbour (Waterford)	1,312 (b)
Trawbreaga Bay (Donegal)	1,198 (c)
Ballyness Bay (Donegal)	1,043 (c)

- note a) occasional counts
  - b) single January count
  - c) single September count
  - \* no counts of Lapwing, Golden Plover and Snipe are included.

## Some wader counts made in Ireland 1970/71

•	<del></del>	
	Donegal to Galway	Dublin to Corl
•	September 1970	January 1971
	The state of the s	
Oystercatcher	1,623	4,488
Lapwing	576	20,250 +
Ringed Plover	1,712	685
Grey Plover	· · · · · · · · · · · · · · · · · · ·	877
Golden Plover	411	22,330 +
Turnstone	63	676
Snipe	<del>-</del> ·	387 +
Curlew	2,177	5,469
Whimbrel	22	
Black-tailed Godwit	9	3,943
Bar-tailed Godwit	135	5,502
Common Sandpiper		. 4
Redshank	270 •	3 <b>,</b> 978
Spotted Redshank	· · · · · · · · · · · · · · · · · · ·	21 +
Greenshank	109	68 +
Knot	96	15,329
Dunlin	982	29,993
Curlew Sandpiper	3	<del>-</del>
Purple Sandpiper	<del>-</del>	*
Sanderling	448	170
Ruff	_	18

+ does not include birds on the Wexford Slobs.

Counts made in the 1970/71 season add considerably to our knowledge about several areas and it is encouraging to see some more intensive counts of gulls during the present season. I would again make a plea for more counts of gulls and if at all possible please do not use the scale of abundance but attempt an estimate. Even a crude one is of more value than a letter.

Greater Black-backed Gulls were most numerous on the east coast of England. The four largest concentrations were recorded on the Humber (3,557:November), Lindisfarme (2,000: November), Teesmouth (1,753: January) and Foulness (1,392: September). In contrast Lesser Black-backed Gulls were present in much smaller numbers, the largest flock being only of 900 in the Doon (Ayrshire) during August.

Only the following estuaries recorded peaks of 10,000 or more of the other three common species of gull. The breeding colony on the Beaulieu river (Hants.) had 40,000 Black-headed Gulls in May; there were 35,000 on the Wash in September and 12,000+ on the Humber in November. The largest concentration of Common Gulls during January was on the south Solway (31,650)

with Lindisfarme second (10,000 in October and December). Lindisfarm also held very large numbers of Herring Galls (25,000 in October and November), while on the Wash there were 10,000 of them in November.

In addition to Glaucous Galls at eight sites, 3 Iceland Calls, 15 Little Gulls (largest count of 6 on the Mt. Lacs. Sabines Gulls and 2 Mediterranean Gulls were observed.

Helatively small numbers of terms were recorded. Sandwich terms were most numerous on the north-east coast with concentrations on Teesmouth (1.064 in August), the Firth of by (1,000 in September) and the Firth of Forth (960 in last) 2,000 Common/Arctic Terms were noted on the Tay estrant, while the Dee with 1,050 was the only other site where over a thousand were recorded in September. Very few Rosesie Tems were recorded, with a maximum of 20 on Conway Bay. Similarly Little Terms were not numerous, the two main concentrations being on the Dec (126) and the Swale (101), both in Agust. Black Terms were quite frequently recorded on estuaries in August with the Wash having 43 and Burry Inlet 41. A white winged Black form was recorded at the head of the lee estuary.

## RECTONAL CHEANTSERS

ENGL

New. J.E. Beckerlegge, St. Crowan Vicarage, Cornal:

Ezze, Cornwall.

S. Griffiths, 8 Longford Park, Kingsteignton, Devoze:

Mewton Abbot, Devon.

D.J. Godfrey, 77 Merley Ways, Wimborne, Dorses

Agreet.

Mr. P. Burton, Bird Room, British Museum (Nat. Esser

Wist.), Pring, Heris.

C.P. Green, having organised this area has now Hampwire:

handed over to:

Br. N.H. Pratt, 7 Salcombe Crescent, Totton,

Southampton, Hants.

I. Stafford, Westering, Moor Lane, Brightstone, Isle of Wight:

Isle of Wight.

K. Noble, 48 Coolgardie Avenue, Chigwell, Essex. Inner Theres

Major G.F.A. Mumos, R.A. Records, Sidcup, Kent. Kent=

S. Lanashire/ Chesare Flintshire

Br. P.H. Smith, Liverpool Regional College of

Technology, Byrom Street, Liverpool 3.

J. Wilson, Myers Farm, Silverdale, Carmforth, N. Lacashire: Lancs.

Northerland: B. Galloway, 115 Southway, S.W. Denton,

Newcastle-upon-Tyne, WE15 780.

H.N. Hammond, 39 Outgang Road, Aspatria, Solver -English side: Carlisle, Cumberland.

K. Fox, Plot 45, Queens Road, Churchmead, Somerset/ Glouestershire: Nailsea, Bristol.

E.B.G. Henson, 17 South Green, Southwold, Suffolk Suffolk,

Sussex: M. Shrubb, Fairfields, Sidlesham,

Chichester, Sussex.

Yorks: D.B. Cutts, 81 Beverley Road, South Cave,

E. Riding Nr. Brough, E. Yorks.

Teesmouth: E. Crabtree, 6 Woodland Way, Long Newton,

Nr. Stockton, Co. Durham.

Wash: M. Allen, Dept. of Extra Mural Studies,

University of Cambridge, Stuart House,

Mill Lane, Cambridge.

WALES

Anglesey/ A.J. Mercer, having organised this area

Caernarvon/ has now handed over to:

Denbigh: Dr. P.J. Dare, Tan-y-allt, Trefriw, Caerns.

Cardiganshire: P. Davis, Ty Coed, Nr. Tregaron, Cards.

Carmarthenshire: D.H.V. Roberts, 38 Heol Hathren, Cwmann,

Lampeter.

E. Glamorganshire: P. Lansdown, 13 Dovedale Close, Penyland,

Cardiff.

W. Glamorganshire: R.J. Howells, Ynys Enlli, 14 Dolgoy Close,

West Cross, Swansea.

Merionethshire: P. Hope-Jones, Bedwen, Bro Enddwyn,

Dyffryn Ardudwy, Merioneth.

Pembrokeshire: J.H. Barrett, Anchor Cottage, Haverfordwest,

Pembs.

SCOTLAND

Ayr/Wigtown: A.G. Stewart, 31 St. Andrews Avenue,

Prestwick. Ayrshire.

Inner Clyde: E.T. Idle, having organised this area has

now handed over to:

I. Gibson, 41B Mossvale Street, Paisley,

Renfrewshire.

Firth of Forth: Dr. D.T. Parkin, having organised this area

has now handed over to:

J. Ballantyne, 6 Mansfield Place, Edinburgh,

EH3 6NB,

Moray/Cromarty/ A. Curries, Balnabeen House, Dumcanston,

Dornoch Firths: Conon Bridge, Ross and Cromarty.

North Solway: J.G. Young, Benvannock, Glencaple,

Dumfriesshire,

Tay/Eden: R. Summers, 353 Arbroath Road, Dundee.

EIRE

National Organiser: C.D. Hutchinson, 74 Marlborough Road,

Donnybrook. Dublin 4.

Co. Cork: K. Preston, The Rennies, Boreenmanna Road,

Cork.

Co. Dublin: C.D. Hutchinson, see above.

Co. Wexford: O.J. Merne, North Slob Nature Reserve,

Wexford.

NORTHERN IRELAND B. Coburn, 58 High Street. Newtownards,

Co. Down.

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