and from the marking of moulting adults in the Volga delta (A. Landsborough Thomson, 1941, *International Wildfowl Inquiry*, vol. I, pp. 84–105). The summer recoveries of the Danish birds were from northern Scandinavia and north-west Russia, while the Volga moulting birds evidently breed mainly to the east and south of the 'Western European winter population', especially beyond the Urals. More ringing must be done before the homogeneity of the British population can be asserted with confidence, but the scatter of winter records as well as of those shown here suggests that much mixing occurs.

The summer distribution of British-ringed Shoveler differs appreciably from that of the two previous species (Figure 3). The recoveries lie in a rather narrow belt running north-east to no farther than 66°N, 58°E, with no records in Russia south of Lake Ilmen. The Shoveler breeds over a very wide range in Europe and Asia, without being very numerous except in a region between 35°E and 90°E and 48°N to 55°N. Apparently birds from that part of the U.S.S.R. do not visit Britain extensively, our immigrants coming only from the northwestern extremity of the Palearctic range of the species.

The Tufted Duck ringed in Britain in winter have included some British-breeding birds, but most recoveries have come from northern Russia (southern limit about 47°N). The scatter of these recoveries accords well with the distribution of the species according to Isakov (*loc. cit*). He indicates an area of high density in southern Finland and the adjacent area of Russia (shaded in the map). Seven of the 21 recoveries plotted here were marked in London, by the London Natural History Society, and 12 in Essex. Others marked in Britain as ducklings have been recovered here in winter, as have some marked in Iceland, and it is likely that the preponderance of immigrants from the north-east suggested by the map is not a reliable representation of the composition of the total British winter population, although it may well reflect that of the London area.

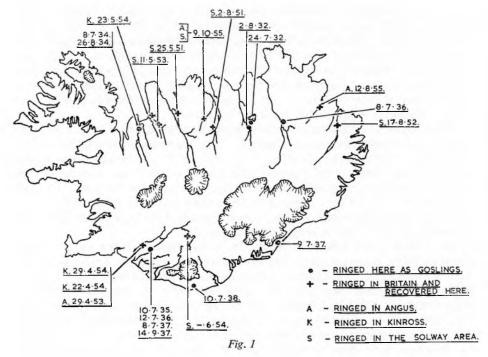
The three maps all convey the impression that the populations so far sampled (i.e. largely those of south and east England) come principally from north-west Russia and Finland.



RECOVERIES OF BRITISH-RINGED GREY LAG GEESE

By Hugh Boyd

FIFTY Greylags were ringed in Iceland between 1932 and 1938 (Fuglamerkingar I-XV År, published by Náttúrugripasafnið, Reykjavik, 1932-51). Thirteen were recovered. All had been ringed as juveniles. They had been captured in five localities in the north and three in the south of Iceland and were also widely scattered when found in Britain: eight in Scotland (Orkney one, Inverness one, Perthshire three, Dumfries two, Wigtown one) and five in Ireland (Wexford four, Kilkenny one). It could be inferred that the Iceland-breeding population



winters in Britain and probably nowhere else and that though the breeding population consists, of necessity, of rather small widely-scattered colonies, the inhabitants of the various colonies probably do not remain segregated in winter.

The Trust has not attempted to ring Greylags in Britain in a systematic way, but between March 1950 and November 1953 431 were caught, yielding 84 recoveries so far. Most of these have been published in earlier Annual Reports. There have been 12 overseas recoveries of these British-ringed Greylags, all from Iceland. The map (Figure 1) shows the distribution of these and also the places where the Iceland-ringed juveniles were ringed. The plotted localities are remarkably widely distributed amongst the areas known to be frequented by the species. Eight of the 12 recoveries have been in April, August or October. This possibly causes the recoveries to over-emphasise the peripheral distribution of the species in Iceland. In fact the Greylag nests farther inland for the most part, although not deep in the interior where it is replaced by the Pinkfoot, but lives nearer the coast before and after the breeding season. Since the human inhabitants of Iceland are largely concentrated in coastal areas it is inevitable that the geese are particularly liable to be shot at these times, although legally protected between 31 March and 1 August. The main values of these recent recoveries lies in the additional evidence they provide for the view that the Iceland population may be regarded as a single one.

This, too, is the merit of the recoveries within Britain of British-ringed birds, which are summarised by localities in Table I. Nearly all the major wintering localities have yielded recoveries, even though Greylags have been ringed in only four. The number of recoveries is too small to permit any detailed analysis of the kind attempted for Pinkfeet (Seventh Annual Report, pp. 107–122), but it is perhaps worth noting that there is so far no indication at all that older

Greylags have been more attached to the locality where they were caught than those ringed in their first winter. Some of the geese, caught in January and March, could not be classified by age. Of those that could be and have since been recovered, 42 were adults and 24 first winter. Amongst recoveries in the winter of ringing nine of 23 adults were taken near the place of capture, as compared with nine of 15 first-winter birds. This shows that much wandering occurs (as in Pinkfeet, for which the proportion of both adults and first-winter birds recovered in the same season near where ringed was about half). Recoveries in later years show a similar tendency for Greylags ringed when young to be no more likely than older ones to be found where ringed (4 of 9 first-winter, 7 of 19 adults). This result, which needs confirmation, is in direct opposition to that for Pinkfeet, which showed that those marked in their first winter were much less likely than older birds to recur in the same area in later years.

The recovery series (Table II), though small, is apparently able to provide a fairly precise estimate of the annual death-rate, using the method recently devised by Haldane (Acta XI Congressus Internationalis Ornithologici, pp. 454-458. Basle, 1955) which is applicable to data like these in which the series are still incomplete because some of the marked birds are still alive. The death-rate is calculated to be $23\cdot1\% \pm 2\cdot19\%$, similar to the estimated death-rates of Pinkfeet, $26\cdot0\% \pm 1\cdot6\%$ (Seventh Annual Report, pp. 99-106) and Whitefronts, about 28% (see pp. 80-84).

 ${\bf TABLE} \ \ {\bf I}$ Summary of Recoveries within Britain of British-ringed Grey Lag Geese

| | | | | Where Ringed | | | | | | |
|---|-----|-----|------------------------------|--------------|---------------|------------------------------|--------|--|--|--|
| Where Recovered | | | | Angus | Angus Kinross | | Solway | | | |
| | | | Number Ringed | 88 | 218 | Dumfries 81 Kirkcudbright | | | | |
| Cromarty Moray | | | Total Recovered 1 2 | 1 | 1 | <u> </u> | | | | |
| Angus Perth Fife Kinross | | | 4 10 6 8 | 2 3 1 | 7 5 7 | 2 - 1 | | | | |
| Lothians | | | 100 | - | 1 | _ | | | | |
| Dumfries Kirkcudbright Wigtown | | | 9 7 12 | 1 1 2 | 1 3 6 | 7 3 4 | | | | |
| Westmorland Lancashire | • • | | 1 | 1 | = | l | | | | |
| Co. Down Co. Clare Co. Dublin Co. Louth Co. Wexford | | | 4 1 1 2 2 | | 3 1 1 | 1 1 1 1 | | | | |
| Total | | ••• | 72 | 13 | 36 | 23 | | | | |

TABLE II

Recovery Series for Iceland-ringed and British-ringed Grey Lag Geese

| Marked | | No. Marked | Recovered (years after marking) | | | | | | | |
|--------------------------|-------|---------------|---------------------------------|-----|-----|-----|----|----------|-----|--|
| | | | 0–1 | 1–2 | 2–3 | 3-4 | 45 | 5–6 | 6-7 | |
| Iceland 1932-36 | | 50 | 7 | 3 | 1 | 1 | 0 | 0 | 1 | |
| Britain 19 50 –51 | | 47 | 5 | 4 | 4 | 0 | 1 | _ | | |
| Britain 1952 | | 88 | 8 | 2 | 6 | * | _ | <u> </u> | | |
| Britain 1953 | • • • | 296 | 37 | 18 | _ | _ | _ | _ | _ | |
| | | 481 | 57 | 27 | 11 | 1 | 1 | 0 | 1 | |

UGANDA

New Year 1956

The Director was invited by the Trustees of the Uganda National Parks to open a new Safari Lodge at Paraa in the Murchison Falls National Park. He was accompanied by Mrs Scott and in the course of a fortnight an impressive list of 145 species of birds was identified and many others were seen which were not. The Director submits the following report.

Our first introduction to Uganda birds was a day spent with the distinguished naturalist Dr Sandy Haddow of the Virus Research Institute. He showed us Crowned Cranes and Pelicans, Open-billed Storks, Hornbills, Touracos, the marvellous scarlet shrike known as the Black-headed Gonolek, two species of Bee-eaters, three of Sunbirds, and the delicate blue Fairy Flycatcher. But the climax of the day came during a canoe trip along the shores of one of the numerous arms of Lake Victoria which surround Entebbe. There is a fringe of papyrus swamp round these shores and outside it some thin rushes mingled with the beautiful purple waterlily. It was here that we came upon three African Pygmy Geese, Nettapus auritus. There is no doubt that the drake is among the most beautiful of all waterfowl. The back and crown are glossy green, the breast and flanks are rich pale chestnut, and the side of the head, which is white, has a large pale green patch edged smartly in black. This lovely pattern is set off by a bright orange bill. In flight there is a conspicuous white wing

