## SMALL CANADA GEESE IN GREAT BRITAIN AND IRELAND

## H. Boyd

ON 5th April, 1958, J. Sheppard found in a flock of Barnacle Geese Branta leucopsis on Islay, Argyll, a small dark short-necked Canada Goose. This record appeared in the "Report on rare birds in Britain and Ireland in 1958" (British Birds 53 : 153-72 at p.162) with the comment by the Rarity Records Committee "clearly an example of one of the small races of *B. canadensis* breeding in the North American Arctic." A note by Mr. Sheppard later appeared in Scottish Birds 1(9) : 274-5. Recent observations have produced three more examples of Canada Geese likely to be of transatlantic origin. It seems worthwhile to draw attention to the possibility of distinguishing such vagrants from wanderers from the feral stocks in the British Isles.

*B. canadensis* is a very variable species, including both the largest and smallest of all true geese. The breeding range of the species in North America is very wide, from about  $37^{\circ}$ N northwards to Alaska and the northern Canadian islands up to about  $72^{\circ}$ N and extending from the Pacific to the Atlantic. The largest geese breed in the south, the smallest in the north. In the east the body colour is pale, in the west it is dark. Taxonomists have expended much effort on sorting the geese into recognisable races. Their solutions differ considerably and none seems likely to achieve general approval. Earlier authors split the group into two, three and even four species. The latest reviewer, J. Delacour (*Waterfowl of the World*, vol. I, 1954) recognises a single species divided into twelve named races, with the possibility that these will have to be increased when more is known about the details of breeding distribution and migration, since many intermediates are to be found.

Where such confusion exists it is foolish to suppose that field observations can lead to individuals always receiving the right subspecific label. But for the purpose of detecting transatlantic vagrants in the British Isles this does not much matter, providing that observers can be persuaded to take the trouble to describe the geese they see in some detail.

In taxonomic and morphometric studies of Canada Geese in North America, wing length and length of exposed culmen have been found the most reliable criteria for differentiating groups (Hanson, Auk 68 : 164-173, 1951). For the field observer wing length is nearly useless, but the length of the bill, especially relative to the size of the head and neck, is helpful. Other relevent features are some measure of body-size, the relative length of the legs, the body colour, particularly that of the region immediately below the black neck, and the voice. Male Canadas tend to be larger than females and young birds are lighter in build than older ones, though not markedly smaller in linear dimensions. These differences help to blur the distinctions between races. The juvenile plumage, which is duller and softer than that of older geese, creates few practical difficulties, because most of it is quickly replaced by feathering indistinguishable from the adult plumage.

Of the twelve races named by Delacour two, possibly three, are believed extinct. Figure 1 depicts the ranges of individual size to be found within six of these races, using the crude measures of total length and weight; it also includes comparable figures for the five common species of geese in Britain. The Wildfowl Trust



Figure 1. Comparative length and weight of 6 races of Canada Geese and of other goose species found in Great Britain and Ireland.

Feral Canada Geese in this country are almost entirely derived from *canadensis* and possible vagrants from eastern Canada cannot be distinguished from them. The two other large races—*interior* and *moffitti*—are a.so not likely to be identifiable in the field, though the former tends to be slightly smaller and darker and the latter slightly larger, with longer bill and legs. *B.c. interior* is in any case a poorly differentiated race known to embrace at least four stocks with distinguishable breeding and wintering areas. *B.c. moffitti* has been less intensively studied but is also likely to be heterogeneous.

The races so far mentioned are all bigger than the Greylag Anser anser, itself the largest native British goose. The remaining six are all appreciably smaller than the Greylag. This is a useful criterion: any Canada Goose seen with other British geese which is no bigger than they are belongs to a race other than canadensis and hence is likely to be of transatlantic origin.

The six smaller races may be further grouped into three pairs. B.c. fulva and occidentalis are very noticeable dark on the breast and back: fulva is little smaller than canadensis, occidentalis is about the size of a large Pinkfoot A. brachyrhynchus. Both these forms live on the Pacific coast of southern Alaska and British Columbia and are nearly sedentary. Thus any dark goose

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attributable to either seen in Britain is almost certain to be an 'escape.' Few are in fact kept in Europe and no full-winged flocks are known at present.

B.c. parvipes, the Lesser Canada, and B.c. taverneri, Taverner's Canada, vary in size within the range of the Pinkfoot. They intergrade between themselves and with moffitti. The Lesser Canada is very similar in proportions and colouring to the larger southern races, especially moffitti, having a long bill and neck. Taverner's is similar but rather smaller, with shorter bill and neck, and is usually, but not always, darker in body colour. The two are not separable in the field and can perhaps most usefully be classed as 'Lesser Canadas,' tending to parvipes- or taverneri- type as the case may be. Taverner's, from the interior of Alaska, is relatively unlikely to occur as a vagrant in Britain, but (like parvipes) is kept in a number of European collections and so may occur as an escape. Lesser Canadas seen here are more likely to be vagrants than escapes, though a few collection birds are believed to be full-winged in Co. Down, N. Ireland.

The remaining two races, B.c. minima, the Cackling Goose, and B.c. hutchinsi, Richardson's Goose, are readily distinguished from the others by their very small size and by their voices. The voices of both are high-pitched and cackling, unlike the 'honk' of the larger races. The Cackling Goose is the smallest of all, overlapping the Brent. It has a tiny bill, a short neck and relatively long legs. The black on the neck runs into the dark grey brown of the upper back and the deep chocolate of the breast without any obvious break, a distinctive feature of the race. Part of a white ring may be present at the base of the black neck in front. Adults are easily identified, but immatures, which are usually lighter in colour below and duller on the back, may not be very obviously different from dark individuals of Richardson's Goose. The latter are usually larger, with relatively long and high bills, often nearly as pale-breasted as *canadensis* but occasionally much darker. Cackling Geese are kept and bred in several European collections, though no fullwinged birds are known. Richardson's Geese have rarely been kept and are not known to have bred in captivity in Europe, so are unlikely to give rise to escapes. The Cackling Goose breeds along the shore of Western Alaska and winters from southern British Columbia to southern California: Richardson's Goose breeds on several of the eastern Canadian Arctic islands and has recently been found breeding in west Greenland, and migrates along the western shore of Hudson Bay to the Middle West. Thus Richardson's Goose seems more likely to occur in Britain as a vagrant than does the Cackling Goose.

The description of the small Canada Goose seen on Islay in April, 1958, was submitted to Peter Scott as well as to the Rarity Records Committee. In his view the bird described was not *hutchinsi* but sounded like *minima*, despite the unlikelihood of an Alaskan bird reaching Scotland.

On 6th November, 1960, H. Boyd saw a very small Canada Goose in a flock of Greenland White-fronted Geese A. albifrons flavirostris near Loch Gruinart, Islay. This appeared to be B.c. hutchinsi: though it was a fairly dark-breasted individual for that race it was not dark or brown enough for minima. From its vigorously aggressive behaviour it was probably an adult, unpaired, but apparently attached to a family of six Whitefronts. The occurrence of this goose on the same island where the other was seen in 1958 suggests that both records might refer to the same individual, but this is

unlikely, since the 1960 bird was lighter in colour, and probably larger, than that of 1958. If the latter had been a first-year *minima* it would have become darker, not lighter, in adult plumage.

On 22nd November, 1960, E. A. Maxwell and H. Boyd saw two Canada Geese with Greenland Whitefronts on the North Slob, Co. Wexford. They were in the same small group but not apparently paired to each other or to Whitefronts. One was markedly smaller than the Whitefronts, the other much the same size while on the ground and appearing rather larger and longerwinged when in flight. The two Canadas differed from each other not only in body size but also in the proportions of their heads and bills and in body colour. The larger was paler-breasted and had a bill looking as long as its head, while the smaller, darker bird had a small bill, much shorter than its head. From their size both these birds were "Lesser Canadas": but though the larger appeared typical of parvipes the smaller seemed very much like taverneri. Part of the discrepancy may be attributable to a difference in sex, the larger bird looking and behaving like a male. It would in any case be unsound to argue that the difference in appearance required the birds to have originated in widely separated breeding areas, but the occurrence of a taverneri-type suggests that the geese are rather unlikely to have come from the eastern extremity of the range of parvipes, which is closest to Britain. The possibility that these geese were escapes from English or Irish collections has been checked and eliminated, so far as that can be done.

Both birds were still present in February, 1961, when they were seen, independently, by James Cadbury and Major R. F. Ruttledge. At that time a third Canada Goose was apparently paired to the larger of the two geese described above. This third goose was larger and probably a typical *canadensis*. Major Ruttledge believes that the Canada Geese which have appeared on the slobs in other years have also been *canadensis*.

Since the census of breeding Canada Geese in Britain in 1953 (N. G. Burton Jones, *Bird Study* 3 : 153-170, 1956) the distribution has been extended very considerably by introductions, for example, in Westmorland, Pembroke and Perth. and by geese escaped from collections establishing themselves, as in Dumbarton and Renfrew, so that the appearance of Canada Geese in unexpected places may often be evidence of an attempted introduction rather than of transoceanic vagrancy. It is, however, well worth while examining strays with some care and submitting detailed descriptions for the consideration of editors of local reports.

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