## **Immigrant Mute Swans in south-east England**

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The wild Mute Swan Cygnus olor at present breeds in Holland, Denmark, central and south Sweden, northern Germany and Poland, extending eastwards through Russia to Mongolia. It is stated to be a migrant to south-eastern Europe and south-western Asia. Scott and Boyd (1957) mention that Russian birds move south in winter, and also that some coastal flocks in Britain in winter may contain birds from overseas. Atkinson-Willes (1963) says that it is unlikely that immigration on a substantial scale occurs at present. Authors of county bird books covering south-east England, Ticehurst (1909), Harrison, J. M. (1953) and Walpole-Bond (1938), all thought it likely that occasional migrants reached our shores, particularly in times of severe weather when Whooper Swans Cygnus cygnus were prevalent.

Ringing of Mute Swans, both in Britain and on the Continent, which might provide concrete evidence of immigration, has only got under way in the last ten years. Some exciting recoveries following the hard winter of 1962-63 led J. G. H. to review his diary notes concerning the probable occurrence of genuine wild Mute Swans in his home county of Kent. The first mention is for 7th April 1947, when he visited the Wicks, near Dungeness, in company with Norman Moore. There they saw "a single Mute Swan which behaved just like a wild one. It kept its neck like a Whooper's and flew when we were 200 yards off. Undoubtedly, we thought, it must be a wild one. Norman has seen others before, but they are rare." Earlier in 1947 it will be remembered that there had been a prolonged spell of exceptionally severe north-easterly weather.

The next reference was on 17th January 1953, when a solitary adult Mute Swan was seen on flooded pastures on the Isle of Sheppey, near Harty. This was "an obviously wild bird, that kept its neck straight and took flight when a man walked within about 200 yards of it." These two entries are over five years apart and it is interesting to note that both of these birds took flight at approximately the same range. For a few days prior to this occurrence, north-east winds had been blowing, bringing snow storms. A considerable influx of White-fronted Geese Anser albifrons was noted in Kent at this time.

It was not until 1963 that the next wild Mute Swans were noted in Kent. On 7th January 1963, when the Arctic spell of weather was at its worst, with persistent east and north-east gales and blizzards, a herd of 15 adult and two sub-adult Mute Swans was found on the Riverhead gravel pit near Sevenoaks. Once again, their behaviour was quite distinct from that of the other resident birds. They were "swimming around quite suspiciously with their necks raised, always on the alert." They were, in fact, quite difficult to photograph. Next morning "while I was there, 12 of them, all adults, rose and circled while taking up a V-formation and then left, flying due west, calling." There was absolutely no doubt that these were hard weather migrants.

On 20th January 1963, J. G. H. visited the same water with his father, Dr. J. M. Harrison, and "there we found one young Whooper Swan walking about on the ice with five adult Mute Swans and one juvenile. All the Mutes had the posture and behaviour of wild birds." All were present at dawn next day, but had gone by 10.15, together with the young Whooper and three other newly-arrived adult Whoopers.

These diary notes clearly demonstrate a relationship between severe weather in north-west Europe and the occurrence of wild Mute Swans in Kent. Two other observations by the same writer suggest that Mute Swans migrate southwards into north-west Europe in autumn. On 15th October 1949, he saw a lone adult Mute Swan among a large gaggle of Greylag Geese Anser anser on Bishorst Island, in the Elbe Estuary. Later it parted from the gees and was extremely shy and alert. It flighted inland at dusk and returned to the estuary at dawn.

On 26th October 1949, a large-scale south-westerly migration was watched at the mouth of the River Krückau, on the north shore of the Elbe Estuary. Large numbers of Carrion and Hooded Crows *Corvus corone* and *C. cornix*, Redwings *Turdus musicus*, Chaffinches *Fringilla coelebs* and Starlings *Sturnus vulgaris* were on the move, accompanied by a few Peregrines *Falco peregrinus*, Merlin *Falco columbarius*, Sparrow Hawks *Accipiter nisus* and a Marsh Harrier *Circus aeruginosus*. Included in the migration were two skeins of ten and eight Mute Swans and a further pair. All were adults and all continued to fly south-westwards directly across the Elbe Estuary (Harrison, J. G. 1954).

As explained above, the evidence from ringing is all of a recent character for although over 15,000 Mute Swans have been ringed in Britain, all but a thousand of these have been marked in the last six years. Out of the 2,700 recoveries received so far only ten show movement overseas. All were ringed in the south-east of England and five were caught during the hard winter of 1962-63. These five were recovered as follows: Holland (March 1963), Schleswig-Holstein, West Germany (August 1965), south-west Sweden (January 1966), Orleans, France (May 1966) and Mecklenberg, East Germany (October 1966). Of the other five overseas recoveries, two were of birds caught on the south coast in the summer following the hard winter and may well have been immigrants that had stayed on. One was subsequently recaptured in Holland in December the same year, the other was found dead in Schleswig-Holstein, West Germany, in May 1964. Two other birds were caught on the Sussex coast, one in January 1961, the other in May 1961, and both were found dead on the north coast of France three months and two months later respectively. The fifth bird was caught whilst moulting on a reservoir in Essex in August 1959 and recaptured five years later moulting this time in Holland.

During the hard winter of 1962-63 there were a number of concentrations of Mute Swans on the south coast where normally only small numbers occur, and two of the foreign recoveries mentioned above came from birds ringed out of these flocks. It was also in one of these flocks that there was only the second record of a foreign-ringed Mute Swan to occur in Britain. A bird caught on 6th February 1963 at Pagham Harbour had been ringed in Holland in May 1961. The third record followed soon after when a bird found oiled at Wells-next-the-Sea, Norfolk, on 21st February 1963 carried a ring put on near Stockholm, Sweden, in July 1962. The only other foreign-ringed Mute Swan to reach Britain was ringed as a juvenile in Lithuania in August 1955, and found dead near Annan, Dumfriesshire, on 12th January 1959. The reasons for this movement must remain a mystery.

There is thus considerable supporting evidence from ringing that during the severe weather in 1963 there was an immigration into south-east England of birds that subsequently returned to France, Holland, the West and East German Baltic coasts and south Sweden, and which, in all probability, originated in those parts. It is therefore worth looking for further evidence from those countries for movements by their Mute Swans.

Berglund et al (1963) show that the Mute Swans in central and southern Sweden do not leave their summer breeding and moulting areas until forced to do so by the onset of ice conditions. From ringing results they demonstrate that there is a regular movement at this time to the south coast of Sweden, but that if the conditions become more severe and the sea begins to freeze, these birds will move on further to the German Baltic coast and to the east Danish islands. There has been a considerable volume of recoveries of Swedish-ringed Mute Swans since the above paper was written including those in the 1963 hard winter. Ninety-six of the 107 overseas recoveries are from the Baltic coasts of Germany and Denmark with two-thirds of them in early 1963, and small numbers in each of the succeeding winters, which clearly bear out the statements above. However, the 1962-63 winter also produced recoveries in West Germany (two), the west side of Denmark (two) and single ones in Holland and west France, as well as the Norfolk recovery mentioned earlier. Finally, as evidence of an even more easterly origin for some birds, a swan ringed in Sweden in February 1963 was recovered in the Brest region of Russia (55°N, 23°E) in June 1965.

If we look at the records of ringing in Denmark we find more evidence to relate the movements of Swedish birds to that country to severe weather conditions. Recoveries in Sweden of birds ringed in Denmark can be listed by month and year of ringing as follows: March 1947— 1; December 1953—1; February 1954— 9; February/March 1956—2; January 1959—1; May 1960—1; October 1961—1; March/April 1963—6. Thus no less than 18 out of 22 recoveries can be directly associated with hard winters. In February 1963 there was also the first recovery of a Danish-ringed Mute Swan from France, near Rouen.

French localities also appear in the Dutch recovery lists for the 1963 cold winter, together with the bird in Sussex already mentioned. Four birds were reported from the west coast of France and two from the Saône valley north of Lyons. In January 1962, another time of severe weather, there was also a recovery of a Dutch-ringed bird from the west coast of France. There have been two overseas recoveries notified of birds ringed in Holland during early 1963. One bird was recovered in south-west Sweden in November 1964, and the other in Mecklenberg, East Germany, in August 1965.

In conclusion, it now seems certain that in spells of severe weather immigrant Mute Swans reach the south-east of England, and that this is the tail end of a general hard weather movement which has its origins in Sweden and the Baltic. At the eastern end the movement is probably of regular occurrence and the observations of J. G. H. on the Elbe in October 1949 suggests that it extends further south and west than recent ringing recoveries would indicate. Also this part of it does not require the stimulus of hard weather which is undoubtedly responsible for the large-scale movements. None of the published literature dealing with the effects of the 1947 and 1962-63 cold spells on birds in this country makes any reference to the possible arrival of wild Mute Swans, other than a reference in a general article in the Shooting Times (Harrison, J. G. 1963). In view of the recent ringing recoveries it seemed desirable to place the observations forming the first part of this short paper on record.

## References

Published lists of ringing recoveries for birds ringed in Sweden, Denmark, Holland and Britain were found in Vår Fågelvärld, Dansk Ornithologisk Forenings Tidsskrift, Limosa and British Birds respectively. We are greatly indebted to the officers of the Swedish and Dutch Bird Ringing Schemes for providing us with all their Mute Swan recoveries up to date and giving us permission to make use of this material.
ATKINSON-WILLES, G. L. (Ed.) 1963. Wildfowl in Great Britain. 386 pp. Nature Conservancy Monograph No. 3. London: H.M.S.O.
BERGLUND, B. E. et al. 1963. Ecological studies of the Mute Swan in south-eastern Sweden. Acta Vertebratica 2 : 167-288.
HARPISON I. G. 1954. Parameter Mark 122 pp. Witherby London

Acta Vertebratica 2 : 167-288, HARRISON, J. G. 1954. Pastures New. 172 pp. Witherby, London. HARRISON, J. G. 1963. Cold comfort. The Shooting Times : 15th February, 1963. HARRISON, J. M. 1953. The Birds of Kent. Vol. 1. 510 pp. Witherby, London. SCOTT, P. and H. BOYD. 1957. Wildfowl of the British Isles. 64 pp. Country Life, London. TICEHURST, N. F. 1909. A History of the Birds of Kent. 557 pp. Witherby, London. WALPOLE-BOND, J. A. 1938. A History of Sussex Birds. Vol. 2. 384 pp. Witherby, London.

