

## Effects of recent hard winters on the Shelducks of the Ythan

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Shelducks (*Tadorna tadorna* (L.)) from the breeding colony on the Ythan estuary, Aberdeenshire spend the winter months moving gradually up the east coast of Britain on their return from moulting grounds on the North Sea coast of Germany. By the critical months of January and February, most of the Ythan birds have reached central Scotland; some in fact arrive back at the Ythan as early as the first week of January. Most of them, however, appear to spend the coldest part of the winter on the great tidal mud flats of the Eden estuary in Fife and in Montrose Basin in Angus, and it is at these stopping places that our birds would have experienced their greatest hardships during the severe winters of 1961-62 and 1962-63.

A count on 22nd February, 1963 at Edenmouth revealed 1,200 Shelducks, a number about average for that time of year as compared with counts by Boase from 1947 to 1954 (*British Birds* 52: 90-96, 1959). A count of 414 in Montrose Basin on 24th February, 1963 was considerably higher than any previous count in that area, Boase giving a February mean of 50 for the years 1952-1954. There have been no records of unusual numbers of dead or dying Shelducks found in either of these areas in

1963.

The early arrivals to the Ythan did however show some signs of the ravages of the hard weather. Many of the birds (perhaps 10%) had frost-bitten feet. In some this appeared only as inflamed swellings on the toes and webs, while in others the webs were completely necrotic and in extreme cases the webs had disappeared altogether. It was also noted that birds arriving back in the spring of 1963 were on the average about 90 gms. lighter in weight than those of 1962 (average 1370 gms.) which might well be a reflection of the scarcity of food during the prolonged freeze-up.

It was only after all the Ythan birds had returned to their feeding territories that a reduction in total numbers became obvious. Counts made during the height of the breeding season showed that the resident population had declined from 115 pairs in 1962 to 92 in 1963 (a reduction of 20%). This may or may not have been a direct consequence of the severe weather. There is a considerable amount of indiscriminate shooting both at Edenmouth and at Montrose (personal observation) and this rather than the climatic factor may have been at least partly responsible for the apparent drop in Shelduck numbers.

## The Shelduck population of the Mersey area in summer, 1957-1963

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The purpose of this report is to show that the summer population of the Shelduck (*Tadorna tadorna* (L.)) in 1963, following the extremely hard winter, was not below average on the coasts of Lancashire, Cheshire, and North Wales. Counts of the Shelduck in the estuaries of the Rivers Mersey, Dee, Clwyd and Conway (hereafter referred to collectively as 'Area A') were first organised in 1957. The object was to find out how the totals for this area compared with the scale of moult migration recorded annually in Cheshire since 1950 (R. H. Allen and G. E. Rutter, *British Birds* 49: 221-226, 1956 and later duplicated reports). Counts were made at the end of June, be-

fore migration commenced, and, from 1959 to 1962, again in mid-August when the moult-migrants had departed. The mid-August counts were abandoned after 1962 because the previous four years observations showed consistently that about nine out of ten adults migrated from Area A.

Table I compares the numbers of adults and young counted in Area A on 23rd June, 1963, with those found in late June or early July each year from 1957 to 1962. The numbers of adults found on the Mersey and Clwyd are below the average for the previous six years, continuing a trend of several years duration, but the total for the whole of Area A was very close to the aver-