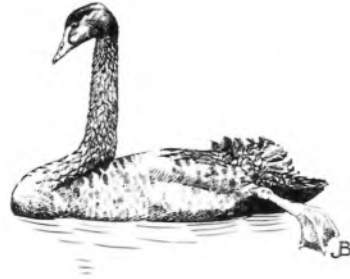


Moult and dispersal of Mute Swans *Cygnus olor* in East Scotland: a preliminary analysis



C.J. SPRAY and N.D. ATKINSON

Preliminary results were given from ringing studies and population censuses of Mute Swans moulting at Montrose Basin; a tidal inlet at the mouth of the River South Esk in N.E. Scotland (56°43'N, 2°33'W).

Records of a non-breeding Mute Swan flock go back to 1936, with a gradual increase in numbers recorded in the 1950s and 1960s. More detailed counts since 1952 show that maximum numbers fluctuated between 150 and 200 birds up until 1970, but since then have increased sharply to over 300 birds. Monthly counts show a distinct annual pattern, with a peak during the autumn moult period, and low levels in winter and, lowest of all, spring. Comparison of numbers counted by air surveys over a wider area of N.E. Scotland in 1983 reveal an influx into the area of nearly 200 birds between spring and autumn, rather than just a local redistribution of swans accounting for the autumn peak numbers.

Biometrics and population statistics were presented from a total of 670 swans handled during autumn moult catches in 1980, 1983 and 1986. Mean adult: 1st year ratio was 72:28, with male birds being dominant in number 54:46. The weights of adult males (mean: 10.5 kg) was higher than adult females (mean: 8.8 kg), with 1st year males (mean: 9.8 kg) heavier than both adult and 1st year females (mean: 8.1 kg). The stage of primary moult (as determined in 1980 from mean primary score) was more advanced in adults (2.66) than 1st years (2.33), though no difference was apparent between sexes.

Data were presented on the natal origin of moulting birds, fidelity to Montrose as a moulting location in subsequent years, and dispersion from the site in winter and spring. Males showed greater moult site fidelity than females in subsequent years, and adults greater fidelity than 1st year birds; with 38% of 1st year females being reported moulting at a different moult flock location in subsequent years.

C.J. Spray, Skipport, Main Street, Barnack, Stamford, Lincs PE9 3DN, UK.

N.D. Atkinson, Ealadhan, 5 Tolmount Crescent, Montrose, Angus DD10 9DQ, Scotland, UK.