

## Wintering Goosanders in Cumbria 1990/91

Goosanders are resident in Cumbria throughout the year occurring on all major river systems, lakes and some smaller tarns and ponds. They are less frequent visitors to tidal waters, although large numbers have been observed particularly on the Inner Solway, where 103 birds were found in August 1990. In the 1968-72 survey period for the BTO Atlas of Breeding Birds, Goosanders were recorded in 35 of Cumbria's 10 kilometre grid squares (42% of the total). The number of 10 kilometre squares occupied during the second "Atlas" survey period, 1988-91, had increased to 53 (62% of the total). The Goosander population outside the breeding season is more widespread. A total of 57 10 kilometre squares were occupied during the 1981-84 "winter Atlas" survey period rising to 65 squares (76%) in the 1990-91 survey.

### The 1990-91 Winter Goosander Survey of Cumbria

The 1990-91 Goosander survey had three principal objectives. Firstly, to investigate the distribution of wintering Goosanders in Cumbria and assess the population of the species in the county during the winter period. Secondly, to identify fluctuations on the number of birds present during the winter months and possible patterns of movement in the region. Thirdly, to evaluate the habitat preferences of Goosanders and particularly the importance of roosting sites in Cumbria.

The fieldwork was co-ordinated by local organisers within the 11 areas based on the major drainage basins of the county. Three Goosander counts were undertaken during the 1990-91 winter period in November, January and March timed to coincide with the 'National Wildfowl Count' dates. Records were accepted seven days either side of the "target weekends" to allow more sites to be visited. However, over 85% of visits were carried out on the specified dates and there was little evidence of duplication of numbers counted by local movements of birds. The specific locations of Goosanders observed during the survey were recorded and the results summarised within the 10 kilometre grid squares of the region. Counts were submitted by 123 fieldworkers covering over 750 kilometres of river bank, 95 lakes, ponds and reservoirs and several estuaries. Few standing waters or stretches of river likely to host significant numbers of Goosander were omitted.

### Survey of Wintering Gooseanders in Cumbria: Drainage Basins



