

Distribution of Whooper Swans, *Cygnus cygnus* in Britain and Ireland in relation to habitat type and flock social structure

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In January 1986 a census of the Iceland breeding population of Whooper Swans was conducted in all of Britain and Ireland. The questionnaire was designed in such a way as to identify some of the proximate factors involved in the swans' winter distribution, e.g. distribution in relation to habitat quality and to social regulation. Of the 918 sites that were recorded in the census 579 contained flocks of Whooper Swans at the time of observation. Twenty-one different habitat types were distinguished.

Flock size varied from 1 to 404 birds (mean 26 birds). Larger flocks were located in southern Ireland and the Scottish borders, and smaller flocks in southern England and Wales and E.C. Scotland. Flock sizes were smaller on open water habitats and larger on crops and grassland.

Flocks which had the largest proportions of young were found in EC and NE Scotland and NW England and northern Wales on arable habitats. The smallest proportions of cygnets were located in eastern Ireland where there was no significant interaction with arable land; coastal marshes appear to have supported flocks with a significantly smaller proportion of cygnets. When comparing flocks with and without cygnets in them, arable and pasture lands were most likely to contain cygnets.

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