

Common scoter *Melanitta nigra*

Status

Red listed: BD, BR, WL Non-SPEC Schedule 1 of WCA 1981 and Wildlife Order NI 1985 Annex II/2 of EC Wild Birds Directive

National monitoring

National survey: 1995 (WWT/IWC/RSPB/JNCC/SNH), 2005. Rare Breeding Birds Panel. WeBS.

Population and distribution

This species started breeding in northern Scotland in the mid-19th century. The main populations are in the north and west of Britain and Ireland. The breeding population (particularly in Northern Ireland) has suffered both population decline and range contraction; breeding numbers in the UK are estimated to be 95 pairs (Underhill et al 1998). Wintering flocks are difficult to count, with wintering grounds in the North Sea, mainly offshore and in sheltered bays. The UK wintering population was estimated to be 37,550 individuals (*Population Estimates*).

Ecology

Common scoters breed in dense vegetation on the scrub-covered islands or uninhabited shorelines of lochs. In Ireland, these areas are usually large loughs (sometimes >100 km²) with complicated shorelines and island systems. In Scotland, the breeding sites can be larger lochs, remote hill **loch**ans, small moorland lochs and pool systems. Slowflowing **rivers** are occasionally used in the main breeding areas (eg the Flow Country). A clutch of 6–8 eggs is laid between late May and midJuly. There is a single brood and most of the young fledge by the end of August. Winter flocks occur on open coastal waters where shallow bays with high bivalve populations are particularly favoured (*Red Data Birds*).

Breeding season survey – population

Most of the methods given here are based on work in the Scottish flow country (Hancock 1991) and on methods used for the British Isles breeding survey (Underhill et al 1998).

Information required

- maximum count of females
- details of presence and absence at all sites checked.

Number and timing of visits

Three visits: first visit 24 April to 7 May; second visit 8–21 May; third visit 22 May to 4 June.

Time of day

Any time.

Weather constraints

Avoid poor weather.

Sites/areas to visit

Sites where scoters are known to have bred and potential sites within the range of common scoter.

Equipment

- 1:25,000 map of the lake or water system to be surveyed
- telescope
- · Schedule 1 licence.

Safety reminders:

When working alone in remote areas, ensure someone knows where you are and when you are due back. When working near water, work in a team of two wherever possible. A compass and maps should always be carried. Spare warm clothing, a plastic survival bag, first-aid kit and food supplies should be carried.

Disturbance

Common scoters are not readily put off their nests, but observers should not go close to, or on to, known nesting islands. Observers should avoid disturbing adult scoters with chicks, especially if the chicks are small. Any disturbance could distract adults and leave chicks more vulnerable to predation.

Methods

Scoters begin returning to their breeding lakes in mid- or late April, the main arrival usually being within a week of the first birds. Mark the area to be surveyed on a map. Scan the area systematically from one or more suitable vantage points. One vantage point will be sufficient for small moorland lochans, but for slightly larger lakes more than one observation point will be necessary. If parts of the shoreline are not visible, walk the shoreline to ensure complete coverage. Walking surveys are not useful along very complex loch shorelines where islands are also present; in this case, use a boat.

Divide the lough into sections and systematically traverse each section, scanning for birds. Ensure that there are two observers in the boat and carefully scan all of the shoreline and islands and all areas of water – scoters often feed very close inshore or loaf on banks.

Report negative results as well as positive ones. An example recording form (as used in the 1995 common scoter survey) is given in Figure 1; the following are definitions of the terms that should be recorded on the form.

Term	Definition
Site Name	Name of site.
Grid Ref	Two-letter and six-figure OS grid reference.
Pairs	The number of common scoters seen in pairs.
?Pairs	The number of common scoters where birds were
	probably paired but pairing was not obvious.
ರಿರೆ	The number of single adult male common scoters
	(over one year old).

Imm. 33 The number of single first-year male common scoters.

PP The number of single female common scoters (this will

include first-year and older females).

Unsexed It is possil or unaged scoters wi

It is possible that very poor views of flying common scoters will not enable the observer to determine the sex or age of the bird. Enter all such observations in this column, but give as much additional detail as possible regarding possible sex/age.

In some situations, for example on the larger loughs in Ireland, it is more difficult to classify birds as either pairs, probable pairs or single birds because they are more likely to form groups. If this problem is encountered and observations do not reveal any information on the likely number of pairs, note the number, sex and age of each bird and make clear that these birds formed one group.

Report the number of females, pairs and probable pairs (?pairs). The population estimate is expressed as the number of females present, regardless of pairing status.

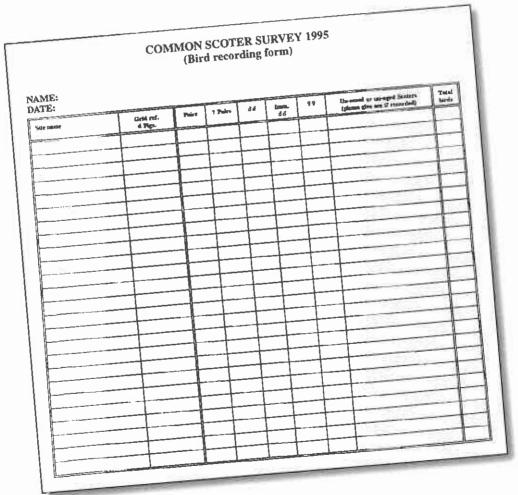


Figure 1
The recording form used for the 1995 common scoter survey. The same type of information is relevant to smaller-scale common scoter surveys.

Breeding season survey – productivity

Information required

- number of fledged young per pair
- size and number of broods with ducklings classified into four approximate size-classes.

Number and timing of visits

Two visits, mid-July to mid-August (including one in the second week of August).

Weather constraints, Sites/areas to visit, Equipment, Safety reminders, Disturbance

As for the population survey (above).

Methods

Visit all sites where breeding pairs have been seen in order to look for any young. Some broods are attended by the female through to fledging but others are abandoned soon after hatching. Ducklings can be very difficult to spot. On smaller lochs, it is best to use two observers (standing 50–100 m apart) to locate chicks, especially on complex pool systems. As for the population survey, the larger and more complex sites should be surveyed by boat. Broods can be very difficult to find, but when approached they do tend to move out from the shoreline rather than seeking cover, and only dive when approached very closely.

The number of young, their size and the number of broods found on each site should be reported. Broods sometimes join together. While broods of different ages can be distinguished, this is impossible for combined broods of the same age.

It is important to report negative results, ie sites with breeding adults but where no young were seen on a visit. Record the size of the young seen on each visit as a fraction of adult size (eg about $\frac{1}{4}$, $\frac{1}{4}$ – $\frac{1}{2}$, $\frac{1}{2}$ – $\frac{3}{4}$, $>\frac{3}{4}$ or the same size), although this can be difficult if no adults are present. Estimating the size of the young (even roughly) can help to distinguish between different broods in subsequent visits and can be used to estimate duckling survival. The later the checks (ie into the first week in August) the more difficult it can become to distinguish adult females from large juveniles; good views of the birds are required to do this. Some extra checks on scoter broods after 6 August may help to assess survival of chicks and locate any later broods.

Report the number of broods, the size of the brood and the approximate size-class of each young scoter. Report fledging success as the estimated total number of fledged young divided by the peak count of paired birds.

Winter survey

See the generic survey methods section on WeBS counts. Winter counts are highly variable, with huge numbers in some years and many fewer in others (probably dependent on bivalve populations). Only coordinated aerial surveys would give a comprehensive picture of the UK population. Two main generic methods are outlined in the generic



survey methods section: see Waterfowl and seabirds at sea and Inshore marine waterfowl.

References

Hancock, M (1991) Common Scoter in the Flow Country, Results of the 1991 Survey: comparison with previous years and suggested monitoring method. RSPB unpubl.

Underhill, M.C., Gittings, T., Callaghan, D.A., Hughes, B., Kirby, J.S. and Delany, S. (1998) Status and distribution of breeding common scoters. *Melanitta nigra nigra* in Britain and Ireland in 1995. *Bird Study* 45: 146–156.