

# Wildfowl Disturbance

## Title

Waterfowl Breeding Disturbance 1980

## Description and Summary of Results

Wintering populations of waterfowl in Britain had been counted regularly for some time, and included many birds which come into Britain from breeding grounds to the north and east. In contrast the only previous survey of breeding waterfowl in Britain was carried out from 1965-1970 by the Wildfowl Trust overlapping with the 1968-1972 BTO Breeding Atlas which had given a definitive view of the distribution although not the numbers. There are substantial numbers of some species of breeding waterfowl -- Little Grebe *Tachybaptus ruficollis*, Great Crested Grebe *Podiceps cristatus*, Mallard *Anas platyrhynchos*, Tufted Duck *Aythya fuligula*, Mute Swan *Cygnus olor*, Canada Goose *Branta canadensis*, Moorhen *Gallinula chloropus* and Coot *Fulica atra* being the commonest -- and smaller numbers of many others including a fair number of feral and introduced species.

The demand for water-based recreation had increased greatly over the previous 20 years or so, and this survey was therefore designed to determine the numbers of some of these species on different waters, and more specifically to find out what were the effects of recreation by humans on breeding numbers and productivity. (The survey was part of a wider project covering the effects of recreation on waterbirds at all seasons.)

Results were received from 359 sites covering a range of habitat types although not all were counted in every month. Mallard was the commonest and most widespread species followed by Tufted Duck and Coot. A by-product of the survey was some of the most detailed information collected to that point on the breeding requirements and densities of the species concerned. This confirmed that densities and breeding productivity were not noticeably lower than in areas known to be good breeding habitat in other areas of Europe and North America.

The commonest recreational activities were natural history (63% of sites) and 'informal' (57%). Coarse fishing was recorded on 48%, game fishing on 35% and boating of various kinds on up to 25% of sites and with most sites recording 1-4 activities of those specifically asked about. There were, however, very few consistent results when investigating the intensity of such activities on the numbers of adult birds or their broods. Only Teal *Anas crecca*, Moorhen and Little Grebe showed significantly lower adult densities at more intensively used sites in more than one month, with the Moorhen also showing lower brood variables.

Overall it seemed that recreational activities had not had a major impact on overall waterfowl numbers or their breeding success so far. However it does not mean that there will not be local effects on any particular site and the policy of controlled development and separation of activities had so far been generally acceptable.

### **Methods of Data Capture**

Observers were asked to count all the adult waterfowl each month from March to August on a series of inland waters ranged throughout Britain. They were asked to distinguish sexes (where possible) and to record the number and size of broods of young if these were found.

They were also asked to fill in a form on the recreational use of the site, listing what was allowed, what was taking place, any seasonal restrictions and the intensity on a scale from 1 -- continuous heavy use, through 2 -- periodic heavy use (eg weekends only), 3 -- fairly continuous medium use, 4 -- periodic medium use, 5 -- low level to 6 -- no recreational use. Activities included boating (sailing, powerboating, waterskiing etc), swimming, fishing (coarse, game), natural history and others.

### **Purpose of Data Capture**

To assess the impact of water-based recreation on waterfowl on enclosed inland waters and to provide recommendations on how the different interests can be integrated.

### **Geographic Coverage**

All of Britain with sites broadly following the availability of inland waters.

### **Temporal Coverage**

The breeding season of 1980 with counts requested monthly from March to August.

### **Other Interested parties**

The project was jointly run by the BTO with the Wildfowl Trust (now Wildfowl and Wetlands Trust).

Funding was from the Nature Conservancy Council and the Sports Council.

### **Organiser(s)**

Chris Tuite, employed by the Wildfowl Trust.

### **Current Staff Contact**

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### **Publications**

A full report on the survey was produced as a separate publication:

Tuite, C.H. n.d. (but ca 1982). The impact of water-based recreation on the waterfowl on enclosed inland waters in Britain. *Report to the Sports Council and the Nature Conservancy Council.*

A paper on the numbers of breeding waterfowl in respect of different types of waterbody is:  
Tuite, C.H. & Owen, M. 1984. Breeding waterfowl on British inland waters in 1980.  
*Wildfowl* 35: 157-172.

The survey was noticed in *BTO News* numbers 103, 113, 122 and 136.

**Available from NBN?**

No.

**Computer data -- location**

The data were input at the time by the Wildfowl Trust. Current location unknown.

**Computer data -- outline contents**

Unknown.

**Computer data -- description of contents**

Unknown.

**Information held in BTO Archives**

The data sheets and forms were all sent to the Wildfowl Trust. Nothing is held by BTO.

**Notes on Access and Use**

**Other information**

**Notes on Survey Design**

**Specific Issues for Analysis**