



33.1 Introduction

The Black-necked Grebe *Podiceps nigricollis* is the most social of the grebes, with pairs nesting in colonies and small flocks forming outside the breeding season. Its preferred habitats are shallow inland lakes, ponds, lochs and reservoirs which have extensive water plants. Both sexes work together to build a floating nest, consisting of a heap of water plants and dead leaves, usually well hidden in dense reeds or sedges in shallow water. Several nests may be built before one is selected. At suitable sites, colonies of up to 10-12 pairs may form. Eggs are usually laid during late April to July, clutch size 3-4. Most young have fledged by the end of August and can often be seen riding on their parents' backs when small. During the breeding season they mostly feed on insects such as water beetles, dragonfly larvae, caddisflies and mayflies. Small fish are also eaten, particularly during the winter.

In August, they start to leave the breeding areas, birds from central and northern Europe move south-east or south west, and some reach Britain by November. In winter small concentrations occur on the London area reservoirs and in several south coast estuaries and harbours. Return migration starts during March when birds reappear at breeding sites.

33.2 Current status

Black-necked Grebe is a rare breeding species in the UK with approximately 70 pairs breeding nationally per year, almost entirely north of a line from the Wash to the Severn estuary. The British population had never numbered more than 10 pairs before 1970, since then the population has fluctuated, but has sustained a slow but steady increase. The breeding records come from four or five main colonies with occasional pairs elsewhere. The wintering population is about 120 birds nationally.

Black-necked Grebes first bred in England at Tring Reservoirs in Hertfordshire in 1918. They maintained a small irregular breeding population up to 1928 but did not breed again in Hertfordshire until 1990 when a pair raised three young at Hilfield Park Reservoir. Although present in almost every spring subsequently, they did not breed again at this site until 1998 when a single pair raised four young. The species has bred in all years since then and has slowly increased in population but has not enjoyed good breeding success in a number of these years.

In 2003 Hilfield Park Reservoir held six pairs, representing possibly 8% of the national breeding population. Ten young were raised at Hilfield, a rate of 1.7 young per pair, which exceeds the 2002 productivity figures from the largest single site for this species in north-west England.

33.3 Current factors causing loss or decline

33.3.1 Loss of suitable habitat and changes in land use

Historically natural wetlands in Britain have suffered greatly from drainage and conversion to agricultural usage (e.g. the fens). In recent years this has been offset somewhat by the construction of man-made wetlands, often as a bi-product of mineral extraction or the requirement for potable water resources. In Hertfordshire there are no natural water bodies, but considerable numbers of man-made lakes, gravel pits and reservoirs which are mainly grouped in the Lea and Colne valleys with reservoirs also in the north west of the county at Tring.

There has generally been a lack of positive management of wetland sites for wildlife. Most have, at best, multiple usage where wildlife shares the same water body with angling or sailing activities for example. Many man-made wetlands are ephemeral in nature; unless managed, open water and emergent aquatic vegetation dries out through natural succession: banks become overshadowed by willows and the emergent vegetation becomes shaded out. There has also been a loss of man-made wetlands to development pressures, i.e. landfill for agriculture and new housing.

33.3.2 Human disturbance

The increase of recreational activities such as angling and sailing has reduced the number of sites suitable for Black-necked Grebes as they prefer to nest on quiet undisturbed waters.

The local population may also have been subject to targeting by egg thieves. There was a possible incident at Hilfield Park Reservoir in 2003 to which Three Valleys Water, the Police and the RSPB responded extremely well.

33.3.3 Nest flooding

Locally, heavy rain during incubation has caused nests to flood. The HMWT voluntary warden, has produced some analysis of rainfall/breeding success during good and bad years. The floating nests at Hilfield appear to be constructed of a single type of pondweed attached to reed stems. The extremely flat platform nature of construction makes them particularly vulnerable to changes of water level.

Additionally, the open nature of Hilfield Park Reservoir means that any strong north/north-westerly wind has an opportunity to build significant wave heights by the time they reach the south bank. The preferred nest sites appear to be on the outer edge of the reed bed making them extremely vulnerable to flooding from wave action.

33.3.4 Isolation of populations

Restriction to a few isolated sites nationally leaves the population vulnerable to chance events.

33.3.5 Predation

The effects of predation are relatively unknown, but Pike and Mink have been implicated at sites where breeding success is low.

33.4 Current action

33.4.1 Legal status

In the UK the Black-necked Grebe is afforded full protection as a Schedule 1 breeding bird under the Wildlife and Countryside Act 1981(as amended). It is also a Red Data Book species and is on Appendix II of the Berne Convention on the Conservation of European Wildlife and Natural Habitats, 1979.

33.4.2 Mechanisms targeting the species

The population and breeding success of known colonies are monitored annually by the RSPB and the Rare Breeding Birds Panel.

There are local monitoring activities carried out in north-west England where the largest concentrations of Black-necked Grebes breed.

33.5 Black-necked Grebe Action Plan**Objectives, actions and targets**

Objective 1: To maintain or increase the population of Black-necked Grebes at Hilfield Park Reservoir

Target: To implement habitat enhancement work at Hilfield Park Reservoir by 2008

Action code	Action	Target start date	Target end date	Lead partner	Other partners
BNG/A/1.1	Set up a Working Group to oversee the implementation of the plan	2003	2003	HBC/ HMWT	TVW, Hertsmere BC, RSPB
BNG/A/1.2	Liaise with other monitoring groups in the UK to compare data on habitat, food types, water quality, etc	2003	2004	Working Group	
BNG/A/1.3	Monitor the breeding success and note any significant factors effecting this		Annually	HBC/ HMWT	
BNG/A/1.4	Survey breeding habitat and produce a breeding habitat enhancement plan	2003	2004	HMWT	HBC
BNG/A/1.5	Identify and survey potential food sources for young	2004	2006	HMWT	HBC
BNG/A/1.6	Investigate the viability of artificial mechanisms to protect the nest sites (rafts, booms to lessen wave action, etc)	2004	2005	TVW	HMWT, HBC
BNG/A/1.7	Develop a contingency plan for protecting the site against wilful disturbance	2003	2004	HMWT	TVW, RSPB, Police Wildlife Liaison Officer

Relevant Action Plans:*Local Plans*

HMWT Hilfield Reservoir Management Plan

Hertfordshire Plans

Wetlands

National Plans

Eutropic standing waters

Abbreviations (Partners)

HBC – Herts Bird Club

HMWT – Herts & Middlesex Wildlife Trust

RSPB – Royal Society for the Protection of Birds

TVW – Three Valleys Water

Contact

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