

A6.35 Tufted Duck *Aythya fuligula* (non-breeding)

1. Status in UK

Biological status		Legal status	Conservation status
Breeding	✓	Wildlife and Countryside Act 1981	Species of European Conservation Concern (UK) Species of Conservation Importance All-Ireland Vertebrate Red Data Book
		General Protection Schedule 2(1) Schedule 3(3)	
Migratory	✓	Wildlife (Northern Ireland) Order 1985	
		General Protection Schedule 2(1)	
Wintering	✓	EC Birds Directive 1979	
		Annex II/1 Annex III/2 Migratory	

2. Population data

	Population sizes (individuals)	Selection thresholds	Totals in species' SPA suite
GB	60,600	600	4,476 (7% of GB total)
Ireland	40,000	400	20,471 (51% of all-Ireland total)
Biogeographic population	1,000,000	10,000	24,947 (3% of biogeographic population)

GB population source: Kirby 1995a

Ireland population source: Way et al. 1993

Biogeographic population source: Rose & Scott 1997

3. Distribution

The monotypic Tufted Duck has a wide global breeding distribution across northern Eurasia from Iceland to the Bering Sea, generally between 45° and 70°N (Scott & Rose 1996). It is resident on the breeding grounds in temperate regions of western Europe, but continental northern populations are highly migratory. These birds winter in temperate, western Europe, sub-Saharan Africa, around the Black and Caspian Seas, and eastwards through the Indian subcontinent to southern China and Japan (Scott & Rose 1996).

Tufted Ducks occur across much of central and north-western Europe in winter, although the distribution is more discontinuous in Iberia and the Mediterranean basin. Large numbers of birds wintering in the Baltic may move to The Netherlands, Britain and Ireland in hard winters (Durinck *et al.* 1984; Ridgill & Fox 1990).

In winter, Tufted Ducks are highly gregarious, preferring large, freshwater lakes, ponds and reservoirs, though they are also found in estuaries, along sheltered seacoasts and on brackish inland seas in winter (Scott & Rose 1996). They feed by diving, with 80% of the diet consisting of animal material, particularly the exotic Zebra Mussel *Dreissena polymorpha*, but also feed on seeds and green parts of aquatic plants, aquatic insects and crustaceans (Olney 1963; Owen *et al.* 1986).

Although Tufted Ducks are found in flocks of several thousand birds in parts of Europe in winter, numbers in the UK rarely reach these levels. Instead, the species is widely distributed in smaller aggregations (Scott & Rose 1996). Nevertheless, large numbers (>20,000) occur at Loughs Neagh and Beg in Northern Ireland, and about ten sites, mainly gravel pit complexes and reservoirs, support about 1,000 or more birds each.

Within-winter ringing recoveries indicate that Tufted Ducks move only short distances. Colour-marking studies in north-east England indicate that more than 40% utilise more than one site within the region during the course of a winter (J. Coleman pers. comm.)

4. Population structure and trends

Five biogeographic populations of Tufted Duck are recognised (Rose & Scott 1997), of which two occur in Europe: north-west Europe (numbering *c.* 1,000,000 individuals); and central Europe, Black Sea, Mediterranean (*c.* 600,000) (Rose & Scott 1997). Numbers wintering in Britain amount to about 60,600 individuals (Kirby 1995a) which constitutes approximately 6% of the north-west European population.

The population trend of non-breeding Tufted Duck in north-west Europe has been stable over the 23-year period from 1974–1996 (Delany *et al.* 1999), although looking at only the last ten years (*i.e.* 1987-1996) an increasing trend is apparent. In Britain, monitoring has shown the population trend over the last two decades to be amongst the most stable of all waterbirds (Pollitt *et al.* 2000). In contrast, numbers wintering in the Republic of Ireland have fluctuated markedly through the 1990s (Colhoun 2000). The recent increase in north-west European wintering numbers may be a result of interchange between the central European, north-west European and western Mediterranean populations. However, it has also been attributed to the species' adaptability to new habitats artificially created by man and the colonisation of north-west Europe by Zebra Mussels (Scott & Rose 1996). Tufted Ducks are believed to be particularly adept at exploiting this food resource, and high mussel densities may increase winter survival rates (Mednis & Zomerdijsk 1997).

Ringing recoveries from one winter to another indicate that the majority of birds use sites less than 50 km apart. Colour-marking studies in north-east England have shown that at least 50% of Tufted Ducks return to the same site each winter (J. Coleman pers. comm.). However, Tufted Ducks demonstrate cold weather movements, often on a large scale, and influxes into northern England from continental Europe occur regularly (Ridgill & Fox 1990).

5. Protection measures for population in the UK

SPA suite

In the non-breeding season, the UK's SPA suite for Tufted Ducks supports, on average, 24,947 individuals (calculated using WeBS January site totals for the period 1992/93 to 1996/97 – see section 4.4.1 and Appendix 2 for further explanation). This total amounts to about 8% of the British population, about 51% of the all-Ireland population, and about 3% of the international flyway population. The suite comprises seven sites where Tufted Duck has been listed as a qualifying species (Table 6.35.1).

6. Classification criteria

The single site (Lough Neagh and Lough Beg) in the UK supporting more than 1% of the international population was considered under Stage 1.2, and was selected after consideration of Stage 2 judgements. A further six sites were considered and selected under Stage 1.3 (see section 5.3) with Tufted Ducks identified as an important component of a wider non-breeding waterbird assemblage.

The sites are distributed through most of the range of the population in the UK, from Loch Leven in eastern Scotland, to Lough Neagh and Lough Beg in Northern Ireland, and sites on the east coast of England. All these sites are multi-species SPAs, of importance also for a range of other waterbirds. There is a very long recorded history of occupancy at most of these sites (Boyd in Atkinson-Willes 1963).

As the selection of sites under Stages 1.2 and 1.3 resulted in a suite which includes the main population centres of non-breeding Tufted Duck in the UK, and as the species is otherwise widely dispersed, it was not considered necessary to select additional sites using Stage 1.4.

Distribution map for non-breeding Tufted Duck SPA suite

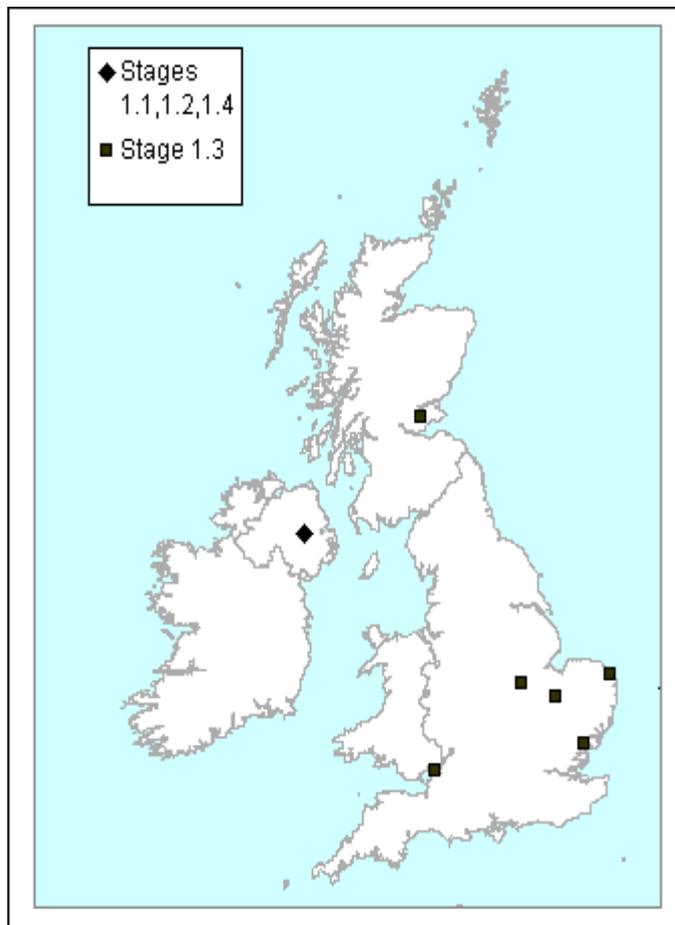


Table 6.35.1 – SPA suite

Site name	Site total	% of biogeographical population	% of national population	Selection stage
Abberton Reservoir	1,864	0.2	3.1	1.3
Broadland	1,336	0.1	2.2	1.3
Loch Leven	3,362	0.3	5.6	1.3
Lough Neagh and Lough Beg	22,372	2.2	55.9 (Ire)	1.2
Ouse Washes	986	0.1	1.6	1.3
Rutland Water	2,289	0.2	3.8	1.3
Severn Estuary	796	0.1	1.3	1.3

TOTALS	24,947 (in January)	2.5%	7.5% 51.2% (Ire)
---------------	---------------------	------	---------------------