

A6.29a Gadwall *Anas strepera* (breeding)

1. Status in UK

Biological status		Legal status		Conservation status	
Breeding	✓	Wildlife and Countryside Act 1981	General Protection Schedule 2(1) Schedule 3(3)	Species of European Conservation Concern	SPEC 3 Unfavourable conservation status (vulnerable) but not concentrated in Europe
Migratory	✓	Wildlife (Northern Ireland) Order 1985	General Protection Schedule 1(2) Schedule 2(1)	(UK) Species of Conservation Importance	Table 4
Wintering	✓	EC Birds Directive 1979	Annex II/1 Annex III/2 Migratory	All-Ireland Vertebrate Red Data Book	Rare

2. Population data

	Population sizes (pairs)	Selection thresholds	Totals in species' SPA suite
GB	770	8	111 (14% of GB population)
Ireland	30	1	No SPAs selected in Northern Ireland
Biogeographic population	10,000	100	111 (1% of biogeographic population)

GB and Ireland population source: Gibbons et al. 1993

Biogeographic population source: Rose & Scott 1997

3. Distribution

The Gadwall has a wide but discontinuous global distribution, breeding in wetlands within temperate steppe and other grassland habitats between about 40°–60°N. It is a widespread breeding species in the Prairie Pothole regions of North America where birds migrate to more southern areas in winter. Gadwall breed across Eurasia from Iceland and Iberia in the west, east to near Lake Baikal at about 100°E. A small number of isolated populations occur further east in China, Kamchatka and Alaska.

The nominate sub-species of Gadwall *A. s. strepera* has a Holarctic population. The only other sub-species (*A. s. couesi* described from the Pacific) is now extinct.

Almost three-quarters of the European breeding population occur in Russia, where the distribution is rather even. Since the 19th century, the population has expanded westwards

throughout the rest of Europe, giving a highly discontinuous distribution westward as far as Iceland (Tucker & Heath 1994).

In the UK, the breeding Gadwall population is spread throughout south-east England, East Anglia and the Midlands, with the breeding stronghold in Norfolk. Gadwall inhabit inland, eutrophic, still waters in lowland areas, including reservoirs and flooded gravel pits, as well as marshy grassland and flood meadows (Fox 1988; Gibbons *et al.* 1993).

4. Population structure and trends

The European biogeographic population is 10,000 pairs and the population breeding in the UK is estimated at 770 pairs. In the last few decades, there has been a major increase in both the range and numbers of breeding Gadwall, both in the UK and on the near continent. The breeding Gadwall population predominantly originates from introduced birds (Gibbons *et al.* 1993; Fox 1988). Around 1849 at Dersingham, Norfolk, two wild birds were caught and pinioned and established a breeding population which spread to Breckland, with the probable influence of continental migrants (Holloway 1996). Between the 1950s and 1960s the Gadwall population increased and became widespread in the county. Further populations became established at Chew Valley Lake (following escapes from the WWT's collection at Slimbridge), Sevenoaks in Kent, Leicestershire and Cumbria (all following the release of hand-reared birds by wildfowlers) (Fox 1988; Fox & Salmon 1989).

Increases in September numbers (*i.e.* numbers after the end of the breeding season) in areas where introductions have taken place correlate well with the documented growth in nesting pairs (Fox 1988), and reflect the ability of the naturalised populations to exploit an increase in available breeding habitat. Longer-established populations in south-east Scotland and East Anglia show more stable population trends, reflecting the sedentary nature of the species and more complete habitat occupancy (Fox 1988). Thus, in Scotland, Loch Leven was first colonised in 1909 and has been the nucleus of the Scottish population ever since, with between 25–40 pairs breeding each year (Gibbons *et al.* 1993).

There have also been significant increases of breeding birds in continental Europe, where the role of climate change could be involved (Cramp & Simmons 1977), although the extent of the contribution that migrant birds have had on the UK breeding population is not known.

The total British population was estimated at 580–590 pairs in 1983, representing a 4.5% annual increase between the years 1960–1985. This increase was not uniform throughout the birds range, with a stable population in East Anglia and increases of 9.5% and 9% in south-west and south-east England, where reservoirs are more numerous. There was a corresponding rise in the proportion of the population associated with reservoirs from 14% in 1970 to 49% in 1984 (Fox 1988).

5. Protection measures for population in UK

In the breeding season, the UK's SPA suite for Gadwall supports, on average, 111 pairs. This amounts to about 14% of the British breeding population and 1% of the international population. In an all-Ireland context, no sites have been selected in Northern Ireland for breeding Gadwall. The UK SPA suite is comprised of a single site (Table 6.29a.1) where Gadwall has been listed as a qualifying species.

6. Classification criteria

The single site (Ouse Washes) in the UK that supports more than 1% of the international population was considered under Stage 1.2, and was selected after consideration of Stage 2 judgements. The Ouse Washes has a long history of occupancy by breeding Gadwall and is a multi-species area supporting a further 11 qualifying species as well as a non-breeding bird assemblage with numbers of European importance. It is a high-quality, semi-natural habitat with lowland wet grassland and controlled summer flooding providing areas of standing water.

It was not considered necessary to select additional sites using Stage 1.4, as breeding Gadwall are widely, though thinly, dispersed elsewhere in the UK and in Europe.

Distribution map for breeding Gadwall SPA suite

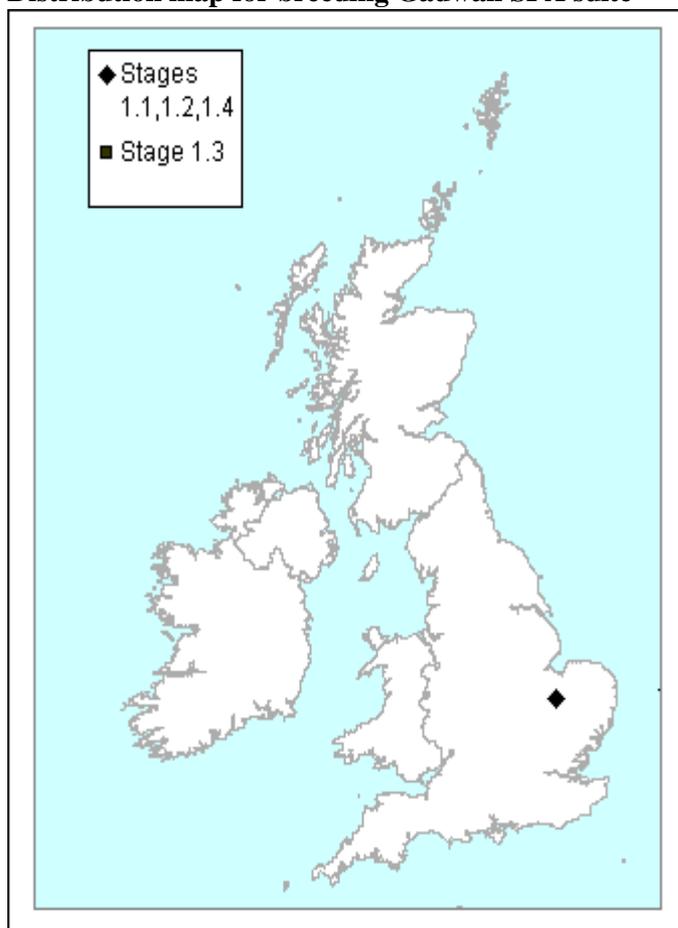


Table 6.29a.1 – SPA suite

Site name	Site total	% of biogeographical population	% of national population	Selection stage
Ouse Washes	111	1.1	14.4	1.2
TOTALS	111	1.1%	14.4%	