

A6.53 Spotted Crane *Porzana porzana*

1. Status in UK

Biological status		Legal status		Conservation status	
Breeding	✓	Wildlife and Countryside Act 1981	General Protection Schedule 1(1)	Species of European Conservation Concern	SPEC 4 Favourable conservation status (secure) but concentrated in Europe
Migratory	✓	Wildlife (Northern Ireland) Order 1985	General Protection	(UK) Species of Conservation Importance	Table 4
Wintering		EC Birds Directive 1979	Annex I Migratory	All-Ireland Vertebrate Red Data Book	

2. Population data

	Population sizes (calling males)	Selection thresholds	Totals in species' SPA suite
GB	50	1	42 (84% of GB population)
Ireland			
Biogeographic population	48,800	488	42 (<0.1% of biogeographic population)

GB population source: JNCC unpublished

Biogeographic population source: Hagemeyer & Blair 1997

3. Distribution

The global breeding range of the monotypic Spotted Crane extends from western Europe to central Russia, largely in the boreal and temperate zones east to about 100°E in central Asia. The species also nests sporadically within the Mediterranean basin (Cramp & Simmons 1980; Hagemeyer & Blair 1997). Spotted Cranes are migratory, and in the non-breeding season breeding birds from the west of the range (Europe) move to spend the winter months in sub-Saharan, east and south-east Africa. Birds from the eastern part of the breeding range move south to over-winter in Pakistan and northern India (Cramp & Simmons 1980).

In Europe, Spotted Cranes are absent from Iceland, and the species is highly local throughout much of its range, becoming more abundant only in the continental boreal and temperate zones of Eastern Europe and Russia (Cramp & Simmons 1980; Hagemeyer & Blair 1997).

In Britain, Spotted Cranes breed in a few widely dispersed locations from Shetland in the north to the south and east coasts of England (Ogilvie and the Rare Breeding Birds Panel 1999). In 1997, birds were recorded at 13 localities, of which nine were in Scotland and four in England, but in past years between five and 19 localities have been occupied (Ogilvie and the Rare Breeding Birds Panel 1999). Other than one nesting record in 1851, Spotted Cranes appear always to have been absent from Ireland (Holloway 1996).

Throughout its global range, the Spotted Crake breeds on lowland fen-like habitats with very shallow fresh water interspersed with extensive stands of low plant cover, rich in invertebrates (Cramp & Simmons 1980). Most of the British sites are extensive fens or marshy wetlands dominated by sedge *Carex* spp. beds and scattered willows *Salix* spp. (Francis & Thorpe 1999). Spotted Crakes are secretive and difficult to census, with singing males often the only sign of birds being present at a site, and breeding very difficult to prove and rarely confirmed through sightings of young birds (Francis & Thorpe 1999). As far as is known, few localities are used regularly, and the core of the species' range in Britain is largely defined by the SPA suite described below.

4. Population structure and trends

The European population is estimated to be 48,786–67,083 pairs (Hagemeijer & Blair 1997), principal populations being found in Belarus (26,000 pairs), Romania (10,000 pairs), Ukraine (4,500 pairs), France (3,250 pairs), and Poland (3,000 pairs), with smaller populations in most other parts of Europe (Hagemeijer & Blair 1997). Populations throughout Fennoscandia increased in the 19th century, but have decreased since, except in Sweden and Finland. Here there have been recent and continuing increases in both numbers of birds and range continuing from the early 1960s (Cramp & Simmons 1980; Hagemeijer & Blair 1997). Numbers are known to fluctuate, and the species is vulnerable to changes in water levels brought about by drainage and climate change. There have undoubtedly been increases in effort by observers over the last decade in locating this cryptic bird, and this further confuses interpretation of historical trends.

Prior to the mid-19th century, Spotted Crakes were locally common in many counties of Britain, but declines owing to extensive drainage of wetlands and agricultural intensification of other habitats in the 18th and early 19th centuries have made the species a sporadic breeder since 1900 (Alexander & Lack 1944; Parslow 1967; Holloway 1996; Batten *et al.* 1990). No formal surveys were carried out before the 1970s, but some information on distribution and numbers is collated in Parslow (1973). There is evidence that some sites have remained in regular use by the species since 1900, especially in southern and eastern England, and northern Scotland. Spotted Crakes may have been more numerous between 1926 and 1937, with four or five pairs breeding in Somerset alone in 1930, and again through the 1960s (Parslow 1973).

The first national population estimate in the late 1970s recorded six males at six locations in 1978 (Batten *et al.* 1990). Throughout the 1980s and 1990s, British numbers fluctuated without trend (Ogilvie and the Rare Breeding Birds Panel 1999) between three and 31 singing males at between two and 19 localities, but breeding success was inconclusive (Batten *et al.* 1990; Ogilvie and the Rare Breeding Birds Panel 1999; Francis & Thorpe 1999). Due to census difficulties, the species is likely to be under-recorded, but the estimated national population of Spotted Crake in Britain is at least 50 singing males (JNCC unpublished).

5. Protection measures for population in UK

SPA suite

The UK's SPA suite for Spotted Crake supports, on average, 42 pairs. This amounts to about 84% of the British breeding population. The suite contains less than 0.1% of the international population (numbers in the UK are very small in comparison to those elsewhere in Europe). The species does not occur in Northern Ireland. The SPA suite contains four sites (Table 6.53.1) where Spotted Crakes have been listed as a qualifying species.

Other measures

The use by Spotted Crakes of successional fen habitat will require active management of key sites to sustain their currently favourable status. In particular, there is a need to extend and re-wet fens that are drying out, and create new wetlands liable to be colonised by *Carex* spp. to ensure that adequate future habitat is maintained (Francis & Thorpe 1999).

6. Classification criteria

All sites in the UK in natural or semi-natural habitats that were known to support more than 1% of the national breeding population of Spotted Crane were considered under Stage 1.1, and all were selected after consideration of Stage 2 judgements.

All the sites in the suite have a high degree of naturalness, and all are multi-species SPAs.

Distribution map for Spotted Crane SPA suite

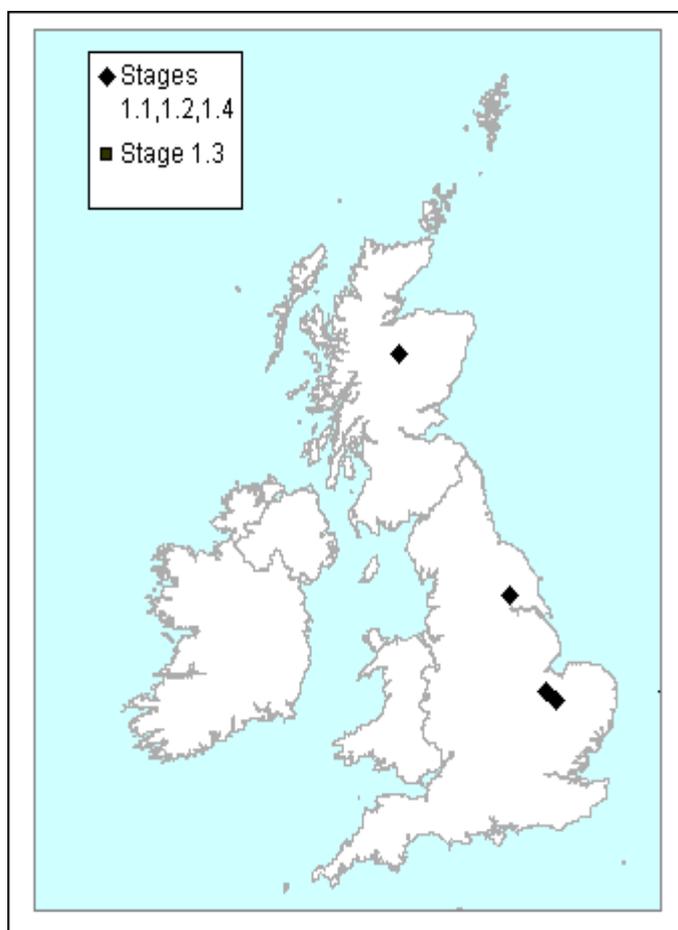


Table 6.53.1 – SPA suite

Site name	Site total	% of biogeographical population	% of national population	Selection stage
Lower Derwent Valley	31	<0.1	62	1.1
Nene Washes	5	<0.1	10	1.1
Ouse Washes	3	<0.1	6	1.1
River Spey - Insh Marshes	3	<0.1	6	1.1
TOTALS	42	<0.1%	84%	

The extent of the UK suite of SPAs for Spotted Crake in the 1990s

The extent of the UK SPA suite for Spotted Crakes is now known to be significantly different from the assessment published in the 2001 SPA Review because of revised totals at the main UK site, and a revised national population estimate following the national survey in 1999 (Gilbert 2002).

Revised estimate for the Lower Derwent Valley

The estimate of numbers in the Lower Derwent Valley SPA (31 singing males) included in the 2001 SPA Review was subsequently withdrawn by English Nature and a revised, significantly lower, estimate (12 singing males) re-submitted to the Rare Breeding Birds Panel to be part of the national record and published by Ralston (2005).

This revised assessment has implications for the site, for the national population estimate, and for the calculation of the proportion of the UK population contained within the SPA network.

1999 national population estimate

The assessment of the SPA suite for Spotted Crakes in 1998 used a best national population estimate of 50 calling males (Stage 1 threshold = 1). In 1999, the first national co-ordinated survey found 73 singing male Spotted Crakes at 29 sites in England, Wales and Scotland (Gilbert 2002).

Subsequent extensive collation and review of Spotted Crake records have located significant new site counts in 1999 not known to Gilbert nor reported to RBBP. A revised 1999 total incorporating these new counts, and the revision for the Lower Derwent Valley, gives a 1999 total of 80 singing males (Stroud *et al.* 2012). (The Stage 1 threshold remains 1 for national population estimates of 50, 73 and 80).

The late 1990s SPA suite

The implications of both revised site data and the national survey show that the extent of the SPA suite for this species was not 84% as stated in the 2001 Review, but rather only 27% (Table).

Table. Knowledge of the late 1990s extent of the current Spotted Crake SPA suite.

	As published in 2001 SPA review	Now known to have been present in 1999
National population size estimate	50	80
Numbers in SPAs:		
Lower Derwent Valley	31	12
Nene Washes	5	5
Ouse Washes	3	3
River Spey-Insh Marshes	3	3
Total within SPA suite	45	23
Proportion of national population within SPA suite	84%	29%

References

- Gilbert, G. 2002. The status and habitat of Spotted Crakes *Porzana porzana* in Britain in 1999. *Bird Study* 49: 79-86.
- Ralston, C.S. 2005. *Birds of the Lower Derwent Valley. A historical review 1850-2002*. English Nature. 252 pp.
- Stroud, D.A., Francis, I.S. & Stroud, R.A. 2012. Spotted Crakes breeding in Britain and Ireland: a history and evaluation of current status. *British Birds* 105: 197-220.