

A6.61a Golden Plover *Pluvialis apricaria* (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 4 Favourable conservation status but 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 I Annex II/2 Annex III/2 Migratory	All-Ireland Vertebrate Red Data Book	Vulnerable

2. Population data

	Population sizes (pairs)	Selection thresholds	Totals in species' SPA suite
GB	22,600	226	5,895 (26.1% of GB population)
Ireland	400	4	12 (3.0% of all-Ireland population)
Biogeographic population	474,900	4,749	5,907 (1.2% of biogeographical population)

GB population source: Stroud et al. 1987

All-Ireland population source: Gibbons et al. 1993

Biogeographic population source: Hagemeijer & Blair 1997

3. Distribution

The global distribution of Golden Plovers is very much restricted to boreal regions of the western Palearctic, with only a small extension further east. The western limit of the range is in eastern Greenland, and breeding extends eastwards more or less continuously to the southern regions of the Taiymyr peninsula (c. 100°N). Golden Plovers generally breed between 60°–70°N, although nesting occurs significantly further south in Britain and Ireland (being the southernmost extent of the global range). Generally, within southern parts of the range (Britain and Ireland, southern Scandinavia and the Baltic States), the distribution is discontinuous. In winter, birds migrate south and westwards, with localised wintering occurring from North Africa and Iberia, east through the Mediterranean Basin to the Middle East and the shores of the Caspian Sea. Large numbers winter in Britain and Ireland, France and the Low Countries (Cramp & Simmons 1983; Byrkjedal & Thompson 1998).

The taxonomy of Golden Plovers is complex, with considerable geographic variation in size and plumage occurring within the species' range. The degree to which this variation can be considered racial, remains the subject of active debate. Cramp & Simmons (1983) and Byrkjedal & Thompson (1998) conclude that the species is monotypic. However, Rose & Scott (1993,1997) and Wetlands International (1999) assign birds breeding at high latitudes to *P. apricaria altifrons*, whilst those occurring further south (in Britain, Ireland, Denmark and Germany) are considered as the nominate *P. a. apricaria*.

In Europe, breeding occurs through Iceland, Scandinavia, and the Baltic States, northern Russia and in northern/upland parts of Britain and Ireland. In Britain, the species is distributed widely throughout upland areas, with concentrations in northern and western Scotland and the north and south Pennines, and smaller outlying groups breeding in Wales and south-west England (Ratcliffe 1976; Gibbons *et al.* 1993). In Ireland, the species breeds mainly in the northern and western uplands. Two-thirds of the British and Irish breeding population occur in Scotland. The English and Welsh populations breed at the southern edge of the species' global range (Gibbons *et al.* 1993; Byrkjedal & Thompson 1998).

Golden Plovers breed on heather moorland, blanket bog, acidic grasslands and montane summits, where they prefer to nest on high, flat or gently sloping plateaux, away from the moorland edge. Adjacent pastures with abundant earthworms and tipulid larvae are important for feeding adults, and chicks may be moved up to 2 km or more to feed in marshy areas rich in invertebrate food (Byrkjedal & Thompson 1998). Breeding densities generally vary from 2–7 pairs/km², but exceptionally have been recorded at 16 pairs/km² (Ratcliffe 1976). Densities in Great Britain are some of the highest within the range (Byrkjedal & Thompson 1998).

4. Population structure and trends

Rose & Scott (1997) distinguish two biogeographical populations (*P. a. altifrons* and *P. a. apricaria* – see above). Wetlands International (1999) note a number of other populations, although consider that mixing occurs. Numbers breeding in Europe are estimated to be between 440,000–785,000 breeding pairs (Hagemeijer & Blair 1997), and this is taken as the reference population for this review.

The core population in northern Europe was relatively stable between 1970 and 1990, although the smaller southern populations have continued to decline since the 19th century (Tucker & Heath 1994). Numbers in Britain during the 1980s were estimated at 22,600 pairs (Stroud *et al.* 1987), compared with 29,400 during 1968–1972 (Sharrock 1976). In Ireland, the population was estimated at 400 pairs, compared with 600 during the earlier period.

Substantial range contractions and declines in breeding numbers in Britain and Ireland have, as elsewhere in Europe, been attributed to afforestation (especially in Scotland), the agricultural intensification of permanent pastures and overgrazing by sheep (Thom 1986; Lovegrove *et al.* 1994; Boobyer 1992; Byrkjedal & Thompson 1998; Fuller & Gough 1999). Losses in the uplands of Britain have further been attributed to a reduction of moorland burning, resulting in the development of tall vegetation that is avoided by breeding birds, and reduced predator control due to a decline in game-keeping (Gibbons *et al.* 1993).

Many of these factors interact, with for example, loss of game management and keeping on moorland (which appear to provide beneficial conditions – Tharme *et al.* in press), leading to sale for afforestation which in turn results in greater predator pressure on Golden Plovers nesting on adjacent moorland (Parr 1992, 1993). This has resulted in the extinction of some local populations (Parr 1992).

Effects of grazing are complex. Some of the highest densities of Golden Plover in the UK occur in the South Pennines (Brown 1993), where there are high levels of moorland grazing (Anderson & Yalden 1981). Whittingham *et al.* (2000) found equivalent densities on grazed blanket bog and heather moorland, and suggested grazing can be important to prevent heather becoming rank, as breeding Golden Plovers appear to favour short heather. Whilst severe overgrazing leading to conversion of heather to grass is likely to be detrimental to Golden Plovers, high grazing levels of in-bye pasture close to moorland edges may be important to maintain areas of short sward used by feeding birds during the breeding season.

5. Protection measures for population in UK

SPA suite

In the breeding season, the UK's SPA suite for Golden Plovers supports, on average, 5,907 pairs. This amounts to about 26% of the British breeding population, and 3% of the all-Ireland population. The suite contains about 1.2% of the international population. The SPA suite contains seven sites (Table 6.61a.1) where Golden Plovers have been listed as a qualifying species.

Moorland habitats are maintained and enhanced in the North Pennine Moors SPA by English Nature's Wildlife Enhancement Scheme and by the Countryside Stewardship Scheme run by MAFF. Habitat management within these schemes that may benefit Golden Plovers includes modifications to sheep-grazing, blocking of grips (drainage ditches) to restore natural hydrology and sympathetic heather burning. Additionally, Environmentally Sensitive Area schemes in the South Pennine Moors SPA are helping to control problems of over-grazing on moorland. The Moorland Regeneration Scheme in the North York Moors SPA is similarly promoting traditional moorland management, including sympathetic burning and legal predator control by gamekeepers, and the restoration of natural flushes to provide food for feeding birds and their chicks.

6. Classification criteria

All sites in the UK that were known to support more than 1% of the relevant national breeding population of Golden Plover were considered under Stage 1.1, and all within Britain were selected after consideration of Stage 2 judgements. In Northern Ireland, although Pettigoe Plateau was selected after Stage 2 considerations, the Antrim Plateau and Cuilcagh were not selected because of their small population size and low density of breeding birds. In Britain, Muirkirk and North Lowther Uplands was additionally included under Stage 1.4 as a site contributing a large population to the species' suite as well as additional range coverage in the Southern Uplands of Scotland. The sites are located throughout the UK range of this species, with representation of most of the main centres of occurrence.

All the sites in the suite have a high degree of naturalness, and all are multi-species SPAs, with the exception of Pettigoe Plateau in Northern Ireland, which has been selected solely for this species. Many sites have a very long history of occupation (Ratcliffe 1976; Stroud *et al.* 1987, 1988; Holloway 1996).

Distribution map for breeding Golden Plover SPA suite

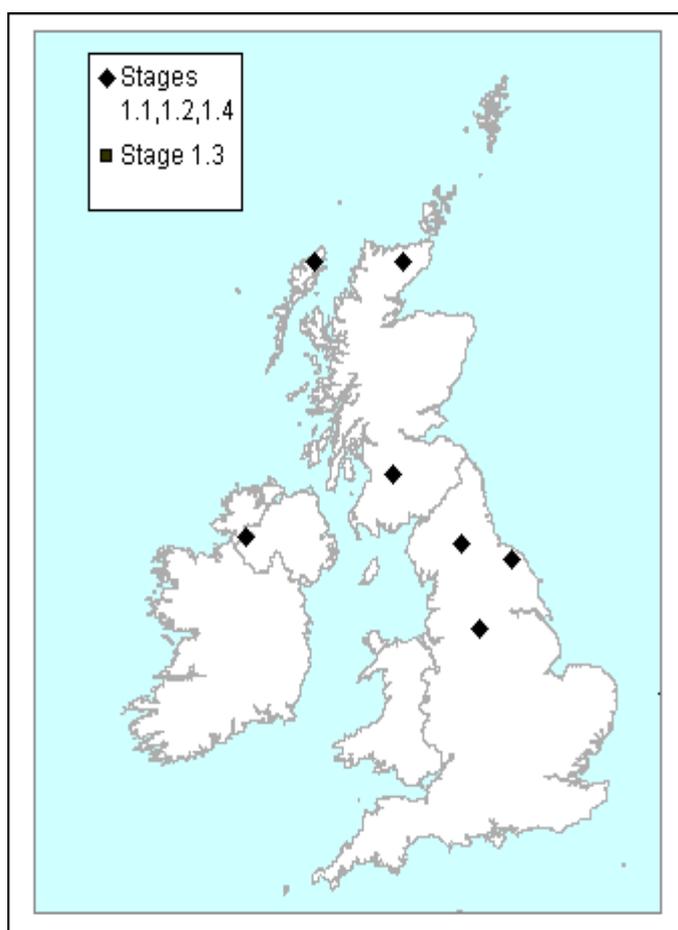


Table 6.61a.1 – SPA suite

Site name	Site total	% of biogeographical population	% of national population	Selection stage
Caithness and Sutherland Peatlands	1,064	0.2	4.7	1.1
Lewis Peatlands	1,978	0.4	8.8	1.1
Muirkirk and North Lowther Uplands	175	<0.1	0.8	1.4
North Pennine Moors	1,400	0.3	6.2	1.1
North York Moors	526	0.1	2.3	1.1
Pettigoe Plateau	12	<0.1	3.0 (Ire)	1.1
South Pennine Moors	752	0.2	3.3	1.1
TOTALS	5,907	1.2%	26.1% 3.0% (Ire)	