A6.73a Curlew *Numenius arquata* (breeding)

1. Status in UK

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

2. Population data

	Population sizes (pairs)	Selection thresholds	Totals in species' SPA suite
GB	33,000	330	3,930 (12% of GB population)
Ireland	12,000	120	No sites selected in Northern Ireland
Biogeographic population	120,000	1,200	3,930 (3% of biogeographic population)

GB population source: Piersma 1986
All-Ireland population source: Reed 1985
Biogeographic population source: Rose & Scott 1997

3. Distribution

The breeding distribution of Curlew is globally restricted to the temperate and boreal regions of Europe and Asia. The species breeds from Ireland and Britain in the west, across continental Europe to the Russian far east. The Asian range narrows eastwards from the Urals through the boreal zone, to reach the upper Amur River at *c.* 125°E (Cramp & Simmons 1983). The species is polytypic with two subspecies described. The nominate race *N. a. arquata* occurs across Europe to western Siberia, where it grades into *N. a. orientalis* which breeds in the eastern part of the range in central Asia (Cramp & Simmons 1983).

In winter, Curlews migrate south from their breeding areas and occur widely, though sparsely on southern hemisphere coasts in the northern winter. They are distributed through south-east Asia, India and the Middle East, and around most of Africa as well as occurring locally in the Mediterranean basin and on the coasts of north-west Europe (Cramp & Simmons 1983).

In Europe, Curlews have an essentially northern temperate distribution, occurring in greatest numbers in Scandinavia, the Low Countries (especially The Netherlands) and in Britain and Ireland (Hagemeijer & Blair 1997). Their distribution becomes thinner and more localised in the south of Europe (France, southern Germany and Hungary).

The Curlew is a widespread breeding species throughout much of Britain, but is absent from most parts of south-east England, and is sporadic in south-west England, north-west Scotland and parts of Ireland. It is most common in the North Pennines, the Southern Uplands of Scotland, parts of the east Highlands, Caithness, Orkney and Shetland. Smaller areas of high abundance also occur in northern and central parts of Ireland, north and central Wales, and on the west coast of Britain, between Anglesey and Islay.

Despite its recent expansion into lowland agricultural habitats, the species is still more abundant in uplands and northern regions where there are extensive areas of moorland and rough grazing. Variation in breeding densities show that nesting Curlews prefer low intensity agricultural habitats (Gibbons *et al.* 1993).

4. Population structure and trends

Four biogeographical populations of Curlew have been described (Rose & Scott 1997). Of these, the only one to occur in Europe is the European population (amounting to the whole of the nominate sub-species). This is currently estimated at 348,000 individuals (Rose & Scott 1997, comprising about 120,000 breeding pairs, of which the British population amounts to 33,000 pairs (Piersma 1986). However, Hagemeijer & Blair (1997) have recently suggested that the figure published by Rose & Scott is an underestimate.

In Europe, populations have been declining in many countries (Russia, The Netherlands, Finland, Sweden and Norway), generally associated with patterns of agricultural intensification (Henrikson 1991; Tucker & Heath 1994; Samigullin 1998; Lebedeva 1998). Whilst ultimate causes seem to relate to intensification of farming, proximate mechanisms are complex, and include factors such as enhanced predation on nests and young (Grant *et al.* 1999), or increased destruction of nests through use of machinery or trampling by stock (Berg 1992).

In the UK, there has been no further expansion of the breeding range in the last 20 years and the distribution has not altered since 1968-72 (Sharrock 1976). There has been a considerable contraction of breeding range in south and east Ireland, as well as more localised contractions in west Scotland, the English Midlands, Pembrokeshire, Devon and Dorset. Population declines have also been recorded in Northern Ireland and the North Staffordshire Moors (Grant 1998) but not in recent extensive re-surveys of farmland habitats in Scotland and northern England (O'Brien unpubl. data). Declines are likely to be associated with recent agricultural improvements, such as land drainage and re-seeding of moorlands, though increases in nest and chick predation rates are also implicated in causing declines (Grant *et al.* 1999).

Further losses of nesting habitat are likely to have resulted from increased afforestation, which has been cited as a reason for declines in certain parts of Ireland. Nest predation rates are often high and are the likely proximate cause of decline of the species in Northern Ireland (Grant *et al.* 1999).

5. Protection measures for population in UK

SPA suite

In the breeding season, the UK's SPA suite for Curlews supports, on average about 3,930 pairs. This amounts to about 12% of the British breeding population and about 3% of the international population. In an all-Ireland context, no sites have been selected for breeding Curlew in Northern Ireland. The SPA suite total is contained within a single site (Table 6.73a.1) at which breeding Curlew has been listed as a qualifying species.

6. Classification criteria

The single site (North Pennine Moors) in the UK known to support more than 1% of the international breeding population was considered under Stage 1.2, and was selected after consideration of Stage 2 judgements. The site has a high degree of naturalness, and is a multi-species SPA of European importance for several other breeding birds.

Outside the SPA suite, breeding Curlews are widely distributed throughout both lowlands and uplands in north and west Britain and Ireland. Accordingly, and given the lack of SPEC status in the breeding season (Tucker & Heath 1994), it was not considered necessary to select further SPAs using Stage 1.4.

Distribution map for breeding Curlew SPA suite

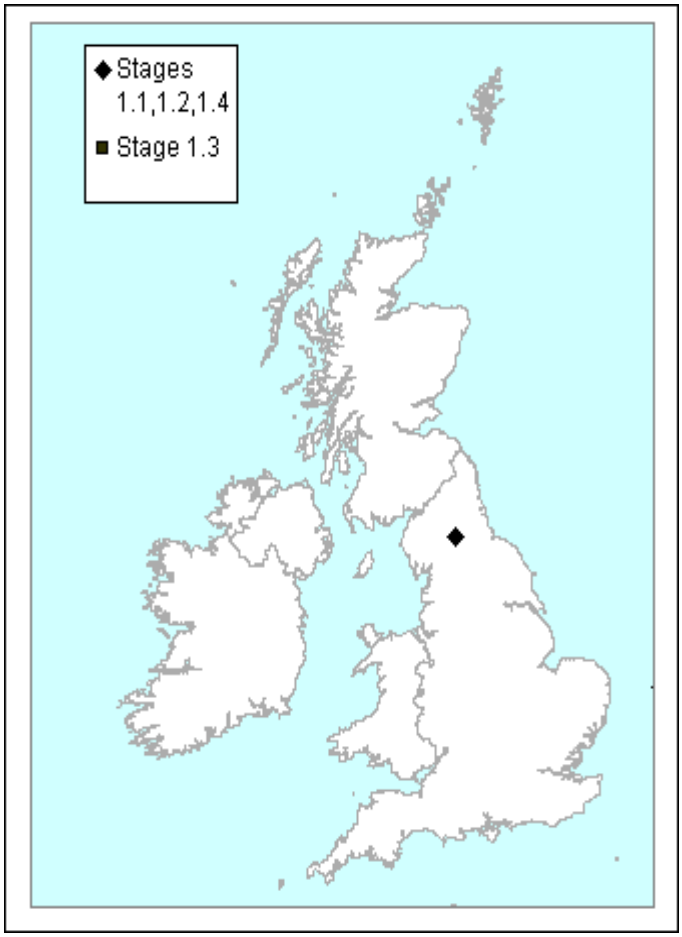

Table 6.73a.1 – SPA suite

Site name	Site total	% of biogeo-graphical population	% of national population	Selection stage
North Pennine Moors	3,930	3.3%	11.9%	1.2
TOTALS	3,930	3.3%	11.9%	