

## 4.2 Waders

If you want to increase waders on your moor, this fact sheet helps you understand their habitat and diet requirements.

The species covered are the main moorland wader suite in England and Wales:

- Golden plover
- Snipe
- Curlew
- Lapwing
- Dunlin

### ***Broad habitat relationships***

The study examined detailed abundance relationships for the first three species and coarser presence/absence relationships for the last two above. Redshank and oystercatcher may also breed on moorland, but were not included in the study.

**Golden plover and dunlin** tend to be most abundant at higher altitudes and on plateau hilltops, being most typical of blanket bog habitats.

**Curlew and snipe** are generally more abundant at lower altitudes on moorland, especially in wet and dry heaths and rough grasslands. Curlews occur widely and may be found up to altitudes of 600m or more.

**Lapwing** are largely restricted to the lower ground and edge zones of moorlands.

All species tend to avoid steeper ground on moorlands.

### ***Biodiversity value & status***

Moorland wader populations are of high conservation importance:

- Golden plover are listed in Annex 1 of the EC's Birds Directive
- Curlew are SPEC2 (Species of European Conservation Concern) which are declining in Europe, with global population concentrated in Europe
- Over 25 % of Europe's breeding curlew are estimated to be in the UK, although not all of these occur on moorland
- Lapwing, dunlin, curlew and snipe are amber listed in the UK's Birds of Conservation Concern
- Recent surveys indicate widespread declines of several wader species (notably lapwing, dunlin and curlew) on moorland sites across the UK
- Lapwing, golden plover and curlew are on the Welsh Section 74 list for the Countryside Rights of Way Act which therefore requires the Assembly to take or promote measures to further the conservation of these species
- Any revised list of Biodiversity Action Plan species for England may include some of these species in the future

## **Habitat Requirements**

The key associations with vegetation characteristics identified in the current study detailed below.

### **Main preferences of different moorland breeding waders for compositional and structural features of moorland vegetation**

<b>Golden plover</b>	Short, open, uniform swards High cover of cotton-grass and/or deer grass. < 5 % cover of soft rush & bracken.
<b>Lapwing</b>	High cover of grasses and heath-rush. Open vegetation
<b>Dunlin</b>	Open vegetation
<b>Snipe</b>	High cover of sedges and/or cotton-grass. <i>Sphagnum</i> cover of 4 – 6 %.
<b>Curlew</b>	High variability in vegetation height, but with < 30 % cover of 0 – 15 cm tall vegetation. High cover sharp-flowered rush and/or sedge

For the waders, the effects of structure are generally stronger than those of composition, although vegetation typical of wet damp flushes is important for both snipe and curlew. Vegetation effects for curlew were relatively weak compared to those for other bird species, suggesting they occupy a wide range of habitat conditions.

## **Dietary Requirements**

As with other moorland birds, a wide range of invertebrate groups are taken by waders (see the Birds Overview, fact sheet 4). However, some groups are of particular importance.

- Wader chicks on moorland feed predominantly on invertebrates that are active on and above the ground surface
- Beetles (notably click beetles and weevils) and adult craneflies can be major items for curlew chicks on moorland
- Beetles, moth caterpillars, adult and larval stages of craneflies can be important for golden plover chicks
- Larval craneflies are one of the few sub-surface prey recorded as comprising a substantial part of moorland wader chick diets
- Adults of some species (notably curlew and golden plover) often feed on pastures or other grasslands away from the moorland breeding area. Here, earthworms and larval craneflies are the main food items for much of the breeding season. When feeding on moorland adults will take similar prey to chicks

## **Other Options and Information Sources**

See details in fact sheet 4.

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