

2.4.6 Improved grassland

Introduction and description

Improved grasslands account for the majority of all grassland found in rural and urban parts of North West England and the UK as a whole. They are species-poor, grass dominated swards, often sown for agricultural or recreational use, or created by modification of unimproved grasslands by fertilisers and selective herbicides. They are particularly characterised by the abundance of rye-grass *Lolium perenne* and white clover *Trifolium repens*. Within the National Vegetation Classification improved grasslands are represented by MG6 *Lolium perenne* - *Cynosurus cristatus* grassland and MG7 *Lolium perenne* leys and related grasslands. Sometimes such grasslands are temporary and form part of an arable rotation in lowland areas. Where not managed as pasture, improved grasslands are often mown regularly either for silage production or, in non-agricultural contexts, for recreational and amenity purposes.

The biodiversity of improved grasslands is low and, in general, they are of limited nature conservation interest. Fertiliser use in particular stimulates the growth of competitive grasses and a small number of common broadleaved plants such as common ragwort *Senecio jacobaea* and docks *Rumex* spp. at the expense of other plant species.

Generally these grasslands support a very impoverished fauna. Locally however, particularly in coastal areas, improved grasslands are of importance for wintering waterfowl including pink-footed goose* *Anser brachyrhynchus*, Bewick's swan* *Cygnus columbianus bewickii*, whooper swan* *Cygnus cygnus*, widgeon* *Anas penelope*, barnacle goose* *Branta leucopsis*, lapwing* *Vanellus vanellus* and golden plover* *Pluvialis apricaria*. Coastal improved pasture may also be used as extreme high tide roosting sites by wintering and passage waders. Peregrine falcon* *Falco peregrinus* and merlin* *Falco columbarius* may hunt over coastal improved pasture during the winter months. Where machine use is infrequent and stocking densities low improved grassland may retain a range of ground nesting birds such as lapwing* and skylark** *Alauda arvensis*. Brown hare** *Lepus europaeus* also utilise this grassland habitat.

Current status

Nationally the extent of improved grassland has increased by approximately 90% in the last 50 years due to increased intensification of farming. This expansion in area has largely been at the expense of habitats of high biodiversity importance, most notably, unimproved grasslands and moorland habitats. This is one of the most extensive habitats in NW England and occurs throughout the region.

Improved grasslands around the Solway Firth, the southern part of the Lune estuary, on the Fylde and in West Lancashire support internationally important numbers of barnacle geese, whooper swan, Bewick's swan, golden plover, pink-footed geese and lapwing during the winter months. The first three of these species are listed on Annex 1 of the EC Birds Directive, whilst skylark** and brown hare** are UK Priority Species. All other birds in this statement are UK Species of Conservation Concern.

Issues affecting improved grassland

- There is no particular threat to the improved grassland resource in NW England.
- Intensification of grassland management, including increased fertiliser and herbicide use, further reduces the biodiversity of this impoverished habitat.
- Agricultural advantages of silage over hay-making, reflecting climatic changes.

Representative sites

Lancashire: Fields around Martin Mere and adjacent to Ribble Estuary; Fields around the southern side of the Lune Estuary.