

4a Lowland meadows

This includes most forms of unimproved neutral grassland in lowland areas, both hay meadows and pasture. This is because the land use may change yet the plant community remain with only subtle changes. The main communities are MG5 crested dog's-tail *Cynosurus cristatus* – lesser knapweed *Centaurea nigra* grassland, MG4 meadow foxtail *Alopecurus pratensis* – great burnet *Sanguisorba officinalis* floodplain meadow and MG8 crested dog's-tail *Cynosurus cristatus* – marsh marigold *Caltha palustris* flood-pasture. It does not include upland hay meadows, maritime grasslands or purple moor grass and rush pastures. A high proportion of broad-leaved herbaceous plants are found in these habitats providing a colourful show of flowers.

Status

The three communities mentioned are only found in the British Isles. An estimated 97% of semi-natural lowland grassland has been lost from England and Wales between 1930 and 1984, at the end of which 200 000 ha remained. Losses have continued since, at 2-10% per year in some areas. This has occurred almost totally as a result of changing agricultural management. Recent estimates indicate a coverage of only 5000-10 000 ha of *Cynosurus-Centaurea* grassland in England and Wales. Unimproved seasonally-flooded grasslands are even rarer. *Alopecurus-Sanguisorba* flood-meadow covers less than 1500 ha, in scattered sites north to Yorkshire's River Ouse catchment. *Cynosurus-Caltha* flood-pasture probably covers less than 1000 ha of England and Wales, with 600-800 ha in Scotland.

Threats

Agricultural improvement is the main threat to this habitat, through the heavy use of fertiliser or manure, shifts to silage production and conversion to arable land or perennial rye grass *Lolium perenne* pasture. Neglect may result in the loss of some species and allow scrub or bracken invasion. High stock levels and supplementary feeding can lead to eutrophication, and changes in stock levels or breeds will affect the floral community. Changes to the flooding patterns of meadows connected with reductions in water levels for a variety of reasons will also affect the community of plants that develops. The use of herbicides and pesticides will reduce biodiversity and atmospheric pollution and climate change may also have an adverse impact.