



UK Biodiversity Action Plan Priority Habitat Descriptions

Upland Hay Meadows

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The definition of this habitat remains unchanged from the pre-existing Habitat Action Plan (<https://webarchive.nationalarchives.gov.uk/20110303145955/http://www.ukbap.org.uk/UKPlans.aspx?ID=11>), a summary of which appears below. Following the 2007 review, occurrences of this habitat on roadside verges are also covered by the definition.

For the purposes of this plan upland hay meadows are treated as being equivalent to EC Habitats Directive Annex 1 habitat 38.3, Northern Hay Meadows (British types with *Geranium sylvaticum*). The habitat thus comprises the single National Vegetation Classification community MG3, *Anthoxanthum odoratum* - *Geranium sylvaticum* grassland and is characterised by a dense growth of grasses and herbaceous dicotyledons up to 60–80cm high. No single grass species is consistently dominant and the most striking feature of the vegetation is generally the variety and abundance of dicotyledons, including wood crane's-bill *Geranium sylvaticum*, pignut *Conopodium majus*, great burnet *Sanguisorba officinalis* and lady's mantles *Alchemilla* spp.

Upland hay meadows considered in this plan are, for the most part, in upland valleys in the north of England, with outliers in Scotland. The main concentrations are in the northern Pennines of North Yorkshire, Durham and east Cumbria but there are scattered locations in west Cumbria, Lancashire, Northumberland, Perthshire and as far north as Aberdeenshire in Scotland. The most important centres are Teesdale, Lunedale, Weardale and Baldersdale in Durham, Swaledale and Wharfedale in North Yorkshire and around Tebay, Orton and Ravenstonedale in Cumbria. There are no known examples in Wales or southern England; certain stands of MG5 *Cynosurus cristatus* - *Centaurea nigra* grassland in Radnorshire and Herefordshire with frequent great burnet *Sanguisorba officinalis* are the nearest floristic equivalents but lack wood crane's-bill *Geranium sylvaticum* and some other MG3 constants. These and other species-rich mesotrophic grassland communities are covered in the companion plan for lowland meadows.

Past cover data are not available, but it is highly likely that meadows of this kind have become much reduced in the 20th century through agricultural intensification. Recent estimates indicate that there are less than 1,000ha in northern England. Scotland is believed to have less than 100ha.

Upland hay meadows are confined to areas where non-intensive hay-meadow treatment has been applied in a sub-montane climate. They are most characteristic of brown earth soils on level to moderately sloping sites between 200m and 400m altitude. Stands of *Anthoxanthum* - *Geranium* meadow are typically found in isolated fields or groups of fields, where many are still managed as hay meadows, but they are also recorded from river banks, road verges, and in woodland clearings. Most stands of the habitat are less than 2ha in extent.

Most of the variation within this habitat is attributable to management treatments. The fields are grazed in winter, mainly by sheep, except in the worst weather. In late April to early May the meadows are shut up for hay. Mowing takes place in late July to early August though, in unfavourable seasons, it may be delayed as late as September. The aftermath is then grazed once more until the weather deteriorates. Traditionally, the meadows have been given a light dressing of farmyard manure in the spring, and this, together with occasional liming, may have helped maintain the richness and diversity of the most species-rich stands.