

UK Biodiversity Action Plan Priority Habitat Descriptions

Upland Calcareous Grassland

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Please note: this document was uploaded in November 2016, and replaces an earlier version, in order to correct a broken web-link. No other changes have been made. The earlier version can be viewed and downloaded from The National Archives: http://webarchive.nationalarchives.gov.uk/20150302161254/http://jncc.defra.gov.uk/page-5706

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The definition of this habitat remains substantially unchanged from the pre-existing Habitat Action Plan (https://webarchive.nationalarchives.gov.uk/20110303145955/http://www.ukbap.org.uk/UKPlans.aspx?ID=13), a summary of which appears below. Following the 2007 review, this habitat includes examples of CG1, CG2 and CG10 that clearly occur in an upland setting (i.e. above the level of agricultural enclosure).

Upland calcareous grasslands occur on lime-rich soils situated above the upper limit of agricultural enclosure, both in the sub-montane and montane zones. Most examples occur above 250–300m altitude, but the habitat is also found within unenclosed moorland at lower elevations, and descends to sea level in north-west Scotland. Upland calcareous grasslands typically occur as components of habitat mosaics, which are generally managed as rough grazing land for domestic livestock. These are relatively rare upland vegetation types which support a wide range of uncommon species. Lowland calcareous grasslands are covered by a separate habitat action plan.

Upland calcareous grasslands are generally restricted to shallow soils derived from a variety of lime-rich bedrocks. The most widely distributed and locally extensive calcareous rock in the uplands is Carboniferous Limestone, which forms major exposures in north and south Wales, the North Pennines and Northern Ireland. Other limestones support calcareous grassland in Scotland and northern England, while certain shales and sandstones are locally important. Basic igneous rocks provide another source of calcareous substrates, including the Borrowdale Volcanics in Cumbria, dolerites and pumice tuffs in north Wales, and Tertiary basalts in western Scotland and Northern Ireland. In Scotland especially, upland calcareous grasslands also occur on calcium-rich metamorphic rocks, such as the schists of the southern central and eastern Highlands.

This habitat comprises various forms of grassland characterised by the prominence of calcicolous ('calcium-loving') grasses and herbs. Six communities defined in the National Vegetation Classification are represented (CG9 to CG14). These include upland forms of Sesleria albicans grassland (CG9), Festuca ovina - Agrostis capillaris swards (CG10, CG11 and CG12), and Dryas octopetala communities (CG13 and CG14). Swards tend to be much more species-rich than upland grasslands on acidic substrates, and may contain over 60 species/4m². Montane forms of calcareous grassland are often enriched by a distinctive assemblage of Arctic-Alpine plants, such as Alchemilla alpina, Polygonum viviparum and Silene acaulis.

It is estimated that there are 10,000ha of upland calcareous grassland in England, 10,000–13,000ha in Scotland, 800ha in Wales, and 1,100ha in Northern Ireland. There is thus an estimated total of approximately 22,000–25,000ha of upland calcareous grassland in the UK. Particularly important areas for the habitat include the North Pennines and Cumbria in England and Breadalbane in Scotland.

There are good data holdings on the extent and distribution of around two-thirds of the total area of upland calcareous grassland in the UK. However, few data are available regarding changes in either the extent or floristic composition of the habitat.