



UK Biodiversity Action Plan Priority Habitat Descriptions

Lowland Dry Acid Grassland

From:

UK Biodiversity Action Plan; Priority Habitat Descriptions. BRIG (ed. Ant Maddock) 2008.

This document is available from:

<http://jncc.defra.gov.uk/page-5706>

For more information about the UK Biodiversity Action Plan (UK BAP) visit

<http://www.jncc.defra.gov.uk/page-5155>

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>

Lowland Dry Acid Grassland

The definition of this habitat remains unchanged from the pre-existing Habitat Action Plan (<http://tna.europarchive.org/20110303145238/http://www.ukbap.org.uk/UKPlans.aspx?ID=14>), a summary of which appears below. Following the 2007 review, occurrences of this habitat on roadside verges are also covered by the definition.

Lowland acid grassland typically occurs on nutrient-poor, generally free-draining soils with pH ranging from 4 to 5.5 overlying acid rocks or superficial deposits such as sands and gravels. It includes the *Festuca ovina*-*Agrostis capillaris*-*Rumex acetosella* (U1), *Deschampsia flexuosa* (U2), *Agrostis curtisii* (U3), and *Festuca ovina*-*Agrostis capillaris*-*Galium saxatile* (U4) National Vegetation Classification (NVC) grassland plant communities. Inland vegetation, but not coastal dunes, characterised by *Carex arenaria* (*Carex arenaria* dune *Festuca ovina* sub-community (SD10b) and *Carex arenaria*-*Cornicularia aculeata* dune, *Festuca ovina* sub-community (SD11b)) is also included but is highly localised.

Definition of lowland acid grassland is problematical but here it is defined as both enclosed and unenclosed acid grassland throughout the UK lowlands (normally below c300m). It covers all acid grassland managed in functional enclosures; swards in old and non-functional enclosures in the upland fringes, which are managed as free-range rough grazing in association with unenclosed tracts of upland, are excluded. It often occurs as an integral part of lowland heath landscapes, in parklands and locally on coastal cliffs and shingle. It is normally managed as pasture.

Acid grassland is characterised by a range of plant species such as heath bedstraw *Galium saxatile*, sheep's-fescue *Festuca ovina*, common bent *Agrostis capillaris*, sheep's sorrel *Rumex acetosella*, sand sedge *Carex arenaria*, wavy hair-grass *Deschampsia flexuosa*, bristle bent *Agrostis curtisii* and tormentil *Potentilla erecta*, with presence and abundance depending on community type and locality. Dwarf shrubs such as heather *Calluna vulgaris* and bilberry *Vaccinium myrtillus* can also occur but at low abundance. Lowland acid grassland often forms a mosaic with dwarf shrub heath, the latter being covered in the separate lowland heathland action plan. Acid grasslands can have a high cover of bryophytes and parched acid grassland can be rich in lichens. Acid grassland is very variable in terms of species richness and stands can range from relatively species-poor (less than 5 species per 4m²) to species-rich (in excess of 25 species per 4m²).

Parched acid grassland in particular contains a significant number of rare and scarce vascular plant species many of which are annuals. These include species such as mossy stonecrop *Crassula tillaea*, smooth rupturewort *Herniaria glabra*, slender bird's-foot-trefoil *Lotus angustissimus*, bur medick *Medicago minima*, and clustered clover *Trifolium glomeratum* and spring speedwell *Veronica verna*. Perennial taxa associated with these grasslands include, sticky catchfly *Lychnis viscaria*, and shaggy mouse-ear-hawkweed *Pilosella peleteriana*.

The bird fauna of acid grassland is very similar to that of other lowland dry grasslands which collectively are considered to be a priority habitat for conservation action. Bird species of conservation concern which utilise acid grassland for breeding or wintering include woodlark *Lullula arborea*, stone-curlew *Burhinus oedipnemos*, nightjar *Caprimulgus europaeus*, lapwing *Vanellus vanellus*, skylark *Alauda arvensis*, chough *Pyrrhocorax pyrrhocorax*, green woodpecker *Picus viridis*, hen harrier *Circus cyaneus*, and merlin *Falco columbarius*.

Many of the invertebrates that occur in acid grassland are specialist species which do not occur in other types of grassland. The open parched acid grasslands on sandy soils in particular, can support a considerable number of ground-dwelling and burrowing

invertebrates such as solitary bees and wasps. A number of rare and scarce species are associated with the habitat, some of which are included on the UK Biodiversity Action Plan list of species of conservation concern, such as the field-cricket *Gryllus campestris*.

As with other lowland semi-natural grassland types, acid grassland has undergone substantial decline in the 20th century although there are no figures available on rates of loss. The decline is mostly due to agricultural intensification although locally, as in the Breckland, afforestation has been significant.

Cover data for lowland acid grassland across the UK for the full altitudinal range are not currently available. Stands remote from the upland fringe, which are the primary focus of conservation attention, are now of restricted occurrence and it is estimated that less than 30,000ha now remain in UK. Important concentrations occur in the Breckland, the New Forest, Dorset, Suffolk Sandlings, the Weald, Dungeness, the coasts of SW England and the Welsh and English border hills of Powys and Shropshire. Scotland is estimated to have less than 5,000ha and much of this is likely to be on the upland fringe. Extensive areas of acid grassland are included within sites designated as common land, but separate figures for uplands and lowlands are not available.

It will be important to ensure that acid grasslands are taken into account during implementation of the action plan for lowland heathland; actions in the two plans need to be closely integrated.