

## Acid Grassland



### Current factors causing loss or decline

Unimproved or traditionally managed acid grasslands have declined in recent years although there is very little hard data to support this; undoubtedly large areas have been improved by agricultural treatments or conversion to ley pastures. However a number have also been lost to urban developments and, particularly to the urban fringe, management for golf courses (although roughs at the latter can be an important resource).

**Agricultural intensification** – particularly fertilisation, ploughing or drainage

**Over-grazing** – heavy grazing can deplete herbs and is usually associated with stock feeding

**Woodland planting** – schemes often target the lower productivity, unimproved grasslands

**Neglect** – encouraging the spread of scrub, notably birch or gorse, and bracken

**Built developments** – causing direct loss of sites, both to urban fringe and local central sites such as old sand quarries and waste ground.

**Unsympathetic management** – intensive treatment of grasslands in parks and golf courses reduces potential sward diversity.

### Current Action

Only a few small pockets of acid grassland are included within local SSSI's. The majority of the remaining areas are included within City-wide Sites of Importance for Nature Conservation (SINCs) or some local sites (LSINCs), and thus receive some protection from development pressures but not agricultural treatments.

### Current status

**Acid grasslands** are probably one of the most extensive semi-natural habitats in Britain, but there is very little information on true extent or conservation management. Estimates suggest 1,200,000 ha in the uplands but in the lowlands it is unlikely to exceed 30,000ha. However much of the upland type comprises low diversity swards, considered to be the product of poor management of heathland or mire precursors. Species rich acid grasslands are mostly associated with lowland communities developing on skeletal soils, where a number of nationally rare, often annual species occur.

They are often called bent-fescue pastures and typically they support a lower diversity of vascular plants than some neutral or calcareous grasslands, although bryophytes and lichens may provide some compensation. Typical indicative species include grasses such as Sheep's-fescue (*Festuca ovina*) and Wavy Hair-grass (*Deschampsia flexuosa*), Tormentil (*Potentilla erecta*) and Heath Bedstraw (*Galium saxatile*). Heather (*Calluna vulgaris*) and Blaeberry (*Vaccinium myrtillus*) may be present at low frequencies but their presence tends to reflect affinities and close association with heathland habitats (see Dwarf Shrub Heath HAP). Other species, some indicative of higher diversity grassland (and more base enriched), include Bird's-foot Trefoil (*Lotus corniculatus*), Heath Milkwort (*Polygala serpyllifolia*), Mountain Pansy (*Viola lutea*), Mouse-ear-hawkweed (*Pilosella officinarum*), Eyebright (*Euphrasia* spp.), several sedges (*Carex* spp.) and a number of bryophytes.

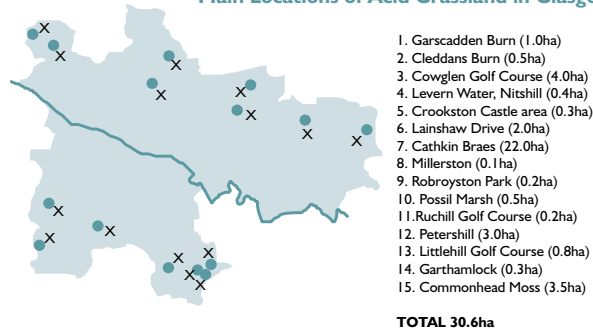
Acidic grasslands (and associated vegetation mosaics such as heaths and rush pastures), provide important breeding grounds for a number of waders, and also support populations of small mammals and birds, which in turn provide a resource for raptors. Invertebrates can also be well represented at areas of unimproved grassland.

In the Glasgow area most of the remaining acidic grasslands are associated with the upland fringe pastures, although where these occur on shallow basaltic or other rocky outcrop soils, such as the Cathkin Braes, their biological diversity can be high. A few low-lying areas, associated with sandy soils or some waste areas, occur at Garscadden Burn and near Tollcross and the Sandyhills area.

Distinguishing between acid grasslands and neutral or base rich sites can be problematical, especially if the swards have received some agricultural enrichment. Earlier habitat surveys may have coded semi-improved bent-fescue grasslands as neutral types and some of the localities in the Cathkin Hills have affinities to calcareous grassland types.

This plan therefore includes such transitional types, particularly calcareous ones, and has some overlap with the neutral grasslands HAP.

Main Locations of Acid Grassland in Glasgow



### Objectives and targets

The UK Broad Habitat Statement for acid grasslands has a main conservation direction to: "Maintain and enhance important areas of acid grasslands, restore areas of degraded acid grasslands in particular to buffer existing important areas" and lists a number of further measures for consideration.

**Object 1:** Establish the extent and assess conditions of important areas within the City.

**Target 1:** Survey all the sites by 2004.

**Object 2:** Ensure no loss in area or reduction of quality of the current, main acid grassland sites.

**Target 2:** Retain all existing sites and ensure no further damage occurs.

**Object 3:** Increase the current area of acidic grassland through restoration and positive management.

**Target 3:** Introduce restoration work and sympathetic management over 25% of the current resource by 2006.

**Object 4:** Promote awareness and value of acidic grassland to landowners, managers and general public.

**Target 4:** Establish communication and develop guidance literature.

## Proposed Action with Lead Authorities

Action	Lead	Delivery	Objective
<b>Policy and Legislation</b>			
Ensure important acid grassland sites are noted in Local Plans, district and regional Structural Plans and land-use Strategy documents.	GCC-LS(CG)	GCC-DRS	2, 3, 4
Ensure the value and needs of existing grasslands are noted during woodland planting schemes.	GCC-LS(CG)	FC, GCC-DRS, SNH	2, 3
Review agri-environment schemes to ensure that acid grasslands receive due recognition.	GCC-LS(CG)	FWAG, GCC-LS, SNH	2, 3
<b>Site Safeguard and Management</b>			
Oppose, or minimise impacts of, land use developments, forestry and agricultural activities that will adversely affect acid grasslands.	GCC-LS(CG)	FC, GCC-DRS, SNH	2, 3
Encourage landowners, managers and farmers to implement sympathetic management.	GCC-LS(CG)	FWAG, GCC-LS, SNH	2, 3
Identify areas for restoration work and liaise with owners and users for feasibility.	GCC-LS(CG)	FWAG, GCC-LS, GfC	3
Develop conservation management plans or agreements at key acid grassland sites.	GCC-LS(CG)	FWAG, GCC-LS(CG), RSPB, SWT	2, 3, 4
<b>Advisory</b>			
Develop and promote guidance notes for good management practice.	GCC-LS(CG)	FWAG, GCC-LS(CG), RSPB, SNH	2, 3, 4
<b>Future Research and Monitoring</b>			
Survey known acid grasslands and assess status and conservation needs.	GCC-LS(CG)	GCC-LS(CG), SNH, SWT	1, 2, 3
Establish monitoring plots to assess management work.	GCC-LS(CG)	GCC-LS(CG)	2, 3
Survey and identify potential areas for acid grassland restoration.	GCC-LS(CG)	GCC-LS(CG), SWT	3
<b>Communication and Publicity</b>			
Encourage public access and appreciation of acidic grasslands, where appropriate.	GCC-LS(CG)	GCC-LS(CRS), RSPB, SNH, SWT	4
Liaise with Lead Agencies of national acidic grasslands Habitat Action Plan.	GCC-LS(CG)	GCC-LS(CG)	1, 2, 3, 4
Review the progress of this Action Plan by 2006.	GCC-LS(CG)	GCC-LS(CG)	1, 2, 3, 4

Glasgow City Council: Development and Regeneration Services(GCC-DRS), Glasgow City Council: Land Services(Conservation Group) (GCC-LS(CG),

Glasgow City Council: Culture and Leisure Services (GCC-LS), Glasgow City Council: Education Services (GCC-ES), Glasgow City Council: Land Services Countryside Ranger Service (GCC-LS(CRS)),

Carts River Valleys Project (CRVP), Kilpatrick's Project (KP), Kelvin Valley Countryside Project (KVCP), British Waterways (BW), Forestry Commission (FC), Farming Wildlife Advisory Group (FWAG),

Glasgow Natural History Society (GNHS), Royal Society for the Protection of Birds (RSPB), Scottish Environment Protection Agency (SEPA), Scottish Natural Heritage (SNH), Scottish Wildlife Trust (SWT), Treewise (TWISE)