

HA3: Acid Grassland

Definition

Acid grassland generally consists of fine-leaved grasses such as common bent and fescues, with typical herbs such as sheep's sorrel, tormentil and heath bedstraw. Acid grassland flora is sometimes associated with lowland heath and mire communities. This assemblage is commonly found on nutrient-poor, free-draining and acidic soils underlain by the sands of bagshot beds, gravels, sandstones and acid igneous rocks.

London's acid grassland resource

Although acid grassland is one of the most extensive semi-natural habitats in the United Kingdom, there are scant data on its true extent. Estimates suggest that there is in excess of 1,200,000 ha of acid grassland in the uplands but in the lowlands there is unlikely to be more than 30,000ha (HMSO 1995). The acid grassland resource in London covers an estimated 1,300 ha, which represents some 4% of the total in lowland Britain.

Acid grassland is widespread throughout London; only six out of the thirty-three London boroughs have no recorded areas of acid grassland. There are several quite extensive areas, particularly in the Royal Parks in west London, the southern part of Epping Forest in north London and Wimbledon Common; but in many boroughs the habitat is limited in extent and highly fragmented.

Richmond upon Thames has the largest total area of acid grassland in Greater London with 580 ha (mostly in Richmond Park). This accounts for almost half of this habitat in Greater London. Croydon has 130 ha of acid grassland, which although the second largest amount in London, is less than a quarter of Richmond's resource (see Table 1 and the Map). Merton has 109 ha of acid grassland, the third largest area within a London borough. The approximate figures for additional boroughs are also given.

Table 1: Acid Grassland Resource within Greater London

Borough	Total Acid Grassland (ha)	Percentage of London's resource (%)
City of London	0	0
City of Westminster	0.1	(0.01)
Barking & Dagenham	8	0.6
Barnet	26	2.1
Bexley	9	0.7
Brent	0	0
Bromley	59	4.7
Camden	38	3
Croydon	130	10.3
Ealing	2	0.1
Enfield	7	0.5
Greenwich	14	1.1
Hackney	0.5	(0.04)

Borough	Total Acid Grassland (ha)	Percentage of London's resource (%)
Hammersmith & Fulham	0	0
Haringey	3	0.2
Harrow	10	0.8
Havering	5	0.4
Hillingdon	22	1.7
Hounslow	25	2
Islington	0.5	(0.03)
Kensington & Chelsea	2	0.2
Kingston upon Thames	17	1.4
Lambeth	2	0.2
Lewisham	8	0.6
Merton	109	8.7
Newham	0	0
Redbridge	120	9.5
Richmond upon Thames	580	46
Southwark	0.5	(0.03)
Sutton	0	0
Tower Hamlets	0	0
Waltham Forest	44	3.5
Wandsworth	29	2.3
London Total	1,264 ha	

NB: Numbers have been rounded to two significant figures. The UK lowland acid grassland resource is an estimate. Taken from London Ecology Unit Survey Data, 1984, 1989, 1993, 1994, 1995 & 1997 and HMSO 1995.

Nature Conservation Importance

Lowland acid grassland is becoming increasingly rare in Britain. Although intrinsically less species-rich than neutral or chalk grassland of similar quality, acid grassland contains many characteristic species that do not occur widely in other grassland types. Nationally rare plants such as clustered clover *Trifolium glomeratum*, fine-leaved sandwort *Minuartia hybrida* and autumn squill *Scilla autumnalis* can all be found in acid grassland in London. Even within central London, in the City of Westminster, a tiny patch of acid grassland supports harebell *Campanula rotundifolia*. More typical acid grassland species include mat grass *Nardus stricta*, early hair-grass *Aira praecox* and sheep's sorrel *Rumex acetosella*.

Acid grasslands are also valuable for invertebrates, especially hymenoptera (ants, bees and wasps) such as the mining bee *Andrena florea*; and butterflies such as green hairstreak and small copper. Few bird species have a particular association with acid grasslands, but green woodpecker, meadow pipit and linnet are invariably present on the larger acid grassland sites.

Some acid grassland sites of nature conservation value in Greater London

Hounslow Heath, LB Hounslow
Leyton Flats, LB Waltham Forest
Richmond Park, LB Richmond upon Thames
Wimbledon Common and Putney Heath, LB Merton, LB Kingston upon Thames, LB Wandsworth

Threats and Opportunities

Threats

Lowland acid grassland is declining nationally. It is likely that the area has declined greatly within London with the loss of traditional management practices affecting core areas such as commons and heaths. The current threats to this habitat include:

- Loss of habitat through cessation of traditional management, especially grazing, causing encroachment by trees and scrub.
- Damage and erosion caused by increasing recreational pressure.
- Fragmentation and isolation of the remaining habitat.
- Direct loss of habitat due to ‘improvement’ of grassland for amenity purposes e.g. mowing and/or fertiliser application to produce a sward suitable for golf course fairways or sports pitches.

Opportunities

Although much reduced in area and distribution and varying in quality, acid grassland is still a significant habitat in Greater London, particularly in the many parks and commons. It is, however, a fragile habitat which requires careful management. Many formal parks and open spaces contain areas of acid grassland and relaxation of the mowing regime in these areas will quite quickly result in some enhancement of biodiversity – common blue, small heath and small copper butterflies could be encouraged to breed, for example. A considerable amount of acid grassland also occurs on some of London’s older golf courses and a similar programme of identifying key areas and modifying mowing regimes could result in considerable benefit to biodiversity without seriously detracting from the primary purpose of the course.

Opportunities should be sought to enhance existing extensive areas of acid grassland through methods such as scrub clearance and the re-introduction of grazing. This should be carried out only after careful consideration of the value of alternative management options; some areas might be suitable for restoration to heathland and in other areas a scrub/grassland mosaic may be especially valuable for certain species of bird and invertebrate. Mowing may be the only practical management regime for most acid grassland.

Where recreational pressure is resulting in loss or damage to important acid grassland habitat, visitor management should be implemented in combination with a programme to raise awareness of the value of acid grassland sites. Erosion caused by recreational use of acid grasslands can, in some instances, be of benefit, creating bare areas which are favoured by some acid grassland invertebrates, particularly those that require exposed ground in which they can burrow.

Data Sources

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Rationale and limitations of approach.

Data were taken from the London Wildlife Habitat Survey (1984/85) and selected re-surveys of individual boroughs. The choice of data used reflects both data availability and time constraints. The following re-survey data was used: Kensington and Chelsea (1994) Islington (1989) Westminster (1995) and Redbridge (1997).

It is likely that acid grassland is under-recorded owing to difficulties in locating all examples of this habitat. Furthermore, much acid grassland in heathland landscapes may have been recorded as heath.