

GRASSLANDS & LOWLAND HEATHLAND

“It is interesting to contemplate a tangled bank, clothed with many plants of many kinds, with birds singing in the bushes, with various insects flitting about, and with worms crawling through the damp earth, and to reflect that these elaborately constructed forms, so different from each other, and dependent upon each other in so complex a manner, have all been produced by laws acting around us.”

“On Hayes Common where it was burnt the heath is a good deal mixed with gorse and there is much moss but not lichen...”

Charles Darwin.

The common link between these grasslands is that they are ‘unimproved’, so supporting a rich variety of less common grasses and broad-leaved herbs. All survive due to sensitive cutting or grazing, which prevents trees and shrubs from colonising. They differ in that they occur on different soils with varying pH and mineral balances, but all soils are nutrient poor.

Chalk grasslands develop on shallow, lime-rich soils, derived in Bromley from chalk bedrock. They contain an exceptional diversity of wild flowers and other plants, many of which are restricted to lime-rich soils. Consequently the invertebrate fauna is also very rich. Downe Bank, a Kent Wildlife Trust nature reserve, is internationally known for its association with Charles Darwin.

Species-rich neutral grasslands, unaffected by agricultural improvement, are rare and threatened in the UK. These grasslands are mainly managed as hay meadows or pasture and are colourful because they contain a high proportion of broad-leaved herbs relative to grasses. In Bromley, they tend to be found on soils over London Clay in pockets of small fields with hedgerows.

Acid grassland occurs on acidic, nutrient poor, generally free draining soil. They are characterised by fine-leaved grasses such as common bent and fescues, with typical herbs such as sheep’s sorrel, tomentil and heath bedstraw. In Bromley they are generally found on the gravels and sands of the Blackheath Pebble Beds and Woolwich Beds. In the UK lowlands, acid grasslands are now rare and those of Bromley are limited in extent and much fragmented. Acid grassland tends to be restricted to open areas of the remaining commons, sometimes associated with lowland heath and mire communities.

Lowland heathland is usually found on acidic, sandy free-draining soils that are nutrient poor. It is characterised by the presence of plants such as heather, purple bell heather, dwarf gorse and cross-leaved heath, and is generally found below 300m in altitude. Areas of good quality heathland consists of an ericaceous layer of varying heights and structures, some areas of scattered trees and scrub, areas of bare ground, gorse, wet heath, bogs and open water. Bromley has one of only four mires in the Greater London boundary and it is the most species rich. The habitat is also important habitat for invertebrate and reptile species. Charles Darwin visited Keston Common especially to look at sundew plants.

VISION:

To sympathetically manage all chalk grasslands in Bromley, over one third of London's total, and to care for species important to Bromley, including orchids, butterflies and lizards.

To main species-rich neutral grasslands, a small reminder of a once widespread habitat before improvement for amenity or agriculture and supporting the evocatively names cuckoo flower, adder's tongue fern and ragged robin.

Bromley's cherished commons support fragments of acid grassland providing a flavour of one of the most extensive semi-natural habitats in Britain and our aim is to care for those species important to Bromley, including the adder.

Bromley's isolated heathland portrays one of the rarest and most threatened semi-natural habitats in Britain and our aim is to care for those surviving species, such as heather, cow wheat and bilberry.

AIMS

- To protect the current area of unimproved and semi-improved grassland.
- To enhance the quality of these grassland areas by appropriate management.
- To increase the extent of species-rich grassland in the Borough, especially where they connect existing areas.
- To monitor, survey and appraise grasslands quality.
- To protect, manage and enhance all remaining heathland and mire.
- To increase the area of heathland via habitat creation or restoration.
- Increase public awareness of lowland heathland and involvement in its management.

Factors affecting the habitats:

- (a) Loss of habitat through lack of traditional management, especially grazing and cutting, causing encroachment by rank grasses, scrub and trees.
- (b) Over grazing by horses or change from hay cutting to spring and summer grazing.
- (c) Fragmentation and isolation of remaining habitat.
- (d) Damage to the habitat by ploughing and from inappropriate pesticide use, application of fertilisers or lime (on non-chalk grasslands), reseeding, over-cutting, irrigation, tree planting.
- (e) Damage and erosion caused by increasing recreational pressure (eg. thin turf of chalk grassland) or from illegal parking on heathland habitat.
- (f) Pollution and climate change.
- (g) Direct loss of grasslands through development disturbance of heathland from development such as road construction.
- (h) Creation of new grasslands on arable land.
- (i) Genetic variation of 'imported' seeds on grassland sites.
- (j) Intensive or inappropriate management of heathland through regular mowing, fertiliser application or tree planting.
- (k) Nutrient enrichment (eutrophication) of heathland, particularly deposition of nitrogen compounds emitted from car exhausts.
- (l) Management constraints eg. stock availability, public access.
- (m) Limited opportunity for expansion of heathland habitat.
- (n) Arson and accidental fires.
- (o) Increasing awareness of grassland and heathland ecology amongst the public.
- (p) Gradual extension of fringes of heathland through scrub and woodland clearance and re-establishment through re-seeding.

Flagship Species of Chalk Grassland:

Flora: Fragrant orchid, man orchid, autumn lady's-tresses, Kentish milkwort, greater yellow-rattle, kidney vetch, quaking grass, pyramidal orchid, yellow-wort, carline thistle, felwort (autumn gentian), sheep's fescue, common rock-rose, chalk milkwort, yellow-rattle, small scabious, wild thyme, basil, hairy violet, bee orchid, fly orchid, horseshoe vetch, greater knapweed, cowslip and lichens.

Fauna: Chalkhill blue butterfly, small blue butterfly, dark green fritillary butterfly, glow-worm, burnet moth, ant hills, adder, slow-worm, common lizard, skylark, song thrush, corn bunting, green woodpecker, linnet, grey partridge, kestrel, barn owl, Roman snail, house martin, meadow pipit, harvest mouse.

Negative Indicators of Chalk Grassland:

Upright brome, cocksfoot, false oat grass and woody scrub.

Retrievables of Chalk Grassland:

Small blue, horseshoe vetch, marbled white.

Flagship Species & Retrievables of Neutral Grassland:

Flora: Adder's-tongue fern, corky-fruited dropwort, pepper saxifrage, common spotted orchid, sneezewort, cuckooflower, ragged robin, bird's-foot trefoil, yellow-rattle, common sorrel, and lesser stitchwort.

Fauna: Yellow meadow ant, skylark, meadow pipit, skylark, song thrush, corn bunting, green woodpecker, linnet, grey partridge, kestrel, barn owl, swallows, house martin, harvest mouse.

Negative Indicators of Neutral Grassland: Coarse grasses and scrub

Flagship species of Acid Grassland:

Flora: Harebell, bird's-foot, heath bedstraw, wavy hair-grass, sheep's sorrel.

Fauna: common lizard, adder, solitary/burrowing bees and wasps, anthills, green hairstreak, small copper, skylark, song thrush, corn bunting, green woodpecker, linnet, grey partridge, kestrel, barn owl, swallows, house martin, meadow pipit, harvest mouse.

Negative indicators of Acid Grassland:

Bracken, birch and other trees, coarse grasses (high percentage of perennial rye grass).

Retrievables of Acid Grassland: All above notable and quality indicator species.

Flagship Species for Heathland:

Flora: dwarf gorse, bilberry, cross-leaved heath, lousewort, lichens, heather, bell heather, harebell, common cow-wheat, heath bedstraw, crow garlic, heathland grasses such as fine-leaved sheep's fescue.

Fauna: adder, common lizard, slow-worm.

Negative indicators for Heathland:

Tarmac, bracken, birch and other trees, purple moor grass on mire.

Retrievables for Heathland:

Lousewort