

## HA6: Heathland

### Definition

For the purpose of this audit, heathland is defined as habitat characterised by the presence of heather *Calluna vulgaris* and gorse *Ulex Spp.* Heathlands usually occur on free-draining acid soils below 300m in altitude. Areas of good quality heathland consist of a shrub layer of varying height and structure, a scattering of trees and scrub, areas of bare ground, and occasional flushes and open water.

### London's Heathland Resource

Only small fragments of heathland remain in Greater London. This resource has been much reduced in distribution and is of variable quality. However, heathland still represents a significant habitat in London, particularly because of its presence on Wimbledon Common and scattered patches on sites throughout the capital.

There are about 80 hectares of heathland remaining in Greater London in total. The approximate figures for each borough are shown below in Table 1. The Map represents the extent of heathland in the capital. There are estimated to be approximately 23,000 ha of heathland habitat in Southeast England. A list of sites is provided in Table 2.

**Table 1: Lowland Heathland Resource in the United Kingdom, South-East Region and Greater London**

| Borough/Region/ Country | Total Heathland Area (ha) | Percentage of London's Heathland Resource (%) |
|-------------------------|---------------------------|---|
| Barnet                  | 0.05                      | 0.06  |
| Bexley                  | 1.9                       | 2.4   |
| Bromley                 | 7.4                       | 9.3   |
| Camden                  | 0.9                       | 1.1   |
| Croydon                 | 8.3                       | 10.4  |
| Greenwich               | 1.1                       | 1.4   |
| Harrow                  | 6.9                       | 8.6   |
| Hillingdon              | 8.5                       | 10.6  |
| Hounslow                | 2.4                       | 3   |
| Kingston                | 0.9                       | 1.1   |
| Merton                  | 13.5                      | 16.9  |
| Richmond upon Thames    | 0                         |   |
| Wandsworth              | 28                        | 35  |
| <b>London Total</b>     | <b>80</b>                 |   |
| South East Region       | 23 000                    |   |
| United Kingdom          | 58 000                    |   |

*NB:* Sub totals may not add up to totals due to rounding.

Areas of 'potential' heathland are provided for four sites: Joyden's and Chalk Wood (L. B. Bexley), Croham Hurst (L.B. Croydon), Addington Hills (L. B. Croydon) and Bostall Heath (L. B. Greenwich). This amounts to a total area of approximately 15 ha. Two sites, Hounslow Heath (L. B. Hounslow) and Barnes Common (L. B. Richmond), have gorse stands highlighted separately.

**Table 2: Heathland Areas within Greater London**

| Borough              | Site   | Heathland Area (ha) | Comments  |
|----------------------|--|---------------------|---|
| L.B. Barnet          | Rowley Green Common                          | 0.05                | plus two smaller patches                        |
| Bexley               | Lesnes Abbey Wood                            | 1.2                 |   |
|                      | Joyden's and Chalk Woods                     | 0.7                 | plus 6.3 ha. of 'potential' heathland           |
| Bromley              | Chislehurst Common                           | 0.1                 | plus two smaller patches                        |
|                      | Crofton Woods                                | 0                   |   |
|                      | Hayes Common                                 | 4.8                 | plus several smaller scattered patches          |
|                      | Keston Common                                | 1.2                 | plus several smaller scattered patches          |
|                      | St Pauls Cray Common Wood                    | 1.3                 |   |
|                      | Scadbury Park                                | 0                   |   |
|                      | Hampstead Heath (West, East and Sandy Heath) | 0.9                 | in widely scattered patches                     |
| Croydon              | Croham Hurst                                 | 0.3                 | plus 1.8 ha of 'potential' heathland            |
|                      | Addington Golf Course & Shirley Heath        | 3.7                 |   |
|                      | Addington Hills                              | 4.0                 | plus 5.4 ha of 'potential' heathland            |
|                      | Spring Park & Threehalfpenny Wood            | 0.2                 |   |
|                      | Hall Grange                                  | 0.1                 |   |
| Greenwich            | Bostall Heath                                | 1.1                 | Scattered plants within areas of acid grassland |
| Harrow               | Grimsdyke Golf Course                        | -                   | No contact found                                |
|                      | Harrow Weald Common                          | 0                   |   |
|                      | Stanmore Common                              | 6.9                 |   |
| Hillingdon           | Mad Bess Wood and Poor's Field               | 8.5                 |   |
| Hounslow             | Hounslow Heath                               | 2.4                 |   |
| Kingston upon Thames | Coombe Hill Golf Course                      | 0.9                 |   |
| Merton               | Mitcham Common                               | 1.5                 |   |
|                      | Wimbledon Common                             | 12.0                |   |
| Richmond upon Thames | Richmond Park                                | 0                   |   |

| Borough             | Site              | Heathland Area (ha) | Comments             |
|---------------------|-------------------|---------------------|----------------------|
|                     | Barnes Common     | -                   | Small patch          |
|                     | East Sheen Common | -                   | Only 1 heather plant |
|                     | Bushy Park        | 0                   |                      |
| Wandsworth          | Wimbledon Common  | 28.0                |                      |
| <b>London Total</b> |                   | <b>80 ha</b>        |                      |

*NB:* Sub totals may not add up to totals due to rounding. Sites with no heathland are included to highlight data received from site contact.

### Nature Conservation Importance

Lowland heathland is a scarce and declining habitat in Europe and is of international importance. The UK has approximately 20% of the global resource of this habitat, of which the largest proportion (55%) is found in England.

In Greater London many of the plant species associated with this habitat, such as dwarf gorse *Ulex minor*, petty whin *Genista anglica* and cross-leaved heath *Erica tetralix*, are locally rare and threatened. Some, such as cotton grass *Eriophorum angustifolium*, are confined to a single site.

The varied topography and terrain of many heathland sites makes them especially attractive to a range of specialised invertebrates. The green tiger beetle *Cicindela campestris*, for example, and the mining bee *Andrena florea*, both require patches of open sandy ground, whilst the black darter dragonfly prefers pools on open heathland. Some of London's rarest butterflies and moths also have an association with heathland, notably the green hairstreak (a butterfly) and the beautiful yellow underwing (a moth).

Unfortunately, London's heathlands do not support any of the very rare bird species associated with heathlands elsewhere in southern England. However, stonechat and meadow pipit, which are relatively common on more extensive heathland sites outside of London, still occur as breeding species on the larger London heaths.

#### Some heathland sites of nature conservation value in Greater London

Addington Golf Course and Shirley Heath, LB Croydon

Hounslow Heath, LB Hounslow

Stanmore Common, LB Harrow

Wimbledon Common/Putney Heath, LB Merton and LB Wandsworth

### Threats and Opportunities

#### Threats

Heathland has probably always been a relatively uncommon habitat in London. It is confined to the areas where sandy or gravelly soil occurs and was reliant historically on grazing of livestock and clearance of invasive trees and shrubs to maintain the characteristically open nature of this habitat. Some areas of heathland arose as a result of turf-cutting which removed the fertile topsoil to expose areas of sand and gravel beneath.

Many areas of former heath in London were lost to development during the large expansions of London's urban areas in Victorian times and in the middle part of this century. Fortunately, some of the more important areas of heathland in London occur on historic common land or other protected open space which has prevented the loss of even more of this fragile habitat.

However, most heathland was formerly maintained by grazing and removal of timber (for firewood for example). As these traditional management techniques disappeared (no longer conforming to the management requirements of urban parks and commons), London's heathlands have declined in extent and quality. Furthermore some areas of heathland have been degraded by unsympathetic management such as mowing or fertiliser application, in response to the demand for more formal recreation areas.

Currently, the major threats to London's heathlands are:

- Lack of appropriate management (grazing and/or turf-cutting, the ideal management regime, is not practised on any London heathland except Poor's Field in Hillingdon)
- Recreational pressure (many of the remaining fragments of London's heathlands are subject to excessive trampling or, in the case of heathland on golf courses the habitat conflicts with sporting requirements)
- Inappropriate tree-planting in areas of acid grassland or other sites where there is potential for restoration of heathland
- Limited opportunities for expansion (many heathland species require extensive areas of heathland habitat in order to maintain viable populations)

Nutrient enrichment, including nitrogen deposition from car exhausts, is also having an adverse effect on London's remaining heathlands.

## **Opportunities**

There are some opportunities available to extend the existing heathland resource by utilising heathland restoration and re-creation methods in suitable areas adjacent to existing areas of habitat, or where heathland was formerly known to exist. The main constraints are the loss of formal recreation areas, the loss of acid grassland that may have its own special interest, or the loss of secondary woodland (often much-valued by the public) which has replaced the former area of heathland. There may also be the potential for the restoration of mineral workings (sand and gravel pits) to heathland. Re-instatement of grazing may be feasible on the more extensive heathland areas.

Although some of the best quality patches of heathland in London are small areas on golf courses, or within public open space which is not managed primarily for nature conservation, these are more likely to be lost by changes in management or through fragmentation and isolation. Many of these smaller sites can be effectively managed by dedicated volunteers or site managers, although there are often constraints imposed by lack of funding, adverse reaction to tree and scrub removal, and lack of access to privately owned sites.

## **Data Sources**

HMSO (1995). *Biodiversity: The UK Steering Group Report. Volume 2: Action Plans*. HMSO.

London Wildlife Habitat Survey (1984/5). Held by LEU, includes habitat dot distribution maps, aggregated area figures and standardised information on every survey parcel.

Wicks; D & Cloughley, P. (1998). *The Biodiversity of Southeast England: An Audit and Assessment*. Published by the Hampshire and the Isle of Wight Wildlife Trust.

Williams; P. R. (1993). *Phase 2 Survey of Acid Grassland and Heathland in Greater London*. English Nature South East Region Reports.

## Rationale and limitations of approach

Two heathland surveys exist for London, both of which use strict National Vegetation Classification (NVC) for heathland:

- London Ecology Unit Phase 1 survey of London (1984)
- English Nature Phase 2 survey of acid grassland and lowland heathland (1993).

However, use of this strict definition excludes other 'heathy-type' habitats. Therefore the following, broader, definition of heathland was used: heathland areas are those characterised by ericaceous dwarf shrubs and *Ulex* spp. The use of this broader definition enabled all sites applicable to the Lowland Heathland Biodiversity Action Plan to be included within the audit.

To enable a full audit of Greater London's Heathland, a 1:10,000 map was drawn of each site containing ericaceous dwarf shrubs, using the London Wildlife Trust's Geographical Information System (GIS). These maps were then sent to site contacts. The contact was asked to draw areas of heathland onto their maps and, if known, provide the size. The contacts were also sent a list of all the known sites which had been mapped and asked to note any omissions. The information from these site maps was then digitised onto GIS. This provided the area of heathland for each site. The heathland area maps will be tied to tabulated information on each site, such as ownership, current threats and management.

One of the drawbacks of this approach is the difficulty in delineating areas of habitat on the ground. As a result, a handful of the returned maps had crosses rather than clearly marked areas. In these cases the crosses were encircled and mapped, but the area of the circle was not included within the total heathland area for the site.

Although 'crossed' sites do not provide habitat parcel areas they do enable the location of heathland habitat within a site. Sites with crossed areas have been listed in Table 2 alongside the totals for habitat which have been delineated. Only one site, Grimsdyke Golf Course (LB Harrow), had no site contact and was not assessed within the current audit. One extra site was added to the original list: East Sheen Common. However, this site was not mapped as the site contained only one plant for which no location was provided.

Information on 'potential' heathland areas was provided by some site contacts. This included zones where restoration is already underway, as well as areas that have potential for restoration in the future. The information on 'potential' heathland areas has been mapped alongside heathland habitat parcels.