

HS4: Hedgerows

Definition

Hedgerows are linear features composed of woody species. Ancient hedgerows are those which were in existence before the Enclosures Acts (passed between 1720 and 1840 in Britain). Species-rich hedgerows are those which contain 5 or more native woody species on average in a 30 m length, as defined in Wicks & Cloughley, 1998.

In urban areas many hedgerows are of relatively recent origin, having been planted along the boundaries of gardens, parks or open space around schools and other institutions. These hedgerows are frequently composed of non-native coniferous or evergreen species.

London's hedgerow resource

The 1984/5 London Wildlife Habitat Survey documented native-species hedgerows only where these were within survey parcels. Therefore native-species hedgerows which fell outside survey parcels, such as those hedgerows traversing areas of arable farmland or close-mown amenity grassland; or isolated within the urban fabric, were not documented. This restricted data resulted in only 369 ha of native-species hedgerow being identified in London. This is undoubtedly a serious underestimate. However, when the amount of documented native-species hedgerow is identified by borough, as a percentage of the total native-species hedgerow resource in London, it does give an indication of the distribution of this resource (Table 1). Unsurprisingly, the bulk of this habitat is found in those outer London boroughs with extensive areas of countryside.

Other studies have been undertaken in an attempt to estimate the native-species hedgerow resource in London. A study by Vickers for the London Biodiversity Partnership estimated a total native-species hedgerow resource of 705 km. A study undertaken to estimate the extent of rural hedgerows in the London Borough of Brent found 31km.

None of the above studies have taken into account the extent of non-native hedgerows which, although of less intrinsic nature conservation value, are likely to account for most of the hedgerow resource in London.

Table 1: Native-species hedgerows in Greater London

Borough	Percentage of London's resource (%)	Borough	Percentage of London's resource (%)
City of London	0	Hillingdon	14.2
City of Westminster	0	Hounslow	4.2
Barking & Dagenham	0.3	Islington	0
Barnet	17.8	Kensington & Chelsea	0
Bexley	0.9	Kingston	1.5
Brent	0.9	Lambeth	0
Bromley	10.8	Lewisham	0
Camden	0	Merton	0

Borough	Percentage of London's resource (%)	Borough	Percentage of London's resource (%)
Croydon	1.7	Newham	0.1
Ealing	2.1	Redbridge	1.9
Enfield	3.3	Richmond	0.4
Greenwich	1.1	Southwark	0.8
Hackney	0	Sutton	0.4
Hammersmith & Fulham	0	Tower Hamlets	0
Haringey	0.6	Waltham Forest	0.1
Harrow	4.7	Wandsworth	0
Havering	32.3		

From London Wildlife Habitat Survey 1984/85

Nature Conservation Importance

The hedgerows with most intrinsic nature conservation value are mainly those that predate the Enclosures Acts. Many of these hedgerows are remnants of ancient woodland, retained to mark boundaries. They consist of species such as hazel *Corylus avellana*, oak *Quercus robur*, hornbeam *Carpinus betula* and field maple *Acer campestre* and harbour woodland or woodland edge flora including bluebell *Hyacinthoides non-scripta*, primrose *Primula vulgaris*, wood anemone *Anemone nemerosa* and honeysuckle *Lonicera periclymenum*.

The Enclosures Acts resulted in the planting of many hundreds of hedgerows which, although composed predominantly of quick-growing hawthorn *Crataegus monogyna* and therefore less diverse, can provide important nesting sites for a wide range of birds such as turtle dove, bullfinch, whitethroat, song thrush and greenfinch. During the breeding season, grey partridge and corn bunting are likely to find much of the insect prey with which they feed their chicks in the grasses and herbs at the base of hedgerows in arable fields.

Hedgerows, as boundary features, are ecologically important for a diverse range of invertebrates. The orientation of the hedge can provide varied micro-climates and associated features such as banks and ditches create additional habitat diversity.

Several butterfly species may also have an association with these older native-species hedgerows. White-letter hairstreak occurs in some hedgerows with regenerating elm suckers (the remnants of the mature elm trees which succumbed to Dutch elm disease) and gatekeeper is often numerous where hedgerows border meadows and areas of rough grassland.

As corridors, hedgerows allow species of small mammal such as wood mouse and bank vole to move between nearby wooded habitats. This helps to prevent local extinctions through the isolation of small populations. Bats will also use hedgerows as flight line features and the loss or fragmentation of the hedgerow can result in a reduction in a bat's range.

Old hedgerows are also important from a cultural perspective, often marking boundaries of historical significance or the line of historic green lanes and other rights of way.

Although of less intrinsic nature conservation value than the older native-species hedgerows, mixed and non-native species hedgerows around parks and gardens can provide nest-sites for

common garden birds and habitat for a variety of common species of invertebrate as well as some that are rare or declining. The privet hawk-moth, for example, is now rare in London, despite the caterpillar feeding on garden hedgerow shrubs such as garden privet, lilac and forsythia.

Some native hedgerows of nature conservation value in Greater London

Arkley Lane, LB Barnet

Fryent Country Park, LB Brent

Ickenham Marsh, Austin's Lane Pastures and Freezeland Covert, LB Hillingdon

Threats and Opportunities

Threats

Most old hedgerows in London, particularly in the arable farmland of the Green Belt or within the mostly densely urbanised parts of the city, no longer serve their original purpose as stock-proof barriers or markers of parish or property boundaries. Consequently they are subject to 'grubbing out' where their presence hinders agricultural operations, development or expansion of recreational areas - or neglect where they no longer delineate a recognised boundary. Even where a hedgerow may still prove useful as a stock-proof barrier (e.g. where livestock, particularly horses, are paddocked - a relatively common occurrence throughout London's Green Belt) it is often removed - either to expand the effective grazing area, or because of the difficulties of hedgerow maintenance.

Fortunately, complete removal of hedgerows is no longer the most serious threat to hedgerows. The 1990 DoE Countryside Survey suggested that there had been a 23% national decline in hedgerows between 1984 and 1990. Of the hedges that were lost, only 10% were actually removed, suggesting that the remaining 90% were lost through neglect or mismanagement. (Wicks & Cloughley, 1998). This is likely to be the major threat to hedgerows in London.

The most prevalent form of mismanagement is flailing or cutting too frequently. Hedges which are cut or flailed to the same width and height on an annual basis rarely flower or fruit (depriving animal species of a food supply) and become too dense and compact to provide suitable nesting habitat for many birds. Conversely, a hedgerow that has not been managed (cut, coppiced or layed) for many years eventually loses the essential characteristics of a hedgerow and becomes a line of trees. This habitat is usually considerably less valuable to wildlife.

Other commonly encountered examples of unsympathetic hedgerow management are mowing, spraying or ploughing vegetation at the base of a hedgerow; and filling gaps in native-species hedgerows with quick-growing conifers.

Opportunities

Hedgerows have become something a cause célèbre, in part because of their historical associations and as symbols of a romanticised view of the English countryside. This cultural value of hedgerows ensures that there is considerable public interest in hedgerow conservation and protection.

Better hedgerow management in London's farmland and semi-natural open spaces can be promoted through targeted advice and incentive schemes such as Countryside Stewardship. The

restoration of neglected hedgerows can also be addressed through incentive schemes linked to a growing interest in the traditional skills of hedgelaying and coppicing.

Although never a replacement for existing hedgerows, new hedges can be planted and can be particularly valuable in restoring links between isolated areas of semi-natural woodland or scrub habitats.

Traditional hedgerows were a functional element in the landscape. Therefore, restoring a 'purpose' for hedgerows might prove an effective tool for ensuring the management and restoration of existing hedgerows and the establishment of new ones. The Metropolitan Police Crime Prevention Unit has advised that planting thorny hedgerows along boundaries provides a deterrent to burglars. Furthermore, establishing or restoring hedgerows along the boundaries of parks and other open spaces provides a visual barrier to the urban landscape and may filter noise and other pollutants. Hedgerow restoration and management can also be a catalyst for restoring neglected rights of way or re-establishing a sense of neighbourhood by rediscovering and redefining old parish boundaries.

Data Sources

Department of the Environment (1990). *Countryside Survey*. DOE.

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

Vickers, D. (1995) *Regional Biodiversity Audit, Habitats in London. London Biodiversity Partnership* (unpublished).

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

Williams, L.R. (1989) The Survival of Rural Hedgerows in a London Borough. *The London Naturalist* No. 68.