

## HA2: Open Landscapes With Ancient/Old Trees

### Definition

This audit includes the following habitats:

- Deer parks
- Wood pasture
- Other areas of unimproved grassland with scattered old trees (usually oak).

Old, mostly 19<sup>th</sup> century landscaped parklands are also included where these appear to have been superimposed on former wood pasture or deer parks.

These habitats are derived from medieval forests, wooded commons, parks and pastures with trees in them. Subsequently, some had a designed landscape superimposed; usually during the 19th century. A range of native species usually predominates amongst the old trees, together with non-native species that have usually been planted. The Royal Parks are classic examples.

Defunct wood pasture is found where the traditional management of stock grazing is no longer practised and where the trees are no longer pollarded to provide timber or fodder. They may include a landscape history of commoners' rights and forest rights. A typical example is Epping Forest.

Parklands are the typical open landscapes with scattered trees. They may include a history of having been enclosed and managed as deer parks, Royal hunting grounds or formal public and private open landscapes.

### London's open landscapes with ancient/old trees resource

There have been no previous comprehensive surveys of this resource. There are many difficulties in trying to establish the extent of this habitat type due to its complex composition. It has, therefore, been very difficult to identify discrete areas of open landscape with ancient/old trees. Many areas of former wood pasture, for example, have developed into closed canopy woodland since the cessation of grazing and the natural character of some former wood pasture or deer park has been lost as a result of subsequent landscape planting or conversion to more formal urban parks. On the rural fringes of London some of this habitat may have been lost via conversion to farmland. Table 1 and the Map summarise the extent of this resource within the limitations outlined above.

Although not included within this audit, the city squares in the City of London and boroughs such as Islington, Kensington and Chelsea and Westminster support significant numbers of mature trees, particularly London Plane *Platanus x hispanica*. This species is not noted for its nature conservation value.

It is important to stress that this audit deals specifically with ancient/old trees found *within open landscapes* as opposed to an audit of individual ancient/old trees. Clearly ancient/old trees occur within several other habitats, particularly within the more formal parks and open spaces which are not covered by this audit; in woodlands, old hedgerows and within larger gardens of low-density suburban housing.

**Table 1: The Extent of the Open Landscapes with Ancient/Old Trees Resource in London**

Borough	Area (ha)	Borough	Area (ha)
City of London	0	Hounslow	19
Barking and Dagenham	0	Islington	3
Barnet	41	Kensington and Chelsea	35
Bexley	4	Kingston	0
Brent	22 (20)	Lambeth	0
Bromley	0	Lewisham	41
Camden	(39)	Merton	75
Croydon	22	Newham	86
Ealing	31	Redbridge	52
Enfield	55	Richmond	974 (80)
Greenwich	65	Southwark	30 (30)
Hackney	(21)	Sutton	(58)
Hammersmith & Fulham	(4)	Tower Hamlets	0
Haringey	0	Waltham Forest	20
Harrow	93	Wandsworth	28 (83)
Havering	74	Westminster	(375)
Hillingdon	23	London Total	<b>1899 (720)</b>

*NB:* Figures in parentheses indicate areas which are open landscapes with old trees, but where the trees are predominantly exotics.

### Nature Conservation Importance

The old trees and dead wood components of wood-pasture have some similarities to the original 'wildwood'. These sites are frequently of national, cultural and landscape importance. The great number and continuity of ancient/old trees and associated dead wood habitats within these areas are outstanding at a European scale and this habitat is most common in southern Britain. Pedunculate oak *Quercus robur* is the most common tree associated with this habitat although others, particularly sweet chesnut *Castanea sativa*, are associated with this resource in London. However, in former deer parks and wood pastures, which have subsequently been landscaped, exotic tree species (particularly London plane) often greatly outnumber the native oaks.

Parkland and wood-pasture habitats are particularly of value for the fungi, lichens, and insects associated with ancient/old trees and decaying timber. Several species of insect such as the click beetle *Ampedus cardinalis* and the crane fly *Ctenophora pectinicornis* which are confined to the deadwood habitat in the trees. Isolated oak trees may also support colonies of the purple hairstreak butterfly.

Open landscapes with ancient/old trees support a wide variety of bird species that are typical of both woodland and grassland habitats. However, green woodpecker, kestrel and nuthatch are species with a particular affinity for this habitat type. Mature trees and open habitats may also be of significance to bats, which may utilise them as roosts sites and as flight line features in the landscape.

### **Some open landscapes with ancient/old trees of nature conservation value in Greater London**

Barn Hill Open Space, LB Brent

Bedfords Park, LB Havering

Bentley Priory, LB Harrow

Greenwich Park, LB Greenwich

Richmond Park, LB Richmond upon Thames

Trent Park, LB Enfield

## **Threats and Opportunities**

### **Threats**

The major threat to open landscapes with ancient/old trees is the cessation of traditional management, particularly grazing. Most sites in London are no longer managed in this way although deer still graze Richmond Park and Bushy Park. The remainder of this habitat in London is maintained by mowing, which is a much less sympathetic management regime. In addition to the lack of grazing, many mature parkland trees are managed inappropriately from a nature conservation point of view, by the removal of dead and decaying limbs and the clearance of fallen or standing dead wood.

Open landscapes with ancient/old trees are, by definition, habitats with a well-established presence in the landscape. This is itself a threat to their survival as it is often forgotten that they are essentially human-created landscapes that need to be maintained by human intervention. New generations of trees need to be planted (or naturally regenerating saplings protected from mowing or grazing) as long-term replacements for extant mature specimens.

A less obvious threat, but one which may adversely affect the diversity of sensitive species such as lichens and fungi living on the mature trees, is air pollution. It is well known that many lichen species are sensitive to air pollution and their loss, or failure to re-establish themselves, may have unforeseen consequences for a wider range of species which may be dependent upon the lichen communities.

Poor management of these sites is linked with a poor understanding of their nature conservation value and a concern for public safety. There is a widespread and mistaken belief that dead wood is bad for the tree and a public hazard.

### **Opportunities**

Most of the resource in London lies within areas of protected open space. However, this does not necessarily ensure effective nature conservation management, as the protection is aimed mainly at maintaining the recreational and aesthetic attributes of habitat. However, under the auspices of the Veteran Trees Initiative, better management of ancient and old trees for nature conservation is being promoted. A number of sites around London provide examples of successful re-introduction of pollarding, planting of replacement trees, and resumption of grazing management. These techniques could be readily translated to sites within London.

The old parklands in London are among the most popular places visited by Londoners and tourists alike. Most informal recreational activity is compatible with maintaining the nature conservation of these sites and, therefore, there are opportunities for raising awareness about park management that integrates biodiversity conservation, landscape maintenance and recreational demand. Awareness-

raising programmes could focus on the conservation work for some high-profile species such as the stag beetle, bats and woodpeckers.

Local communities could become involved with the conservation of this habitat by collecting and propagating local seed (from oaks and other appropriate trees) for eventual planting out to provide future generations of parkland trees.

The moss and lichen communities on ancient and old parkland trees may provide a useful biological indicator for air quality in the city. Recovery of fungi, mosses and lichens on the trees is related directly to reductions in nitrogen dioxide and sulphur dioxide in the air. As a better understanding develops of the potentially damaging effects of climate change on trees (for example drought stress), people may develop a better appreciation of their own responsibilities in terms of air pollution and water consumption. This would provide a link between the London Biodiversity Action Plan and other environmental initiatives.

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### **Rationale and limitations of approach**

This audit was conducted as a desk top study, relying upon the best available data, the present day accuracy of which may vary from site to site.

The audit should be treated as a guide and not as a definitive statement of the extent of Greater London's Open Landscapes with Ancient/Old Trees. Each borough could refine the audit by co-ordinating a re-survey of the listed sites, thereby adding to, or reducing the number of sites or area of each site included.

The majority of the data collected has been taken from the London Ecology Unit (LEU) 'Phase 1' habitat survey of Greater London (1984). This survey represents the most fully comprehensive survey to date. It has been cross-referenced with re-surveys carried out by LEU. Further cross-reference was made with the Register of Parks and Gardens of Greater London compiled by English Heritage. Without visiting every site to assess whether or not each should be included within this audit, it is not possible at this stage to differentiate easily between parks with ancient/old trees but with no other notable habitat features and those parks with all these features. Therefore, some sites may have been included at this stage that do not possess all features, whilst others that do possess all features have been excluded.

A considerable amount of further research is needed to obtain a full audit of this resource. For example, difficulties may arise where ancient and old trees occur alongside rivers and streams; some opinion holds that this relationship should be treated as linear wood pasture. Further difficulties may arise where ancient and old trees occur at the edges of ancient woodland, where the distinction between woodland and open landscape may not be clear. At this stage of evaluation, it has not been possible to identify those pasture sites where the intervening hedgerows include ancient or old trees; this information is not yet included in the LEU data set. For example, there may be significant numbers of ancient hedgerows alongside hay meadows or pastures in several of the north London outer boroughs such as Havering and Barnet.

Whatever definitions are arrived at in future in London, a fundamental point must be maintained: namely that it is the wood decay caused by the symbiotic relationship between the tree and its fungi that is most important. This relationship gives rise to a 'deadwood' ecosystem where fungi, mosses and lichens thrive and provide a food source for an invertebrate food chain. Conserving deadwood will pose the biggest challenge to London's site managers.

## Appendix

**Table 2: Open Landscapes With Ancient/Old Trees By Borough.**

<b>Borough</b>	<b>Site Name</b>	<b>Grid Reference</b>	<b>Area(ha)</b>
<b>Barnet</b>	Highwood Hill (Sellars Field)	222 935	7
	Hampstead Heath	260875	6
	Totteridge Common	230 939	3
	Prince's Park	243 885	1
	Friary Park	273 926	9
	Edgwarebury Park	190 934	15
	<b>Borough Total</b>		
<b>Bexley</b>	Bigs Hill Wood	506 748	3
	Waring Park	5468 1724	1
	<b>Borough Total</b>		
<b>Brent</b>	Barn Hill Open Space	194 875	22
	Gladstone Park	223 858	20
	<b>Borough Total</b>		
<b>Camden</b>	Hampstead Heath	270 867	
	Waterlow Park	286 871	11
	Regent's Park	281 828	28
	<b>Borough Total</b>		
<b>Croydon</b>	The Ruffets	349 633	1
	Beaulieu Heights	334 695	7
	Norwood Grove	310 700	14
	<b>Borough Total</b>		
<b>Ealing</b>	Horsenden Hill		20
	Twyford Abbey	190 832	6
	Islip Manor Park	127 843	5
	<b>Borough Total</b>		
<b>Enfield</b>	Trent Park	289 975	31
	Forty Hill Park and Estate	335 987	24
	<b>Borough Total</b>		

<b>Borough</b>	<b>Site Name</b>	<b>Grid Reference</b>	<b>Area(ha)</b>
<b>Greenwich</b>	Greenwich Park	392 765	65
	Maryon Wilson Park		6
	<b>Borough Total</b>		<b>71</b>
<b>Hackney</b>	Clissold Park	327 865	21
	<b>Borough Total</b>		<b>21</b>
<b>Hammersmith &amp; Fulham</b>	Fulham Palace and Bishop's Park	243 760	4
	<b>Borough Total</b>		<b>4</b>
<b>Harrow</b>	Bentley Priory	155 928	62
	Grounds of the Royal National Orthopedic Hospital	159 939	11
	Pear Wood and Stanmore Country Park	172 933	20
	<b>Borough Total</b>		<b>93</b>
<b>Havering</b>	Bedfords Park	523 919	12
	Dagnam Parkland Pastures and Woods	547 936	43
	Dagnam Park	552 932	16
	Latchet Shaw	590 891	3
	<b>Borough Total</b>		<b>74</b>
<b>Hillingdon</b>	Hillingdon Court Park	072 839	23
	<b>Borough Total</b>		<b>23</b>
<b>Hounslow</b>	Chiswick House Grounds	209 775	19
	Osterley Park	146 781	55
	Syon Park	173 767	47
	<b>Borough Total</b>		<b>266</b>
<b>Kensington &amp; Chelsea</b>	Kensington Gardens	257 797 - 268 805	18
	<b>Borough Total</b>		<b>18</b>
<b>Lewisham</b>	Beckenham Place Park Golf Course	383 707	39
	Mayow Park	357 719	2
	<b>Borough Total</b>		<b>41</b>

<b>Borough</b>	<b>Site Name</b>	<b>Grid Reference</b>	<b>Area(ha)</b>
<b>Merton</b>	Morden Hall Park	261 687	20
	Wimbledon Park Golf Course	245 723	20
	Morden Park	246 675	35
	<b>Borough Total</b>		<b>75</b>
<b>Newham</b>	West Ham Park	401 842	31
	<b>Borough Total</b>		<b>31</b>
<b>Redbridge</b>	Claybury Hospital	429 917 - 440 908	8
	Woodford Green Cricket Ground	399 915 - 400 917	9
	Epping Forest - Whitehall Plain	400 940	35
	<b>Borough Total</b>		<b>52</b>
<b>Richmond upon Thames</b>	Hampton Court Park	165 685	188
	Bushy Park	155 698	240
	Old Deer Park	180 763	86
	The Copse and Holly Hedge Field	176 728	10
	Richmond Park	200 730	450
	Kew Gardens	185 770	80
	<b>Borough Total</b>		<b>974 (80)</b>
<b>Southwark</b>	Dulwich and Sydenham Hill Golf Course	340 727	30
	Dulwich Park	336 736	30
	<b>Borough Total</b>		<b>30 (30)</b>
<b>Sutton</b>	Beddington Park	292 654	58
	<b>Borough Total</b>		<b>(58)</b>
<b>Waltham Forest</b>	Highhams Park	395 922	9
	Epping Forest	392 892	11
	<b>Borough Total</b>		<b>20</b>
<b>Wandsworth</b>	Tooting Bec Common	287 715 - 296 720	16
	Wandsworth Common	266 745 - 278 734	12
	Battersea Park	280 767 - 286 775	83
	<b>Borough Total</b>		<b>28 (83)</b>



<b>Borough</b>	<b>Site Name</b>	<b>Grid Reference</b>	<b>Area(ha)</b>
<b>Westminster</b>	Regent's Park	274 832 - 285 835	74
	Green Park	287 799 - 291 798	62
	St. James' Park	295 798 - 290 799	49
	Kensington Gardens	260 803 - 268 805	190
	<b>Borough Total</b>		<b>(375)</b>
<b>London total</b>			<b>1899 (720)</b>

*NB:* Lambeth has no records, though Clapham Common and Brockwell Park have areas of similar habitat.