

Lucas Gardens Tree Trail



Lucas Gardens were opened as a public park in July 1955. They were originally the grounds of the terrace of 12 Georgian houses known as East Terrace built around 1790. From 1846 they were used as an extension to Camberwell House Lunatic Asylum.

The tree trail route is anti-clockwise and starts just inside the Peckham Road entrance on the right with a long line of (1) Common Limes (*Tilia x europaea*) - this is a hybrid of broad and small-leaved limes, the most frequently planted limes for the last 300 years. The buds are fat, leaves typically 10x10 cm, flowers hanging 4-10 per bract. These lime trees have very many shoots growing from the base, (epicormic growth), which should be pruned regularly for the health of the tree. Those limes at the main entrance and along the right hand side of the park have been allowed to grow to their natural shape, but those towards the back of the park have been reduced in height which has resulted in foliage covering the whole trunk and loss of their graceful shape. Lime wood is used in the making of musical instruments.



In the patch of lawn facing the row of limes, are four (three in a group and one on its own) 2) Tibetan Cherries (*Prunus serrula*) - a species of cherry native to China and used as ornamental trees because of their striking smooth coppery red bark and clusters of blossom in spring. These small deciduous trees can reach a height of 9 metres. The bark has horizontal lenticels, the fruit is a small oval bright red drupe. These trees live for about 50 years.



Keep walking towards the circular yellow and black metal fence. On your left near the wall, just beyond the last two Tibetan Cherries, is a tree with a curved trunk and three bird boxes hanging from it. This is a (3) Tree of Heaven (*Ailanthus altissima*) - This tree was introduced from China in 1751 and was so named because it is “a tree reaching the skies”. It seems to be resilient to pollution but has a relatively short life of up to 70 years. It has pinnate leaves, i.e. multiple leaflets on a single stalk. It is now regarded as an invasive species with an overly abundant amount of seeds, reproduction through roots and a chemical that can prevent or kill nearby plants. The leaves on the male tree smell like old trainers. Tree of Heaven saplings have spread through Lucas Gardens.



A couple of metres behind the yellow and black circular fence you can see a magnificent tree guarding the view as the park opens up. This is a (4) Copper Beech (*Fagus sylvatica Purpurea*) –They appeared as natural mutants of the common beech in various parts of Europe as early as the 15th century. Beech trees have a typical lifespan of 200 - 300 years. The bark is smooth, grey, often with slight horizontal etchings. Leaf buds are coppery with a criss-cross pattern. Both male and female flowers grow on the same tree. In spring the copper beech’s male catkins hang from long stalks, while female flowers grow in pairs, surrounded by a cup. The leaves are oval and fringed with silky brown hairs. Little will grow under a beech tree. The textile Modal (a kind of rayon) is often made from reconstituted pulped beech wood.



Next, head to the green bench immediately in front of you – this is around 10 metres on from the Copper Beech on the main path into the park. Located on the green patch ahead on your right is a Y shaped tree, a

(5) Holm Oak (*Quercus ilex*) – One of the evergreen oaks, the Holm Oak is a Mediterranean species introduced here in the 1500’s. It thrives to such a degree that it commonly seeds itself and these saplings can be mistaken for Holly as the young

leaves are similarly spiky. Often bushy and very dense, leaves are evergreen and blackish, acorns small with felted cup-scales. The Holm Oak can live for about 400 years and when mature reach a height of 65 to 70 feet. They are sometimes planted as windbreaks along the sea coast because of their resistance to salt-spray.



To the right of the Holm Oak are two (6) Wych Elms (*Ulmus glabra*) - The word "wych", also spelled "witch", comes from the Old English wice, meaning pliant or supple. They can live 200-300 years and are the most common elm in the north and west of the UK and the only British native elm tree. Elm leaves are oval and characteristically asymmetric at the base. The fruit is a winged samara with a small seed in the centre. Since the late 1960s millions of Elms have been killed by Dutch Elm disease, however Elms are making a comeback in the south of England. Before metal was widely available, many English towns had elm water mains.



Keep going along the main path for around 15 metres and stop at the first black bin on your right. From this vantage point, the first three trees you can see on your left are (7) Norway Maples (*Acer platanoides*) - Introduced in the 17th century they can live up to 250 years. Norway Maples are distinguished from other maples by their larger leaves with pointed rather than blunt lobes and by the presence of one or more teeth on all of the lobes. They produce a large quantity of viable seeds in paired samaras (winged seed pods). The timber is used for furniture, flooring and musical instruments and it is believed that many Stradivarius and other older Italian violins have probably been made from Norway Maples. There is also a Purple Norway Maple in the centre of Lucas Gardens.



From the black bin, walk up the ramp to your right towards the two children's rocking horses. To the left of the locked gate ahead of you, growing beside the wall and looking like a large bush is a (8) Common Hazel (*Corylus avellana*) – also a native British tree. It is often found in hedges, or coppiced, but when allowed to grow can reach up to 12m and live for up to 80 years. Leaves are nearly round, doubly toothed with a sharp point at the tip, soft, hairy and floppy. Yellow male catkins open in late winter and nuts ripen early in autumn. The Hazel has a reputation as a magical tree, a hazel rod protects against evil spirits, and can apparently be used as a wand and for water-divining.



Now, turn back towards the park and walk down the three steps back onto the main path. Next turn right. The first tree you pass on your right is a (9) Japanese Pagoda Tree (*Styphnolobium japonicum*) - The Japanese Pagoda tree is native to China, but cultivated and naturalised in Japan. Known in China as the Scholar Tree, it has been planted in gardens and temple grounds for over 2,000 years. As the symbol of the 8th moon (September) when examinations for the Chinese Civil Service take place, scholars studied beneath the tree. The tree has white flowers in August but flowering usually commences when the tree is 30–40 years old. Fruits form after the flowers fade, looking like a string of pearls.



Set back behind the Japanese Pagoda Tree, towards the perimeter wall, with a wide, gnarled trunk is a (10) London Plane (*Platanus x hispanica*) - London Plane is a hybrid of the American Sycamore and the Oriental Plane. As a hybrid it is more vigorous than either parent and can grow to 35m and live for several hundred years. The oldest Plane trees in London are 320 years old. They are tough trees that have been much planted in London streets and parks where they can tolerate high pollution levels. The bark is scaly, the leaves are large, thick and maple-like. The fruits are distinct 3 cm balls of hairy seeds which break up in the spring. The London Plane is the capital's most common tree.



Keep going along the main path, on the left, with a circular stone paving at its base, is a (11) Common Hawthorn (*Crataegus monogyna*) – Common in most hedgerows it can grow to 15m tall. Known also as a May-tree (the month it flowers) the Hawthorn is slow growing but very long-lived. It has small deeply lobed leaves, twigs with sharp thorns, scented white flowers and red berries (haws) with one pip. The Common Hawthorn is a native British tree, which is defined as a species that was present in Britain when flooding divided Britain from mainland Europe and the English Channel (around 10,000

years ago). Britain's most famous hawthorn is the Holy Thorn of Glastonbury. It provides food for many species of moths and butterflies; fortunately it is considered bad luck to cut down a hawthorn.



Follow the same path straight on all the way to the children's playground, up a slight hill. Look on the right for the last tree before the entrance gate to the park the playground. This tree is an (12) Indian Horse Chestnut (*Aesculus indica*) – This Indian Horse Chestnut has been grafted (visible on the lower trunk) on to a normal Horse Chestnut. It has the characteristic chestnut leaves, but with pale pink flowers and small black-brown conkers in spineless husks. Grafts are sometimes made to support a more decorative or less hardy specimen onto a sturdier specimen.



Immediately to your left, next to the metal fence enclosing the children's playground, is a row of three (13) Sycamores (*Acer pseudoplatanus*) – Thought to have been introduced to the UK during the sixteenth century, the sycamore can grow to a height of 35m (115ft) and live for 400 years. The branches form a broad rounded crown. The bark is grey, smooth when young and later flaking in irregular patches. The leaves grow on long 'leafstalks' and are large and palmate, with 5 large radiating lobes. The flowers are greenish-yellow and hang in dangling flowerheads called panicles. They produce copious amounts of pollen and nectar that are attractive to insects. The winged seeds (samaras) germinate freely in the spring. There are many self-seeded Sycamores in the park, and are not popular with gardeners.



Now, leave the path to the left and track the metal fence enclosing the children's playground, heading towards the centre of the park and a wooden climbing frame. Pass through a green gate and continue tracking the metal fence. The first tree ahead of you, to the right of the wooden climbing frame, and inside the bendy path, is an (14) English Oak (*Quercus robur*) – this tree is quite young, but could grow to 40 metres. Also known as Pedunculate Oak or Common Oak, it and the Sessile Oak are the only native British oaks. It has a broad crown, grey bark in knobby ridges, and leaves have irregular deep lobes. The fruit (acorns) are often paired on a long stalk called a peduncle. One tree can produce about 25 million acorns in its lifetime. It takes 40 years before an oak tree produces its first acorns and about 120 years before peak productivity. The English Oak supports over 280 species of insects and bird life more than any other native tree in the UK. Oak trees have been here for much longer than humans, with remnants of the trees dating back about 300,000

years. They are still the commonest trees in our shrinking woodlands. In the 1700s English Oak trees were grown especially for ship builders, every ship commissioned by Drake and Nelson used wood from around 2,500 trees.



Next, head to the circular swing that looks a bit like a tyre. On your right in this corner of the park are quite a number of (15) Golden Alders (*Alnus incana Aurea*) - these are a rare variant of Alder with yellow foliage, slender and less tall than other alders, reaching 12 metres and living for about 50 years. Their yellow shoots turn orange in winter. The flowers are catkins, with longer male catkins on the same plant as shorter female catkins. Alders generally thrive in wet locations, when waterlogged, they get stronger and harder.



To the left of the swing, next to a curved wooden sculpture, is a tree with a trunk that looks like cork, a (16) Cork Oak (*Quercus suber*) – a small evergreen oak tree from the Mediterranean basin where Cork Oak forests cover wide areas. Fossil remnants show the tree to be an ancient species. They are slow-growing and can live for 250 years. They have a very thick and deeply ridged bark which is harvested as cork. This can be harvested every 7 to 10 years after which a new layer of cork grows. The Romans used it for making sandals. Today it is used for bottle corks, floor tiles and sound-proofing.



Face downhill towards the centre of the park and join the path to the left of the wooden sculpture. Follow the path through the grey-black gate into the lawn area and then immediately look to your right. The large tree against the boundary wall is a (17) Horse Chestnut (*Aesculus hippocastanum*) - Originating in Albania and the north of Greece it was widely planted after introduction in 1616. They can grow to 40 metres and live for 300 years. It has easily recognisable leaves - 5–7 toothed leaflets on a central stem. The flower spikes (white flowers each with a pink spot) appear in May. Sadly Horse Chestnuts are afflicted by both the larva of a leaf-mining moth which from mid-July causes the leaves to wilt and die and a fungal infection known as bleeding canker which can also be fatal. Horse Chestnuts remain very popular trees, particularly for the vast numbers of conkers that appear in the autumn.



Follow the path for 10 metres and stop just before the path curves left. The heavily leaning tree to your right, with one of its limbs propped up, is a (18) Black Mulberry (*Morus nigra*) - Probably a native of the Black Sea area but cultivated in the UK for many years. Mulberry trees can grow 15 metres high but rarely live for more than 75 years. They have a crooked trunk, orange-brown bark, crumbling patches and many big burrs. Leaves are heart-shaped, rough above and hairy beneath. Mulberry fruit ripens in high summer, is richly flavoured and quickly stains fingers and clothes.

Leaves of the White Mulberry are the food required for the caterpillars that produce silk fibres. China had a monopoly on silk production for 2,000 years. King James I wanted to produce silk, so he had a 4 acre mulberry garden planted, but the project failed because he mistakenly planted the Black Mulberry instead of the White Mulberry. This Black Mulberry is quite old and is listed as a notable 'Morus Londinium'. Tengujo, the thinnest paper in the world, is produced in Japan and made with kozo (stems of mulberry trees).



Behind the Black Mulberry, by the boundary wall, is a (19) Red Oak (*Quercus rubra*) - a large oak tree; note the very large leaves often 20 cm long and small acorns of about 2 cm which take 2 years to ripen. Oaks normally do not fruit for the first 20 years and do not produce acorns for another 20 years. These Red Oaks are native to North America, but have been planted in the UK for 300 years.



To the left of the Mulberry, you can't miss the largest tree in the park, with an enormous trunk, a (20) Common Ash (*Fraxinus excelsior*) - Can grow to a height of 35m and live for 200-300 years. This common woodland tree is the last of our native trees into leaf, it is also one of the first to drop its leaves. The leaves are pinnate, having leaflets in pairs on either side of a leaf stalk. The tree is easily identified in winter by its black, velvety leaf buds arranged opposite each other and at 90° to the next pair. It has winged fruits known as 'keys' seen hanging in large bunches in autumn. The timber is used for traditional tool handles.

The Common Ash is under attack from both the fungal infection *Chalara fraxinea*, also known as Ash Dieback, killing 90 per cent of the trees it affects and the emerald ash borer beetle. There are fears that many of the country's Common Ash trees will be lost, but they do self seed and saplings spring up in the most unlikely places.



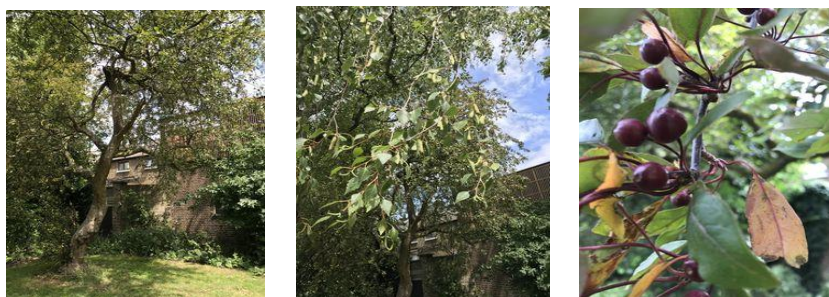
Leaving the path onto the lawn, the next large tree down the lawn beyond the huge Ash is a (21) **False Acacia** (*Robinia pseudoacacia*) – also known as Black Locust. Introduced into Britain in 1636, the False Acacia grows to 20–30 metres and lives about 120 years. The leaves and thorns bear a resemblance to the Acacia in the Mimosa family, so it was named as False Acacia. The bark has long deep often diagonal fissures. The leaves have 9-23 oval untoothed leaflets. Flowers are white cascades at the start of summer and seed pods of around 10 cm hang in bunches. In many European countries, it is the source of acacia honey.



Keep going down the gently sloping lawn. You will see three different trees in a row ahead. The middle one of the three is a (22) **Silver Birch** (*Betula pendula*) - These native British weeping silver birches, distinguished by their white bark, can reach 30 metres in height and live 50-60 years providing food and habitat for more than 300 insect species. They have and male and female catkins on the same tree. Some shoots are long and bear the male catkins at the tip (present during the winter), while others are short and bear female catkins which develop in spring. Broomsticks are made with birch twigs, and they were used to brush away evil spirits.



At the right of the silver birch there is a (23) **Crab Apple** (*Malus sylvestris*) - Also a native British tree and an ancestor of the cultivated apple. They can live to up to 100 years; mature trees grow to around 10m in height. They have a wide canopy and a gnarled 'crabbed' appearance. The flowers are scented. Birds and mammals eat the fruit. The fruit can be used to make an exquisite, pink coloured jelly. Crab apples are traditionally associated with love and marriage.



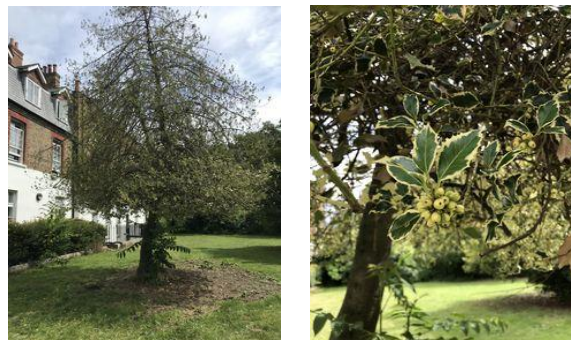
Bearing left, around 20 metres past the three trees, is a large bush like tree next to the wooden fence. This is a (24) Bay (*Laurus nobilis*) – Also known as Bay Laurel and Sweet Bay. It is an aromatic evergreen tree with smooth green leaves which are used in cooking as bay leaves. The fruit is a small shiny black berry that contains one seed. It is also used as a topiary plant and for hedges. Bay laurel extracts are used in herbal medicine as a salve on open wounds and aromatherapy.



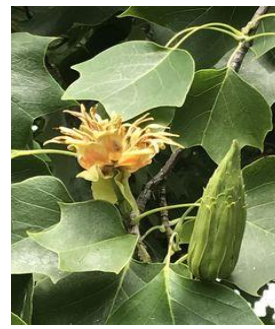
Beyond the Bay, the tree tucked into the rather cramped corner on the right and jutting out is an (25) Indian Bean Tree (*Catalpa bignonioides*) – Introduced to the UK in 1726, these spectacular trees originate from the banks of the Mississippi in the American Deep South. They can grow 15m and though not particularly long lived there is a specimen in a Reading churchyard that is 150 years old. Its enormous leaves appear in late June up to 30 cm across, followed in July by flower spikes which are white with attractive yellow and purple splashes. Thin bean pods up to 40 cm long dangle from the branches during autumn and winter. Crushed leaves of *Catalpa bignonioides* produce a rank smell.



Turn left, track the metal fence against the buildings for a short distance until you see an evergreen tree with green and yellow spiky leaves. This is a (26) Variegated Holly (*Ilex aquifolium*) – A native British evergreen tree or shrub and can live for 300 years. The flowers develop into red berries which can remain on the tree throughout the winter - vital food for birds and small mammals. Holly wood is the whitest of all woods, it is commonly used to make walking sticks.



Looking back towards the centre of the park, around 10 metres to the right of another similar sized – but all-green – holly tree, is a very tall tree dominating this section of the lawn, a (27) Tulip Tree (*Liriodendron tulipifera*) – A very tall and shapely tree often growing to 35 metres, living 100-200 years, it has a straight trunk, rich green foliage and remarkable large tulip-shaped leaves. In the summer it has wonderful large cream flowers which produce large quantities of nectar. The unusual tulip-shaped leaves turn butter yellow in autumn. This Tulip Tree lost part of its crown in the great storm of 1987, but it has continued to grow and flourish. It is used in church organs.



This brings us to the end of the Tree Trail.

Questions

What is the tallest tree in Lucas Gardens?

Which tree is good for making walking sticks?

Which tree has leaves that smell like old trainers?

When was the Great Storm?

Name two trees that resist pollution

What is the capital's most common tree?

Which native tree supports most wildlife?

Which tree produces conkers?

Which tree is named after a flower and why?