

## Friends of Headington Hill Park

### HEADINGTON HILL PARK - TREE TRAIL



Headington Hill Park has been maintained as a public green space since 1953. Out of its approximate 1,000 trees, the Friends have compiled a walk highlighting a few of the most interesting, old and rare species, many of the trees from the original arboretum survive. From this list of 51 special trees shown on the plan, the Friends have created a shorter list of the most interesting (shown in red). This should enable a visitor with limited time to have an informative and enjoyable half an hour walk around the park.

**01 Lime tree avenue** (*Tilia × europaea*). This avenue of 20 limes was planted along the footpath that leads towards St Clement’s Church (completed 1829) to align with the avenue of limes within the churchyard itself. The church contains a memorial to James Morrell Snr and James Morrell Jnr, and they and other members of the family are buried in the churchyard.

**02 London Plane** (*Platanus × hispanica*). A large, fine specimen, Hybrid between *P. orientalis* and *P. occidentalis*. First planted in the UK around 1680. The London Plane is very tolerant of atmospheric pollution and root compaction, and for this reason is a popular urban roadside species. It is one of the most efficient trees at removing small particulate pollutants.

**03 Chilean Pine or Monkey Puzzle Tree** (*Araucaria araucana*). The first tree planted by the Friends in December 2017. It is endangered in its native Chile, but now widely grown as an ornamental tree and it was very popular in Victorian times. The leaves are thick, with very sharp edges and tips, and they have a lifespan of over 20 years. The cones produce nuts. This pine was known to exist 500 million years ago, but was first discovered by Europeans in the 1780s. It is said that in 1850 the barrister Charles Austin on being shown one for the first time exclaimed: ‘It would puzzle a monkey to climb that’, hence the name.

**04 American (Northern) Red Oak** (*Quercus rubra*). This is a good size specimen, which displays rich red autumn colour. Its bark features ridges that appear to have shiny stripes down the centre. A few other oaks have bark with this kind of appearance in the upper tree, but the American Red Oak is the only one with the striping all the way down the trunk. Unlike other oaks, the wood of the Red Oak has a very open grain so is unsuitable for boatbuilding.

**05 Butternut** (*Juglans cinerea*). Sometimes known as the White Walnut. Very rare in the UK, this is an old and large specimen, 22m high with a spread of 34m. This tree is listed as one of the 'Monumental Trees of England'. It originates from the eastern USA and Canada where it is listed as 'endangered'. The nut matures in mid-autumn, and the bark and nut rinds were once used to dye homespun cloth. During the American Civil War the Confederate soldiers were known as 'butternuts' because their uniforms were coloured with butternut dye.

**06 Foxglove Tree or Princess Tree** (*Paulownia tomentosa*). This is a group of three originating from a previously fallen tree. A native of China, it has one of the largest leaves found in the UK and produces violet foxglove like flowers in May. There is a tradition in Japan to plant one of these trees at the birth of a girl and this fast-growing species matures as she does. When the girl is eligible for marriage the tree is cut down and carved into wooden articles for her dowry.

**07 Nettle Tree or Honeyberry** (*Celtis australis*), A group of three. Related to the elm, and originally from Southern Europe, it was introduced into England in 1796 and is confined to collections. The fruit of this tree is much loved by birds and other wildlife. It is supposed to have been the 'Lotus' fruit of the ancients. In the 8th century BC Homer has Ulysses refer to the 'Lotus-eaters' and the 'lotus' in the Odyssey,

**08 English Oak** (*Quercus robur*). A large and splendid tree, with a spread of over 30m and a girth of 3.7m. This tree is of great age, around 150 years, and is certainly one of the first trees planted in the arboretum when the Hall was built. (The Forestry Commission paper, 'Estimating the Age of Large and Veteran Trees in Britain' concludes that with large oaks and other species, the age in years is approximately equal to the girth measured in inches at chest height.) The oak, the national tree of England, supports the highest biodiversity of insect herbivores, small mammals and birds of any British plant.

**09 Japanese Maple** (*Acer palmatum cultivar*) A group of three plus two singles. This small species of tree, introduced into England in 1820, displays strong red or golden autumn colour, and has become synonymous with the high art of Japanese and oriental gardens. It is also a popular choice for 'bonsai'.

**10 Oriental Plane** (*Platanus orientalis*). This is a large specimen, but younger than the one in Christ Church, planted around 1636 by Edward Pococke which was the inspiration for Lewis Carroll's 'Jabwocky'. It is also known as the Tree of Knowledge or the Tree of Hippocrates as it was under these trees that Hippocrates, the 'Father of Medicine' taught early medicine at Kos.

**11 Himalayan Cedar** (*Cedrus deodara*). A native of the northern India and is the national tree of Pakistan. The name derives from the Sanskrit for divine druid tree. It has a conic crown with drooping branchlets from the level branches. The timber is rot resistant and fine grained, and traditionally used for the construction of religious temples. The inner wood is aromatic and used to repel insects.

**12 Turkey Oak** (*Quercus cerris*). Originally from Asia Minor, this is a good sized specimen. It is faster growing than the English Oak and the acorns have cups covered in hairy bristles. The tree harbours gall wasps, whose larvae damage the acorns of native British oaks and prevent the production of galls or oak apples. Oak galls have been used in the production of ink since at least the time of the Roman Empire. Gall ink was also used to write Magna Carta and the 1217 Charter of the Forest.

**13 Black Birch** (*Betula nigra*). This is a rare species originating from the Eastern USA. It has attractive and variable bark, usually being dark grey-brown to pinkish-brown and scaly. The fruit is unusual among birches in that it matures in late spring. It is composed of numerous tiny winged seeds packed between the catkin bracts. Native Americans used the boiled sap as a sweetener similar to maple syrup.

**14 Red Maple** (*Acer rubrum*). This is abundant in eastern and central North America. Its flowers, petioles, twigs and seeds are all red to varying degrees. It is best known for its brilliant deep scarlet foliage in autumn.

**15 Pride of India or Golden Rain Tree** (*Koelreuteria paniculata*). Native of eastern Asia, it was introduced from China in the 1760s. It has unusual foliage with small panicles of yellow flowers, followed by papery bladder-like seed pods ripening to pink in the autumn.

**16 Japanese Bitter Orange** (*Poncirus trifoliata*). This tree is rare with only a few examples in the UK. Unusually, it is a hardy member of the orange family, armed with large spines, lovely white scented flowers in the spring, followed by small ‘bitter’ oranges in the autumn (not edible). Studies have shown that *Poncirus trifoliata* contains a high concentration of ‘aurapten’, which give immunity against ‘citrus tree virus’ (CTV), a disease responsible for the death of millions of citrus trees.

**17 Persian Ironwood Tree** (*Parrotia persica*). It is one of several in the park. It has dark red flowers in early spring and the leaves turn rich purple to brilliant red in the autumn. A native of northern Iran and a member of the Witch Hazel family. It is named after the German naturalist Friedrich Parrot (born 1791).

**18 Swamp or Bald Cypress** (*Taxodium distichum*) Several trees. Deciduous (hence bald) conifer from southern USA where it thrives in wetlands. The feathery foliage turns orange-brown to dull red in the autumn.

**19 Dawn Redwood** (*Metasequoia glyptostroboides*). Thought to be extinct for 65 million years until, in 1944, a small population was found in China. Now widely distributed in parks and arboreta, it is the smallest of the three giant redwoods, but it can still reach a height of 60m. The distinctive grooved bark develops into buttresses on the lower trunk and the deciduous foliage turns golden in the autumn. (A large group of young trees have recently been planted at the bottom of South Park).

**20 Indian Bean Tree** (*Catalpa bignonioides*). Originating from the south east USA, this is one of several in the park. It has very large, heart-shaped leaves, campanula-like flowers followed by long bean pods. The wood is brittle and hard, and does not rot easily.

The name “Catalpa” is a misspelling, by a European botanist, of “Catawba”, who were the local people living in the area where the tree was discovered in the 1700s.

**21 Katsura Trees** (*Cercidiphyllum japonicum*), a group of six trees. A native of Japan and China, the Katsura tree has small, heart-shaped, copper-toned green leaves, which turn stunning shades of yellow, honey-orange and pink in the autumn, and as they fall they produce a delicious and distinctive scent of burnt sugar or caramel from late summer/early autumn.

**22 Pin Oak** (*Quercus palustris*). This is uncommon in the UK. Unlike other oaks it is fast growing and short lived. The leaf is mostly hairless except for a very characteristic tuft of pale orange-brown down on the lower surface which turns bronze in the autumn. The tree can be recognised by its distinctive dead branches on the lower trunk (‘pins’). The name may also derive from the use of this wood for timber dowels or pins in timber framed structures.

**23 Copper Beech** (*Fagus sylvatica purpurea*). A large noble tree with smooth silver-grey bark, deep purple leaves and pink tinged flowers. Beech nuts are a useful food for wildlife.

**25 Southern Magnolia** (*Magnolia grandiflora*). Sometimes known as Bull Bay, it is a large evergreen tree with dark green leaves (unlike the other nearby magnolias (*Magnolia soulangeana*) which are deciduous). It has large creamy white, lemon scented flowers from July to August. Native of south eastern USA, it was formally introduced into the UK in 1726 by plant collector Mark Catesby. Earlier the Administrator of South Carolina Sir John Colleton (1608-1666), on his retirement, returned with plants for his home in Exeter. There are now more than 100 named cultivars.

**26 Handkerchief or Dove Tree** (*Davidia involucrata*), pair. This tree is strikingly unusual, with white bracts around small flowers which appear in late May, followed by fruit in the autumn. Named after Father Armand David (1826–1900) who discovered a single tree in China in 1869.

**27 Cappodocium Maple** (*Acer cappadocium*). This species originates from northern Iran and Central Turkey (ancient Cappadocia) and shows good autumn colour. Unlike other Maples it can often produce numerous root sprouts.

**28 Turkish Hazel** (*Corylus colurna*). A native of southeast Europe and south-west Asia, the leaves are softly hairy on both faces. The ‘Turkish nuts’ are surrounded by thick, soft spiny husks. It is now a popular urban tree as it gives good shade and can withstand air pollution.

**29 Giant Sequoia** (*Sequoiadendron giganteum*). The second tree planted by the Friends in 2018. Also known as the Giant Redwood (and unofficially as a ‘Wellingtonia’, named by the British after the Duke of Wellington), it is the largest of the three redwoods (the other two are the Coastal Redwood [48] and Dawn Redwood [19]) and now considered

endangered because of a declining population. It is a Native of the Sierra Nevada in California where they are known to grow to a height of 80m. The Giant Redwood is one of the oldest living things on earth and can live for 3,000 years. Seeds were introduced into the UK in 1853, One of the first was planted outside the University Museum of Natural History and is now semi mature at about 160 years old.

**30 Hop Hornbeam** (*Ostrya carpinifolia*). This is the only *Ostrya* native to Europe but rare in the UK. The timber is very hard (*Ostrya* taken from Greek word ‘ostrua’ – bone-like.) The leaves are similar to other hornbeams but it has a hop like fruit.

**31 Chestnut Leaf Oak** (*Quercus castanifolia*). Originally from Iran/north Africa, although introduced into the UK in 1846 it is still relatively rare. The leaf is like a sweet chestnut. The acorns are very bitter and only eaten by squirrels as a last resort.

**32 Cut Leaf Beech** (*Fagus sylvatica heterophylla*). This is a form of Common Beech with deeply serrated thread like leaves. It was introduced into the UK in the early 1800s.

**33 Southern Beech or Roble Beech** (*Nothofagus obliqua*). One of 43 species of *Nothofagus*, (known as *Lophozonia obliqua* since 2013). Originally from Chile and Argentina and was introduced into Britain in 1849. It displays strong autumn colour.

**34 Horse Chestnut** (*Aesculus hippocastanum*). Although a native of South East Europe it is now wide spread and best known for its fruit called ‘conkers’. They have a dense canopy and were planted to give good shade. This tree is a veteran of almost 200 years, estimated from its girth of 2.44m. This particular tree (compared with others in the park) is interesting in that the main branches have been bent down and pinned to the ground where they have re-rooted to form a ring of secondary trunks. This is known as ‘layering’ and it is believed this was practised by the Victorians to increase the span of the canopy to give greater shade and provide an interesting space to sit under.

**35 Lucombe Oak** (*Quercus x hispanica ‘lucombeana’*). William Lucombe was a horticulturalist and nurseryman who discovered and gave his name to the natural hybrid Lucombe Oak in 1762. The tree is a hybrid of the Turkey Oak (*quercus cerris*) [12] and a Cork Oak (*quercus suber*) and has characteristics of both parents, though are normally evergreen. Lucombe felled the original hybrid in 1785, keeping the timber to be used for his coffin. However, he didn’t die until the exceptional age of 102.

**36 Whitebeam** (*Sorbus aria hybrid*). The top of the leaf is mid-green, but the underside is almost white (hence the name), transforming the appearance of the tree as the leaves ‘dance’ in strong winds. It has clusters of white flowers in spring followed by speckled red berries in autumn.

**37 Cut Leaf or Fern Leaf Alder** (*Alnus glutinosa lacinata*), a group of three. This was introduced from St Germain in France in the 1820s. A more ornamental form of the native alder which shares its cousin's characteristic dancing catkins in early spring, but

differs in leaf, offering deeply cut, almost oak-leaf shaped foliage which gives a feathery effect.

**38 Maidenhair Tree** (*Ginkgo biloba*), pair. A native of China with distinctive fan-shaped leaves, it is one of the few species surviving from the Eocene period (270 million years ago). These are separate male and female trees. The male has small pollen cones and the female produces yellow, unpleasant smelling brown fruit containing the seed. Extracts from the leaf are claimed to stimulate blood vessels in the brain.

**39 Purple Leafed Sycamore** (*Acer pseudoplatanus purpureum*). A Sycamore variant with large leaves that have a strikingly purple underside.

**40 Rowan + Mistletoe** (*Sorbus aucuparia + viscum album*). This tree is notable for the large infestation of Mistletoe. Mistletoe is a parasitic plant which played an important role in Druidic mythology and was associated with fertility and vitality through the Middle Ages. By the 18th century it had also become incorporated into Christmas celebrations.

**41 Silver Maple** (*Acer saccharinum*). A Maple with silver underside to the leaves that 'dance' in the wind and in autumn turn a golden yellow. It is a native of east and central North America.

**42 Liquid Amber Tree** (*Liquidambar styraciflua*). A member of the Witch Hazel family, it is originally from the south east USA where it is known as a Sweet Gum and is often confused with maples. It displays flame red autumn colour. The species was introduced into Europe in 1681 by John Banister, the missionary collector sent out by Bishop Compton, who planted it in the gardens at Fulham Palace.

**43 Bhutan Pine** (*Pinus wallichiana*). This pine has leaves ('needles') that are in fascicles (bundles) of five up to 18cm long and they are noted for being flexible along their length. The cones are large and banana shaped. It originates from the Himalayas.

**44 Tulip Tree** (*Liriodendron tulipifera*). This is originally from the eastern USA. It has unusual large, four lobe shaped leaves turning a clear bright yellow in autumn. The flowers, which appear in May are creamy yellow and tulip-like.

**45 Indian Horse Chestnut** (*Aesculus indica*). This is a native of the Himalayan lowlands, and is the most graceful form of Horse Chestnut, with pendulous like leaves and small smooth brown fruit after yellow-pinkish flowers.

**46 Judas Tree** (*Cercis siliquastrum*). From Southern Europe. In the spring the tree produces deep pink flowers on both the branches and the trunk and long flat pods that hang vertically. There is a long-standing myth that Judas Iscariot hanged himself from a tree of this species. Another possible source for the vernacular name is the fact that the flowers and seedpods can dangle direct from the trunk in a way reminiscent of Judas' suicide.



**47 Paper Bark Maple** (*Acer griseum*). Introduced from China 1901 by Ernest Wilson, and is now much planted in parks and large gardens as an ornamental tree. The bark is dark red, chestnut or coppery-brown, peeling and rolling away to leave smooth areas on the bole and branches. The leaves turn orange/crimson by the end of October. Attempts are being made to acquire new seed stock from the wild populations in China because it is believed that the current gene pool of cultivated specimens is very small.

**48 Coastal Redwood** (*Sequoia sempervirens*). Originally from the western USA and is the least common of the three giant redwoods in the UK. The Coastal Redwood is the world's tallest tree which can reach a height of 115m and live for around 1,500 years.

**49 Japanese Pagoda or Chinese Scholars Tree** (*Sophora japonica*). This is a native of China and a member of the pea family. Grown for its small white flowers, borne in late summer after most other flowering trees have long finished flowering, it is one of the 50 fundamental herbs used in traditional Chinese medicine. The Guilty Chinese Scholar Tree was an historic pagoda tree in Beijing, from which the last emperor of the Ming dynasty, Chongzhen, hanged himself.

**50 Cockspur Thorn Hybrid** (*Crataegus x lavalleyi*). This is a thornless hybrid of the American 'Cockspur Hawthorn'. Clusters of creamy-white flowers are followed by red fruits, and in the autumn the leaves turn to yellow, then to red.

**51 Honey Locust** (*Gleditsia triacanthos inermis*). This is the thornless variety of the honey locust which originates from central North America. Despite its name, it is not a significant honey plant; the name derives from the sweet taste of the ripe seed pods which mature in early autumn. It also produces strongly scented cream flowers in the spring.