

Tilgate Park Tree Trail – Tree Descriptions

1 Formosan Cypress

Chamaecyparis formosensis

Originating from the island of Taiwan, once known as Formosa, this group of rare conifers is almost hidden by the Rhododendrons that surround it; try hunting for the shaggy red-brown trunks and then look up! These slow growing conifers have leaves which, when crushed, smell of seaweed. Have a go – what do you think they smell like?

2 Roble Beech

Nothofagus obliqua

This unusual member of the Beech family is native to the southern Andes of Chile and Argentina. The trunks of these fast growing trees are well hidden from the path. Just look up to see their distinctive herring-bone shoot patterns towering above the Rhododendrons.

3 Paper Bark Maple

Acer griseum

This small attractive tree is native to central China. The foliage provides a bright splash of autumn colour in red, orange and pink, and the peeling and papery bark provides an interesting feature in the winter.

4 Sessile Oak

Quercus petraea

This superb tree, more commonly found in the North and West of the British Isles, is an unusually large specimen for the area. It can be distinguished from the English Oak (**30**) by its longer stemmed leaves and lack of stem on the acorn. Try to find a leaf of each tree and compare them.

5 Cork Oak

Quercus suber

Originating in coastal regions of countries bordering the western Mediterranean Sea this evergreen oak has a holly-like leaf. The thick cork bark has evolved to protect the tree from the effects of forest fires. In Spain and Portugal bark is stripped and harvested every 7 to 10 years; this doesn't harm the tree and the bark grows back. Cork has many uses including soles for shoes and fishing floats. The increased use of plastic wine stoppers and screw caps has led to the loss of value of the cork oak woodland and the threat of clearance.

6 Chinese Dogwood

Cornus kousa var. chinensis

A beautiful dogwood originating from China, this tree produces striking pink petal-like leaves surrounding the insignificant flowers during May and June. It also has beautiful autumn colours and red berry-like fruits from which it gets its alternative name of Strawberry Dogwood.

7 Handkerchief Tree

Davidia involucrata

Another tree native to China, the first seeds were sent to Britain in 1901. The flowers that appear in May are surrounded by modified leaves called bracts which have the appearance of a white handkerchief, hence the common name, but it is also known as the Dove Tree or Ghost Tree. This specimen regrew from the root of a much larger tree that blew down in the 1987 storm. Can you find any of the other handkerchief trees in the park?

8 Chusan Palm

Trachycarpus fortunei

This hardy palm is native to parts of Asia including central China and southern Japan where it grows at altitudes up to 2400 metres. Its strong leaf fibres were used for making rope, sacking and other coarse cloth. Victorian gardeners were keen to try out this exotic looking plant and today it can be found in many formal gardens and in coastal resorts where it gives a tropical feel.

9 Yellow Birch

Betula alleghaniensis

This tree got its common name from the yellowish tinge of the newly exposed bark. A native of North America, this handsome tree has large leaves which turn bright yellow in the autumn. When the twigs are scratched they smell slightly of wintergreen oil.

10 Yellow-wood

Cladastris lutea

One of the rarest trees of the eastern United States this example has been recorded as the tallest in Britain. The wide, spreading crown has been propped to prevent it collapsing through old age! Not only is the wood yellow, but the autumn leaves also turn bright yellow.

11 Keaki

Zelkova serrata

Valued for timber in its native Japan, this member of the elm family was introduced to Britain in 1862. Its resistance to Dutch Elm disease and bright orange/yellow autumn foliage have made it a popular ornamental tree for parks and landscaping.

12 Maple

Acer x dieckii

This old tree has been recorded as a champion for its height. It is a cross between two European species, the Norway maple and Lopell's maple. Like all maples this tree produces helicopter fruits which catch on the wind and spin to the ground. Maples have palmate leaves, meaning hand shaped, which can be thin and serrated or wide and smooth edged. How many different types can you find in the park?

13 Crab apple

Malus x scheideckeri

Another champion tree for height! A hybrid between two East Asian species the Japanese Crab (*M. floribunda*) and Plum Leaved Crab (*M. prunifolia*), it was originally raised in 1888 and has given rise to several cultivated varieties which produce inedible crab apples.

14 Chinese Stewartia

Stewartia sinensis

A member of the tea family, which also includes Camellias! Named after John Stuart, the Earl of Bute, who introduced it to Britain in 1901. It has handsome white flowers in summer and a smooth bark which peels away in the autumn and winter.

15 Swamp Cypress

Taxodium distichum

Native to the south-east of the United States it often grows in areas prone to flooding hence its common name. This conifer has adapted its root system to produce 'knees' that protrude several feet out of the ground so they are clear of water. This is a deciduous conifer meaning it loses its leaves in the winter. The fine, feathery, alternately arranged foliage is soft green when it emerges in spring and turns a rich brown colour in autumn.

16 Douglas Fir

Pseudotsuga menziesii

Native to Western North America, Douglas firs were once the world's tallest conifer with trees of 120 metres – all of which have now been felled for their timber. Some of these trees were around 1000 years old! They were first introduced into Britain in 1827 where the tallest specimens are now 62 metres (that's the height of 14 double decker buses!) Our gnarled old specimen is over a hundred years old having been mentioned in the Journal of Horticulture and Cottage Gardener, September 1902. It has also survived a lightning strike; you can see the wound from it running down the main stem. The bark is non-flammable which protects them from forest fires, and they have distinctive cones with three pronged bracts (modified leaves) projecting out from between the scales. Look under the tree and see if you can find one.

17 **Monkey puzzle**

(Araucaria araucana)

The Monkey Puzzle is native to Argentina and Chile. It was introduced to Britain in 1795 and became widely planted in Victorian gardens due to its interesting appearance. The spiny leaves which also cover the trunk gave rise to its common name – the task of climbing the tree would even puzzle a monkey! Large scale logging and clearance for agriculture has resulted in this tree being protected in its native habitat. Fossil evidence shows that the Monkey Puzzle tree was already around 200 million years ago during the time of the dinosaurs!

18 **Canadian Hemlock**

Tsuga canadensis

Much slower growing than its Western Hemlock cousin, which is often grown for timber in Britain, the Canadian or Eastern Hemlock is useless for forestry purposes as the trunk tends to branch into several stems.

19 **Japanese Red Cedar**

Cryptomeria japonica

This species was originally introduced to Kew Gardens from the mountains of Japan in the mid 1800's. The bright glossy green foliage contrasts well with the red-brown bark. This tree is fast growing and widely planted for timber in Japan and China. It is not a true cedar but a primitive relative of Wellingtonia (23) and Coast Redwood (25).

20 **Dawn Redwood**

Metasequoia glyptostroboides

Only discovered in China in 1947 this tree was previously thought to be extinct with fossil evidence dating back 100 million years. Seeds were distributed to collections in Europe and USA and it is now widely planted in large parks and gardens. The Dawn Redwood is a deciduous conifer, the bright green spring foliage turns to russet-pink in autumn. Often confused with its relative the Swamp Cypress (15), it can be identified by its oppositely arranged leaves.

21 **Spanish or Sweet Chestnut**

Castanea sativa

The sweet chestnut is native to southern Europe and is thought to have been introduced to Britain by the Romans. It is often managed as a coppice tree – meaning the stems are cut down on a regular cycle and then allowed to regrow. The wood is used for stakes, gate posts and fencing. The nuts are delicious roasted if you can get to them before the squirrels! Notice the spiralling bark of this very old tree. It is still sending out vigorous shoots despite its age and produces a good crop of chestnuts each year.

22 **Horse Chestnut**

(Aesculis hippocastanum)

This species has been savaged by pests and diseases since the late 20th Century. Leaf miner caterpillars and a bacterial disease called bleeding canker have caused the loss of many of these famous trees – well known to children as the source of conkers for the school playground. It is possible that this tree will disappear in time from our landscape.

23 **Wellingtonia or Giant Redwood**

Sequoiadendron giganteum

When these trees were introduced to Britain in 1853 they were named in honour of the Duke of Wellington who had recently died. Not the tallest trees in the world but definitely the bulkiest, Wellingtonias are native to the Sierra Nevada mountains of California, where they can reach 80 metres in height. This specimen, which survived the 1987 storm totally unscathed, is just 33 metres high; imagine a tree nearly three times this size!

24 **Apollo Fir**

Abies cephalonica var. Apollinis

This tree, which was planted in 1876, is believed to be the oldest specimen of its kind outside of its native Greece. Notice how the very top has forked due to past damage at the point of growth. The bark is a dull grey and cracks into knobbly squares.

25 Coast Redwood

Sequoia sempervirens

Coast Redwoods are native to a narrow strip of the Pacific coast of North America from south-west Oregon into northern California. The coastal fogs and high rainfall keep these forests damp all year. Since the felling of the largest Douglas Firs (16) they are now the tallest living trees, growing to over 100 metres (that's five times the height of our specimen!). This tree was planted in 1963 and has achieved a growth rate faster than any other in the UK.

26 Blue Atlas Cedar

Cedrus atlantica 'Glaucous'

To really appreciate the imposing stature of this tree, stand at the base of the huge trunk and gaze up into the crown. This species was introduced to Britain from the Atlas Mountains of Algeria and Morocco in 1841. The ripe cones shed their scales leaving just the central stalk. See if you can find a cone and compare it to a cone from the Monterey Pine (29).

27 Tulip Tree

Liriodendron tulipifera

Native to the North-east of America these slow growing trees can take 15 years before they produce the striking yellow flowers that resemble tulips. The flowers produce lots of nectar and are very attractive to bees. This tree was described as a large tree in 1905 and even appears in an old photograph of the original Tilgate Mansion! There are several specimens to be found in the Park including one with variegated leaves. Have a look at the unusual shape of the leaf.

28 Maidenhair Tree

Ginkgo biloba

The Maidenhair tree is the sole survivor of an ancient group of trees dating back to the time of the dinosaurs and represents a bridge between conifers and deciduous trees. Native to China the leaves have long been used in traditional Chinese medicine to improve memory. As a slow growing tree it can be very long lived, the oldest on record being over 3000 years old. This specimen was planted in 1970 to commemorate the 25th Anniversary of the Hiroshima Bomb.

29 Monterey Pine

Pinus radiata

Native to small areas of the Californian and Mexican coast, this towering tree has adapted to withstand forest fires. The cones can remain on the tree for up to 20 years, only opening in the heat of a fire to release the seeds onto the forest floor. This is a 3 needle pine (the needles grow in groups of three). Look on the ground for evidence. Can you find any 2 or 5 needled pines?

30 English Oak

Quercus robur

One of the oldest trees in the Park, at approximately 250 years old, this specimen has a crown spread of 40 metres! This suggests that the tree has been growing in open parkland for most of its life rather than in woodland which would restrict the growth of the crown. The English oak provides habitat for more species of invertebrates, birds, mammals, fungi and lichens than any other native tree and has been valued for centuries for its strong timber.