



Tree Trail - Clyne Gardens



Renewal of Tree Trail Clyne Gardens

Clyne Gardens contains over 10,000 mature trees managed by the Parks staff. A number of the largest were collected as part of expeditions by famous plant hunters and date back to the middle of the 19th Century. The original Tree Trail was introduced over 25 years ago, some signs were missing others in need of repair. As part of the Postcode Local Trust grant all 15 signs on the Tree Trail have been renewed. The Trail was developed to enable some of our significant trees to be visited and enjoyed. It is not a comprehensive list, but provides a flavour of some of the elements that contribute to the look and feel of Clyne Gardens.

Many of the trees on the trail are close to paved pathways and are wheelchair accessible but some trees can only be seen at close quarters by venturing over grassy areas or informal paths. The trail can start/finish at any point around the route.



Description of trees on Tree Trail

1. Persian Ironwood - *Parrotia persica*

As its name suggests this tree originates from what was formerly known as Persia - modern day Iran and southern Russia.

This deciduous tree usually grows wider than it is tall. The flowers are small, red and stamen-like and appear in February/March. In autumn the leaves turn yellow, orange and crimson. The timber is not used commercially as it is very hard - as hard as iron! The tree which is named after Johann Jacob Friedrich Wilhelm Parrot who climbed Mount Ararat in 1829, was introduced into Kew Gardens from St. Petersburg in 1840.

2. Blue Atlas Cedar - *Cedrus atlantica* 'Glauca Group'

Found in the desert region of the Atlas Mountains of northern Africa this tree which is extremely long lived grows at approximately 3,000 metres, where even in the heat of the North African sun the mountains remain snow-capped. The foliage of this tree is grey-blue which reflects the strong sun and stops the tree drying out. Unlike most conifers, the tree produces male cones in autumn rather than spring.

The first example of this tree in the UK was planted in Herefordshire in 1845. It is interesting to know that the original tree is still alive and well today.

3. Japanese Red Cedar - *Cryptomeria japonica*

As the name suggests this tree originates in Japan but it also grows wild in China. It is closely related to the North American Coast Redwood sharing its characteristic red coloured bark. The bark peels off easily into strips - squirrels love to use this bark to line their dreys. These trees are claimed to be able to live for 7000 years and reach up to 45 metres in height.

In Japan this tree is a major timber tree but is also widely used in temple gardens. Lots of cultivated forms are grown in British gardens; however, the cultivated trees are different to the native tree in terms of their shape, size and texture. The earliest was introduced into Britain in 1844.

4. Coast Redwood - *Sequoia sempervirens*

A conifer from along the Pacific coast of North America. Capable of living over 2000 years old the coast redwood can reach 115m making it the world's tallest known living tree and with a trunk girth of up to 28m (that is nearly 4 times taller and over 6 times fatter than this example at Clyne). It has a conical crown, with horizontal to slightly drooping branches. The bark is thick, fibrous and has a bright red-brown colour (hence the name redwood). Coast redwood timber is highly valued for its beauty, light weight, and resistance to decay. Its lack of resin makes it resistant to fire. Grown as an ornamental specimen in those large parks and gardens that can accommodate its massive size. Discovered by Archibald Menzies in 1795 and introduced to Britain in 1843.

5. Campbell's Magnolia - *Magnolia campbellii* var. *alba*

This tree comes from the sheltered valleys of the Himalayas, and is also known as the 'Himalayan Tulip Tree'. This tree can reputedly grow up to 45 metres in the wild and the example you see in Clyne has been confirmed as the tallest white flowered Campbell's Magnolia in the British Isle - an important specimen!

During colonial times, it was used for making tea chests and panelling for colonial houses in India. Today, particularly in India, it is mainly used for firewood. The famous botanist Joseph Hooker gave this tree its name in honour of a close friend Archibald Campbell, Superintendent of Darjeeling.

6. Western Red Cedar - *Thuja plicata*

This conifer is native to the north-western area of the U.S.A. It grows in the coastal belt stretching from Oregon to British Columbia. This is one of the world's biggest trees, reaching in the wild up to 60 metres in height and 485 centimetres in diameter.

Unexpectedly, the cones produced are smaller than the average conifer. The trunk of these trees are so large that native American Indians were able to make a canoe big enough for 40 people and 18 metres long. The advantage was that the timber is rot-resistant and rather fragrant. It was also a good material for carving totem poles. Introduced into this country in 1853 by Cornish plant hunter William Lobb.

7. Indian Horse Chestnut - *Aesculus indica*

From north western Himalaya this tree can grow to 30m in height and forms a round canopy. In late spring this tree produces panicles of flowers similar to the more familiar Conker Tree. Its leaves are bronze when young in spring, becoming green then turning yellow in autumn. In its native lands the dried seed (conkers) are ground into flour and medicinal uses include the seed oil which is applied externally in the treatment of rheumatism. Also the wood is used in carving. Introduced in 1851 by Colonel Henry Bunbury.

8. Handkerchief Tree - *Davidia involucreta* var. *vilmoriana*

In 1869, Père David a French missionary in Western China reported sightings of a panda and also this tree. He said about the flowers "...they look like doves.." The wealthy landowners in Britain and Europe wanted one of these exotic sounding trees and sent collectors to find one. Later the Scottish plant hunter Augustine Henry again found a single tree and sent the first specimen to Kew Gardens. In 1899 a nurseryman called John Veitch sent Ernest Wilson, telling him "...I know an Irish doctor who can help you..." Wilson found the doctor in China who drew him a very crude map with an "x" on it to mark where the tree was. However, the "x" was in an area three times the size of England! To make matters worse, the marked area had very few roads and masses of forest to search. Despite this, he eventually found what he was looking for, but had to wait for the seeds to be produced in order to bring them back with him to Britain in 1904.

In spring time white bracts around 22cm long hang down from the branches, hence the name Handkerchief tree!

Credit : Alan Gregg.

Tree Trail signs and tree descriptions

9. Turkey Oak - *Quercus cerris*

Not from Turkey as its name suggests but from southern Europe. This is the fastest growing oak in the UK, growing twice as fast as native oaks. It has a straight, tall trunk and can reach 39 metres high. The leaves are small and narrow and the buds and acorn cups have whiskers on them. The timber produced from the Turkey Oak is not very strong so it is rarely used.

Introduced in about 1735 by nurserymen Lucombe and Pince of Exeter, it is lucky the tree can survive a polluted environment. It was growing at Clyne throughout the time when Swansea became of increasing importance as a port for the coal and metal industries. Copper works in the city also contributed to the terrible air and water pollution in the area at the time of the Industrial Revolution (mid 19th century onwards).

Central Park in New York has a famous avenue with these trees growing there.

10. Monterey Pine - *Pinus radiata*

A conifer from the Californian region of the U.S.A. This tree is fast growing, typically gaining 90 centimetres per year. It is a special type of tree known as a fire climax tree. This means it has various adaptations to help it survive forest fires.

These include: a. Cones that grow high in the tree and only open during fires to release their seeds. The ash left behind by the fire is a very good place for the seeds to grow. The cones being closed most of the time also means that birds do not eat their seeds. b. The rugged bark is 15cm thick, to protect the tree against the flames and heat. c. Fast growth means that the trees mature before the next forest fire. Small young trees might not survive.

This conifer was introduced into this country from America in 1833 by one of the greatest plant collectors of the nineteenth century - David Douglas. Incidentally, this was also the year that the British Empire finally abolished slavery.

This is one of the world's greatest timber trees but is also appreciated for its ornamental value.

11. Small-leaved Lime - *Tilia cordata*

The native range of this tree is Europe (including the British Isle) to Central Siberia and Northern Iran.

A large tree, it can reach 40 metres in height. The flowers are unusual being a yellow-green colour. They contain lots of nectar that is very attractive to bees and other insects. The finely-grained wood is not structurally strong but is used for refined woodcarvings such as those seen in St. Paul's Cathedral and Windsor Castle. It is also commonly used for lightweight projects such as carved spoons. A fibre from the inner bark is used to make mats, shoes, baskets, ropes etc. Fresh flowers are used as a traditional herbal remedy made into a tea. Princess Mary of Teck, later Queen Mary of England planted the example growing at Clyne in around 1900.

12. Monterey Cypress - *Cupressus macrocarpa*

From Monterey in California this tree has lemon-scented foliage and produces small, spherical cones and can grow up to 60cm in its first year. As a parent of the Leyland Cypress, the Monterey Cypress gave the Leyland its vigour. In addition, Monterey Cypress trees generally grow better in the UK than at home in California. This is because in the wild they grow in very exposed areas, which are blasted by Pacific winds.

Mainly used as hedging and wind breaks particularly in sea front areas. First introduced into Britain at around 1838 and later into the Gardens by Graham Vivian in 1860.

13. Giant Redwood - *Sequoiadendron giganteum*

This a mountain tree that grows at 1,200 to 2,400 metres above sea level in the Sierra Nevada area of America. It likes an open position, rain and a mild climate. This tree is the world's largest living organism, unfortunately, however, there are only limited numbers of these huge trees left. One of the largest known examples is nicknamed "General Sherman". It is 83 metres tall, has a girth of 24 metres and weighs over 2,000 tonnes. The tree in Clyne gardens, although large, is only as big as one branch on General Sherman!

The native Tolawa Indians who lived on the Pacific coast of Oregon and California believed the Giant Redwood to be sacred. Later used by settlers for timber, the stumps of these magnificent trees were often used as foundations for structures such as dance floors and concert halls. More recently, however, due to their great environmental value, these trees are now protected by law and none have been felled during the last century.

Discovered in the 1840's during the gold rush in America. On hearing of it many landowners in this country wanted one and thought it would be a fitting tribute to Wellington, being superior to other trees in terms of its size. This led to it being nicknamed in Britain the Wellingtonia.

14. Red Oak – *Quercus rubra*

From eastern North America. In America they have over 60 kinds of oak tree but in Britain we only have two native species. The red oak has over 250 organisms, such as insects, lichens and mosses living on it. The bark is very moist and a very suitable home for many creepy-crawlies! Its name comes from its autumn colours. In Britain however, the Red Oak leaves rarely turn as scarlet as they do in America. The acorn from this tree takes approximately 18 months to mature. An acorn you see in autumn may not be ready to fall until next year! This example has the biggest crown spread currently found in Clyne Gardens!

The timber is used commercially in the UK and U.S.A. It is fast growing which means that commercial forests can be quickly harvested.

Introduced into this country in 1724 from Canada.

15. Tulip Tree – *Liriodendron tulipifera*

This tree originates in eastern North America. It is related to Campbell's Magnolia which itself is also known as the Himalayan Tulip Tree. It is North America's biggest broad-leaved tree with flowers that resemble tulips. They are produced in mid-summer and grow high up in the crown. In autumn the leaves turn a very bright yellow/gold colour and are recognizable by the notch in the tip.

It is characterized by having a very light timber that is buoyant and has been used in the past by native American Indians for making canoes.

Introduced by the Tradescants, gardeners to Charles I around the mid seventeenth century.

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Funds raised by the Friends of the City of Swansea Botanical Complex

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3. Japanese Red Cedar - *Cryptomeria japonica*
4. Coast Redwood - *Sequoia sempervirens*
13. Giant Redwood - *Sequoiadendron giganteum*
12. Monterey Cypress - *Cupressus macrocarpa*
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