A. 1109 – Giant Redwood – *Sequoiadendron giganteum* – California – 1853
(County Champion – girth)

Introduced into the UK by William Lobb for Veitch & Sons. A grove of these giant trees was found in California. The world's largest tree by volume, it can reach 100m in height and live for up to 3,500 years. It has very small seeds in tiny cones and relies on bush fires to clear the ground around it for seeds to set. With little commercial use, it was extensively planted in the UK particularly when it was first named after the Duke of Wellington *(Wellingtonia)*. The Calaveras grove, where it was found in California, became a great tourist centre. One tree was cut down and the flat stump turned into a dance floor 8m across.

B. 1271 Morinda Spruce – *Picea smithiana* – Afghanistan and Nepal – 1818

The tree was introduced by a Scotsman called Smith, giving it its Latin genus name. We believe that this one was planted here in the 1860s. It is distinguished by its very long needles, its distinctive male flowers on the end of branches in June and 15cm long green cones. This species tends only to be grown for display. The Nepalese name Morinda translates as 'honey of flowers', after the resin on the seed cones.

C. 1182 Tulip Tree – *Liriodendron tulipifera* – Canada /Mid-west USA – c1650

Probably introduced on one of his three trips to Virginia by John Tradescant the younger, botanist and gardener to King Charles I. It is popular as an ornamental tree with stunning foliage and, after 20 years, the tulip-like flowers that give it its name.

Native Americans in the Appalachians used tulip trees to make canoes, their trunks hollowed out to carry over 12 people. The wood is like white pine and makes good planks for furniture, boarding and coffins.

D. 450 Turner's Oak – *Quercus x turneri* – England – c.1776

This oak was raised in a nursery of Mr Turner in Essex in 1783. It is a cross between the English Oak *(Quercus robur)* and the Holm Oak *(Quercus ilex)*. The tree can be identified by its leaves, which instead of having the rounded lobes of the English Oak have sharp points. It is a smaller oak with a low, domed shape, with twisting, horizontal branches often barely above ground level. It is also evergreen.

E. 449 Cappadocian Maple – *Acer cappadocicum* – Central Asia – 1838

This fast-growing species is widely grown in parklands and gardens, reaching 20-30m with a broad, rounded crown. It flowers in spring showing bunches of 20 yellow-green five-petal heads. Its round flat seeds have two wings to enable distribution. The bark is smooth on young trees but grooved on older. The leaves of this tree are a stunning yellow in autumn.

If you would like to leave us feedback or would like any further information, please fill out a comment card or email us at tyntesfield@nationaltrust.org.uk

Tyntesfield, Wraxall, North Somerset, BS48 1NX
Tel: 01275 461900

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National Trust

Tyntesfield tree guide

The trees of Tyntesfield

Since 1844, when William Gibbs bought Tyntesfield, four generations of the family have planted ornamental trees from all around the world. The extensive collection now offers spectacular displays of colour throughout the year, as well as an insight into the fascinating world of Victorian plant hunters.

In the late 18th century, wealthy aristocratic landowners started to take an interest in importing and planting exotic (non-native) trees. Competition was fierce, with plant hunters being sent across the globe to seek out new specimens.

As the middle class got wealthier, after the industrial revolution and the Napoleonic wars, nurserymen used their own plant hunters to bring back more trees to feed the ever growing demand.

A small portable glasshouse, called the Wardian case, was developed in the 19th century. This meant that live plants, rather than seeds, could be imported and kept safe on long voyages which led to a higher quality supply of plants.

Some of the plants on the estate came from the nurseries of Veitch & Sons, originally established in Exeter before spreading to the Kings Road in Chelsea. They were an immensely successful finder, importer and hybridiser of plants from all over the world. They sent more than 20 plant hunters out all over the world. These were young men who had shown some ability to identify plants and use their own initiative.

These plant hunters travelled alone, didn't speak the local language and walked or rode on mules into unknown, largely unexplored parts of the world. They had only their wits to keep them alive and no means of communication with their employer. Their stories are fascinating and we can be grateful to them for the enormous range of trees and other plants that make Victorian gardens like Tyntesfield so special.

The *Tree Register of Great Britain and Ireland* keeps a record of champion trees across the country. This records the tallest, widest or most interesting example of each species of tree.

Tyntesfield contains over 60 Somerset county champions, of which 16 are also British Isles champions. In the centre of this booklet is a map showing 62 of the most important trees here at Tyntesfield.

Tree labels and naming

The trees described are labelled in numerical order, usually with a black plaque attached to the trunk.

The tree map at the centre of this booklet will help guide you to the locations of the trees listed. There are tick boxes for you to keep a record of what you have seen and to indicate what you might want to look at next time.

The trees are labelled with their common English and their Latin names. The labels also include a tree trail number and National Trust database number.

The first part of the Latin name is the genus – Abies (Fir), Quercus (Oak) etc. The second part is the descriptive one identifying the species. It may indicate the discoverer (Menziesii – Menzies), where it comes from (Libani – Lebanon) or what it looks like (Serrata – serrated, saw-like leaves). The name is internationally agreed and unique to that species.

Additionally, you may find an X. This indicates a cross between two species and will either show both species or an agreed name for the cross e.g. (turneri). A third word usually in apostrophes e.g. ('Nana') indicates either a naturally occurring variant of the species or a cultivar where there has been human intervention. Also listed is the country or area of origin and the date first introduced to the UK where known.

As you make your way around the garden, you may come across some of our knowledgeable Estate Guides. They will be very happy to provide you with further information and answer any questions that you may have.

1. 863 Wollemi Pine – *Wollemia nobilis* – Australia – 2005

Until 1994, this tree was only known from fossil records, dating between 201 and 145 million years ago. It was then discovered alive, deep in the Blue Mountains of Australia. It is registered as an extremely endangered species with fewer than 100 trees growing in the wild. The tallest known specimen is 40m high. It adapts well to pots and patios when grown from seed and has been successful in the ground as far north as Scotland.

The tree is known for growing with several trunks and having very knobbly bark. A sample in Kew Gardens is being grown in a cage to demonstrate how precious they are. The oldest living Wollemi pine is known as 'King Billy' and is estimated to be around 1,000 years old.

2. 144 Crimson Norway Maple – *Acer platanoides* 'Schwedleri' – Europe – 1870

These trees grow across eastern Europe and Scandinavia, often well into the Arctic Circle. It is not known when the first example came to the UK. The cultivar 'Schwedleri' is one of a number distinguished by leaf colour. This one is an attractive dark purple. The hard, pink to yellow wood has limited use in furniture production. It was used extensively to replace diseased elm but proved to be prone to shedding its branches and to have invasive shallow roots. Note the roots on the surface and the lack of other growth around it.

3. 163 Pagoda Tree – *Sophora japonica* – China – 1753

This tree is popular because of its loose hanging arrays of pea-like white flowers. In China and Japan it is often planted in temples. It takes 30 years to produce its first flowers which are traditionally used as a staple in Chinese medicines. In Japan, the wood is used for the visible parts of building structures (door pillars, etc). The tree is popular for bonsai (miniature) trees. Note the unusual shape. The original leader trunk has been lost so several shoots from the bole have grown around each other.

4. 160 Golden Western Red Cedar – *Thuja plicata* 'Zebrina' – NW USA – 1868

Introduced by Thomas Lobb, of Veitch & Sons, and named 'Red Cedar', this tree is a cypress commonly growing on America's western seaboard. The native tree grows in damp soil and is very water resistant. It is a good commercial tree as its branches do not spread and take light from neighbouring trees. The timber is easily split without cutting so that the watertight structure is not damaged. This has led to extensive use as roof shingles and wall cladding. This one has attractive colour and is still a young specimen which will grow to 12m high. We have two county champions of this species; height and girth.

5. 169 Weeping Ash – *Fraxinus excelsior* 'Pendula' – Native

One of the best-known cultivars, this variety was widely planted during the Victorian era. It grows vigorously, forming an attractive small-to-medium size tree with mounds of weeping branches. In the autumn, mature trees produce bunches of green winged seeds, commonly known as keys. Although this variety is ornamental, ash wood is the traditional material for bows, tool handles, tennis rackets and snooker cues, owing to its high flexibility, shock-resistance and resistance to splitting. This specimen has been grafted onto root stock at about 2m and two branches, one broken and one complete, have fused naturally 6m above the ground. Some people can see a heart in the shape of the opening created.

6. 303 Silver Lime – *Tilia tomentosa* – SE Europe – 1767

The Silver Lime gets its common name from the hairy, white undersides of the dark green leaves. It is deciduous, growing to 20-35m tall, with a trunk up to 2m in diameter.

7. 304 Red Horse Chestnut – *Aesculus x carnea* – 1818

This is an artificial hybrid of the Red Buckeye and the more familiar Horse Chestnut. It first appeared in Germany before 1820. The hybrid is a medium size tree 20-25m tall, half way between the heights of its parents.

It has very large, dark green leaves composed of five to seven leaflets. Although deciduous, Red Horse Chestnut does not produce any appreciable autumn colour. Its name comes from the colour of its bark. There is a large crack in the bark all the way up the tree but it does not appear to be affecting its growth.

Nothofagus Antarctica

8. 861 Antarctic Beech – *Nothofagus Antarctica* – S South America – 1830

About 40 species of similar trees, known as false beech *(nothofagus)*, are native to cooler regions of the Southern hemisphere. This tree grows to 10-25m and has a slender trunk with scaly bark. Growing on Hoste Island in Chile, it has earned it the distinction of being the southernmost tree on earth. The pink-brown hardwood of the Antarctic Beech is used in flooring and cabinetmaking. This specimen was planted in 2005.

9. 173 Nettle-Leaved Hazel – *Corylus avellana* 'Heterophylla' – Native

Also known as Cut-leaved Hazel. This is an ornamental cultivar of the Common Hazel grown for the yellow colour of its leaves. The hazelnut or cob nut, the kernel of the tree's seed, is edible and used raw or roasted, and ground into a paste. The cob is round, compared with the longer filbert nut.

The hazel is an important component of the hedgerows that were the traditional field boundaries in lowland England. The wood was traditionally grown as coppice, the poles cut being used for wattle-and-daub building and fencing. This specimen has developed naturally into this shape with just a few larger branches. When in leaf, you can see the sharp end to the veins which distinguishes it from the more rounded Common Hazel.

10. 171 Crimean Pine – *Pinus nigra subsp. pallasiana* – Turkey/Greece – 1790

11. 172 Corsican Pine – *Pinus nigra subsp. laricio* – Corsica/Italy – 1759

12. 191 Austrian Pine– *Pinus nigra subsp. nigra* – S Austria – 1835

These three trees of the same species are planted together to highlight their differences. Charles Lawson, who introduced the Austrian Pine, hoped to use it as a timber tree. Unfortunately, the wood has large knots that reduce its strength. The Corsican Pine was more successful than the Austrian Pine in this respect.

If you look at the trunks, you will find them almost identical but the branches and leaves show the difference. The Austrian has thick horizontal branches; those of the Corsican are thinner and the whole tree is a bluer shade than the others. The Crimean has attractive upturned branches that grow vertically in line with the trunk.

Fraxinus ornus

13. 200 Manna Ash – *Fraxinus ornus* – S Europe –c 1700

The late summer flowers of this tree are spectacular clumps of creamy white petals. Its use is mainly ornamental. A sugary extract comes from its trunk if cut. This was compared, in medieval times, to 'Manna from Heaven'. This gave us the common tree name. The same sap is used now to make sweetener. This specimen shows a graft at the base where the young tree has been attached to a much bigger native ash root-stock, now covered in moss.

14. 254 Small Leaved Yew – *Taxus baccata* 'Adpressa' – Native

This is a cultivar of the common Yew which is often prized for its yellow-green to gold foliage. This one is just plain green. Its use is purely ornamental and, like other Yews, it is poisonous and therefore not troubled by predators. There is a Common Yew by the path next to this one. Compare the size of leaves to understand its name. Also, note how the small leaves are close together and 'pressed back' against the stem. This is the meaning of 'Adpressa'.

15. 627 Grecian Fir – *Abies cephalonica* – Greece – 1824
(County Champion – height)

A native of the higher mountains of Greece, its leaves are a lustrous bright green above, with silvery effect underneath. Grecian Fir used to be important for timber in general construction, but, after many years of over-use, it is too rare to be used for timber now.

It is also grown as an ornamental tree in parks and large gardens. In areas that often get late frosts it is prone to damage, as it is one of the first conifers to put on new growth in early spring.

16. 251 Yellow Buckeye – *Aesculus flava* – E USA – 1764

The genus name 'Aesculus' comes from the Greek god of medicine 'Aesculapius' and is due to the tree's medicinal properties. This is the tallest and healthiest of the horse chestnut family. It has lightweight wood which is prized for furniture and boxes. In autumn the husked fruits split to produce one or two nuts known as 'Buckeye' (because it looks like a deer's eye). This tree has been grafted onto Horse Chestnut root.

17. 137 Himalayan Cotoneaster – *Cotoneaster frigidus* – Himalayas – 1824
(County Champion – girth and height)

An attractive plant, with white flowers in summer followed by dense clumps of red fruit in autumn. The fruit is used in alternative medicine to replenish the blood. The branches are used in the Himalayas for making baskets and light woven bridges. This tree can appear as a single-trunk tree but more commonly appears like this one, with several larger branches and a forest of shoots growing from the bottom. Although it does not look like it, this plant is a member of the rose family. Another Tyntesfield tree of this variety has a plant label showing it was planted in 1892.

18. 546 – Cedar of Lebanon – *Cedrus libani* – Syria and Lebanon – by 1740

The tree came to prominence in the mid 18th century, when landscape designers like 'Capability' Brown used them widely. In biblical times it was used in the building of great temples but Victorians preferred it for furniture, where its strength and pleasant smell made it attractive.

Seeds were brought back from the Holy Land by J L Gibbs in 1858, resulting in cedars in our formal gardens and parkland; this is almost certainly one of them. The Cedar of Lebanon is distinguished from other cedars by the way the branches tend to be level with the ground.

Cedrus libani

19. 123 Cut-leaved Hornbeam – *Carpinus betulus* 'Incisa' – Native
(British Isles Champion – girth and height)

Hornbeam flowers are green and not very noticeable but look very similar to catkins. The tree's canopy hangs very low, providing dense shade, meaning the plants below are limited. This plant is attractive to bees, butterflies and birds.

The name 'Hornbeam' refers to its very hard wood, which is difficult to work but resists damage, making good butchers' blocks, mallets and balls. It also burns hot and slowly, making it effective firewood. If it is in leaf, look for the lobed shape that distinguishes it from the sharper edged Common Hornbeam. It is very hard to find the incised or cut leaves that give it its name.

20. 233 Camperdown Elm – *Ulmus glabra* 'Camperdownii' – Native
(County Champion – girth and height)

Around 1840, the gardener of the Earl of Camperdown in Scotland found a small contorted elm tree in the forest. He replanted it in the Earl's garden at Camperdown House in Dundee, where it remains. He grafted cuttings onto Wych Elm root stock making a popular show tree that was widely distributed.

It's thought that its frequent resistance to Dutch Elm disease is because beetles will not climb the downward facing branches. It does not grow above 4m in height. As you can see, this is a rather odd looking tree with a large root stock and distorted growth above.

21. 231 Lawson Cypress 'Nana' – *Chamaecyparis lawsoniana* 'Nana' – Oregon/California
(County Champion –girth and height)

The false cypress genus, 'Chameacyparis', consists of five species which differ from cypresses in having smaller cones and flattened branches. The Lawson species comes in a wide variety of colours and shapes and is popular as a show tree.

This one, 'Nana', is a relatively unusual dwarf variety. It grows slowly to around 2m, developing a thick trunk as it gets older. It was first raised in France in 1862. A tree label was found on this one showing a planting date of 1892.

22. 117 Broad-leaved Lime – *Tilia platyphyllos* – Native

This very large tree can grow to 35m. Notice its grey, finely ribbed bark. The young twigs are hairy. The leaves are long and hairy on the underside, especially on the veins.

The common name Broad (or Large)-leaved Linden is in standard use throughout the English-speaking world except in the UK, where it is known as Broad-leaved Lime. Lime and linden flowers were used to treat colds, coughs, fever, infections, inflammation, high blood pressure, headaches and a host of other illnesses.

23. 226 Chinese Plum Yew – *Cephalotaxus fortunei* – E China – 1848

Introduced by scotsman Robert Fortune and named after him, it is not widely planted in the UK. It is an attractive small evergreen with vertical trunks and sprouting branches. Its broad yellow-green leaves give it its Chinese name of Cow's Tail Pine.

The Plums in the name are small olive-sized fruit with large stones. They take two years to grow and are not recommended for eating.

Chamaecyparis lawsoniana 'Nana'

24. 112 Golden Monterey Cypress – *Cupressus macrocarpa* 'Donard Gold' – California – 1935
(British Isles Champion – height County Champion – girth and height)

Theodor Hartweg, who collected for the Royal Horticultural Society, found this tree. There are only two native stands of Monterey Cypresses in California. There are several varieties of this tree grown for particular colours. This one is more yellow-green than the usual trees and shines brightly in sunshine.

Tyntesfield tree guide

The trees are listed in number order in the text. Each tree is labelled, usually on the trunk. The label has the route order as shown on the map, the unique reference number from the master tree survey of all estate trees, the common and Latin names, area of origin and date of introduction to the UK.

The 57 numbered trees are routed to give a logical walk either from the garden entrance near Home Farm visitor centre or, in reverse, from the front of Tyntesfield House. The five trees labelled with letters do not fit easily into the route but are important specimens.

These are only a few of the many trees in the Formal Garden. Finding the labelled ones can be challenging but with perseverance and the help of Tyntesfield Estate Guides, it will prove worthwhile.

25. 267 Maidenhair Tree – *Ginkgo biloba* – China – 1754

Various Ginkgo species were known from fossils but were assumed to have died out millions of years ago. But in 1691 a German merchant was astonished to find one growing outside a monastery in Japan. It is regarded as the oldest tree species in the world and can live for up to 3,000 years. Its longevity seems to have given it religious significance, so trees were brought from a few small enclaves in China to grow around Japanese temples.

Trees are either male or female. We have three trees on the estate, all of which are male plants. They are generally used for ornament, as the female produces sticky, foul smelling seeds. Even in winter there are usually leaves to be found on the ground. They are a distinctive shape with no central spine and two characteristic lobes *(biloba)*.

26. 211 Oriental Plane – *Platanus orientalis* – Asia, SE Europe and India – 1562
(County Champion – girth and height)

This large spreading tree can grow to 30m and is traditionally at home beside rivers. The wood is called 'lacewood' and is used for veneers in furniture.

The London Plane, used extensively as a pollution resistant tree on the streets of London and other cities, is a cross between the Oriental and Occidental planes.

You can see several of the large shallow roots that draw all the moisture from the surface and stop other growth under the tree.

27. 292 Eastern Hemlock – *Tsuga canadensis* – E North America – 1736
(County Champion – girth and height)

The Eastern Hemlock grows well in shade and it lives a long time; the oldest recorded specimen being at least 554 years old.

The wood is soft, coarse-grained and light buff in colour. The timber is used for general construction and crates. Untreated, the wood is not durable if exposed to the elements. The wood is also a source of pulp for paper manufacturing.

As has happened here, the tree often splits its trunk into several parts fairly close to the ground, reducing the amount of timber that can be gained.

28. 465 Coast Redwood – *Sequoia sempervirens*
Western USA – 1843

Discovered in 1769, the Redwood was not introduced to the UK until 1843. One measuring 115m was recently found in California, making it the world's tallest living thing. In its natural state, the tree grows in dense forests. It has developed the ability to drop its lower branches to allow light to get to the bottom. This can leave a bare trunk of up to 25m before growth is seen.

The wood is fire and insect resistant and very light. It has never been used for timber in this country but is popular in the USA. This has led to a 95% reduction in the number of Redwoods in 150 years.

We would usually expect to see a single trunk to full height. Early in its growth, this one has split into two parallel trunks.

29. 355 Purple Beech – *Fagus sylvatica* 'Purpurea' – Native

Purple or Copper Beech is a particularly common cultivar of *Fagus sylvatica*. Beech timber is ideal for chairs; it bends without breaking, has a fine grain and is relatively free of knots. Beech tends not to be used for building as it decays quickly without protection and is not strong enough to bear any great weight. Note the extensive carpet of beech mast (seed husks) on the ground around the tree.

30. 346 Southern Magnolia – *Magnolia grandiflora* – SE USA – 1734

Collector Mark Catesby introduced this plant and it was first described by Linnaeus in his *Systema Naturae* of 1759. *Grandiflora* comes from the Latin words *grandis* (big), and *flora* (flower). It's an evergreen tree with large dark green leaves and large white fragrant flowers. The timber is hard and heavy, and is used commercially to make furniture, pallets, and veneer.

It was thought that this tree may have been planted inside the conservatory before it collapsed in 1917. We now believe that it was planted later, thriving in this sheltered site. This specimen would be more accurately described as a shrub, but grows large in both this form and as a single-trunked 'tree' version.

31. 374 Common Yew – *Taxus baccata* – Native

A native long associated with churchyards. It is slow growing and can live to 3,000 years. It is poisonous; not just the bright red arils in autumn but the leaves, bark and wood. It is famous for providing medieval English bows, most notably for Agincourt in 1415. The staves are strong and flexible to give power to the arrow's flight. *Taxus* translates as 'bow' in Latin.

32. 380 Balearic Box – *Buxus balearica* – S Spain, N Africa – Before 1780
(British Isles Champion – girth)

Usually, Box is known for small, evergreen hedges clipped into geometric shapes. Unlike Common Box, Balearic Box can grow to as much as 10m. Its wood has very high density and it is one of the few woods denser than water. The fine end grain of box makes it suitable for woodblock printing.

Boxwood was commonly used in the manufacture of recorders in the eighteenth century, and a large number of instruments made today are produced from it. If you look at the leaves and compare them to the box hedges in the Rose Garden behind, you can see similarities.

33. 109 Red Oak – *Quercus rubra* – E USA – 1724

This tree can grow up to 45m tall at the rate of 2.5m a year. Its fruit is a classic acorn that takes two years to ripen. The tree will not produce flowers for 20 years and acorns for 40 years.

Very colourful in autumn, it is often used for timber in the USA – for flooring, veneers and furniture. It's very strong but open grained with an attractive red colour. Note the pointed leaf which is very different from the English Oak.

Taxus baccata

34. 108 Black Mulberry – *Morus nigra* – Western Asia – Early 1500s

First brought to Europe by the Romans. King James I had large numbers grown to feed silkworms, who unfortunately only eat white mulberry *(Morus alba)*, which does not thrive in the UK. Black Mulberry fruit is similar to raspberry and blackberry and can be eaten raw or cooked. This tree has been pruned to prevent it from falling, a common trait of this species.

35. 107 Chinese Rowan – *Sorbus hupehensis* – China – 1910
(County Champion – girth and height)

Discovered by Ernest Wilson, the last significant Veitch plant hunter, famous for introducing Himalayan Rhododendrons. The *sorbus* genus (Rowan and Mountain Ash) is split into two groups with one, including the whitebeam, having single complete leaves and the other, including this one, having multiple leaflets. The bluish-green leaves turn spectacularly red in autumn to contrast with the white fruit. There is no known commercial use but it is extremely popular for display.

36. 075 Turkey Oak – *Quercus cerris* – Turkey/Mediterranean – 1735

Most of its features are similar to the English Oak, except that the cups of the acorns are mossy or furry. It was brought to the UK to supplement supplies of oak for housing and ship manufacture. Although fast growing and attractive, the Turkey Oak has a tendency to split and warp so it never fulfilled its potential. It is also host to the 'Knopper' gall wasp, whose larvae damage the acorns of native British oaks. Looking at the leaves, you can see a thin, irregular shape quite different to the English Oak.

37. 073 Douglas-Fir – *Pseudotsuga menziesii*
West Coast North America – 1827

A fast growing tree used both in major construction and furniture. The second tallest tree in the world, it can grow to 100m in the wild and there is one 68.4m tall in Scotland (2016). Discovered in 1793, it was not introduced until 1827 after the first seeds were lost during a dispute between a ship's captain and the finder, Archibald Menzies. It is not, in fact, a fir *(Abies)* but after several reclassifications it now has its own genus. An old label was found next to this tree indicating a planting date of 1892.

38. 071 Deodar Cedar – *Cedrus deodara* – W. Himalayas – 1831

Following its introduction, attempts were made to grow the tree for timber production, but unfortunately it didn't attain the same statue as in the wild. We see it today as an ornamental tree alongside the other two great cedars, the Lebanon and the Atlas. Compared to the other two cedars, the Deodar has longer needles and the branches droop toward the ground. In India and Pakistan the strong scented wood is often used in temple buildings, but is also found as railway sleepers and in road bridges. *Deodar* in Sanskrit means 'tree of the Gods'.

39. 051 Tree of Heaven – *Ailanthus altissima* China – Mid-1700s
(County Champion – remarkable)

Introduced in the mid-1700s, it became popular for garden display. The fruit has a very unpleasant smell. It is called the Tree of Heaven because the branches all grow directly upwards towards the sky. The tree puts out suckers from the roots: if you look around the labelled tree, you will see a dozen smaller trees between 10 and 15m away from the parent. The suckers can travel even further and we have found one 50m from the original!

Cercis siliquastrum

40. 052 Judas Tree *Cercis siliquastrum* – E. Mediterranean – Before 1600
(County Champion – girth and height)

The name probably refers to its origin in Judea. The species name *siliquastrum* comes from the Latin for 'pod' – it produces long brown seed pods in autumn and winter. Magenta flowers often grow straight from the trunk and appear before the leaves. The wood is fine grained, colourful, hard and is often used for veneers. It is used extensively in Chinese medicine.

In Japan, the wood is used for the visible parts of building structures (door pillars etc.). Often planted in temples, it is also popular for bonsai (miniature) trees. Unusually shaped, this tree was badly damaged by wind during the winter of 2013/4. The original leader trunk has been lost so several shoots have formed at the bole and grown around each other.

41. 046 English Oak – *Quercus robur* – Native

The quintessential British tree, the English or Pendunculate Oak can live for 1,000 years and reach 30m tall. England was once covered by oak forests. The best wood for building ships, it took 2,000 trees to build a large ship and heavy use during the Napoleonic wars decimated the stock. It can be 50 years before an oak produces acorns. Many are eaten by scavengers so only a small proportion take root. It can then be 150 years before the timber is ready to use. The leaves are very recognisable as they form the logo of the National Trust.

42. 041 Blue Atlas Cedar – *Cedrus atlantica var. glauca*
Atlas Mountains, N. Africa – 1841

A close relative of the Cedar of Lebanon. An immediately popular introduction, with this bluish tinged variant 'glauca' being the most used. It is fast growing and tolerant of a range of growing conditions.

The branches grow upwards rather than the sideways growth of the Lebanon. There are a number of mature specimens, including one by the empty boating lake that lost several branches in the gales of 2013/4.

43. 038 Fern-leaved Lime – *Tilia platyphyllos* 'Asplenifolia' – Native
(County Champion – girth)

Like all Limes, this one is often used in towns as street planting. It has medium sized leaves which are deeply divided into narrow segments. It flowers in July and August.

44. 037 Sweet Chestnut – *Castanea sativa* – S Europe

Probably introduced by the Romans, this tree can almost be regarded as a native. It spread extensively as it was very effective for making charcoal to smelt metal.

Its timber is now used for furniture and fencing but tends to warp if used for larger beams. Catkins are produced in spring and edible nuts in autumn, in 'cupules' with spiky shells to deter squirrels. The bark is distinctive, with deep grooves often spiralling around the tree.

45. 032 Box Elder – *Acer negundo* – N America – 1688

Elder is considered invasive in central Europe. In bulk, the tree is only considered good for fibreboard but craftsman use it for lathe turned items such as bowls. In 1959 the wood was identified as the material out of which the oldest existing Native American flute was made. Part of the Maple family, the leaves do not follow the usual maple pattern, having instead three to seven non-joined leaflets. Grown commercially in the USA for its sap - Maple Syrup

46. 029 Japanese Keaki – *Zelkova serrata* Japan – 1861
(British Isles Champion – girth)

Introduced by John Gould Veitch, a young son of the Veitch family sent to the newly opening Japan to collect. He took part in the first foreign expedition to climb Mount Fuji, collecting plant samples whenever he could. The timber is widely used in furniture in Japan, for timber roof supports in temples and to make traditional taiko drums. *Serrata* refers to its serrated leaves. It is sometimes known as 'saw-leaf' Keaki. The leaves turn a spectacular golden orange in autumn and the tree remains attractive in winter with its peeling multi-coloured bark. It was probably planted after the ha-ha was built in the 1880s and now clings to its edge.

47. 028 Keble Oak (Hybrid English x Algerian Oak) – *Quercus canariensis x robur* – Morocco/Spain – 1845
(County Champion – girth and height)

This tree was planted by William Gibbs on 31 October 1872 to commemorate the visit of his friends: the Right Honourable Sir John Taylor Coleridge, the Reverend Edward Talbot, Warden of Keble College, Henry Hucks Gibbs Esquire, the Reverend John Hardie, and architect William Butterfield Esquire. These men met at Tyntesfield on 5 September 1872 to discuss William's proposal for the building of the chapel at Keble College, Oxford. William did not live to see the chapel completed. Until recently, it was assumed that this was a pure Algerian Oak, but it is now identified as a cross.

48. 027 Nootka Cypress – *Chamaecyparis nootkatensis* – Western North America – 1853

Named for the Nootka inhabitants of Vancouver Island, Canada. It can grow to 36m in the wild and live for 2,000 years. The dense timber was used for canoes. The Nootka produces attractive yellow flowers at the tip of its fronds and its crushed leaves have a strong smell.

49. 860 Monkey Puzzle Tree – *Araucaria araucana* Argentina and Chile – 1795

When plant hunter Archibald Menzies dined with the Governor of Chile he pocketed, and later planted, some nuts served at dinner. John Veitch realised the commercial potential and sent William Lobb to Chile to collect more seeds. The spiky green leaves are very distinctive and climbing it would be a puzzle for a monkey. There are many of these trees at Tyntesfield. This tree, planted in 2008, replaces another Monkey Puzzle planted in 1850 which blew down in 1965.

50. 006 Leyland Cypress – x *Cupressocyparis leylandii* 'Haggerston Grey' – Wales – 1888
(County Champion – girth)

A natural cross between a female Nootka (48) and male Monterey (24) Cypress. The cross first occurred at Leighton Hall, near Welshpool, at that time the property of a Mr Naylor. In 1888 a seed was sown and six seedlings were taken by Naylor's brother-in-law, C. J. Leyland, and planted on his property Haggerston Hall, Northumberland, in 1892-3. In the wild, their natural habitats are over 800 miles apart, so this hybridisation would never have occurred naturally. The tree is both loved and hated by gardeners: it grows vigorously and makes dense hedges, taking away light and views. It generally does not grow back if heavily pruned, leaving a lot of visible dead wood.

51. 002 Golden Milkmaid Holly – *Ilex aquifolium* 'Golden Milkmaid' – Native
(British Isles Champion – girth and height)

Golden Milkmaid Holly has attractive curved, prickly gold foliage edged in dark green with thick splashes of white in the centre. The tree features abundant showy red berries in late autumn. This is a vigorous variety, growing slowly to a height of 5m-6m and a spread of 4m. Although the top of the tree has reverted to the green Common Holly, it remains a champion tree.

52. 001 Caucasian Fir – *Abies nordmanniana* – N E Turkey – 1848
(County Champion – girth and height)

Nordmann Fir is one of the most important species grown for Christmas trees. It has attractive foliage, with needles that are not sharp, and do not drop readily when the tree dries out. The wood is soft and white, and is used for general construction, paper, etc. It was named for Finnish zoologist Alexander von Nordmann (1803–1866), professor at the university of Odessa.

53. 005 Three-Flowered Maple – *Acer triflorum* – Manchuria/Korea – 1923
(British Isles Champion – Remarkable)

Very rare outside specialist collections. The leaves are divided into three narrow-toothed leaflets which turn a stunning orange in autumn. There are yellow-green flowers in spring. It can grow to 10m but it is very slow growing.

54. 1040 Golden Weeping Holly – *Ilex aquifolium* 'Aurea Marginata Pendula'
(County Champion – girth)

This is a weeping holly with dark stems and particularly prickly dark green leaves with broad bright yellow edges. *Aquifolium* means that the leaves are pointed.

55. 1027 Lawson Cypress 'Wisselii' – *Chamaecyparis lawsoniana* 'Wisselii' – Oregon/California – 1888
(County Champion – girth)

This Cypress was first introduced by plant hunters working for the Lawson & Son nursery in Edinburgh. Nurserymen found it amenable for breeding colourful cultivars. Eight of these, including *Wisselii* have the RHS Award of Garden Merit. Note the attractive chunky red bark: the timber is strong but light, with great rot resistance. It has a fragrant ginger smell. The straight grain made it perfect for arrow shafts and its heartwood is often used in the sounding boards of musical instruments.

56. 1020 – Swamp Cypress – *Taxodium distichum* – Eastern USA – 1640

Introduced by John Tradescant the younger, it likes damp soil so is often planted close to rivers and lakes. In waterlogged ground some of the roots will push up to the surface. These are known as 'knees' and help the roots to breathe. This location is well drained and far from its natural habitat. Although there are no breathers, you can see on the ground around it how close to the surface the roots are placed. It is one of the few conifers to shed its leaves in winter. It has both male and female flowers and produces seeds with open blades so that they blow across any water to find land. The wood is waterproof, making it popular for window frames and barrel making.

57. 1010 Crucifixion Thorn – *Colletia hystrix* – Chile, Argentina – 1847
(British Isles Champion – height)

Known in some parts of the world as 'Barbed Wire Brush', it is more commonly known as 'Bristly Colletia' from its long, sharp thorns. It rarely grows larger than this specimen. It is native to poor, dry soils and fixes nitrogen in its roots, making it very drought tolerant. In its natural habitat it produces masses of tubular, white and very fragrant flowers.