

# Tree Walk



Wivenhoe Park

John Constable

A pleasant walk around parts of the campus and Wivenhoe Park highlighting some of our notable trees

**Christopher Howard**

## University of Essex Tree Walk

This new guide is in memory of Christopher Howard. He had an incredible passion and knowledge of every tree on campus and he played a big part in creating this new guide.

The first edition of this booklet was issued in 2013. It has been revised because of some developments with campus buildings and indeed, some of the trees; all adding considerable interest to the walk.

This takes you past some of our notable and sometimes curious specimens. Trees - those large woody plants that we sometimes take for granted. We benefit from their welcome shade on a hot summer's day, or stroll through the landscape happily accepting the beauty and diversity they bring to our surroundings. That is, until we notice an unusual leaf, strange fruits, colourful bark, or perhaps, surprising flowers that we'd not noticed before, and then we think: *What is that tree?* Perhaps this little guide will help.

A tree index, glossary and map can be found at the back of the booklet.

Each tree also has a numbered botanical label giving the English and scientific names, along with the specimen's origin.

The route of this self-guided walk starts at the end of Square 5 by the Lakeside Theatre and coffee shop. It covers part of the original parkland and will take you about an hour, or longer if you linger over some of the more interesting trees.

Enjoy your walk.



Move from Square 5 with the Lakeside Theatre on your left, towards the Silberrad Student Centre and take the sloping path to your right and leave this for the trees on your left. The dip in the ground here was formerly known as the Elysian Grove. This earlier parkland feature was likely to have been a cool leafy glade. Part of the man-made dip remains, but the trees are now different.

The area contains some interesting trees including two different Ashes growing on either side of a Silver Birch (recognisable by its white bark)

The first of the two, on your left, is (1) the **Narrow-leaved Ash** (*Fraxinus angustifolia*). Its compound leaves form a quite delicate foliage with smaller leaflets than other Ashes which seem to merge into 'clouds'. Look up through the leaves to appreciate how fine and feathery they are. This tree usually shows a deep red colour in the autumn, explaining its other common name of Claret Ash.

Moving along the grass, the next tree, on the far side of the Silver Birch, is (2) the **Common Ash** (*Fraxinus excelsior*). This is the last of our native trees into leaf. Like the first Ash, the leaves have leaflets that are pinnate, in opposite pairs. It is also one of the first to drop its leaves. The timber is often used for traditional tool handles. It's also much valued as fuel, as the wood burns very well, even when green. It is a common woodland and hedgerow tree. It has winged fruits in the form of single wings known as 'keys' and they are often seen hanging in large bunches late into the autumn.

Crossing the grass and heading uphill to the left of the Ivor Crewe building, and passing on your right a large wooden sculpture, you will see the first of the campus sign points with their distinctive red cubes on the top. Turn right at the one marked VALLEY, following the path, signed 'Central Campus'. Once on this path you will see (3) on your right, the **Medlar-leaved Oak** (*Quercus petraea* Mespilifolia Group). The first of twelve different and varied species of Oak on the walk. This one is rather rare and its appearance can puzzle. Most of the leaves are unlobed and quite 'un-oak like', but it has the familiar acorns. You will see an actual Medlar tree later on the walk.

The small conical tree behind the Medlar-leaved Oak is an evergreen, (4) the **Holm Oak** (*Quercus ilex*). The younger leaves are sometimes spiny-edged; explaining its other common name of Holly Oak. The underside of the leaves is finely white-felted, making quite a contrast.

Move back to the path and after a few metres, on your left near the metal triangle sculpture, you come to (5) the **Turkey Oak** (*Quercus cerris*). You will recognise the leaf as 'oak-like' (lobed) but varied in shape and size. The acorns are fascinating and quite distinctive; the cups are sometimes described as mossy because they are very heavily whiskered, as with the buds which have been described as 'spidery' – you can see why.



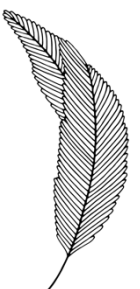
Continue on the path, go down a few steps and turn left at the LECTURE THEATRE sign. Follow this path uphill passing the second directional sign until you notice the label on a post for **(6)** a pair of coppiced **Sweet Chestnut** (*Castanea sativa*). You will not be looking at a tree in its usual form here, as these two mature trees have recently been severely coppiced – that is cut back to ground level. This is their second coppicing, having been originally cut back following development of the residential towers. The species was introduced into Britain by the Romans and is now a common woodland tree. Coppicing is use of the stump of a felled tree to regenerate new growth, which appear as smooth-barked poles. These can then be used as needed at the appropriate size. They were often used on hop fields before metal supports, but these days are used for fencing etc. The trees are known for the spiny husks on their fruits, but the high summer flowers on abundant catkins are not to be missed either. It will be a while before these characteristics develop again here but they are noticeable on other mature specimens on campus.

Continue up the path and where it forks take the right fork, where the sign above the door says 'Welcome to Essex Sport', and turn right. Follow the path to the end of the building and then to the barrier and cross to the 'SOUTH COURTS' sign. Behind this is a deceptively trim Oak, with another one the same a few metres on. These are **(7) Cypress Oaks** (*Quercus robur* Fastigate Group). These are sometimes mistaken for Lombardy Poplars but it's an English Oak in a neat form (fastigated) with near vertical branches. We go on to look at the English Oak in more detail later in the walk.

Continue along the path almost to the end and then turn to your left, carefully cross, and follow the grassed area between the carpark and a former pinetum, devastated by the great storm in 1987, Boundary Road is on the far side. With the carpark on your left, stand with the lamppost (No.SP3A4) behind you. On your right, and ahead, are two species of common pines. On the right are a group **(8)** of **Scots Pine** (*Pinus sylvestris*) and directly in front is **(9)** a **Black Pine** (*Pinus nigra*). Both species are two-needle pines and can be confused. However, the needles (actually leaves) on the Black Pine are longer; you can see these on the low-hanging branches. Note the bark as well, the Scots Pine has a slight reddish tinge to it, often more noticeable higher up when in full sun.

Follow the small paved path to the point level with the far end of the multi-storey carpark, and turn right towards Boundary Road. Turn left at a very tall Black Pine in the carpark, standing in a stone circle. Walk through this carpark to the campus entry road (Park Road) ahead. Cross Park Road and follow the path with Boundary Road on your right and the sports field on your left.

You will now pass along a pleasant avenue of trees beside Boundary Road with views on your left towards Wivenhoe House. You eventually come to a point with two green bins on your left. Leave the path and move ahead on to the field at about 45 degrees towards **(10)** the **Chestnut-leaved Oak** (*Quercus castaneifolia*), a tree with quite an open form. Seeing the leaf on this young tree helps you to appreciate the diversity of Oaks. These leaves have lobes but they are small, quite regular and triangular; quite different from the other Oaks that you saw earlier. There are more Oak surprises later on the tour.





Go back to the path and continue. Just before it ends you will notice a couple of **(11) Portugal Laurels** (*Prunus lusitanica*). These are large bushy evergreens with deep green glossy leaves and distinctive red petioles, or leaf stalks. There are creamy-white tails of flowers in late spring/early summer, these have a pleasant fragrance and are followed by bitter-tasting deep purple berries.

Leave the path at this point and cross the Sports Field towards the chimneys of Wivenhoe House. If the field is in use follow the boundary until you pick up the fence line around the copse area. Towards the end of the fence line there is a pedestrian gate that lets you into the grounds that surround the back of the House and its various buildings. Keeping the long black wooden buildings to your right, move towards the clock tower and the conical tree ahead.

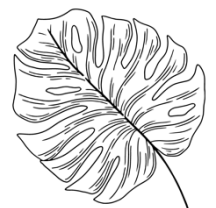
This is **(12) a Dawn Redwood** (*Metasequoia glyptostroboides*). A deciduous conifer originally from China where fossil records were known but the tree itself was thought extinct. It was re-discovered and introduced into Britain in 1948. Having a very neat shape and form with soft green foliage turning rust colour in the autumn, it has become popular in parkland planting, but it can develop into quite a large tree.

Moving along the back of the main buildings with the black wooden buildings on your right, follow the roadway right towards the Lodge and turn left at the second lamp post to view **(13) the Bhutan Pine** (*Pinus wallichiana*). This often shows a good display of very large cones, the most noticeable hanging near the crown of the tree, but there are also usually a few old open cones on the ground. This five-needle pine has interesting and strangely beautiful male flowers around June time. Some of the needles have a distinct kink on Bhutan Pines, in that they turn ninety degrees to hang downwards – see if you can spot them. As the name suggests the tree originates in the Himalayas. It was introduced into Britain in the early nineteenth century and is a good ornamental specimen for a tree lawn.

Move down this lawn, keeping the road close to your left, towards the next tree **(14) the Western Red Cedar** (*Thuja plicata*). It should be easy to locate next to the road, with its unmistakable large and luxuriant green conical foliage all the way to the ground. This tree is Cedar in name alone. It belongs to the family of Cypresses, the same as the more familiar hybrid Leylandii, but it is altogether more handsome and distinctive than its commoner cousin. The foliage when crushed gives off a pineapple-like scent.

The next tree is nearby, notable for its conical blue form. This is **(15) a Blue Atlas Cedar** (*Cedrus atlantica* Glauca Group). Originally from the Atlas Mountains in North Africa it makes a showy ornament to the lawn. Its needles are more silver-grey than blue and set in little 'bunches' or rosettes.

The next tree, a few metres away, is clearly the tallest in this group. It is **(16) a Wellingtonia** or the Giant Redwood (*Sequoiadendron giganteum*). With very reddish-brown bark, this specimen should grow even larger. The Wellingtonia is believed to be the world's biggest tree (the largest is in the U.S.) The taller it grows the more flared its base will become. This giant is a big useless softy; in timber terms, it has very soft wood indeed, but it looks good. The bark is so soft that Treecreepers have been known to nest in it when occasional holes form naturally.





Beside the Wellingtonia, with its branches touching, is **(17)** a **Fern-leaved Beech** (*Fagus sylvatica* 'Aspleniifolia'). Note the puzzling variation in the leaves: some are lobed like an oak and others, at the shoot tips, are narrow like a willow - very interesting. If it's a fine day, look up at the blue sky through the early soft green and almost feathery foliage. It's magical.

Stand with the last two trees behind you and to the right of another Wellingtonia you will see **(18)** a **Douglas Fir** (*Pseudotsuga menziesii*), usually with some cones on the ground. Introduced into Britain in the 1820s and often grown in plantations for its timber. The bole (trunk) is usually very tall and straight – look at this one. The cones show a distinctive feature in their 'snake's tongue' bracts. As you may see particularly in the new cones, it's a very good description.

Now move back to the road and follow this until you reach a Salt/Grit bin on your left and ahead of you, you will see the most magnificent and venerable specimen of **(19)** **Cedar of Lebanon** (*Cedrus libani*). Every Big House should have one! In its day this would have been a trophy tree viewed in its elegance from Wivenhoe House. The layered plates of foliage give the tree a handsome form, accentuated by the gaps allowing a clear view through its branches. The branches can grow very long and weighty and have a tendency to break off with age. You will notice the supports here to help prevent that happening to its lower limbs.

Retrace your steps to the tree lawn again by the 'Spinney' sculpture set in a raised brick bed.

The small tree beside the sculpture shows either interesting flowers or fruit, depending on the season, and is **(20)** a **Medlar** (*Mespilus germanica*). Its fruits can be something of an acquired taste, somewhat grainy and best 'bletted', or overripe. They have their followers. The foliage on the Medlar-leaved Oak (3) that you saw earlier, takes its name from the leaves of this species.

With the sculpture and the Medlar behind you, move a few paces down the slope towards the next tree. This rare specimen is **(21)** the **Japanese Chestnut Oak** (*Quercus acutissima*). It's also known as the Sawtooth Oak, and you will see why! You will have seen the earlier tree (10), the Chestnut-leaved Oak. The leaves here are not dissimilar, they are large and very glossy with a lighter but dull underside, but each of the lobes sports a forward-pointing bristle up to about 5mm long. It couldn't saw through paper, but you can see how it got its common name.

Now move towards a very tall Pine at the far edge of the lawn. With your back to the Pine, in front of you is **(22)** a large **Locust Tree** (*Robinia pseudoacacia*), also known as the False Acacia. It has rough and coarsely ridged bark and attractive compound leaves with pairs of oval leaflets. It is at its most attractive in June with its hanging spikes of highly scented white flowers; these are said to remind some people of the smells of the souk in Morocco. The later seed pods often hang into the winter.

Leaving the lawn behind you, move down to the corner and through a gap. The route crosses a culvert at the end of the lake with the Colchester road on your right, then takes you through some Yews and past a small brick building on your right.

About 30 metres up the path ahead of you and on the right is **(23)** the **Daimyo Oak** (*Quercus dentata*). Rather a special Oak and rare in Britain but found in a few





collections. A relatively small tree but with exceptionally large leaves, some of the largest of any Oak. They can reach 40cm in length; and are quite leathery and noticeably hairy. The species was introduced to Britain in 1830 from S.E. Asia. A Daimyo was a feudal Japanese lord, a deserving reference for this little arboreal aristocrat.

Carry on up the path ahead about another 30 metres to the large sprawling tree on your right, the **(24) Common Walnut** (*Juglans regia*). This tree has large compound leaves with the leaflets in pairs with the end leaflet being much larger, making it a distinctive feature. Prized for its wood in furniture making, and in some parts, for 'wet' walnuts for pickling. In England, the nuts ripen best after long hot summers; in the warmer parts of France they are used for producing a flavoursome oil.

Opposite the Walnut you will notice some large leaves, which are oval with a heart-shaped base and forward pointing teeth around the edge, coming to a pointed tip. These are the leaves of the only specimen in the park of **(25) the Black Mulberry** (*Morus nigra*). The ripe fruit look like small raspberries. You are advised not to pick them if you want to avoid the lasting stains they make! But they do make delicious jam.

About 30 metres after the Mulberry bear left towards another Giant Redwood and a green waste bin, and bear left again; a few metres further on, on your left, is a tree that confuses many people. This is **(26) the Ash-leaved Maple**, also known as the Box Elder (*Acer negundo*). The tree's very pretty little plumes of flowers appear in March and the unusual leaves follow. They are pinnate, but some of the leaflets are still recognisable as Maple; just, – what do you think? The fruits confirm the tree as a Maple with strings of the usual pairs of keys.

On your right is another fine conical young Dawn Redwood. The next large tree on the left of the path is our third true Cedar **(27) a Deodar** (*Cedrus Deodara*). The tell-tale cone scales can often be seen here around the base of the tree leaving their spire shaped centres, like candles, on the tree.

The next tree immediately ahead on the left is a top performer in the autumn; you must come back for the show! This is yet another of the park's interesting Oaks **(28) the Scarlet Oak** (*Quercus coccinea*), less common than its cousin, the Red Oak, which you will see later. Its leaves are a deeper cut with whiskers on the lobes and these are the most reliably red of the Oaks – best in a long warm autumn.

Continue along the path and you will find the lake alongside on your left.

Facing the lake and standing by the metal structure, the tree on your left **(29)** is a good example of the **London Plane** (*Platanus x hispanica*). A tough tree, planted a lot in London streets and parks where it can tolerate high pollution levels. Its leaves are Maple-like but it has some distinctive characteristics in bark and fruits. Its bark is noticeably scaly, showing greys, cream and brown, it's sometimes called blotchy.

The fruits become very noticeable in the winter after the leaves fall. These are 3cm balls of hairy seeds, which then break up and disperse in the spring.





With the lake behind you head up over the hill until you are alongside (30) a very large **English Oak** (*Quercus robur*). This magnificent tree is estimated to be well over 400 years old - one of the oldest in the park. You can approach its massive girth and marvel at the curious craggy features of this silent and mighty sentinel of the countryside. The English Oak is everyone's friend, it supplies us with excellent timber and provides a free lunch for more leaf-eating insects than any other tree in Britain. Perhaps that's because a veteran tree like this one can have about a quarter of a million leaves!

From the Oak move in the general direction of the campus buildings, past the next oak and the metal structure heading for the large blue-green cloud of foliage which is incredibly, all from the one tree. This is (31) a huge **Cider Gum** (*Eucalyptus gunnii*). This tree is located by the old main track that once led to Wivenhoe House, crossing the lake. Follow the track down to where the grassy slope above the lake begins and turn right.

You will be alongside a large and spreading (32) **Sweet Bay** (*Laurus nobilis*). The beautifully fragrant foliage has long had its culinary uses. Crush a leaf for the warmly peppery aroma. Appropriately, there is an academic reference too; the Medieval Latin for bachelor is *baccalaurus*, which in turn is derived from laurel-berry. Graduates in earlier times were adorned with Bay.

Walk past the 'Standing Stone' sculpture and to the far side of a small copse. Here you will find a tree with a circular bench around it. This is a perfectly shaped example of another Turkey Oak (*Quercus cerris*). The tree is notable for the bench and its location. Their story is explained in a commemorative plaque fixed to the bench.

Take the pathway back towards the picnic/barbeque area by the lake.

Once on the causeway above the tables, looking towards the Silberraad Centre, there is a row of (33) **Hybrid Black Poplars** (*Populus x canadensis*). These are an inspired planting here as they provide a high parasol for the barbeque area. The triangular-shaped leaves are on very long petioles, or leaf stalks. These allow the leaves to hang freely and catch any passing breeze, causing them to shimmer and tremble in the wind; could there be a more pleasant spot for a picnic! Stand still for a moment if there's a breeze to listen to the rustle; it can be very soothing.

Continuing over the crossing, the last two trees on your left are very similar. The first of these is another Dawn Redwood, while the adjacent tree (standing in the lake) is (34) a **Swamp Cypress** (*Taxodium distichum*). A deciduous conifer, which despite its name, also grows quite happily away from water. But it is a wetland tree and particularly well adapted to this habitat. Often, where water does not have enough movement and so has reduced oxygen levels, the tree will develop root extensions, known as 'knees', above ground, or water, to aid its oxygen supply. There are none evident here; our own 'swamp' perhaps being more agreeable!

Turn left and follow the lakeside to a point where, with the lake and a green metal bench behind you, you will notice (35) an interesting **Copper Beech** (*Fagus sylvatica* Atropurpurea Group). The tree, when in leaf, has an interesting variation in its colouring. The leaves are quite purple at the branch ends nearest the lake. Then as you move under the tree, you will notice the leaves become







quite green but with purple veins; this is because of the imbalance of the colouring pigments (xanthocyanins) in the leaves as the season moves on.

Facing the lake, to your right and a little more elevated, you will see the next tree. This is (36) the **Coast Redwood** (*Sequoia sempervirens*), tall and very conical. We saw the Giant Redwood (16) earlier. The Coast Redwood is believed to be the world's tallest tree (112m in the U.S.). This one is approaching 20m high and it will take some time for it to achieve that unlikely status. If you look through the needle-like leaves you will see the reddish bark.

Next to this is (37), a beautiful mature specimen of **Red Oak** (*Quercus rubra*). A little neater in appearance than the English Oak, this variety has large leaves looking more cut and pointy than most of the other Oaks you have seen. These go a deep red after long and warm Indian summers.

Now head uphill to the point where the old gravel track ends. There is an interesting small oak on your right. This is (38) a **Turner's Oak** (*Quercus x turneri*). This is a hybrid (crossed) semi-evergreen oak from English and Holm Oaks, both of which you saw earlier. Notice how some of these leaves are more 'stretched', and smaller compared to the English Oak.

Now cross towards Wivenhoe House and through the black iron garden gate to the right of the building. Immediately after the gate are (39) some small but interesting **Strawberry Trees** (*Arbutus unedo*) on your left. These are planted in the depression surrounding the house, but this allows a good view of the fruits, flowers and foliage. Despite its fruity name the tree has an attractive but unappetising crop of fruits. The previous year's orange fruits ripen to an appealing red and are evident in the early autumn, at the same time as the flowers, which are clusters of small white 'bells'. These may seem familiar - the tree is in the same family as the heathers. Its Latin name is telling: *unedo* comes from *unum edo* meaning 'I eat one' or eat only one; don't bother to find out why!

Now head towards the rear of the garden, which ends with a Ha-Ha. This is the sunken wall which marks the boundary between garden and parkland. It allows a fine uninterrupted view, but don't walk over the edge!

Near the Ha-Ha are two of the most magnificent (40) **Cork Oaks** (*Quercus suber*) that you are ever likely to see. The 'complexion' of their bark may look in need of a little moisturiser. These two large rather recumbent characters are very alive. It is said that they were planted in 1814 by General Francis Rebow, then owner of the estate, as seedlings that he brought back from Lisbon, where he had been taking part in the Peninsular War. These trees are often found growing on hot scrubby hillsides around the Mediterranean, where their bark has been used for corks for hundreds of years, though plastic capsules and screw tops are changing that. A harvest of the bark every 8-10 years does not damage the tree. A tough tree, with tough leaves. These are small and evergreen, often with small spiny lobes. These final two trees do highlight the diversity of the Oak (*Quercus*) genus.

-oOo-

Trees vary with the seasons because of bud, leaf, flower and fruit development, in some cases quite dramatically. Why not repeat the walk in another season.



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### GLOSSARY

<b>Bract</b>	Modified leaf behind a flower or seed.
<b>Compound</b>	A single leaf divided into leaflets.
<b>Hybrid</b>	The offspring of the result of a cross between different species, sub-species or varieties often growing in close vicinity.
<b>Keys</b>	Term applied to winged fruits (samara), especially of the Ash
<b>Leaflet</b>	One part of a compound leaf.
<b>Lobes</b>	Rounded indentations and promontories on a leaf edge.
<b>Pinnate</b>	Having leaflets in pairs on either side of a leaf stalk.

# NOTES

# MAP

