

Ilkley Tree Trails

Darwin Gardens and the Moor



printing thanks to



Wharfedale Naturalists

The trail starts at Darwin Gardens carpark and visits 35 trees in Darwin Gardens and on the lower Moor. The trail is about 1.5 miles and takes about 90 minutes.

A map marking the location of each tree is on the back page of this booklet.

This booklet and map can also be viewed and downloaded from ilkleytrees.org.uk/treetrails. We suggest that if you plan to follow the trail on your phone you print a copy of the map to carry with you.

The path from White Wells to the lower tarn is rough and steep in places. If you want to avoid this you can retrace your steps from White Wells to Darwin Gardens and take the tarmac track to the lower tarn, rejoining the trail at tree 24.

Go to the far end of Darwin Gardens car park to the three steps in the left corner. On the left hand side of the steps with leaves hanging over the carpark is a very tall tree, 1

1. Beech *Fagus sylvatica*

Native to southeast England but widely planted throughout UK. The leaves are oval, with a pointed tip and a smooth, wavy edge. Standing under beech in summer you will be in deep shade as the foliage is very dense, and little can grow under it. The fruit is an edible nut in a soft-spiked woody case.



Beech Leaves



Beech Nuts

Go up the steps and turn left. Just beyond the first bench on the left of the path is 2.

2. Box *Buxus sempervirens*

A native evergreen with small oval, shiny, leathery leaves, often notched at the tip. Grows well on chalk slopes, such as Box Hill in Surrey, named after the tree, but is planted all over the UK as hedging (as here) and for topiary (as at Levens Hall, Kendal). All parts of the boxwood plant are poisonous.



Box leaves and fruit

Turn to face the maze and walk along its right hand edge. On your right is a hedge containing five multi-stemmed trees, 3.

3. Hazel *Corylus avellana*

A very common native tree, once widely planted for coppicing i.e. repeatedly cutting the tree down to near ground level every 5-10 years and using the cut stems for fencing and poles. It has yellow catkins (male) and tiny bright red female flowers in late winter, before the leaves appear. The leaves are roundish with a drawn out point, serrated, floppy, and downy with hairy stalks. The fruit is an edible nut in a leafy cup, though is often stripped from the tree by squirrels before it fully ripens.



Hazel catkins



Hazel leaves



Hazel nuts

Continue to the furthest hazel and go through a narrow gap in the hedge straight ahead between the table and a bench. On you right is a group of four trees, 4

4. Orchard apple *Malus domestica*

Originally from central Asia, unlike the crab apple, which is native. The orchard apple has hairy stems and the leaves are thinly woolly underneath. The fruits are larger and the leaves longer and less rounded than those of crab apple.



Orchard apple leaves



L - Orchard apple, R - Crab apple

Look to your left to the largest tree at the road edge, 5, on its right, 6 and right of that 7

5. Horse chestnut *Aesculus hippocastanum*

Non-native – came to the UK from Turkey in the 16th C. The leaves are made up of 5-7 large leaflets. It has large sticky red-brown buds in spring, ‘candles’ of flowers in May and the fruits are brown conkers inside a spikey green case.



Horse chestnut leaves and conkers



Horse chestnut ‘candle’

6. Sycamore *Acer pseudoplatanus*

Non-native – probably introduced by the Romans. Very widespread in the UK and long-lived – may live for 400 years. The leaves are 5-lobed and have many coarse teeth, the bark is pinky-grey and smooth initially, becoming cracked and developing small ‘plates’ with age. The winged fruits, called samaras, also known as helicopters, are designed for dispersal by the wind.



Sycamore leaf



Sycamore bark



Sycamore - winged fruits

7. Field maple *Acer campestre*

Native. The leaves have 5 lobes and can be mistaken for sycamore but are smaller, darker green and shiny, and have just a few, rounded teeth. The fruits are similar too, but the two wings are almost in a straight line, not angled towards each other as in sycamore.



Field maple leaf



Field maple - winged fruit

At tree 7 continue up the road. Hanging over the Darwin Gardens board, planted at the end of a hedge together with a hazel, is 8.

8. Guelder rose *Viburnum opulus*

A native shrub and an indicator of ancient woodland, but there are also many cultivars, widely planted in gardens for the creamy-white flowerheads and bright red berries. Its berries are mildly toxic if eaten raw but they can be cooked to make jelly or jam. The leaves have 3 lobes and the leaf stem has a channel down the middle. The name 'guelder' comes from the Dutch province of Guelderland.



Guelder rose leaf with developing berries



Guelder rose flower

Walk a short way down Brodrick Drive. To the left of the second lamppost and leaning at 45 degrees is 9. Towards the main road is another willow, 10.

9. Common osier *Salix viminalis*

A small willow, native to S E England, now widespread throughout the UK. Usually found in wet places and along riverbanks. The leaves are very long, thin and pointed, glossy and dark green above with felt-like silvery hairs beneath. The leaf edges are finely toothed and slightly rolled inwards. Its long flexible stems (called withies) have traditionally been used to make baskets. Now, because of the ability of willow to absorb heavy metals it is planted to 'clean up' contaminated waste ground.



Common osier leaves

10. Golden weeping willow *Salix x sepulchralis* 'Chrysocoma'

This is a commonly planted hybrid of Chinese weeping willow and Golden willow. The yellow shoots are very long and hang down straight. The leaves are a similar shape to the common osier but are broader and a much brighter green.



Golden Weeping Willow



Leaves and shoots



Top - common osier
Bottom - weeping willow

Continue up the road, passing the two ponds of Wells House, and turn left into White Wells carpark. In the left hand corner of the carpark is 11

11. Hawthorn *Crataegus monogyna*

Native and very common. Often planted as a boundary hedge as the foliage is dense and thorny. The leaves have deeply cut lobes, each with a 'tooth' at the tip. Also known as May as this is when it is in blossom, and sometimes called Bread-and-cheese tree as the leaves were eaten in past times of food scarcity. Its red berries are known as haws.

Hawthorn leaves and haws



Walk through the carpark and stop at the White Wells Bath House sign. From here you get a good view of the trees on the moor. They are mostly fairly small, are scattered all over the moor, and consist mostly of self-sown Hawthorn (11), Elder (13), Birch (15) and Rowan (16). Straight ahead in the distance you can see a conifer wood – these are mostly Scots pine (30) and were planted in late Victorian times.

Walk up the track. Just past the first bench on the left and next to a narrow path is 12.

12. Ash *Fraxinus excelsior*

Ash leaves are made up of 9-13 long leaflets and can be confused with Elder (14) and Rowan (17), but the tree is easy to identify, even in winter, as it has black leaf buds. The winged fruits hang like a bunch of keys. Ash die-back is affecting most of the ash trees in Ilkley and is causing devastation in the Dales – you will see diseased trees later in the walk, but this one looks healthy.



Ash leaves and winged fruits



Ash leaf buds

There is a small hawthorn after the ash and then as you continue up the track the next large tree on the left is 13

13. Elder *Sambucus nigra*

A very common native tree. The leaves usually have 5 leaflets, sometimes 7, but fewer than Ash. It has creamy-white heavily scented flowers in spring, and then berries that ripen to purple-black in autumn – 'the Englishman's grape' – the berries can be used to make wine though are toxic if eaten raw, and cordial or 'champagne' can be made from the flower.

Elder leaf and flower



Continuing up, next on your right are two trees growing together, 14 and 15

14. Goat willow *Salix caprea*

Also known as pussy willow as the male catkins look like a cat's paw. These appear before the leaves. The leaves are more oval than other willows (see 9, 10) and the tip twists sideways. The underside of the leaf is a felted grey-green. Willows like wet ground, but goat willow can grow in drier conditions than other willows.



Goat willow leaf

15. Downy birch *Betula pubescens*

The native birch of the North. It is a very hardy tree, one of the first to become established in Britain at the end of the Ice Age, and is known as a pioneer tree – it rapidly colonises heathland, beginning the process of conversion to woodland. Young birch are plentiful on the lower slopes of the moor. Downy birch is similar to silver birch (20), and often hybridises with it, but its leaves are more rounded, are a duller green and feel rough. The young twigs are hairy.



Downy birch leaves and catkins

Continue up, passing an elder and hawthorn on your left. Just on the bend in the track and before the stream, on your right is 16.

16. Rowan *Sorbus aucuparia*

Native. Common in the wild in the North and West and plentiful on Ilkley moor. It is also often planted in streets and gardens. The leaves consist of 4-8 pairs of toothed leaflets with another leaflet at the end. Once pollinated, its clusters of creamy-white flowers develop into red berries, valuable to birds and they can also be made into a jelly. Although sometimes called ‘Mountain ash’ because it can grow at high altitudes, it is no relation of the Ash tree.



Rowan leaves and developing berries



left - Ash, middle - Elder, right - Rowan

Continue towards White Wells and stop at the junction with a grass path a short way before the small wood ahead, planted to conceal the toilet block. In the wood are sycamore, beech, and on the R hand side a single, rather poor specimen of Larch, 17. To see the larch take the grass path (rough, often wet). Otherwise continue straight.

17. European larch *Larix decidua*

Introduced about 400 years ago from Central Europe and now widespread. Unlike most conifers it loses its leaves in winter. The leaves are soft needles which grow from the shoots in tufts. The cones are small and may stay on the tree for many years. This tree is not doing well due to lack of light, and the bluish-white waxy wool seen on some branches is due to an infestation with an insect called an adelgid.



Larch



Larch infestation

Continue to White Wells and take a seat. From here is a good view of the lower moor, the town, and on the other side of the valley, Middleton Woods and the Beamsley Beacon ridge. On a knoll behind White Wells is a group of planted sycamores, and on the ridge far over to the east another conifer wood planted by the Victorians.

Continue east past the steps on the left to the small path to the upper tarn. The paths from here until the lower tarn are rather rough and rocky. Go round the tarn anti-clockwise - the path may be partly hidden by bracken. The first tree on the tarn edge is 18, next to it is 19

18. Grey willow *Salix cinerea*

The leaves are similar to goat willow in shape, being more oval than the long thin leaves of willows 9 and 10, but are not as broad. It will hybridise with goat willow. Grey willow likes very wet ground and cannot tolerate dry conditions.

Grey willow

Far right - Goat willow (L), Grey willow (R)



19. Silver birch *Betula pendula*

Native to the South of England, but widespread throughout the UK, both in the wild and planted. It can hybridise with the downy birch. The leaves are more triangular than those of downy birch and the white bark develops black diamonds with age.

Silver birch



Continue past another birch and two rowans with a small holly in between. The conifer hanging over the path and growing with another holly is 20

20. Yew *Taxus baccata*

One of only three conifers native to the UK. The others are Scots pine and juniper. The leaves are soft, dark green needles in two flattened rows, one either side of the stem, and are evergreen. Yew trees are either male or female (though can sometimes change sex). Unlike most conifers, yew does not produce a cone. Instead the female yew has a red berry-like fruit called an aril. Male yews, like this one, produce tiny round pollen 'cones' on the undersurface of the shoots. All parts of the yew are toxic except the fleshy aril (but the seed inside is poisonous). Yews can live to a great age – over 1000 years.



Yew

Continue around the tarn, almost completing the circuit but just before reaching two big boulders take a small grass path to the right to join a wider track from White Wells. Turn right, heading for the lower tarn. This path is rather steep in parts. Continue down, past a bench and further on some rowans to your left and then a group of very large rocks to your right. Further down where the path bends to the right there is a large rock on the left hand edge of the path with a hawthorn behind it. Just beyond the rock, on your right, a few metres from the path at the top of a small hillock is a small tree, 21

21. Juneberry *Amelanchier lamarckii*

Non-native. Originally from N America, introduced to Europe in 16th C. Popular in gardens for its spring flowers, leaves that are coppery at first, become green then turn orange-red in autumn, and berries - green at first, then red, turning purple black in midsummer- though these rapidly disappear, eaten by birds. This tree was probably bird-seeded and is an unusual tree for the moor.



Juneberry leaves and developing berries



Juneberry flowers

Further along the path and a few metres to the left is 22

22. Wild cherry *Prunus avium*

Another unusual tree for the moor and probably also brought here by a bird. The bark is distinctive - dark reddish brown with cream -coloured horizontal lines called lenticels. The leaves are large and have coarse teeth. This tree does produce cherries but like the Juneberry these disappear very quickly.



Cherry bark and leaves



Continue down. A narrow path crosses your path and shortly after this on the left is 23

23. Whitebeam variety *Sorbus croceocarpa*

Non-native. Origin not known. An unusual variety of whitebeam – it has rounder leaves with fewer veins than common whitebeam, and although it has a pale felted undersurface, it is not as white as the common variety. Again, an unusual plant for the moor and probably bird-seeded.



Whitebeam leaf



Leaf undersurface

Continue down to the lower tarn. The big ash opposite the lamppost has advanced ash die back, as do almost all the ash around the tarn. Go round the tarn anticlockwise, past a common osier (9) on the water's edge and continue to just beyond the island. The next tree on the left just beyond a large rock and before a bench is 24

24. Norway maple *Acer platanoides*

Non-native. Introduced from Europe in the 17th C. The leaves are similar to sycamore, having five lobes, but each lobe has just a few long teeth, mostly with whisker-tips. The leaves turn yellow in autumn. The winged fruits, samaras, are also similar to those of sycamore and field maple.

L-Norway maple, Mid- Sycamore, R- Field maple



Continue along the path. On the right, just before three steps leading up to a bench is 25

25. Small-leaved lime *Tilia cordata*

Native to South and Central England. Our other native limes are large leaved and common lime. After 27 you will pass under the branches of a common lime. All three have heart shaped leaves with a lopsided base. Those of the small leaved lime tend to be smaller than those of the other two but leaf size is not helpful in distinguishing them. The flowers and fruits of the small leaved lime point in all directions, some directly upwards, whereas the other two have flowers and fruits that always hang down. Both small leaved and common lime have a forest of shoots around the base of the tree.



Small leaved lime



Small leaved-fruits/flowers in all directions



Common- fruits hang down

Further on, on the left just before three large rocks surrounding a bench is 26

26. Variegated sycamore *Acer pseudoplatanus f. variegatum*

A cultivar of sycamore, planted for its variegated leaves with cream splashes.

Variegated sycamore leaf



Just beyond 26 on the right is 27

27. English oak *Quercus robur*

Native. Our other native oak is Sessile oak. The leaves are similar, but English oak leaves have short stems, backward pointing 'ears' at the leaf base and its acorns are on long stems. Sessile oak has long leaf stems, no 'ears' and the acorns have no or just very short stems. Native oak support more wildlife than any other native tree in the UK- 2,300 species are known to use it. Oaks can live for 1000 years. The oldest in Ilkley is the Stubham Oak, at 500 yrs.



Backward pointing 'ears' and short stem

English oak leaf

Go around the head of the tarn, passing under the branches of a Common lime, and take the second path off to the R between a group of rocks and a memorial bench. Follow the path down, going L at the first fork. Just before the next fork and on your R is 28

28. Turkey oak *Quercus cerris*

Non-native, introduced from Europe in 18th C. Not so useful for wildlife as native oak and is host to the Knopper gall wasp whose larvae damage the acorns of native oaks. The leaves are slender and variable in outline. The acorn is quite different to the native oak – it has a hairy cup.

Turkey oak leaf and acorn



Take the left fork and at the next fork go left again and up a flight of steps back to the tarn. Turn right, passing two sycamores on your right, carry on past the shelter and stop at the next bench on your left. Between the bench and the island is 29

29. Paperbark birch *Betula papyrifera*

Non-native from North America. Planted for its attractive bark which is white and peels off in thin horizontal strips to show pinky-orange bark underneath. The leaves are similar to native birch but are bigger.



L-R; Downy, Silver, Paperbark birch leaves

Paperbark birch

Go on to the end of the tarn. Just beyond the notice board is a bench on the right. Behind this is a conifer, 30, reached via a narrow path behind the bench

30. Scot's pine *Pinus sylvestris*

Native to Scotland. The leaves are short needles (5-7cm), often twisted, and always growing in pairs. The bark is orange-brown, particularly towards the top of the tree. The current year's cones are green. These mature on the tree the following year, becoming grey-brown with a circular bump in the middle of each scale.



Scots pine cone and needle pair

Return to the main path and turn right. Soon you will see a large prickly bush on your right, 31

31. European gorse *Ulex europaeus*

Native. A large evergreen shrub with spiny leaves, widespread throughout UK. It flowers mainly from Jan – June and is a valuable source of nectar for insects when little else is in flower, but it can also flower at other times. The yellow flowers smell of coconut. Its dense structure make it an important nesting site and shelter for birds. In 2021 extensive 'gorse die-back' has been reported around the country. Cause unknown but thought to be due to the altered weather pattern of the early part of the year.



Gorse

Continue along the path and about 20m past a path and a lamppost on your right is 32

32. Wych elm *Ulmus glabra*

Native. The leaves are very large, with almost no stalk and are asymmetric at the base with the longer side overlapping the stalk. There is a sudden point at the tip and the leaf feels rough. It can be confused with hazel. It has red-purple flowers followed by winged seeds, present before the leaves appear.



Winged seeds



Top - Wych elm
Bottom - Hazel

Continue and just after another lamppost on your right take the sandy path on the left. On your left, after a rowan tree, and about 5m from the path is 33

33. Rhododendron *Rhododendron ponticum*

Non-native evergreen shrub with leathery leaves and large purple flowers. Introduced from Asia or possibly Portugal in the 18th C and popularised by the Victorians. It grows well on the acid soil of the moor, and is invasive - a single plant can cover many metres of ground with impenetrable branches, destroying native habitats. It contains toxins that discourage animals from eating it so it cannot be controlled by grazing. Humans are occasionally poisoned by eating honey contaminated with its nectar – ‘Mad honey disease’.



Rhododendron leaves

Continue past a gorse bush and a group of birches to a large bush on the left, 34

34. Prickly heath *Gaultheria mucronata*

Non-native evergreen shrub from South America. Dark green, leathery, spine-tipped leaves, white bell-shaped flowers in spring, and deep pink berries in summer, popular with birds. Can become invasive, forming dense thickets.



R - Prickly heath flowers
Far right - berry

Go past the shelter and at the T junction turn right, heading downwards. Go left around the end of the paddling pool then turn right along the railings. Just beyond the end of the railings and marked by a memorial post is 35

35. Balm of Gilead *Populus x jackii* ‘Aurora’

Non-native, also known as Variegated poplar. The buds are sticky and smell strongly of balsam. The triangular leaves are dark green in spring, but the later leaves from the stem tips have splashes of cream. Balm of Gilead is mentioned in the bible – a rare perfume from a tree or shrub used to heal the wounded, made in Gilead (now NW Jordan). The phrase has come to mean a universal cure.



Balm of Gilead leaf bud
Balm of Gilead leaf

The trail ends here. Cross the road to return to the car park.

This booklet has been produced by Sue & Neil Stevens in August 2021. We hope you have enjoyed getting to know trees. Your comments are welcome via trees@ilkleytrees.org.uk We would like to thank Wharfedale Naturalists for funding the printing costs and Bruce Brown from the Wharfedale Naturalists for his help with tree identification There are three other Ilkley tree trails available:-

Introduction to Trees
Town Centre Trees
Trees in Winter

All three can be downloaded from IlkleyTrees.org.uk The first two are usually available in printed form from the Grove Book Shop or Ilkley Visitors Centre.

