

Photo guide to Trees in winter

Use this guide between September and March to identify 12 different trees from the bark and buds. Then turn over for places to visit these trees in Bradford.

What are buds?

Buds are small lumps on tree twigs in winter. You can identify trees using the buds once the leaves have fallen.



In spring, the buds burst open into new leaves and flowers.

What is bark?

Bark is the outer part of woody plants. Different trees have bark of different colours and textures.



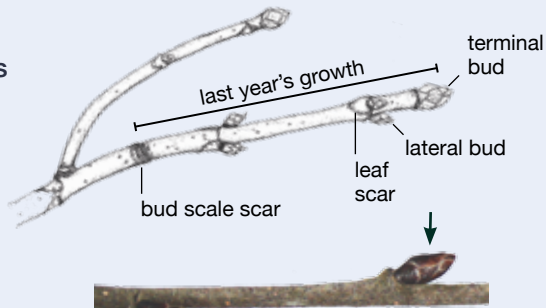
The best place to look at bark is on the main trunk of the tree.

Opposite buds and alternate buds

Check how the lateral buds are arranged on the twig. **Opposite buds** are matched pairs of buds on either side of the twig. **Alternate buds** are offset or spiralling around the twig.



↑ **Opposite buds**
GO TO SECTION A



↑ **Alternate buds**
GO TO SECTION B

A Opposite buds

Ash

Fraxinus excelsior



Buds dark black and hard. **Bark** light grey. Bark is smooth when young, but develops vertical ridges with age.

Horse Chestnut

Aesculus hippocastanum



Buds dark brown, large and very sticky. **Bark** grey-brown, becoming flaky with age.

Sycamore

Acer pseudoplatanus



Buds pale green, with purple edges. **Bark** grey. Smooth on young trees but with age flakes off in rectangles.

Field Maple

Acer campestre



Buds reddish-brown, with white hairy edges. **Bark** grey or brown. With age may become flaky and corky.

B Alternate buds

Oak

Quercus species



Buds orange-brown, plump, with waxy hairless scales. Bark grey, becoming vertically ridged with age.

Cherry

Prunus species



Buds red-brown and pointed. Bark red, brown or grey, with orange-brown horizontal lines.

Sweet Chestnut

Castanea sativa



Buds red and plump. Twigs ridged. Bark brown, smooth when young, developing spirals around the trunk.

Poplar

Populus species



Buds brown or green, sharply pointed and sticky. Bark brown-grey, developing wavy ridges with age.

Beech

Fagus sylvatica



Buds brown, long and pointed away from the twig. Bark grey, developing criss-crossing ridges and furrows.

Hornbeam

Carpinus betulus



Buds brown, pointing towards the twig. Bark grey, develops orange or silver vertical furrows with age.

Lime

Tilia species



Buds green or red, plump and bluntly rounded. Bark grey-brown, furrowed, with suckers (leafy twigs at the base).

London Plane

Platanus x hispanica



Buds red and round. Bark light green or grey, peeling off in patches, cream underneath.

Exploring trees in Bradford

Use **what3words** to follow our new winter tree trails in Bradford and Keighley. Or explore how **Tree for Every Child** is helping to mitigate climate change locally.

Tree for Every Child

Over 55,000 trees were planted in Bradford District between 2021 and 2023 - a tree for every child!



11,607

trees or hedges
planted across
90 different
primary schools

43,987

trees planted
to create
new urban
woodlands

4000

trees given to
residents for them
to plant in their
gardens



Trees for Cities is continuing to support tree planting in Bradford going forward through its new project Trees for Climate Action - offering engagement, training and tree planting opportunities. Find out more at www.treesforcities.org/trees-for-climate-action

/// what3words

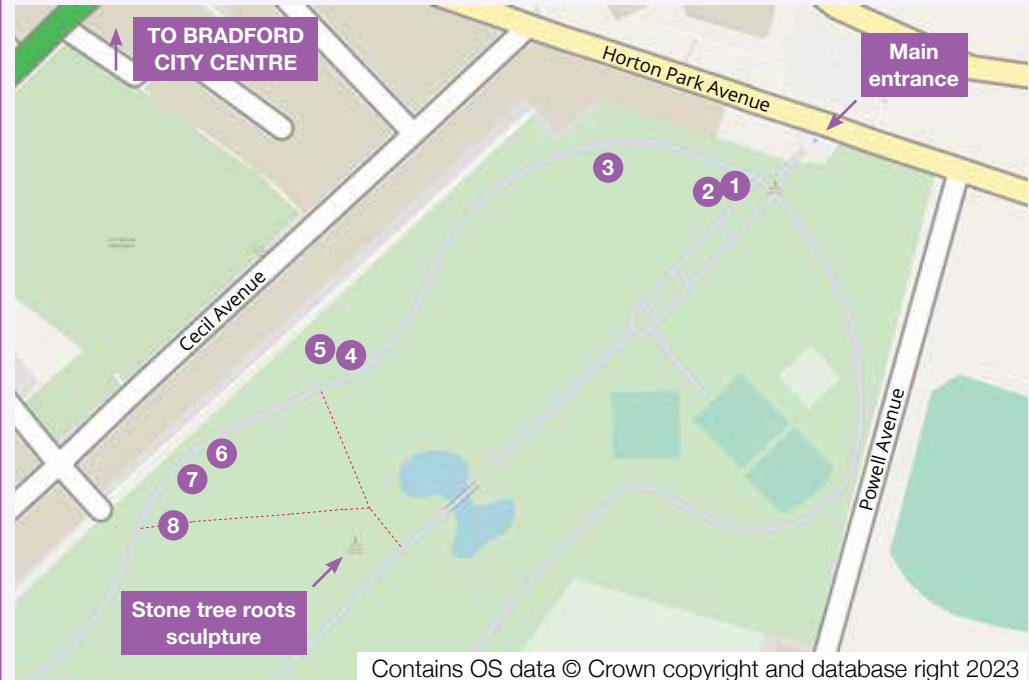
It's easy to track down trees with **what3words**. Every 3 metre square in the world has a unique combination of three words: a what3words address. Follow the QR code (right) to download the free **what3words** app to your phone, then get out and explore!



Horton Park Tree Trail

This Tree Trail follows the West Carriage Drive uphill from the main entrance on Horton Park Avenue in Bradford.

Time needed: 1 hour. Distance: 800 metres. Fully accesible with smooth tarmac paths. Buses to Bradford city centre stop nearby.



1. Beech Large spreading tree close to the Horton Park Avenue gates.

/// talent.punchy.match

2. Sycamore Next to the Beech tree (tree 1) by Horton Park Avenue gates.

/// wisdom.tuned.like

3. Cherry 5 young trees with red-brown bark with horizontal lines.

/// charge.buyers.match

4. Oak Medium-sized tree with spreading branches.

/// city.stiff.danger

5. Lime Large tree with outgrowths at the base behind the Oak (tree 4).

/// update.format.guises

6. London Plane Large spreading tree with peeling bark.

/// vibes.maybe.pinks

7. Ash Large spreading tree just uphill of the London Plane (tree 6).

/// begun.edit.social

8. Poplar 20 tall and narrow trees, planted on both sides of the path

/// likes.entire.bags

Cliffe Castle Park Tree Trail

This Tree Trail starts at the main door of Cliffe Castle Museum (the tower) off Spring Gardens Lane in Keighley

Time needed: 1 hour. Distance: 700 metres. Fully accesible with smooth tarmac paths. Buses to Shipley and Ilkley stop nearby.



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1. Oak Medium-sized tree with spreading canopy by the Dolphin Lamp.
/// prime.dame.mobile

2. Sweet Chestnut Tree with spiralling bark downhill from Museum entrance.
/// grain.pocket.glad

3. Hornbeam Young tree with furrowed trunk next to the path junction.
/// rocket.maple.amount

4. Lime 5 large trees, on both sides of the path sloping downhill.
/// trip.nights.chip

5. Beech At the triangle of paths close to the bandstand.
/// wicked.help.bars

6. Horse Chestnut Large tree with twisted trunk opposite the bandstand.
/// buzz.ports.cure

7. London Plane 2 large trees, just downhill from the pond and fountain.
/// handle.slime.hello

8. Field Maple Medium-sized tree close to the pond and fountain.
/// part.exact.studio

Get to know your tree

Here are some ideas of what you can do, either on your own or with your family, friends, colleagues or community group.



How much carbon?

Want to know how much carbon there is in a tree's trunk, leaves and roots?

- 1 Measure the circumference of the trunk (in cm) at 1 metre above the ground.



- 2 Estimate the dry weight of the tree by finding the nearest value to your circumference measurement.

| Circumference (cm) | Dry weight (kg) | Carbon (kg) |
|--------------------|-----------------|-------------|
| 20 | 9 | 4.5 |
| 30 | 27 | 13.5 |
| 40 | 82 | 41 |
| 50 | 106 | 53 |
| 75 | 310 | 155 |
| 100 | 668 | 334 |
| 125 | 1208 | 604 |
| 150 | 1964 | 982 |
| 200 | 4221 | 2110.5 |

- 3 Approximately half of the dry weight of the tree is carbon. So

$$\text{Carbon content} = \frac{\text{Dry weight}}{2}$$

Exploring trees

- 1 **Bark rubbing.** Rub a crayon on a piece of paper held against the bark.
- 2 **Back to back sketching.** For 2 people. One person describes the twigs and buds. The other person can't see the buds, but tries to draw them from the description.
- 3 **Spot the difference.** Make a short video to tell apart two different types of tree in winter, like Oak and Cherry.
- 4 **Share your photos and videos.** Use the hashtag #TreesforClimateAction

Want to get involved with trees in Bradford?

YorGreen. Volunteer to plant and care for trees yorgreencic.org.uk

Bradford Environmental Education Service. bees-ymca.org.uk

Aire Rivers Trust. Learn new skills aireriverstrust.org.uk

Fruit Works. Help look after local orchards fruitworks.org.uk

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