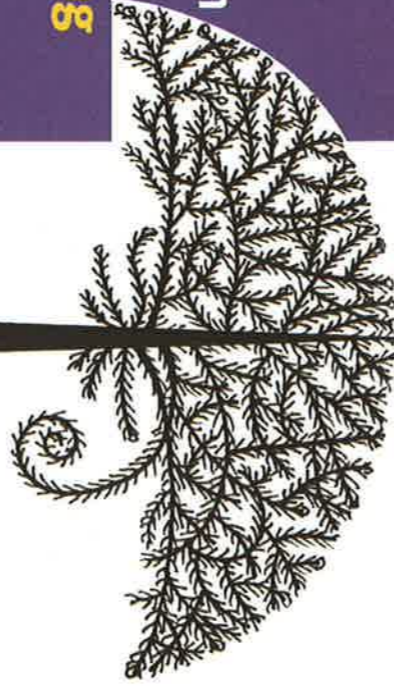


THE TREE GAZING TRAIL

Track down some **fascinating trees** and some of Bath's own special **champions** along this trail through Bath's Botanical Gardens



Join us along this trail and you will be meeting some Champion Trees. Bath has several – mostly in the Botanical Gardens but others in Royal Victoria Park and in the city too.

Of course many other trees are particularly intriguing with unusual stories and so our walk is aimed at directing you to some of these as well.

WHAT IS A CHAMPION TREE?

- to be a Champion, the tree has to be either the oldest, the biggest or the tallest either in the county, in England or in the British Isles



HOW MANY TYPES OF TREES ARE THERE IN BRITAIN?

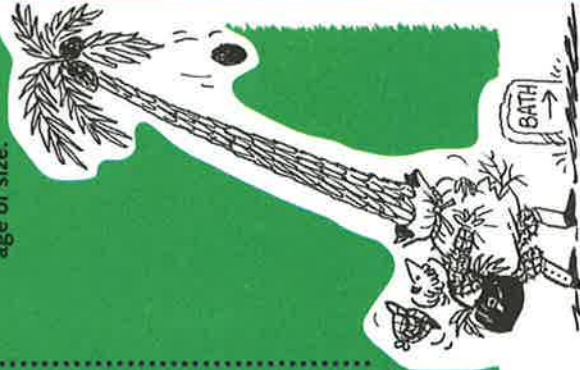
- there are over 1000 different species of trees to be found in the British Isles, but only around 30 are native

WHAT IS THE OLDEST LIVING TREE?

- the 5,062-year-old Great Basin bristlecone pine in the White Mountains of California

WHAT IS THE WORLD'S TALLEST TREE?

- a 115.72m tall coast redwood (*Sequoia sempervirens*) from the Redwood National Park, California



There are 2 places to start the trail:

- **From the Bath Royal Literary and Scientific Institution** follow the instructions below, starting at Tree 1

- **From the gates of the Great Dell, Botanical Gardens** start at Tree 7

Starting from Queen Square

Leaving the BRLSI, turn left and walk to the top of the square. Cross the road carefully and walk up to the gate that leads into Victoria Park. Turn to the right, up the wide steps to the gravel walk. This is the oldest part of the park where duels were fought in the 18th century.

Your tree-gazing starts here and the first tree of note is a beautiful copper beech tree further up on the left.

1 THE ELEPHANT FOOT

Copper Beech (*Fagus sylvatica purpurea*) While this is not a champion tree, it is of special interest because of the magnificent root system gripping onto the bank as if for dear life. This is one of the few

remaining examples of a Victorian fashion for showing the beauty of nature by removing the soil from the roots, which would usually be hidden – here you can see how attractive and extensive it is.

2 WIDEST, SPOOKIEST

Cupressus macrocarpa
Diagonally opposite the copper beech is a huge conifer that is 1.9m across the trunk. This is the widest tree you will pass on your walk and its size confirms how old this part of the park is. Apparently the ghost of a young swordsman, killed in a duel, stands here during the evenings, so let's move on!

Follow the gravel

walk path to the Royal Crescent, turn left where the paths cross (past a champion *leylandii* on the right) and turn right along the road in front of the Crescent. At the end of the road on the left is Tree 3; Tree 4 is opposite, just inside the park gates.

3 RISE AND SHINE

Zelkova carpinifolia
This upright tree is the second tallest of its type in England and very

THE MAYOR, THE MYCOLOGIST AND THE BRLSI

Two members of the BRLSI believed everybody should have a chance to share in the knowledge of plants.

- **Sir Jerom Murch** was the Mayor of Bath who encouraged the development of the Botanical Gardens;

he donated the sculpture of Shakespeare in the Great Dell.

- **Christopher Broome** was a naturalist whose collection of over 2,000 plants was given to the Botanical Garden. He travelled and collected plants which were mounted in his **herbarium**, a collection of preserved plants arranged methodically so they can be studied. His whole collection is in the BRLSI library; you can see a sample page above right.



Broome was also interested in fungi (**mycology**), like the one you saw living on the Silver Maple. You can see below how he used the coloured illustration from an old reference book on fungi to make his own pencil drawings and notes. Compare that beautiful 200 year old drawing of **coral spot fungus** to a modern photograph of the same fungus.



hand drawn illustration printed in an old book

pencil sketch added by Broome

modern photograph

NOTHING NEW UNDER THE SUN

Sunlight fuels everything on the planet; nothing could, or would, have ever survived without the sun.

Trees are the largest collectors of sunlight on the planet and they harness this energy and pass it on, sharing the energy with all the other plants and animals that live in and off them.

So in a funny way a tree is probably just as alive when it is dead.

Trees also provide oxygen and clean our air when alive, so they are hugely generous whether dead or alive.

- If you enjoyed doing this trail, try the BRLSI Science Trail which takes you to the sites associated with some of Bath's most famous scientists, or the Adelard Trail which explores Bath's medieval past.

- Look on the BRLSI website www.brlsi.org/youthactivities for more fun activities or pick up a leaflet from BRLSI reception at 16–18 Queen Square, Bath BA1 2HN.

5 TOO HIGH FOR SQUIRRELS?



London Plane
Platanus x hispanica

This is probably the tallest and most massive tree in the park at 40.5m tall. The trunk is wide

too, many arm-stretches around (how many?), with a diameter of 137cm.

Stand by the trunk, look up to the top and see just how massive this tree is. It's called London Plane because it was commonly planted in cities, being one of the few trees that can

tolerate pollution. The flaky bark is its survival strategy, pushing the pollution into the bark which then flakes off. The tree is not from London at all but from the Mediterranean region, as its name 'hispanica' suggests.

Continue on the diagonal path to another huge tree beside the road, on the right.

Bath Botanical Gardens



6 SUCH A SWEETY

Silver Maple *Acer sacharinum*
Just 1.5m shorter than our tallest trees, this one is still 28.5m tall. Look closely at the base to see what usually kills a tree – this fungus is causing decay in the centre of the trunk and root system. Native Americans use the sweet sap of the tree to make sugar and medicines.

Now cross the top road and follow the path alongside signposted to Botanical Gardens. Enter through the gate on the right into the Great Dell.

Starting from the

Botanical Gardens At

the entrance to The Dell go past the champion Arizona Cypress, a blue conifer on the right. On the bank behind is:

7 A FAMILY OF ONE

Western Red Cedar *Thuja plicata*

The large central tree is the Grandmother and you can see she has laid her arms down around herself to form a ring of daughters (you can follow the branches back to her); the daughters have done the same, and then the grand-daughters form a ring around them. These are all layers from the parent plant in the middle and are genetically identical.

Pass through the family of trees and walk up the bank to see:

8 MONKEY PUZZLE

Araucaria araucana

Supposedly Archibald Menzies, a plant hunter, pocketed some nuts from a dinner table shared with the governor of Chile. The nuts were planted and grew into the strangest trees he had ever seen. They were christened Araucaria after

the Araucaunos Indians and commonly 'monkey puzzle tree' – hard for a monkey to climb! The tree is endangered now in Chile and we possibly have more in Britain – we'll send them some nuts back!

Now follow the path at the top right, past the gate and walk straight on to:

9 OLD SCARFACE

Picea smithiana

This tree with drooping twigs is a native of the Himalayas. Look for a diagonal scar 3 metres up on the trunk where it has been struck by lightning.

Walk down the bank and the rustic steps along to:

10 THE RED GIANT

Coastal Redwood
Sequoia sempervirens

The tallest and some of the oldest trees in the world are redwoods. Feel the spongy, red bark. It's fire-proof and protects the tree in a forest fire; no wonder it's so long-lived. In the USA some trees are estimated to be 2600 yrs old. This one is very wide at 156cm and is likely to be the tallest conifer in the collection.

Continue down the path behind the tree. Go up the steps, cross the bridge at the top, and turn right to the tree with the upright branches.

11 STRANGE CONES

Incense Cedar
Calocedrus decurrens

When you crush the foliage, it smells fragrant, like cedar. The flowers develop into small cones with a strange appearance, almost like a tiny book with scales for pages.

Now retrace your steps to the entrance. Walk past the statue celebrating Shakespeare, given to the gardens by Jerom Murch. Leave the Dell and cross over to the Botanical Gardens.

Go down the right fork of the path and cross the lawn, past the sculpture of 'Man's Hand in Nature' – a celebration of plant collectors. At the far end of the lawn, to the left of the railings, its base rather hidden, is:

12 MR DICKSON AND MR EHRET

Ehretia dicksonii

Imagine you were a naturalist 200 years ago, hunting for new

plant species. What name would you give your latest find? This tree combines the names of two people: Mr Ehret, a botanical artist, and Mr Dickson, a Scottish naturalist. It has wonderful smelling flowers in the spring. What do you think the bark feels like?

Retrace your steps across the lawn and ahead on the right is:

13 ELEPHANT TEARS

Weeping Ash *Fraxinus excelsior pendula* (excelsior means taller and *pendula* means weeping). This isn't a champion but it's interesting being as hollow as a toilet roll with twisted branches. Look closely at the top – it looks like an elephant's head with trunk and eyes.

Turn uphill and cross the bridge and walk down to a large tree like a tent on the right.

Turn uphill and cross the bridge and walk down to a large tree like a tent on the right.



FIND THE ELEPHANT?

14 LOVE NEST

The Fern-leaved Beech
Fagus heterophylla

Find the hole in the canopy and enter into another world – wow, a natural tree tent! A love heart has been carved into the bark suggesting some kissing may have gone on here (but please, never carve into a tree)! This tree is very rare and beautiful, one of the best examples in the country.

Follow the path as shown on the map. Just before a little bridge, on the left is:

15 A CLOSE SHAVE

Dawn Redwood
Metasequoia glyptostroboides

This tree is one of the few deciduous conifers and can grow up to 60m. It was thought to be extinct, known only from some fossilised stumps, until a living example was found by a forester fighting in the Chinese Army during the Second World War. Some American botanists managed to collect seeds and get them out of China just before the communist government closed the borders in 1949.

Cross the bridge turn up right, then left to:

16 SILKY NOT SMOOTH

White Mulberry *Morus alba* (*alba* means white – the fruits are white).

This tree provides the leaves that silk worms feed on. In 1608 James 1st wanted to produce silk in England and had mulberry trees planted. Unfortunately they were black mulberries (with the lovely juicy fruit) not white, so the project failed. It takes 3000 silkworms eating 104kg of leaves to produce 1kg of silk.

18 A FAMOUS LEGEND

The Glastonbury Thorn
Crataegus monogyna 'Biflora'

A small tree with an old legend attached. The legend relates how Joseph of Arimathea visited Glastonbury with the Holy Grail and when he thrust his staff into a local hill, it grew into a thorn tree. This variety, which is related to our native hawthorn, is special because it flowers twice, in May and again in December. Every year a flowering sprig is cut and presented to the Queen at Christmas.

17 A RECYCLING TREE

The Indian Bean Tree
Catalpa bignonioides

This tree, with its metal support, is neither Indian nor does it have beans but seed pods. It grows best in places with long hot summers (like Bath!).

Look inside the open cavity to see the aerial root growing down inside

the hollow trunk, showing how resourceful it is – the tree allows its middle to decompose, then recycles the minerals to make new wood.

On the left, by the gates and exit is:

20 SHRINKING GIANT

The Silver
Pendent Lime *Tilia tomentosa*

This county champion was recorded as being 5m taller eight years ago but is now in its twilight years – yes, it's dying and getting smaller.

Why? As trees become diseased they usually die from the top down. This often prolongs their life as with less mass they need less energy.

That's the end of your tree-gazing trail. You may want to make your way back to BRLSI, revisiting a few of your 'old friend' trees in the park.