

This resource was written with a particular wood in mind – the Woodland Trust’s Big Wood in Cheshire. Big Wood is on the north eastern edge of Runcorn. It is next to the old site of Norton Priory which is now a museum.

The ideas can be adapted for use in any wood.

Teacher’s notes about Big Wood (to tell children)

Big Wood has an interesting past. It is next to the old site of Norton Priory. This was used by monks from 1134 until 1536 when all monasteries were closed then it was used as a family home for nearly 400 years.

The first map of Big Wood, drawn up in 1757, showed a small wood next to the manor house gardens. In 1776 Sir Richard Brookes failed to stop the Bridgewater canal being built across his land. He complained about it spoiling his ‘pleasure woods and lawns’. He received £2000 from the government for the trouble. It is thought that he spent this on re-planning his estate. A walled kitchen garden was built, Big Wood extended, the main Runcorn road moved to the north and the southern carriageway re-routed.

The exotic trees at Big Wood were brought to the Estate by Richard Brookes and his successors to add to their large woodland gardens and amaze their friends. The family and their country visitors would take leisurely walks along the network of paths and ornamental ponds which were created for them to enjoy.

While Big Wood has changed a lot since those days, the trees are still there.



Sugar maple tree at Big Wood. Woodland Trust Picture Library

Big Wood pupil worksheet

Exotic tales

Exploring the world in Big Wood

Imagine you are a famous world explorer for the day. You are about to set off on a quest to find new and interesting tree species. You don't have to travel to far away countries to discover strange and exotic trees. You can find them in Big Wood or maybe in a local park, if you know where to look.

Big Wood has:



sugar maple



monkey puzzle



dawn redwoods

The monkey puzzle, sugar maple and dawn redwoods are not trees that come from Britain. The monkey puzzle comes from Chile in South America. The sugar maple is found in Canada. The dawn redwoods are normally found in China. How did all these exotic and mysterious plants come to be in Big Wood? Why are they important trees? Let's find out.

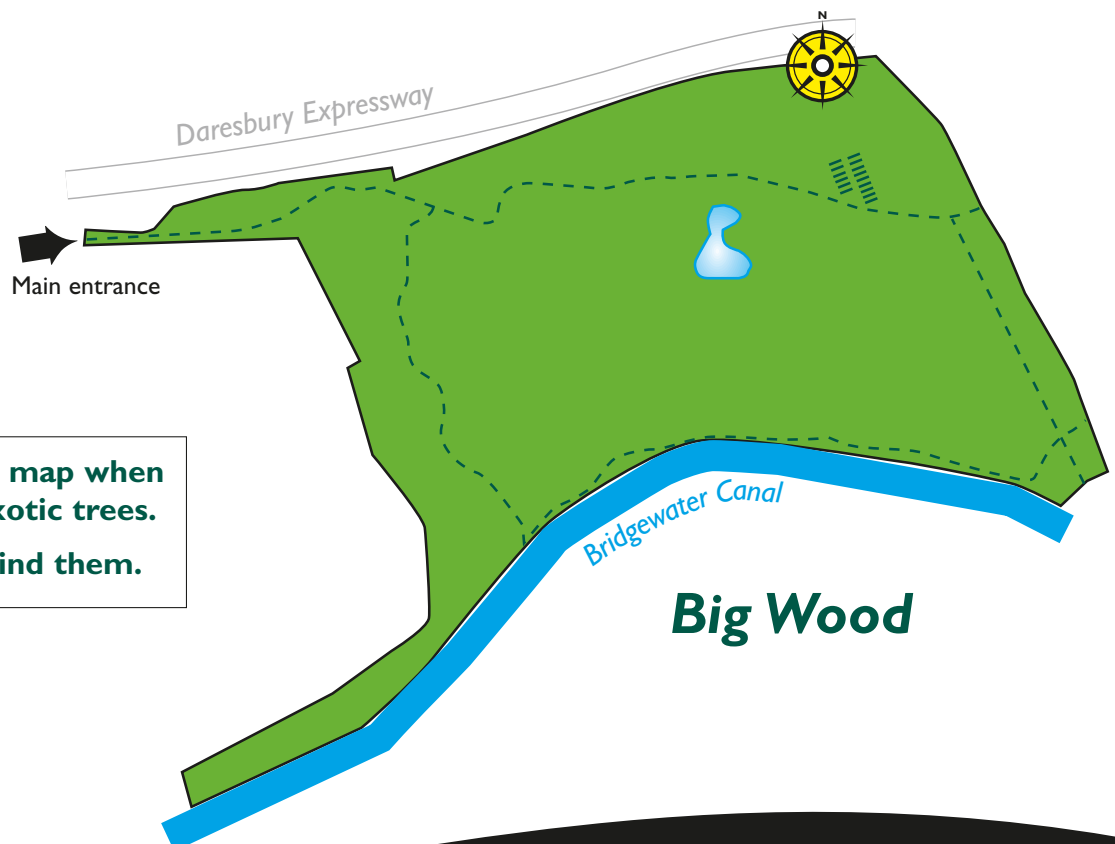
Sugar maple:

harvardforest.fas.harvard.edu/research/leaves/plants/sugar_maple.html (do not add www at start of web address.)

Monkey puzzle:

www.people.virginia.edu/~jmw8m/day8.html

Dawn redwoods: www.cdr3.com/redwoods



You will need this map when hunting for the exotic trees. Mark where you find them.

Big Wood



Pupil fact sheet

The monkey puzzle

A strange name for a strange tree. The monkey puzzle got its name because the people from Europe who first saw it in the 1800s in South America thought that it would be difficult (or a puzzle) for monkeys to climb as the leaves and branches are set out in such a funny way. The leaves are the shape of sharp, pointed triangles and are very tough. They grow in tight spirals around the twigs and branches. This would make it easy for the monkey to climb up the sharp points but not back down.

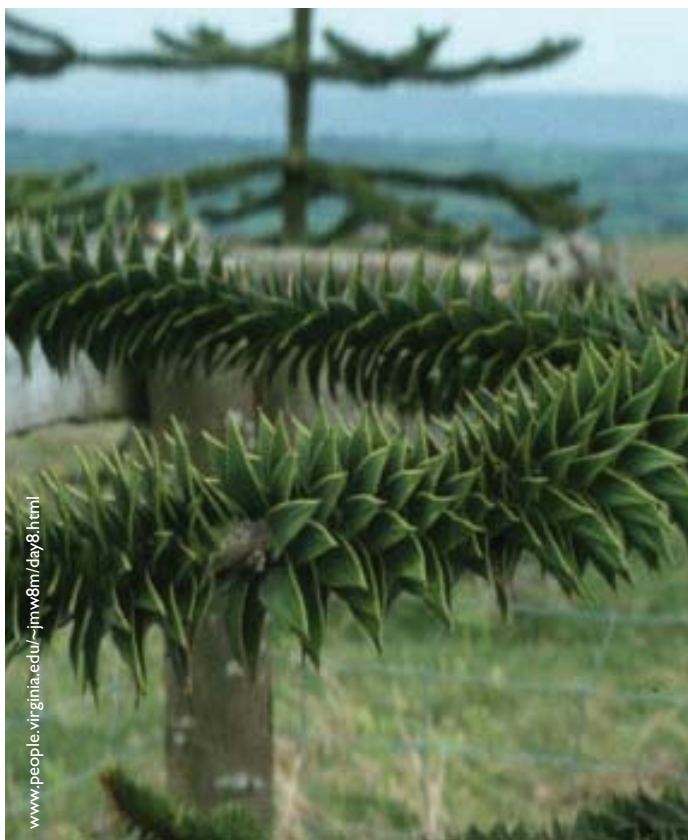
The trunk has an interesting honeycomb pattern. It is tough like the skin of an elephant. The young tree is a pyramid/cone shape. When they are about 100yrs old they lose their bottom branches. This gives them the shape of an opened umbrella.

Large cones grow near the top of the tree. The big seeds inside (4.5cm long & 1.5cm wide) are an important food for the Indians in Chile.

Monkey puzzle trees are very tough. They have to put up with very hot summers and very cold winters. They also grow in areas where there are volcanoes and hurricanes. In Chile, they are in danger of dying out because people want to use their strong wood, even though there is a special law to stop this happening.

How did the first monkey puzzle tree come to Europe? It is said that a man called Archibald Menzies was out to dinner in Chile one night and took some nuts from the table. He put them in his pocket as he wasn't sure what they were.

He forgot about them and some of them started to grow in his pocket on the way back to England! He planted them when he got home. This is how the first monkey puzzle trees arrived here.



www.people.virginia.edu/~jmw8m/day8.html



Pupil fact sheet

The sugar maple tree

The leaf of this tree is on the Canadian flag.



It looks very like a field maple or sycamore tree and has similar 'helicopter' seeds.' Sugar maple trees are found mostly in the north-eastern United States and particularly in Canada. It is used for timber but it is also famous for its syrup. This thick, sticky syrup is delicious poured over pancakes and used in lots of recipes. It is very popular in Canada and in America. Maple syrup is made by draining some of the sap that oozes out of the tree trunk. This is then boiled to make maple syrup. The native Indians are known to have done this for many centuries before Europeans arrived. This sap has more sugar in it than other trees and a special flavour.

Maple syrup farmers drill a small hole, one in a small tree, two in a medium-sized tree and three in a large tree. They then fix a little tap in to each hole. When the weather is warm enough they open the tap and the sap runs out. This does not harm the tree.

A mature tree will give between 10 and 20 gallons (50-100 litres) of sap each year.



Try some maple syrup on a pancake or a piece of toast. Your teacher might have a recipe for making maple cookies.



Pupil fact sheet

The dawn redwood

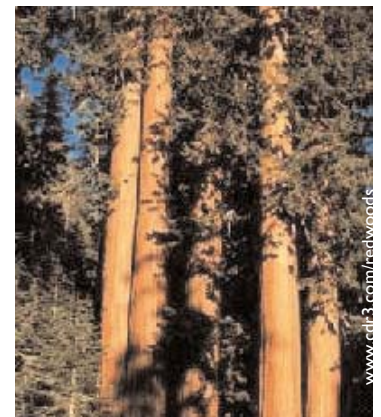
There are many different types of redwood trees in the world. However, the dawn redwood is a very special one.

Everyone thought it was extinct until they were found again in a valley in northern China in the 1940s. The seeds were then taken to be planted in America and Europe. They grow very quickly.

The shape of the leaves (or needles) is similar to other redwood trees but what happens to the leaves is very different. Instead of staying green all year round, they turn yellow then bronze and fall off in the autumn.

They have similar bark to other redwood trees. It is a red colour and has shreddy fibres. Feel the bark of this tree. Does it feel like the bark of other trees? How is it different? They don't mind being in very cold places or very hot places (-30 to 40 degrees C).

This tree, that was once very rare, is now growing in many different parts of the world.



Pupil worksheet

Can you find exotic trees?

Tree fact file

Name of tree	
Where in the World it came from	
Draw the shape of the tree	Draw the bark
	Draw the leaves
	Uses of this tree



Pupil worksheet

Where do exotic trees come from?

Exotic tree fact file

Find out three interesting facts about the country where each of your three exotic trees comes from and write these below.

Tree one

Name of tree: _____

Country it came from: _____

1) _____

2) _____

3) _____

Tree two

Name of tree: _____

Country it came from: _____

1) _____

2) _____

3) _____

Tree three

Name of tree: _____

Country it came from: _____

1) _____

2) _____

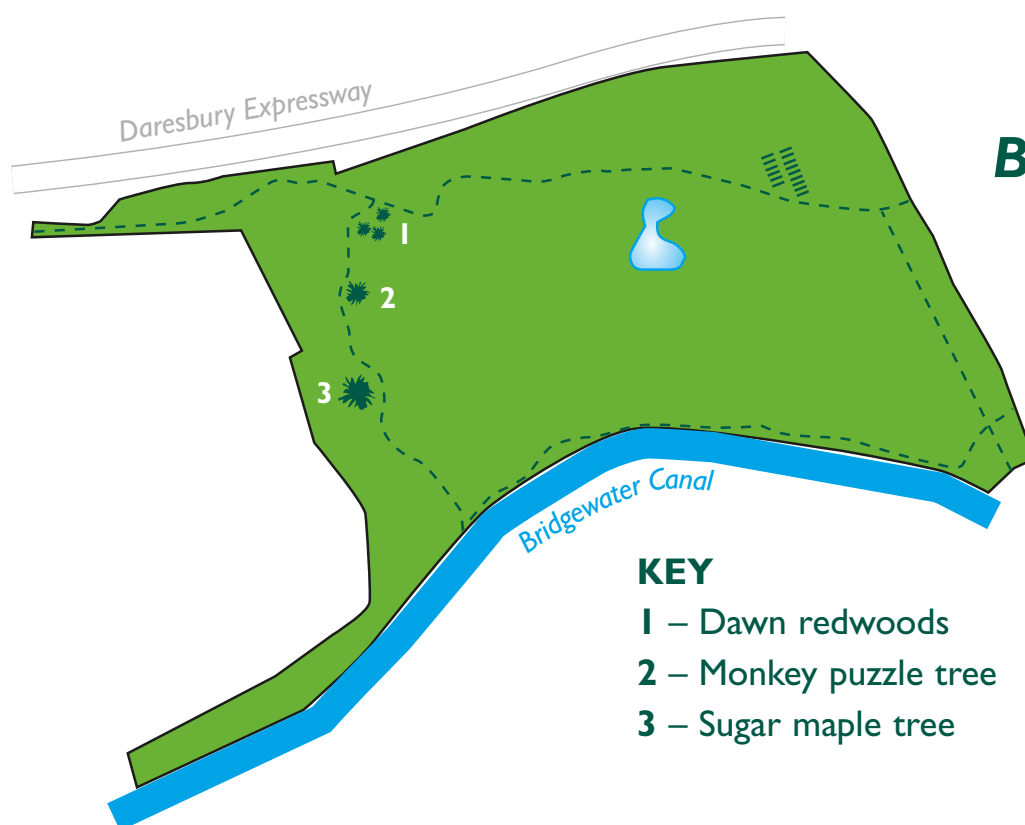
3) _____



You will need:

Plan of Big Wood, pupil's recording sheets, world map, blank paper for own plan or blank outlines to be filled in.

During the woodland visit to Big Wood each child marks the position of the trees on the blank plan and makes a key.



Big Wood

KEY

- 1 – Dawn redwoods
- 2 – Monkey puzzle tree
- 3 – Sugar maple tree

Back in the classroom

As well as finding more details of the countries mentioned, the children could find them on a world map and estimate the distances from Britain.

The local history notes could be used to construct a time line of Big Wood.

Classroom discussion could then include reference to the changes in land use around Big Wood and the importance of sustainable development in woodland areas.

Further details of the three tree species:

Monkey puzzle: www.arkive.org

Sugar maple: maple.dnr.cornell.edu

Dawn redwood: www.cdr3.com/redwoods



Maple syrup cookies

Ingredients

150g plain flour
1 tsp. baking powder
small tsp. bicarb of soda
half tsp. salt
100g butter
6 tbl sp. maple syrup
1 egg
1 tsp. vanilla essence

Method

Mix dry ingredients together.
Add melted butter, maple syrup, vanilla and egg.
Mix thoroughly.
Drop walnut-sized pieces on to a greased baking tray.
Bake at 180C Gas 4 until golden brown.
Cool on a wire rack.

