TREE KNOWELDGE BY MIKE CAUGHLIN

1

Pinus radiata

Discovered by David Douglas in 1833.

Grows faster in the UK than in the wild in California,

In the wild only found on a few cliffs along the coast and copes well with salt spray from the sea

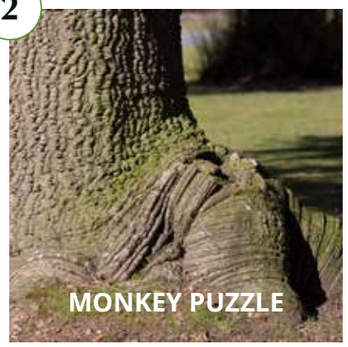
Entire wild population covers only around 160 times the area of The Crichton estate

The area in cultivation is over 100,000 times The Crichton estate which shows how important the tree is for timber and how rare it is in the wild.

It's rare to see an open Monterey pine cone as it normally takes a fire before they open.

Although our tree has grown very well, this species can be prone to certain diseases which mean it's not planted so much in the UK. These diseases are often more severe when many of the same species are growing close together. At The Crichton there is only one Monterey pine and it has lots of space around it.

2



Its scientific name Araucaria araucana refers to the region in Chile, South America and the local tribe where it was first found.

The story goes that in 1792 the famous plant explorer Archibald Menzies was given dessert of Monkey puzzle nuts during a banquet in Valparaiso. He slipped a few into his pocket and germinated them on the journey back to Scotland.

In the wild a variety of rodents are important in spreading the seed of this tree by carrying them away and burying them in places where they will grow well.

3

A tree of the Pacific north west US and Canada, it is the state tree of Washington, US.

Hetero means 'variable' and 'phylla' means leaf (or needle on this conifer). If you look closely at the twigs you will see the needles are different (variable) sizes. The underside of the leaves have two distinctive bands of white 'stomata' or pores.

It grows in the Rockies mountain range in USA up to 6000ft above sea level. A very hardy tree.

An important tree for timber in America and also in the UK. It can grow more than 50m tall if it has shelter from the wind.

One of the tell-tale signs to identify a Western hemlock is the floppy leading twig at the top of the tree.

4

Acer griseum 'Griseum' means grey. When the tree comes into leaf, have a look at the undersides of the leaves and see what colour you find there.

The cinnamon coloured bark which peels like paper and the beautiful Autumn colours in the leaves make this tree a garden favourite.

It was first brought to the UK from its home in Central Chine in the early 20th century. It's not a big tree, only growing to about 15m tall.

In China it grows high in the mountains, sometimes above 6000ft asl.

It needs to produce lots of seeds as only about 5% successfully grow into seedlings.

5

Abies nobilis or Abies procera 'procera' means tall. Another big North American conifer. Up to 50m.

The blu-ish green of the needles on the Noble fir is called ‘glaucous’ and you find this colour in other tree species too although it’s often not as striking.

If you visit this tree in late summer you will see the big cones that are developing. They will eventually mature and fall off, often breaking into smaller pieces as they do. The cones are made up of a stack of hundreds of individual seeds arranged around a central spike.

6

HANDKERCHIEF TREE
DAVIDIA INVOLUCRATA

The time to see this tree is really when it’s in flower in the spring when many handkerchief-like leaf bracts hang from the branches. ‘Involucrata’ refers to the way the flowers are surrounded by these white leaves.

However, even in winter the tree can be appreciated for its unusual flaky bark.

Introduced to the UK in 1904 from China it’s also known as the Ghost tree.

7

KATSURA TREE
CERCIDIPHYLLUM
JAPONICA

The first part of the latin name refers to the heart-shaped leaves of the Katsura resembling those of the Cercis tree - which is only really helpful if you know what a Cercis tree looks like! The second part refers to its native country of Japan.

Also known as the Japanese Judas tree.

It’s worth visiting this tree at any time of year to see the unusual flaking bark. It almost looks like its been stuck onto the tree at different angles in rough strips.

8

HIBA THUJOPSIS
DOLABRATA

The Hiba was introduced from Japan in 1853. However, only a single plant was brought which later died. So it was re-introduced in 1859. It’s an important timber tree in Japan, but in the UK is really only grown for ornament.

This tree is quite unassuming at first glance. It looks similar to many other evergreens in The Crichton gardens. In fact, Thujopsis means ‘resembling Thuja’ which is another conifer tree. Dolabrata means ‘axe-shaped’. Look closely at the branches and you might be able to spot the shape of a pick-axe in the scale-like leaves.

Many people think the twigs covered in these scales look rather like a reptile.

The biggest surprise is when you turn the branches over and see the bright white markings underneath.

It’s not a fast growing tree and usually produces lots of stems which you can see if you peer inside the outer branches.

9

CAUCASIAN SPRUCE
PICEA ORIENTALIS

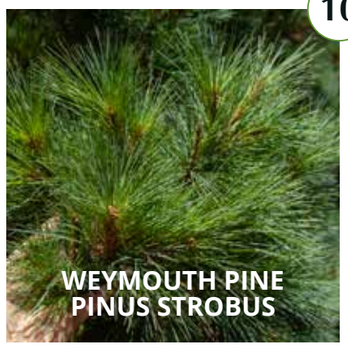
Orientalis meaning Eastern.

Comes from the Caucasus mountains where Europe and Asia meet. Introduced to the UK in 1839.

This tree is notable for having the shortest needles of all the spruces, which makes it quite easy to identify.

It hasn’t been an important tree in the UK in the past, but as our climate changes it could become more important as it seems to quite like the drier conditions which will be more common in future.

10



WEYMOUTH PINE
PINUS STROBUS

Named in honour of Captain George Weymouth who explored the native region of the NE US that this tree comes from.

It can grow up to 80m in the wild but this one in The Crichton arboretum has a long way to go before it gets to that sort of height!

Considering this tree belongs to the same family as the Monterey pine, its remarkable how different the foliage (or needles) is in these two species. The needles on the Weymouth pine are soft and slender, dark green on one side and faintly white on the other.

This species isn’t planted a great deal in the UK because it seems to suffer badly from a disease called ‘blister rust’, but our tree in The Crichton arboretum is doing well so far.

The timber is used for making everything from boxes to boats.

Handkerchief Tree

Paper-Bark Maple