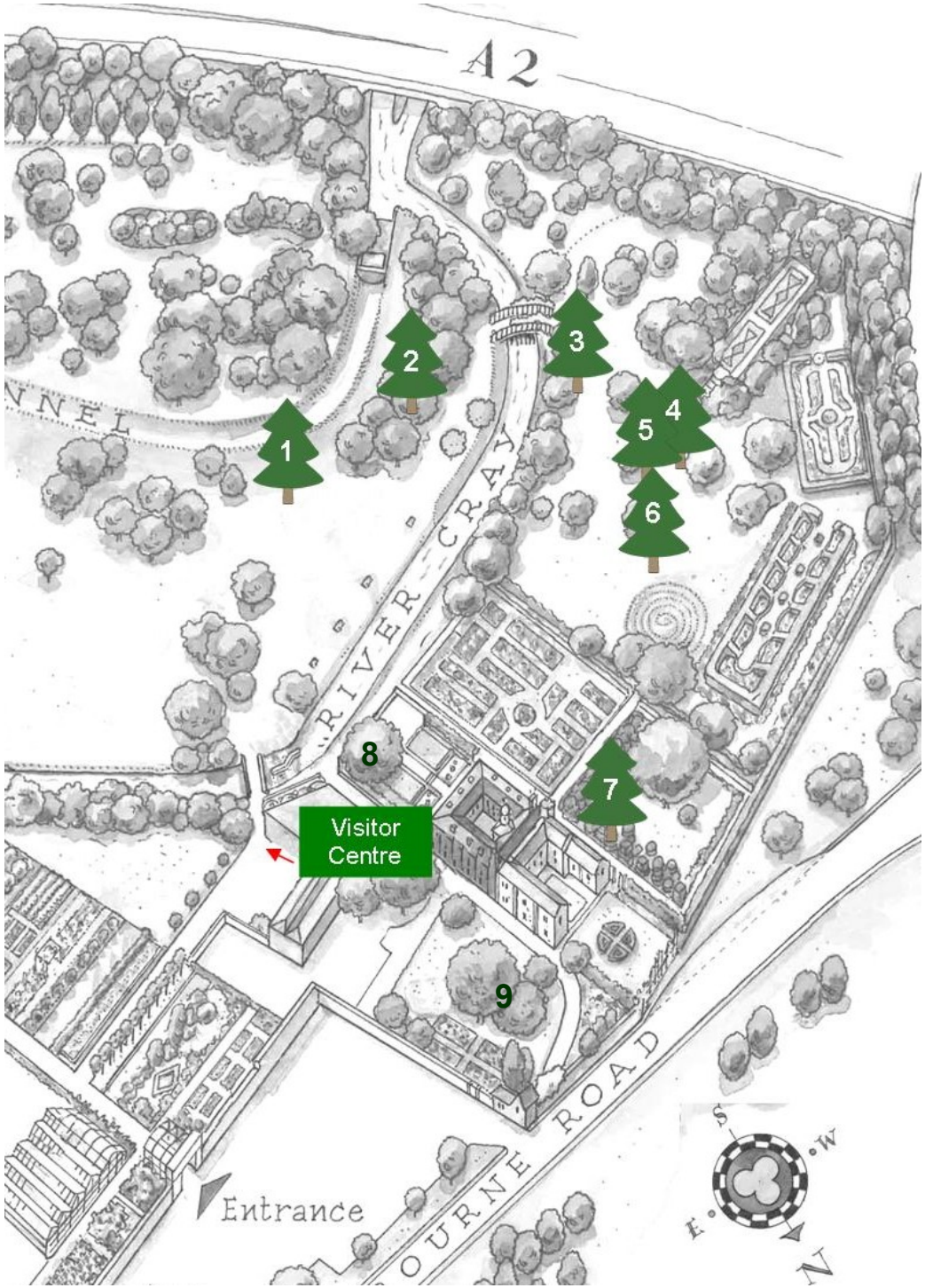


Education Service **www.hallplace.org.uk**

LONDON BOROUGH OF BEXLEY

HALL PLACE & GARDENS

A trail for the whole school class to enjoy together

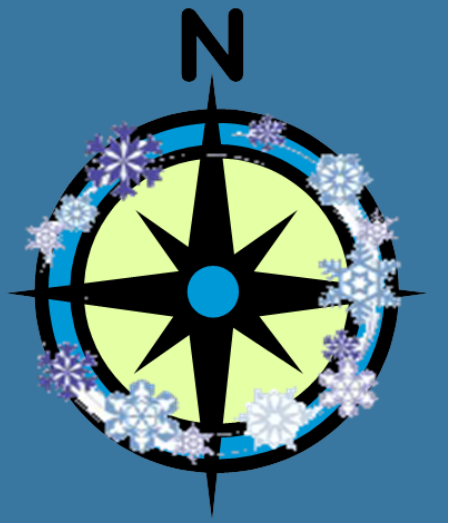
Explorers Trail

Treemendous Winter Tree Trail

Group leader's copy

Not all trees lose their leaves in the winter! This trail will lead you around the gardens looking at different types of evergreen trees, their leaves, fruit and bark.

This is a winter trail so make sure you are wearing warm waterproof clothes and shoes (wellies are perfect).



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Even where **winters** are bad, some **trees** do not **drop their leaves**, and therefore are **known as** evergreen **trees**. **Trees** losing **their leaves** are called deciduous **trees**.

Why do some trees lose their leaves?

A tree needs two things to make food - roots to suck up water from the ground and leaves to soak up the sunlight from the sun. But in winter there isn't much sunlight. The tree doesn't have enough food stored for itself and its leaves, so it sheds its leaves.

But **evergreen** trees keep all their leaves in winter. These trees are designed for cold weather and have small needle-like or tough leathery leaves.

Follow this trail to find some of our best evergreen trees

1. Douglas Fir trees

These three small trees look faintly familiar to many of us, especially at this time of year. Where have you seen them before?

First introduced to the UK by Scottish botanist David Douglas. The needle like leaves are flat, soft and flexible. Their bark is fire proof and dark grey. Amazingly, these trees can live for more than 1000 years.

Can you see any oval cones? They are 5-8cm long and look like this.

How do trees grow?

Male and female

Just like us, plants need a male and female to make more plants.

Trees usually have both male and female flowers growing on the same tree. Either the wind or insects take the pollen from the male to the female. After pollination the female flower will develop the seeds.

Seeds

Take a good look at a tree's branches for the seeds. Mother Nature has designed them in different shapes and sizes to grow in different ways. All seeds need to be kept safe and need to be dispersed (travel away) from the tree to grow. Take a look around the gardens and see if you can find any evidence of some of the seeds below.

Soft fruit - are eaten by birds and animals and the seeds are dispersed in their poo.

Hard fruit like nuts and cones - are stored by animals like squirrels for winter food, the ones they forget or drop, then grow.

Wind power - some seeds have little wings on them to surf the breeze to disperse. Some cone seeds travel this way too.

Sticky power - some seeds have tiny hooks that stick to animals who drop them somewhere new to grow.

It is really important to look after trees as they help us breath.

Trees soak up nasty fumes like carbon dioxide and breathe out lovely oxygen which humans and animals need to live. They also help slow down global warming. So, please treat them with care and-don't swing on the branches or damage them.

Be safe
Please keep away from the river edge, wild birds and animals. Some people are allergic to trees, so keep a look out for allergic reactions.

Other things to look out for

London Plane tree - known for shedding their bark after soaking up lots of pollution. You'll find one right outside the visitor centre map number 8.

The Tree Ent - a magical tree with a face. The famous writer Tolkien described them as 'tree shepherds' looking after trees. You'll find ours on the east lawn, map number 9.

2. Bat and Bird Boxes

Winter is the perfect time to view the many bat and bird boxes that are hidden by leaves in the summer months.

Bird boxes = deep, light coloured with a round hole in the front

Bat boxes = thin black boxes with large openings at the bottom

3. Coastal Redwood

This unusual tree comes all the way from California in North America. It takes it's name from the reddish-brown colour of the wood. Redwood trees are the tallest and oldest living (2000 yrs) things on earth.

These trees love the rain - just as well, as we have a lot of it in Britain.

Look out for the very small cones, they are about 1.5-3cm long and are reddish-brown in colour.

4. Macedonian Pine

There aren't many of this type of tree left in the wilds of Northern Europe. Look for a tall evergreen with upward lifted branches. The needles are in bunches of 5 and very thin.

Look for evidence of cones on the tree and floor. The cones are usually 8-20cm long and look like this.

6. Atlas Cedar

This is the usual tall version of the Atlas Cedar with upward growing branches. Look at its grey bark with cracks and ridges. All Atlas Cedars have a blue tint to their green foliage.

All cedar cones sit upright on the branches and are barrel-shaped. On this tree, they grow up to 8-12 cm long and their scales fall off when ripe leaving the inner stalk.

5. Weeping Cedar

This is a Weeping Atlas Cedar. It's called weeping because of its drooping branches that resemble tears. Unlike the Whomping Willow from Harry Potter, this one is safe to approach but not to hide in!

Look out for the short barrel like cones.

Lost? Follow the map on the back

7. Beastly Topiary Yew

People have been cutting topiary sculptures from Yew trees since medieval times. Our topiary are chess pieces and copies of the 'Queen's Beasts'. These are heraldic animals that you see on medieval knights' shields, helmets and coats of arms.

Which of these beasts are based on real animals and which are imaginary?

Beware the red berries as they are very harmful to humans.