

# Enquiry Question:

## How important are the Cemetery's trees?

### Objective

To find out about the different types of trees in the Cemetery and understand their role in the eco-system.

1 Additional resources are available to support learning activities - look for the orange number to guide you.

### Equipment

- Pen or pencil
- Paper and clipboard or a notebook
- Additional resources
- Map of Sheffield General Cemetery
- Wax crayons, coloured pens or pencils
- Small pebble for reflection

**Time** - this activity can take around **one hour and a half** to complete.

### Prepare

Explain that we are going to explore the trees in the Cemetery and there are 8 species of tree that we are going to look for. Establish that **biodiversity** is the term used to describe all life on Earth, in all its variety.

Introduce Sheffield General Cemetery which is a **local nature reserve** - a statutory designation awarded by Natural England. This means it is a really good place for people to connect with nature and it is important for wildlife and geology.

The General Cemetery is also a **local wildlife site** - a local authority designation. This means it is a place with substantive nature conservation value. The Cemetery is both a refuge and a steppingstone for wildlife close to the heart of the city.



## Explore

Share a map of the site so the learner is familiar with where you are going to go. Explain that at each stop they will look at a different species of tree. 2

Start at the Gatehouse in front of the first stop - the Goat Willow tree. Show the learners using their tree spotter how to identify this tree. Explain that the Goat Willow is an important host tree for many lichen and insect species, increasing the biodiversity of forests.

Share with learners that Sheffield General Cemetery is a really important urban green space. When you walk in from the busy streets of Sheffield on a warm day, you can notice a difference in temperature. The Cemetery helps with urban cooling.



## Discover

As you approach each tree, ask the learner to look at their tree spotter to see if they can identify what the tree is. Encourage learners to use their senses to really observe the trees - what do the flowers smell like? what does the bark feel like? what sound do the leaves or branches make? 3

- **How can you decide which tree is which?**
- **What season will a tree have leaves?**
- **If some trees are larger than others what could that mean?**

At the second stop, explain to the learners that hidden amongst the trees is a an Ash tree which has been cut down. This Ash tree in the Cemetery unfortunately contracted honey fungus as well as ash dieback. Because of this, the Ash tree had to be significantly reduced in height. This may seem like it could only be negative however, this tree happened to have a large canopy and following its removal, other smaller trees surrounding it were able to thrive in the newly exposed light. Sunlight is everything and the trees waiting to come to life in the soil had a chance to grow. The Ash tree itself, although dead and rotting, still functions as a habitat for some creatures who use this particular environment to complete their life cycle. From death, comes life.

- **How important do you think this Ash tree is in the Cemetery?**
- **Can you explain your thoughts?**

## Share

Find somewhere to sit or stand in the cemetery park such as the stone circle to discuss with the learner how identifying different trees has helped with their understanding of the importance of trees.

- **Which tree was most difficult to identify? Why?**
- **What did you notice about the trees?**
- **Did you spot any birds or insects near or around the trees?**

In winter, when trees are bare, it can be difficult to tell them apart, so we need to look closely at their twigs and buds to identify them. Buds on trees collect energy at the end of summer and lie dormant in winter. They then burst into life in spring when they grow new branches, leaves and flowers. Lots of trees flower in spring. Some have masses of blossom, others have catkins dangling from their branches. Blossom is very important for bees and butterflies. Many insects help pollinate trees, turning their flowers into fruits and seeds.

Some of the trees we identified were **deciduous**. This means they lose their leaves in autumn. They are mostly broad-leaved and often have flowers, and/or berries. In autumn, their leaves change colour before falling. Deciduous trees tend to grow faster than evergreen trees and they support a wide range of wildlife.

**Evergreen** trees keep some or all of their foliage throughout the year - growing new leaves before the old ones fall off. The leaves are often distinctive and pine-needle in shape.

### **How important are the Cemetery's trees?**

We came across 8 different species of tree in this small space. There are more of these same species and some others within the Cemetery. A healthy eco-system is a biodiverse one - where there are lots of, and a variety of, species thriving. The Cemetery's trees add to this biodiverse area.

Healthy eco-systems provide for every breath of air and every mouthful of food. Trees and woodland eco-systems in particular provide clean air, offer protection from flooding, and store carbon which is crucial to prevent climate breakdown.

Biodiversity also enriches our lives. We value the chance to get close to nature, and there is growing evidence to show that green spaces are good for our mental and physical well being.



## Create

**Fieldwork 1:** Learners can create a map of the site to plot where the trees are in the Cemetery. They can create a key with symbols that indicate the different trees, perhaps different shaped leaves. KS2 learners could practice using 4 and 6 figure grid references to tell you where trees are located.

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**Fieldwork 2:** Learners could gather information on the number of different species of tree in the Cemetery. They could present this information in a number of ways such as a bar chart or pie chart.

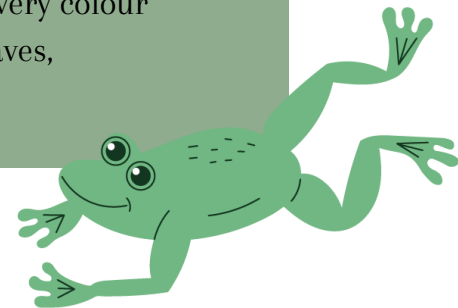
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Or they could measure sticks or leaves and record their findings.

**Nature journalling:** Below are some options for nature journalling.

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- Learners can gather leaves and items from their walk to stick onto paper or in a notebook. They can surround these items with words, descriptions and drawings. You could look up the scientific names afterwards.
- Learners could take leaf rubbings using wax crayons. They could annotate what makes them different, what type of tree they are from. Learners could even use their imagination to create a myth about that tree.
- Learners could go on a colour hunt and find something for every colour of the rainbow or make a collage, using different coloured leaves, feathers or flowers.



## Reflect

Provide learners with the opportunity to gather in small groups to share what they have created.

Gather altogether in a circle. Remind the learners of their enquiry question: **How important are the Cemetery's trees?**

After a short moment of thinking time, pass a small pebble around the circle so that each learner has a chance to say a final thought about what they have discovered.

You could take photos to share with others on social media using **#learningatGenCem** and tagging **@SheffieldGenCem** 📷