



Caring for your tree

Fun activities to help your
tree and the wildlife that it
will support





Tree health check

You'll need a buddy (it's always good to have a second opinion), a pen or pencil, a tape measure, and a clipboard.

7.1 - Caring for your tree

Date: _ _ _ _ _

Completed by: _ _ _ _ _

Tree surveying (location and species): _ _ _ _ _

The trunk + branches

The trunk is key to the health of your tree. It supports the branches and leaves (crown) and contains the structures that transport water and nutrients. This is the first part we check.

What is the circumference in centimetres of your tree's trunk?

Wrap a tape measure around the trunk, 1.5m above the ground. _ _ _ _ _

A healthy tree trunk will grow an average of 2.5cm a year. Check your tree is continuing to grow by regularly monitoring this.

Tick any of the following you can see on the trunk or branches of your tree:

- ☐ Crack or split - monitor for signs of the crack widening or a fungus
- ☐ Fungi - check for honey fungus at the base of the tree
- ☐ Lichen - this is harmless to the tree
- ☐ Dead branches - prune off carefully to the bud behind the break

Other than lichen, these are often signs that there is a problem. If only some branches are affected, they could be pruned or removed to prevent spread. If the trunk is affected, you should seek further advice.





Tree health check

The leaves



The leaves can display early signs that a tree isn't happy or is diseased.

- ☐ White powdery growth, likely to be an infection caused by mildew
- ☐ Coloured spots on leaf, likely a fungal infection (e.g. apple or pear scab)
- ☐ Sticky leaves, likely caused by aphids
- ☐ Something eating them, likely caterpillars

If leaves show coloured spots, carefully remove them by hand and put them in a compost bin to avoid spreading. If your leaves are affected by insects, don't use pesticides that can harm other beneficial creatures. Aphids and caterpillars are often eaten by birds and ladybirds throughout the spring and summer, so it's best to let nature take its course.

The base of your tree

Although often overlooked, the ground at the base of your tree can be very important.

What is the main ground cover at the base of your tree?

- ☐ Grass or weeds that could be competing for the water and nutrients your tree needs - **remove if possible**
- ☐ Bare soil that could be washed away by heavy rain and leave roots exposed - **cover with mulch**
- ☐ Hard earth - **add compost to soil to loosen it and avoid lots of people walking over it**
Fallen leaves are great as they provide lots of nutrients
- ☐ Mulch - keeps moisture in the soil and reduces the growth of grass and weeds - **top up regularly to keep a depth of at least 2cm at the base of the tree**

The soil

Our health is affected by our diet - and the health of a tree is affected by the soil!
Is your soil:

- ☐ Waterlogged - water sitting on the soil? **Mix in mulch and fertiliser**
- ☐ Moist? This is good! **Keep the soil covered with mulch to maintain it**
- ☐ Dry? **Water and cover with mulch**

If the results of your survey suggest your tree is healthy, no further action is needed! Repeat your survey in all four seasons to understand your tree's health. If you think your tree is unhealthy, don't panic. Highlight the issues to whoever is responsible for managing the tree or contact your local council's Tree Officer.



Mulch making

Mulch is like a cosy blanket for the soil – it's made from natural materials and it hugs the soil, protecting it from the weather.

Have you ever wondered why some trees grow tall and strong, while others struggle to survive? The secret lies in the wonderful world of mulch!

What is mulch?

Mulch is like a cosy blanket for the soil around the base of trees and plants. It's made from natural materials, like fallen leaves, grass clippings, straw, and wood chips. Just like we enjoy wrapping up in a warm blanket during chilly nights, mulch hugs the soil, protecting it from harsh weather and giving it a boost of energy. Did you know that you can make mulch yourself and use it to support the growth of your own trees? Let's get started!

You'll need:

- Gloves
- Rakes or garden forks
- Natural materials like leaves, grass clippings, straw, wood chips
- Buckets
- Spades or shovels

Instructions

1. First, put on your gloves and explore the area around your trees.
2. Collect natural materials like fallen leaves, grass clippings, and wood chips. You can use a rake or garden fork to search underneath the surface layer, but remember, we need to be gentle with nature!
3. Combine your materials to create the mulch. Mixing different materials will give our trees more of the nutrients they need.
4. Now, gather around the trees that need some love, especially the young ones. Sprinkle the mulch around their base to keep them happy and healthy. But don't forget, we need to leave a little space around the trunk to stop water from pooling and rotting tree's base.





Tree-mendous friends

Biodiversity refers to the variety of living organisms in a given area. It is essential for a healthy ecosystem, and trees play a crucial role in supporting biodiversity.

By increasing biodiversity around trees, we can create a thriving habitat for plants and animals. There are a number of activities that help enhance biodiversity around trees. Let's take a look!

Complementary planting

Complementary plants are exactly that - plants that 'complement' each other. We can improve biodiversity in a particular area by planting complementary species. Choose a tree in your schoolyard or nearby park to focus on for this activity. Observe the space around the tree and identify areas where additional plants could be introduced. Research and choose native plants that are suitable for the tree's environment (consider shade, sunlight, soil type, etc.). Draw a plan of complementary plants that could be planted around the tree, labelling each plant's name and characteristics.



No-mow zones

Long grass and wildflowers are crucial in supporting biodiversity. Identify an area near the tree that will be designated as a "no-mow zone". Create a sign to mark the no-mowing zone and explain its purpose to others.

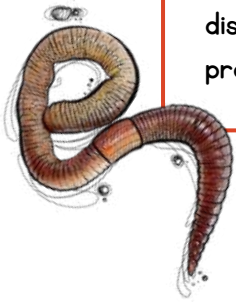




Make an insect home

Step 1

Find the right location for an insect home. Insects like damp, sheltered, cool homes where they won't be disturbed. Under a hedgerow could provide a lovely peaceful spot.



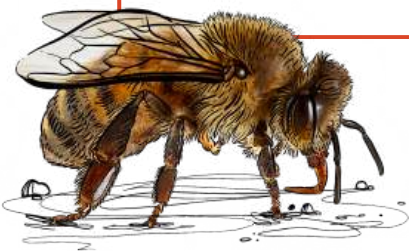
Step 2

Consider your design. You can be as creative and ambitious as you like but remember you will need to find the materials (see step 3).



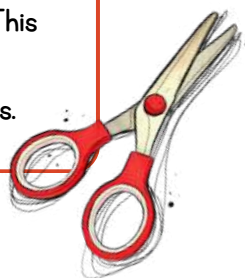
Step 3

Gather the materials for your insect home. Natural materials and recycled materials make this completely free.



Step 4

Get any tools you might need. This could include: gardening gloves, secateurs, a tenon saw, scissors.



What kind of home would your insects like best? Head to the next page to find some ideas to inspire you!



Make an insect home

Cane habitats

Hollow garden canes are excellent homes for solitary bees. They can be bound with twine or stuffed in a re-used plastic bottle to hold them together. These can be stacked under a hedge or hung from a tree.

A-pot-ments

Use an old plant pot laid on its side. The cosy ingredients can then be layered within it to create a home for a range of different insects. This example contains garden canes, rocks and large stones and dead leaves. A number of pots can be stacked together to build a larger home.

Layers

Larger-scale home can be created using bricks, old wood and pallets. They can be as small or as large as you like. Canes, dead leaves, rolls of corrugated cardboard, wood with holes drilled in and rocks can be used to fill the voids in the structure.



Using natural and recycled materials makes creating your insect home completely free! You could use wooden pallets, bricks, untreated wood, or poster tubes. And to create the cosy interior, try hollow canes, dried leaves, cardboard, rocks and stones, twigs and pine cones, or hay and straw.



Food chain challenge

What is a food chain?

A food chain shows the journey of energy and nutrients as they pass from one living organism to another within an ecosystem. It helps us understand how different plants and animals rely on one another for survival and how each living thing contributes to maintaining the balance of nature.

At the base of every food chain are producers, usually plants or trees, that convert sunlight into energy through photosynthesis. Many animals directly rely on trees for food. For instance, squirrels eat acorns from oak trees, while deer feed on the leaves and fruits of various tree species.



Instructions

1. Choose any three organisms including one producer (tree, leaf or seed) from the group above.
2. Arrange them in the correct order to create a food chain.
3. Remember the arrow shows the flow of energy and can be replaced with the words 'is eaten by'.

Can you find three different food chains?

_____	→	_____	→	_____
_____	→	_____	→	_____
_____	→	_____	→	_____



Measuring biodiversity

Biodiversity refers to the variety of living organisms in a particular area. By using quadrats, we can study and record the different plants and animals in a specific habitat.

Materials

- Clipboards or hard surfaces to write on
- Pencils
- Rulers or tape measures
- Quadrat frames (or cardboard squares with dimensions of 50cm x 50cm)
- Field guides or identification books for local plants and animals



Choose a spot to monitor biodiversity: a garden or park would be perfect. Place your quadrat somewhere in your area and count the different plants inside. If you know the names of the plants, that's great, but if you're not sure, use an identification guide or book to help you.

Repeat this process multiple times in your chosen area to get a good idea of what's living there. After you've collected all of your data, it's time to look at what you found. Calculate the average number of plants in each quadrat and compare the results. Which spots had more variety? Which species were the most common? Did you find any rare species?

It's really important to keep a track of biodiversity over time, so that we can see how things are changing. Keep returning to your quadrats every now and then (every season, for example) and see how things change. Nature is always up to something exciting!

