National Education Nature Park and Climate Action Awards

Mapping tree habitats

Mapping tree habitats is part of the Mapping your site activities, enabling you to explore and map the habitats your site currently offers for nature. Understanding your starting point is really important and will allow you to measure any nature gains you achieve when you start making enhancements to your site. Mapping tree habitats is one of seven habitat mapping sessions in this unit of learning.

Meet a tree and the tree survey

Before mapping any tree habitats, these introductory activities have been designed to support learners in identifying the key features of trees, allowing them to answer the questions in the Trees flowchart accurately. The learners' flowchart answers are then added to your Nature Park map by an educator, using the Habitat Mapper app.

The tree survey supports learners to identify what type of woodland they have on your site using the Trees flowchart. In the Habitat Mapper app groups of five or more trees are mapped as woodland. The type of woodland – broadleaf, evergreen or mixed, is determined by the proportions of the type of tree.

Meet a tree and the tree survey can also be used as standalone activities, promoting a positive connection with nature.

Teaching time

60 Minutes

Learning outcomes

To know how to identify fruit and nut trees.
To know how to identify the life stage of a tree.
To identify the difference between evergreen and broadleaf trees.
To record and interpret data about the number of evergreen and broad-leaf trees within a sample of 10 trees.
To use their data to classify their woodland.
To understand their role and contribution to mapping the habitats on their site as part of the Education Nature Park.

Step by step

1. Ask learners to work in small groups (three works well) to choose a tree.

2. Once chosen, give learners no more than two minutes to either observe and sketch the tree, the leaves or make a bark rubbing on their worksheet. Remind them that it doesn't need to be perfect!

3. Use the worksheet to guide the learners in estimating the life stage of the tree. Look at the height of the tree, the thickness of the trunk and the texture of the bark.

4. Ask learners to draw the shape of the leaves and discuss whether the tree is evergreen or broadleaved using the worksheet.

5. Consider what fruits, nuts, or seeds the tree produces. Discuss whether humans or other animals can eat these. Do not eat any fruits or nuts unless you can positively identify them as edible.

Green Skills

Suitable for

Key Stage 2
Key Stage 3

Location

Outdoors

Season

Spring
Summer
Autum
Winter

What you'll need

The Habitat Mapper app on one mobile device (for educator use)
Meet a tree and tree survey activity sheets
Clipboards
Drawing materials
Measuring tape or sticks
Optional: examples of broadleaf e.g., oak, ash or beech and evergreen e.g., conifer tree leaves

Key vocabulary

Evergreen
Broadleaf
Identification
Observation

Step by step (continued)

6. Encourage the learners to look at how the tree fits into its surroundings. Observe whether it stands alone or with other trees. If there are five or more trees in a group, complete the trees survey.

7. If there are fewer than 10 trees, investigate all the trees in that area. If there are more, ask the learners to choose ten trees at random. A random sample is important to create a fair representation of tree types within the woodland area.

8. Using the tree survey activity sheet tally the number of broadleaved and evergreen trees and use the guide to identify what kind of woodland to record.

9. After completing the observations, sketches and trees survey (if needed), use the Trees flowchart to decide which tree habitat you have. Add this to your school map using the Habitat Mapper app.

10.   Repeat these activities and mapping for each separate area with trees on your site, as they may be different types.

Reflection

Trees are incredible living things that are a vital part of our environment. They provide shelter and habitats for other organisms, provide cooling shade, filter water, stop erosion, convert solar energy into stored carbon, provide energy when burned and are an important building material. Ask learners to reflect on their own relationship with trees when they interact with them or use them.

The type of tree influences how much light reaches the ground, how deep the leaf litter layer is and the acidity of the soil, all of which determines what organisms live in the habitat. Challenge learners to make a list of organisms that might rely on trees, did they see any while surveying?

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