

## **Discovering habitats: trees**

### **Learning objectives:**

- Identification of the different habitats associated with a tree
- Quiet observation of mammals and birds that associate with trees and woodland
- Mini beast searching and identification in different habitats

### **Resources required:**

- String for laying out transects from tree base
- Pooters, tweezers, paint brushes, white trays for collecting minibeasts
- A trowel for collecting soil for examination in white tray
- Mini beast identification sheet
- Clip board with a sheet with a transect line drawn along the length

### **Lesson outline:**

1. Outside in woodland or by a tree ask the children to identify different habitats and what animals may be found there.
  - Canopy (birds, insects, squirrels)
  - Trunk (beetles, wood peckers)
  - Vegetation at the base (moths, butterflies)
  - Soil (worms, beetles, larvae)
  - Roots (rabbits sometimes make their burrows)
2. Ask the children to be quiet for animal/bird observations for 5 minutes.
  - This may mean walking to a different site and sitting down
  - Ask the children to sit separately and watch and listen in silence. Ask them to draw what they can hear – birds, leaves rustling, a car, wind etc.
  - What did they see and hear? Rabbits, squirrels, birds, wind, leaves rustling.
3. An optional game in a wooded area:
  - Divide a class into two groups lined up apart from each other A and B.
  - Go down line A and whisper a sound for each child to remember(e.g. hiss, quack, moo, grunt, neigh, hee-haw, cuckoo, cheep, woof, miaow, roar, baa, chitter, tuwit-tuwhoo)
  - Return along line and whisper the same sounds but in a different order
  - Line A faces away from the wooded area and line B goes to hide.
  - On the order 'GO' line A must make their sound and then wait for the response from the hidden line B. Each time a sound is heard the reply must be made, until line A finds their matching partner in line B.

4. Micro trail: stretch out several lengths of string from the base of the tree in different directions.
  - The children in pairs will follow the trail with a magnifying glass and observe everything they pass (insects, leaves, twigs, seeds, pine cones, stones) and draw it on their transect line on clip board.
  
5. Collect soil from under a tree and place in the white tray
  - Watch carefully for mini beasts
  - Trap any in a clear pot for closer examination with a magnifying glass
  - Make drawings and notes for identification
  - What are the key features? (number of legs, size, armour)
  
6. Collect leaf litter and examine in the same way a soil
  - If it is a large group you can split them and get half to do each habitat and compare notes.
  
7. Use a stick to beat the branches of the tree and collect any mini beasts in the tray below
  - Examine the tree trunk and collect any insects with a pooter.

**Back in the classroom: interpretation**

- What species were seen and identified? (mammals, birds, insects)
- Who eats what? construct a food chain (see attached notes)
- Identify herbivores, carnivore, omnivores and decomposers

## **Key to tree dwellers**

Refer to mini beast guide and identification books for more information and pictures.

### **Tree canopy**

- Moth: herbivore
- Robin, great tits, blue tits, gold finches etc: omnivore eats seeds and insects
- Lacewing: carnivore eats aphids
- Ladybird: carnivore, eats aphids
- Grey squirrel: omnivore, eats acorns, twigs, leaves and bird eggs

### **Trunk**

- Cross spider: carnivore eats insects
- Earwig: omnivore, eats insects and plants
- Fungi: decomposer, dead and waste animals and plant matter

### **Litter layer and soil layer**

- Violet ground beetle: carnivore, eats insects and worms
- Woodlouse: decomposer, eats rotting wood
- Millipede: decomposer, eats dead plant matter
- Earth worm: decomposer, eats remains of dead plants