

Bug traps

Objectives:

- To familiarise children with insects and for them not to be fearful of handling them.
- To identify different habitats and the invertebrate families that live there.
- To practice species identification and data collection.

Resources required:

- Hand lenses, transparent containers with lids (available at Bawdsey)
- Pooters, tweezers, paint brushes or spoons to pick up invertebrates
- Different foods for bait for the pit traps
- Plastic jar to act as a trap (such as a sweet jar)
- Piece of wood to cover pit trap
- FSC Identification sheets are available at Bawdsey (or basic ones are available at www.naturedetectives.org.uk).

Lesson plan

1. What insects do we expect to find in different habitats? On trees, in grassland, in the earth, under logs, in leaf litter, in the organic garden.
2. Search in different habitats. Get the children to write down the habitat type, characteristics of the habitat and species found there. Where might they fit into a food web? Are they carnivores, omnivores, herbivores or decomposers?
3. Make a selection of different traps to set over night. These can be done in pairs. Each pair can make a guess at the number and type of species they will catch. They can decide the best place to lay their trap and what bait to use. Maybe a prize can be awarded to the pair that catch the most!

A pitfall trap

- This collects insects that walk or crawl
- Choose a shady place under a tree or shrub
- Put a small container, such as a yoghurt pot or plastic cup into a hole in the ground so that the rim is level with the ground.
- Shape the soil around the rim so it slopes away from the pot allowing water to drain away.
- Mark the spot with a stick and label the trap with the children's name.
- Bait with bread, apple or raw bacon

Bottle trap

- Pierce two holes in the top of the opening and thread a knitting needle through.
- Hang a piece of tin foil from the needle to act as a door flap.
- Put in food bait and place in a shady place over night

Shake sheet for looking at insects in trees or bushes

- Place a white sheet under a branch and shake the branch above with your hand or a stick
- Try different trees and note the differences
- Record species type and number

Bug hunt data collection sheet

Type of trap:

Location of trap (circle):

Grassland woodland garden

List the species found and the number:

Species name	Why is this insect important?	How many?

Draw a food web including the species of invertebrate you have found and the following birds and animals that are found at Bawdsey.

- **Birds:** Blackbirds, robin, sparrow, woodpecker, sparrow hawk, Kestrel
- **Mammals:** mouse, vole, fox, squirrel, rabbit

Bug hunt (answers)

Type of trap:

Location of trap (circle):

Grassland woodland garden

List the species found and the number:

Species	Why is this insect important?	How many?
woodlice	It breaks down dead wood	
worms	Decomposes dead animals and plants	
ladybirds	Eats aphids and other pests	
Centipede (can bite, don't handle)	Feeds on other insects	
Millipede (two sets of legs on each body segment)	Feeds on dead plants and animals	
ants	Insects, dead animals, vegetation, fruit	
earwig	Decaying plant and animal matter, other insects	

Draw a food web including the species you have found and the following birds and animals that are found at Bawdsey.

- **Birds:** Blackbirds, robin, sparrow, woodpecker, sparrow hawk, Kestrel
- **Mammals:** mouse, vole, fox, squirrel, rabbit
- **Include and oak tree and grass**