

# Investigating Ecosystems

## Investigating Ecosystems – full day option

Students will use keys to identify and name the variety of animals living in different habitats. They will discover how animals are adapted, how they obtain their food from plants and other animals, using the idea of a simple food chain and how predators and prey interact.

### Choose one of these habitats to study;

**Pond (April – October only)**

**Woodland (all year)**

**Woodland/grassland (April- September only)**

## Learning objectives

- Use keys and observations to identify living organisms
- Understand that different organisms are found in different habitats due to differences in environmental factors
- Identify adaptations of animals for survival
- Use appropriate methods to collect invertebrates from different habitats

## Some suggestions for visit preparation

1. Re-cap important vocabulary; *habitat, condition, organism, predator, prey, producer, consumer*
2. Use simple keys to sort pictures of living things
3. Look at some food chains and introduce the idea of them linking to form food webs

## Some suggestions for visit follow up

1. Research how animals in other water habitats are adapted to survive, e.g. the ocean, a river.
2. Carry out simple choice chamber experiments, using woodlice, which pupils can collect in school grounds.

## National curriculum links

### Science

#### Interactions and interdependencies

Relationships in an ecosystem

- the interdependence of organisms in an ecosystem, including food webs
- how organisms affect, and are affected by, their environment, including the accumulation of toxic materials.

#### Genetics and evolution

#### Inheritance, chromosomes, DNA and genes

- differences between species
- the variation between species and between individuals of the same species means some organisms compete more successfully, which can drive natural selection
- changes in the environment may leave individuals within a species, and some entire species, less well adapted to compete successfully and reproduce, which in turn may lead to extinction
- the importance of maintaining biodiversity and the use of gene banks to preserve hereditary material.





# EVENT SPECIFIC RISK ASSESSMENT

Visit details: Investigating Ecosystems

Carried out by: Suntrap Centre

Date: Jan 2019

Issue	How to manage it
Understanding/behaviour	Class teacher to advise Suntrap staff of any student who may need extra support out in the forest to help them to follow instructions. School to ensure that there is appropriate adult: student ratios as required.
Medical conditions	It is school's staff responsibility to ensure they bring and administer medication needed for any particular student. Suntrap staff to check that school staff brings medication out into the forest. All adults to be made aware of any medical conditions. Suntrap staff will carry a first aid kit.
Getting lost	Keep within sight of teacher/adult & observe boundaries as directed by the staff.
Choking/Poisoning	No eating outside unless directly instructed by Suntrap staff.
Falling branches	During extreme weather conditions Suntrap staff will make an assessment to ensure it is safe to enter the forest.
Injury from horses/dogs or bikes	Group to be instructed to stand to the side, be quiet and still when horses, dogs or bikes are near.
Accident when crossing the road	Group to be instructed on follow safe procedures for crossing roads ( <b>Suntrap Line</b> ). No one to walk across the cattle grid.
Injury through falling & throwing	Climbing of trees and throwing sticks/stones prohibited
Getting wet/cold	Clothing should be appropriate for weather conditions. i.e hat, coat and gloves. Wellies should be worn when walking through stream.
Soil/water borne disease	Students instructed not to put fingers in mouth during/after activities which include handling plants, soil and sticks. Open cuts should be kept dry and/or covered. Hands should be washed with warm soapy water before eating lunch/snack. Tables to be wiped with disinfectant before eating if animals/soil on tables.
Animal bite/stings	Suntrap staff to make students aware of animals that are not safe to collect, e.g. red ants, wasps.