

Activity Sheets

Plants and Animal Lifecycles

**Educational Visitor
Activities**



Plants and Animals

Aim of the habitat activities

To introduce the children to the lifecycles of different plants and animals found in Local Nature Reserves. The diversity of the reserves allow for lots of investigative activities.

Generally animals have simple lifecycles that are similar to that of humans. Most reptiles, fish, birds and mammals are either born alive from their mother or they hatch from eggs and then grow up. However, some creatures like butterflies and moths have a more complicated lifecycle that includes a period of metamorphosis (the change that occurs in some animals from one stage in its life to another, for example a caterpillar to a butterfly).



A water vole (*Arvicola terrestris*) by Grant Auton Photography

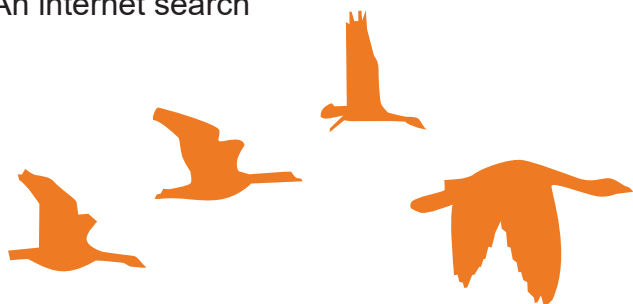
Plant and animal tales

Every plant and animal that you see on the reserve has a story to tell. None of them can speak for themselves, so can you tell their story for them? Do Canada Geese come from Canada and what is so bad about Himalayan Balsam? What does a Dragonfly do during the 2 years of its life when it is growing up in the water.

The questions above are just a few suggestions for some good story material. If you take a walk around the reserve, you will see many kinds of plants and animals that have an interesting background. Choose one that you like and find out its name. Check the identification with your teacher or a Countryside Officer.

Resources

- Books about wildlife
- Information about the reserve in the Educational Visitor Guide
- Photos taken on the Reserve
- An internet search



Challenge

Write a really interesting story about one of the plants and animals on the Reserve. You can imagine that you are the plant or animal and tell your own story, or choose any other style of story writing or newspaper reporting. Use your research to include as many details as you can, but also try to keep it interesting and exciting.

Additional background information

The reserve information pack tells you a lot about the work that is carried out on the reserve. These management tasks are essential to make the reserve a good place for wildlife and a great place to visit. You could include some of these jobs in “your day”. Many of the bigger jobs are done by contractors and they have to be given clear instructions about what needs to be done. You could also ask the Countryside Officer about some of the work that they do in the office.

As old as the trees

Scots pine

It is commonly known that you can tell the age of a tree by counting the rings in the trunk, but it is also possible to get an approximate age by measuring the size of the trunk. This also has the advantage of leaving the tree standing and able to get even older!

Practice the method of aging a tree. You need to measure the circumference of the trunk in millimetres at a height of 150cm from the ground. Divide the circumference by 25 and you will get an approximate age for the tree in years. If the tree is in a wood it will probably be older than this calculation suggests.

Resources

- Tree identification key
- Camera
- Tape measure
- Notebook and pencil
- Calculator

Challenge

Chose some large trees on the reserve and calculate how old they are. What can you find out about why these trees have been allowed to grow to this age. Are there lots of trees of a similar age or just a few? What was the land used for before it became a Nature Reserve and how many trees were there then?

Additional background information

This method is a “rule of thumb” and there are some exceptions to the rule. It works best with trees that are grown by themselves and have a full crown of branches. A tree in woodland can be twice as old as one of the same circumference growing in the open and some species have faster or slower growth. More information can be found in “A Field Guide to Trees of Britain and Northern Europe” by Alan Mitchell.



Harlequin larva

What will I be when I grow up?

Some animals start life looking very much like their parents - but some look completely different. During a visit to the reserve, you will see some young animals and you may see their parents too. Birds will often stay together as a family for a while and so it is easy to tell what the baby will grow up to be. It is more difficult with animals that don't look after their young.

Make a list of some young animals that you have seen on the reserve. These could be baby birds or some young insects. If you have been pond or stream dipping there will be lots of insect larvae and nymphs on your list. You may also see tadpoles. You will also find insects, spiders and snails in the long grass and in the bushes.

Resources

- Information about the reserve in the Educational Visitor Guide
- Camera, Identification Keys
- An internet search
- Books from the library
- Notebook and pencil
- Collecting pots and hand lens



Challenge

Use pictures that you have taken or found on the internet to show the differences between young animals and the adults that they grow into. You can use the pictures to make cards with young animal on one side and adult on the other (or side by side) or make them into a chart.

Additional background information

All animals change as they become adult. Insect larvae have to go through a stage in their life called a pupa, but insect nymphs do not and usually look more like the adult insect. Birds will change their feathers as they grow older and perhaps more than once before they are adult. Young mammals and fish usually look very much like the adult, but there are some slight changes to be seen. Frogs and toads make a series of changes as they grow from egg to adult. Newts don't change as much.

This publication is dedicated to the memory of:

Len Weatherly



**Head Teacher
Shepherd's Spring Infant and Junior School,
Andover
1967 - 1984**

This guide contains a series of National Curriculum linked activities suitable for Key Stage 2 pupils. Some activities are adaptable for younger or older age groups, if necessary. The activities are suitable for use in the classroom or at a Test Valley Borough Council Local Nature Reserve. A detailed map of the site is included in the Educational Visitor Guide to help you find your way around the site.

The Educational Visitor Guides and activity sheets are available from our website: www.testvalley.gov.uk

For further information contact:

**Countryside Officers
Community and Leisure Service
Beech Hurst
Weyhill Road
Andover
Hampshire
SP10 3AJ
01264 368000**

Community&Leisure@testvalley.gov.uk