

# Activity Sheets



# Landscapes



## Educational Visitor Activities

# Landscapes

## Aim of the habitat activities

To gain an overview of the Local Nature Reserve (LNR) and wider green space issues.

## Preparation/classroom activities

Look at a map showing where the LNR is located in England. Identify the principle towns and villages nearby. Discuss the site as a green space and the importance of such spaces for people and wildlife both now and in the past.

## Site visit

Children should make a plan of the main features (both natural and man-made) of an area defined by the teacher (see website for interactive maps).

They should estimate the size of features in metres; mark North on the map using a compass; draw a blue arrow pointing in the direction of their house and draw a red arrow pointing in the direction of their school. A key system should be used to identify the different features.

Some examples that could be included are:

### Natural features

- Chalk grassland
- Hills/slopes
- Scrub
- Bare ground

### Man-made features

- Fences
- Bins
- Gates
- Benches
- Lake

Discuss with the class the landscape around them. Here are some suggested questions as a starting point:

- What is the area like?
- Is it open? (i.e. can they see far into the open distance?)
- Is it closed? (are views restricted by trees?)
- What colours can be seen?
- What do they like about the landscape?
- How do they think it was formed?

### Equipment

- compass





# If I were a countryside officer

Describe your day as a countryside officer working on the reserve. What jobs would you do? Who would you work with? Who would you meet?

As part of a school visit to the reserve you will have met with a Countryside Officer and heard about some of the work that has been done. If you haven't done this you can read about the management of the reserve in the Environmental Education Pack. What time would you start work in the morning? What jobs would you be planning to do? Would there be something unexpected to do during the day? What time of your is it?

## Resources

- Talk to a Countryside Officer
- Information about the reserve in the Educational Visitor Guide
- Photos taken on the reserve
- An internet search

## Challenge

Write about an interesting day in the life of the Countryside Officer. You can do this as a log, showing the times of each job or incident, or write what the Countryside Officer might put in a diary at the end of the day. Try to include some typical work to keep the reserve in good condition, but have a few interruptions to the work such as a problem caused by a member of the public.

## 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.





## Write your own “Discovery Trail”

Meadow path

Help visitors to get more out of a walk around the reserve. Design your own trail, one that visits parts of the reserve that you find interesting. Then make a leaflet that other people can use to follow your trail and discover some of the interesting features.

Explore the reserve thoroughly, with your teacher (you may want to take a Countryside Officer with you). Make notes and/or take photos of the places that you want to include in your trail and mark their positions on a map. Be sure to think about whether the interesting feature can be seen all year round or if it is something that only occurs at a particular time.

### Resources

- Map of the Reserve
- Information about the reserve in the Educational Visitor Guide
- Books about wildlife
- Photos taken on the Reserve
- Examples of leaflets from other Nature Reserves.

### Challenge

Make a nature trail leaflet that will guide people on a short walk around with lots of interesting things to see. Give the leaflet to some of your friends and, after they have been on the trail, ask them to tell you which parts were the most interesting and why.

### Additional background information

Choose a route of your trail that will take about 20 to 30 minutes to walk, allowing time to stop and look at places of interest. Mark the trail and each stopping place on a map of the reserve. Write some short notes about what to look for and why it is interesting. Add some photos and drawings if they help to give information or improve the look of your leaflet. A circular walk is usually best. Designing a trail that works for a particular time of year is easier than trying to write one which works at any time of year.





# Warmer-warmer-cold!

Most living things will have more or less the same temperature as their surroundings. Humans and other mammals are unusual in keeping their bodies at much the same temperature wherever they are. Which other group of animals can do this? Does the temperature change from place to place around the reserve?

Look at a map of the reserve and make a list of the different types of places. You will need to visit a wide range of different places and measure the temperature at each place. You may get some ideas about the reasons for the temperature differences and need to make more measurements.

## Resources

- Maps of the Reserve
- Notebook and pencil
- Long tape measure or meter rulers
- Digital thermometer



### Challenge

Discover if there are any changes in temperature as you walk around the Reserve. Look to see if there any differences between the places that are warmer and the places that are colder? Are they different because they are a different temperature or are they a different temperature because they are different?

## Additional background information

Temperature changes with the height of the ground so always measure it at the same height - perhaps at ground level. You can also affect the temperature measurement by casting a shadow or breathing on the thermometer. A map can be drawn that has places with the same temperature joined by a line. The lines are called isotherms and the map looks a bit like a relief map where places of equal height are joined by lines called contours. It is also possible to make a chart that shows how temperature changes as you move further into a wood or down slope. This is called a thermocline.



# Nature's pattern

Flower beetle

Patterns are all around you in the natural world, but some are easier to spot than others. You need to look very carefully to see a spiral in the yellow part of a daisy. How many other spirals can you find? Are they regular like a coiled spring or do they change shape as the daisy gets older? Which other patterns can you investigate?

During a visit to the reserve, take a close look at the world around you. Try to spot regular patterns such as spirals, stars, ladder shapes, regular branching. Make sketches or take photos as a record of what you see. Some may be easier to see if you use a hand lens.

## Resources

- Camera
- Hand lens
- Notebook and pencil



### Challenge

Find as many examples as you can of each type of pattern. Record what you see and then sort out your collection to see if some patterns are found only in certain types of plant and animal or whether they are found in lots of different types.

## Additional background information

You can take the patterns below as a starting point but don't be limited to looking for only these ones. The patterns may be shown in a whole animal or plant or just in a part of one such as a leaf or a flower.





## A very special tree

One tree can be like a city: thousands will live there and it may have a history that dates back many centuries. Can you find a special tree and describe its present and its past? And what about its future?

Nature reserves often have a lot of trees on them, but is there one which really stands out for some reason? Is it the tallest, the oldest, or perhaps the only one of its kind. Choose your tree and then start your research.

### Resources

- Information about the reserve in the Educational Visitor Guide
- Camera
- Tape measure (to calculate ages – see “As Old as the Trees”)
- Notebook and pencil
- Tree identification chart



### Challenge

**Prepare a report in a format of your choice poster, booklet, video, etc., about a special tree. Identify the species of tree, say why it is special and describe as much as you can about its life. If it is a very old tree, report of what was happening in the world when it was planted.**

### Additional background information

Before there were people in Britain, the land was covered by trees. Now, we have very few places that look like the old, wild forests, but trees are still very important for many reasons. They provide timber, a home for wildlife, clean the air and produce oxygen and provide a pleasant landscape that improves our sense of well being. A tree can outlive humans, and so can be enjoyed by several generations of people, so that they become very special. Some trees are planted to mark special occasions and may be a reminder decades to come.





## Talking points

**Anton incident**

Is there anything happening at your local nature reserve? What are the topical stories, the points of interest or the amusing moments in a day at the reserve? Is there some work being done, has a rare bird been spotted or has someone done something that they shouldn't have? Your job is to report the news.

Watch a news programme and get the feel for how television news is presented. Practice being a news reporter by talking in front of the camcorder while someone else practices using the camcorder. You will then need to go to the nature reserve and look around for some news.

### Resources

- Information about the reserve in the Educational Visitor Guide
- Video camera
- Notebook and pencil

### Challenge

Prepare a news bulletin from your local Nature Reserve. Find some interesting stories, work out what you want to say, and record the news item using a video camera. Try to find 3 or 4 items for your bulletin and use the video camera to help tell the story by filming the scene you are describing.

### Additional background information

The content of your news bulletin will depend on what is happening on the day of your visit, but you could be prepared to do a background piece about the Reserve. This would say where it is, what are the main features and why it is an important place. You can ask the Countryside Officer if there is any work being done at the reserve and why this is needed. Damage caused by improper use of the reserve might be another story to cover.





**Butterfly bush**

# Foreign plants – friend or foe?

Plants from other countries can be found growing wild on the Reserve. What should the Countryside Officer do about them? Try to discover whether these plants are useful or if it would be better to try and stop them from growing.

Look in the Reserves Environment Education Pack to find out the names of plants and animals that are not native to Britain and what they look like. Discover as much as you can about one of these plants and visit the reserve to see where it is growing and how much of it is there.

## Resources

- Information about the reserve in the Educational Visitor Guide
- Camera
- Map of the Reserve
- Internet Search
- Books from the library
- Notebook and pencil

## Challenge

**Is the non native plant you have chosen a friend or a foe. Write a report or make a poster to show your verdict and present your evidence. This can be from your own observations, or from listening to experts or reading about what this plant has done elsewhere.**

## Additional background information

There are many plants that have been brought to this country because they look lovely when grown in gardens. They often find it easy to “escape” from the garden and live very successfully in the wild. These non-native plants, such as Himalayan Balsam and Giant Hogweed can take the place of our own wild plants but are not the right food plants for our native insects. Some “escaped” plants are, however, good for our native animals such as Buddleia (or the Butterfly Bush) which is a good source of nectar for insects.

**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](http://www.testvalley.gov.uk)**

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