

Help the Hedgehog

Teachers' notes

What's it all about

The number of endangered animals in the UK has doubled over the past 10 years according to wildlife experts. Hedgehogs, house sparrows and harvest mice are among the 1,149 species that have been identified as being under threat and in need of help to survive.

Hundreds of wildlife experts spent more than two years working out which species need the most protection. The government-approved list is aimed at increasing awareness of conservation and the animals and habitats at risk.

In this activity children identify the features within a typical garden that both encourage and deter hedgehogs.

Where it fits

Science:

QCA Unit 4B: Habitats

- to identify different types of habitat
- to recognise ways in which living things and the environment need protection
- to pose questions about organisms and the habitat in which they live and make predictions

Scientific enquiry

- turning ideas into a form that can be tested, making a prediction
- making observations
- deciding whether the evidence supports the prediction and suggesting explanations in terms of their knowledge of science.

Work in this activity also provides opportunities for children to learn about the interdependence of living things and how the environment and living things need to be protected.

Numeracy:

- Counting, partitioning and calculating – when carrying out surveys, calculate differences.
- Handling data and measures – sort animals and plants according to own criteria. Select ways of recording the groupings.
- Calculating, measuring and understanding shape – Investigate organisms; use a grid of squares to plot habitats where organisms were found in a survey.
- Securing number facts, relationships and calculating – sort animals and plants according to own criteria. Select ways of recording their groupings. Where appropriate use language of fractions, ratio or proportion to describe them.

What children will learn:

- to identify the effect of changes to the habitat on some organisms

Children will demonstrate this by completing the task on page 3 successfully.

- draw conclusions which match the observations made and relate these to their prediction and to their knowledge about the habitat

Children will demonstrate this by completing the task on page 3 successfully.

- to suggest questions which relates to an organism in its natural habitat and say what they think will happen

Children will demonstrate this by completing the task on page 3 successfully.

What you need to do

Introducing the activity

- Display **Page 1** through data projector or on an OHT. Discuss the images with the children. The newspaper headline informs us that scientists think that hedgehogs will be extinct in less than 20 years.
Ask the children
 - do they know of any animals that are already extinct?
 - do they think this is a problem?
 - why are some species extinct?
 - can man stop more species becoming extinct?

Leading the main activity

- Display **Page 2** through a data projector or on an OHT. This is an information page about hedgehogs. Talk about what hedgehogs need to survive and which a garden habitat provides. Can the children think about their own gardens and think whether hedgehogs would be able to live in them?

Maybe ask the children to do some independent research on hedgehog needs using the weblinks featured. Gather the class together to discuss the findings.

- Display **Page 3** through a data projector or on an OHT. Print copies for the children. Ask the children to look carefully at the picture and circle all the features that encourage hedgehogs into the garden shown and cross out all the features that present a danger to hedgehogs.

Alternatively the class could be split in two with one half looking for the aspects within the garden that encourage hedgehogs and the other half those that could prove to be a danger to them.

Extension work

Group the children and ask them to design their own garden with a view to making it hedgehog-friendly. Gather the class together to share their ideas – construct a new design to encompass the best of everyone’s ideas.

Assessment for Learning: Smart Grid

Thumbs Up	We were great at the task because...	We can list a number of dangers to hedgehogs within our gardens.	Next time we will...
		We know of other species that are in danger of becoming extinct	
		We know that we need to be more aware of animal habitats in order to stop more species becoming extinct	
Thumbs Sideways	We were good at the task because...	We know of some of the ways man is destroying hedgehog habitats.	
		We know that we are able to make changes within our gardens that can help hedgehogs survive	
Thumbs Down	We were OK at the task because...	We know that hedgehogs are found in gardens but are threatened	
		We know that some humans are destroying hedgehog habitats	

smart grid
Assessment for Learning

Smart Grids were devised by the Centre for Science Education

Extension Ideas . . . Cross Curricular Links

Save the Hedgehog poster (Literacy/ICT)

Create a poster using DTP to persuade people to consider the hedgehog's needs and make their gardens more hedgehog-friendly.

Hodgeheg (Literacy)

Read Dick King-Smith's Hodgeheg – an excellent book about a family of hedgehogs

Becoming Extinct (History)

Find out more about other species that have already become extinct. Consider the dinosaurs and what may have caused them to become extinct.

Science at your fingertips

Why are hedgehogs becoming endangered?

There are less and less hedgehogs around because modern living means that their habitats are being destroyed. More building means that areas of open and wasteland are being cleared and used. The undergrowth and dark, shady areas are being destroyed. In addition the modern trend for gardens with decking, gravel and slate chippings means that the hedgehog cannot forage for worms and insects. Also solar lighting means that gardens are sometimes illuminated at night. Fences and walls without gaps underneath mean that the hedgehogs cannot travel about from garden to garden.

What will happen to the food chain if there are no more hedgehogs?

Hedgehogs eat slugs, worms, beetles, caterpillars etc. If there were no hedgehogs then there would be lots more of these creatures around. That would be bad news for gardeners and fruit and vegetable growers.

When do hedgehogs hibernate?

The timing of hibernation does depend on many things including the weather. When it gets very cold, they will hibernate (if they are fit and fat enough) because their natural food disappears in the cold weather. A general guide is November – March although large hedgehogs may hibernate as early as September. However, if it stays mild after November they will stay out longer, and if it warms up in February, you may see them around then! During hibernation a hedgehog will wake up several times, and if you see one it is a good idea to offer food and water, then, if there are no signs of problems, let it go on its way.

Hedgehogs under a year old need to be at least 500-600gms in order to have sufficient fat reserves to successfully hibernate. Older hedgehogs will need to be heavier than this. If they are not large enough or well enough to hibernate then they will not.

Web links

BBC News

http://news.bbc.co.uk/cbbcnews/hi/newsid_6960000/newsid_6966200/6966231.stm

Original news story about the endangered hedgehogs

Wild Chicken

http://www.wildchicken.com/nature/garden/wild007_mammals.htm

Information about hedgehogs

BBC Science & Nature

<http://www.bbc.co.uk/nature/animals/wildbritain/gardenwildlife/myspace/content.shtml?11>

Information about hedgehogs

British Hedgehog Preservation Society

http://www.britishhedgehogs.org.uk/kids/letter_from_spike.htm

Information about hedgehogs **for children**

Stop Look Listen Live

<http://www.hedgehogs.gov.uk/main/main.html>

Road safety web site **for children**

Canadian Museum of Nature

<http://nature.ca/notebooks/english/enexpg.htm>

Endangered and extinct animals

Extinct Animal

<http://www.extinctanimal.com/>

Learn about prehistoric and recently extinct species of animals, and some of their stories.

The Dodo Pad

<http://www.dodopad.com/dodofact/dodofact.htm>

Information about the dodo.

Joint Nature Conservation Committee

<http://www.jncc.gov.uk/page-2905>

A site about endangered and extinct organisms. The Red list has been drawn up of the most threatened species.

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