



# The Scottish Beekeepers' Association

<http://www.scottishbeekeepers.org.uk>

## Learning Support Resources for the 5 -14 Curriculum – The SBA Website for Schools Notes for Teachers

Curriculum Area - ENVIRONMENTAL STUDIES - Science

### Aims

The resource will contribute to the following aims of Environmental Studies:

- ◆ develop and understanding of their environment
- ◆ acquire knowledge and skills that will enable them to interact effectively with the environment
- ◆ recognise the skill, knowledge and understanding associated with science
- ◆ develop informed attitudes and values relating to care of the environment and the use of resources

### Core Skills

The resource will contribute to the development of the following core skills:

- ◆ Communication
- ◆ Problem Solving
- ◆ Working with others
- ◆ Using Information Technology

### Environmental Studies Skills (Science)

The resource will contribute to the following specific Environmental Studies Skills

- ◆ Considering and understanding the task, and planning what will be done
- ◆ Making and using appropriate observations and recording the information a variety of appropriate ways
- ◆ Reviewing and presenting findings in appropriate forms and thinking critically about their significance

### Developing Informed Attitudes

The resource will assist pupils in developing informed attitudes to:

- ◆ A commitment to learning – thinking about solutions in relation to environmental issues
- ◆ Social and environmental responsibility – appreciating the need for conservation and the sustainable use of earth's resources

### Knowledge and Understanding / Skills

The resource will contribute to the following specific strands within the Attainment Outcome – Living Things and the Processes of Life:

Strand	Relevant targets met from the resource	Levels
Variety and Characteristic Features	Recognise similarities and differences; give distinguishing features of invertebrate groups;	A - C
	Sort things into broad groups; name common members of invertebrate groups and some common plants	A - C
The Processes of Life	Name external parts of bodies of animals, examples of how senses are used, name life processes	A - C
	Recognise stages in the life cycle of familiar animals	A - B
	Describe the main stages in flowering-plant reproduction	D

The Interaction of Living Things with their Environment	Recognise and name some common plants and animals found in the local environment; examples of feeding relationships	A - B
	Give examples of how to care for living things, and how they can be protected	A - C
	Give examples of how animals (and plants) are suited to their environment, and how changes to the environment might increase the chances of survival; give examples of physical factors that affect the distribution of living things	D - E

### Availability of the Resource

The resource is contained entirely within a website, whose URL (Web 'address') is:

<http://www.scottishbeekeepers.org.uk/outreach/html/outreachindex.html>

This is part of the much larger website operated by the Scottish Beekeepers' Association, and whose 'root' URL is:

<http://www.scottishbeekeepers.org.uk/>

### Summary of Resource Site Content

The Education part of the website currently includes the following resources:

- ◆ An introduction to beekeeping in Scotland – Climate, Beekeeping Through the Seasons, Basic Bee Biology, and Forage (the range of local flowering plants on which bees feed and depend). This is a series of downloadable Acrobat files which are illustrated in full colour, and follow a 'question and answer' format well suited to children in the 5-14 age range.
- ◆ Links to the British Beekeepers' Association site and their educational resources

### Cost

Access to and use of the web site is free to everyone. A broadband connection is recommended in view of the size of some of the file downloads.

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## Activities

The resource will provide a basis for the following specific activities which are suggested in the *Guidance Notes for Teachers* for the 5-14 Scottish Curriculum:

- ◆ Draw pictures of living things, and discuss why they are living
- ◆ Set up a display of pictures of living things – use it to show examples of animals (and plants)
- ◆ Use the pictures to sort minibeasts into different types
- ◆ Discuss distinguishing features of invertebrates
- ◆ Choose an invertebrate, find out about it and report to the class on the findings
- ◆ Make drawings of invertebrates – label them
- ◆ Discuss the need to take care of animals in the environment, and how to care for them
- ◆ Identify the main external features of animals from pictures
- ◆ Discuss how animals are looked after, using examples of Beecraft and husbandry
- ◆ Recognise stages in the typical insect life-cycle
- ◆ Discuss the role of bees as pollinators in flowering plant reproduction
- ◆ Discuss life processes common to all animals – in relation to feeding and digestion as well
- ◆ Use in conjunction with a local walk to help identify locations and identification of local animals and plants
- ◆ Discuss how animals can be affected by human activity – such as planting flowers, cutting down trees, making gardens
- ◆ Explore seasonal changes in relation to the environment and the activity in a bee colony at different times of the year
- ◆ Give examples of feeding relationships in the local environment (such as nectar, bees and honey, and the human element in this) – tracing a common food back to its source
- ◆ Prepare a presentation or write a letter explaining the impact of an environmental change such as removal of a woodland, destruction of heather moor etc., or how the environment could be improved to benefit wildlife
- ◆ Make a class display of how animals and plants are adapted to each other and to their habitat

The following additional suggested activities may also prove useful in extending children's range of knowledge and understanding, particularly in relation to the importance and impact of bees and beekeeping today:

- ◆ Contact a local beekeeping association to ask a beekeeper to visit the classroom and talk to children
- ◆ Ask children to collect food wrappers which mention honey as an ingredient in food and confectionery
- ◆ Likewise suggest to children they look for products in shops containing beeswax (such as cosmetics and polishes for example)
- ◆ Explore the internet for information on the use of honey and other bee products in medicine and alternative therapies
- ◆ Contact a local health food shop or alternative health practitioner to come into the classroom with honey and bee-related products for the children to see, smell, touch etc.
- ◆ Ask children to collect cooking recipes containing honey. (A school library or local library may be able to support this as well).



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### Educational Support Resources for the 5 -14 Curriculum – The SBA Website for Schools

Order to receive a copy of the resource on CD

Please fill in the details below, then post it with your payment to:

Alasdair Joyce  
Manachie Lodge  
Dallas Dhu  
FORRES  
Morayshire  
IV36 1DE

Name of School: .....

Address of School: .....

.....

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Postcode: .....

Telephone Number: .....

Email address: .....

(These details will not be stored, they will be used only for purposes of mailing the CD to you)

Your Name & Position (Class Teacher, Head Teacher, Manager etc) .....

Please supply .....copy(ies) of the SBA Website on CD

I enclose payment of £5.00 per copy to cover production and mailing costs

(Please make cheques payable to Scottish Beekeepers' Association)

It would be helpful if you would tell us the age of pupils with whom you intend to use the resource:

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The CD will be sent to you as soon as possible on receipt of your order. Thank you for your support and interest.