

Discovering and Helping Bees in your School Grounds

Outline of our school sessions to help study bees in school grounds and creating bee friendly grounds.



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Introduction

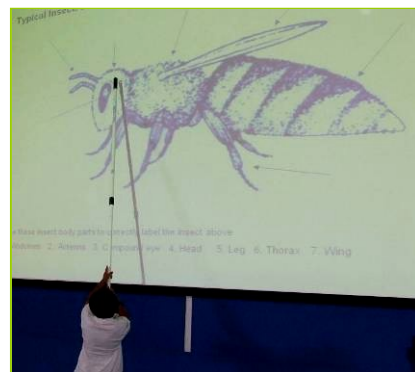
This project provides a fascinating introduction to bees, their importance and how we can help them. The session can be adapted to cater for the different needs of primary and secondary school pupils. As part of a school visit we will provide an introduction to the natural history of bees, identify some common bees, investigation of bees in the school grounds, discuss making a bee map, discuss making a bee home and looking at suitable sites in the grounds.

A major aim of the project is to embed ideas and activities in the curriculum that will allow the school to continue to develop this project themselves. The major elements are outlined in this document.

Bee presentation outline.

A PowerPoint presentation provides an introduction to bees, the days activities and the long term aims of the project within the school.

This session includes the natural history of bees, bees as insects and looks at honey bees, bumble bees and solitary bees.



Honey Bee



Bumble Bees



Solitary Bees

Coastal bees

For coastal schools we can also include the rare vegetated habitat on the Shoreham Beach Local Nature Reserve and our conservation project called Bees on the Beach.

Vegetated shingle is a rare habitat that requires bees for pollination. We have been working with the nature reserve to monitor bees to understand more about the species present on the beach and their role in the health of this rare habitat.

While vegetated shingle is a marine habitat it also contains many terrestrial plants and insects. This can be an interesting habitat to visit and compare with you own school grounds, both plants and wildlife.



The miracle of pollination

Collectively, bees are our most important pollinators for gardens, wild flowers and commercial fruit and vegetable crops. We will explore the role of insect pollinators from the perspective of the bee as well as from the plant, leading to the seeds, fruits and new plants. We will also look at why bees collect pollen and nectar and how they make honey

We will also look at why different bee species are attracted to different shaped or coloured flowers. This will also be part of the practical exploration of the school grounds to record bee species and the plants they are visiting in the grounds.



UK insect pollination is worth an estimated £440 million a year.



Investigating bees in your school grounds



As part of a visit to your school we will work with the children to help investigate and survey for bees. We will identify the bees that are visiting the grounds and the plants they visit.

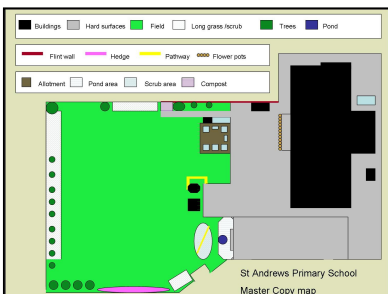
This survey can be repeated at a later date (or another class) to compare observations.

The bee sightings can be used to make a bee map of the grounds.

How bee friendly are your grounds

The data collected can be used to further develop a bee teaching resource for the school.

The bee map can also be used to suggest ways that you could make your grounds even more bee friendly. You will also be able to repeat this survey next year to monitor the success of any new development to your grounds. This project provides an opportunity for pupils to witness conservation in action.



Bees need our help

Bees of all type continue to decline which is very worrying. Due to the decline in honey bees, about 85% of pollination is now done by bumble bees, solitary bees and other pollinators. We will discuss why bees are declining and what we can do to help.

Bee Identification

There are over 250 species of bee in the UK. There is one species of honey bee, 25 species of bumble bees and the rest are solitary bees. Some bees are known as cuckoo bees because they lay their eggs in the nest of other bees.

The session will include identification materials to help the pupils identify some of the more common species.



How can we help bees.

We will discuss ideas that you can implement to help bees in your school grounds. Even an urban school with very little green space can still be 'bee friendly'. We can provide suggestions on plant species for bees that will provide nectar sources at different times of the year.

We can also provide activities that the pupils can undertake to gather more information about the bees in your grounds, to speculate on this information and to help support classroom studies of bees.

A few schools have set up a honey bee hive in their grounds to study bees however the hive will require time to care for the bees. These hives have an observation window.

An easier way to help bees is to make or buy 'bee homes' that providing nesting sites for many species of solitary bee. We can provide information on constructing and choosing locations for bee homes in your grounds. Bumble bees may also nest in your grounds.



The bee project can also be linked to our School Grounds Habitat Mapping Project.

To find out more about our bee projects, sessions, fees etc please contact Steve Savage on stevep.savage@ntlworld.com

You may also find Steve Savage's urban weblog of interest (includes many bee observations in March April 2012). <http://urbanwildlifejottings.blogspot.co.uk/>