

# Project Outline for Schools



**Bee Positive!**

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# Project Outline

Guidance for teachers and parents

**Planting Seeds of Hope** introduces key stage 1 and 2 pupils to conservation activities and discussion of human impact on the environment. Specifically, it is an easy to implement conservation project which responds to recent environmental reports on biodiversity loss and the decline of UK wildlife, especially pollinators.

It is also a response to the recognized increase in eco anxiety especially amongst children and seeks to create positive actions, opportunities and strategies to decrease anxiety and take constructive action.

Planting Seeds of Hope fits the **UK Department of Education Key Stage 1 and 2 Science curriculum** and also the statutory guidelines for PSHE including: the requirement for schools to provide

‘planned opportunities for young people to undertake social action, active citizenship and voluntary service to others locally or more widely.’

This project also adheres to the Department for Environment, Food and Rural affairs **National Pollinator Strategy**: implementation plan (2015) and follows the advice of UK charity **Buglife’s Pollinator Manifesto** which states that ‘Pollination and pollinator conservation should be incorporated in primary school education... ’

In addition this project supports pupils to engage with the complex issues of their time, including climate change and mass extinction, in a way that positively supports mental health and well-being.

Psychologists, teachers and parents report increasing concern over the rise in eco-anxiety, especially in the younger generations who are growing up into an uncertain future and many challenges, see:

[Half of child psychiatrists surveyed say patients have environment anxiety.](#)

## Children are losing sleep over climate change

Our Planting Seeds of Hope resources have been designed and developed to support pupils' mental health in a number of ways including:

Introducing pupils to the concept of conservation and positive human impacts on the environment.

Giving pupils agency and encouraging them to be active citizens in the support of their local environments including school and home gardens.

Providing pupils with the protective psychological factors of:

- Feeling engaged and that their contribution is significant
- Identifying goals in order to have an impact
- Challenging feelings of overwhelm by realising no-one is too small to make a difference
- Feeling empowered by taking direct action for their local environment

- Feeling supported by taking part in an initiative that connects them with others in a positive movement of change
- Processing thoughts and feelings about climate change and wildlife decline in a supportive and proactive environment

Planting Seeds of Hope: Resources and Activities support the key stage 1 and 2 science curricula.

We provide you with activities, displays, videos and additional resources including links to national and international conservation projects and educational materials on pollination and the importance of pollinators.

In addition we provide you with a planting guide for 5 easy to grow, quickly flowering plants which are attractive to bees and other pollinators.

We hope you will encourage pupils to plant their seedlings out in the school garden but also to take them home and plant them in gardens and containers.

In this project pupils can:

- observe and identify the life cycle of a plant
- observe and identify the reproductive cycles of plants
- understand the concept of symbiosis and the relationship between plants and pollinators
- observe and identify different pollinators.

In addition they can compare and contrast different seedlings, plants and flowers and their different speeds of growth and environmental adaptations (like use of scent and colour to attract pollinators) and observe directly the impact of their own conservation efforts by monitoring pollinator visits to their plants.

Our project fits the following statutory guidelines from the **UK Department of Education Science Curriculum**

### **Year One: Plants : Statutory requirements**

Pupils should be taught to: identify and name a variety of common wild and garden plants,

including deciduous and evergreen trees identify and describe the basic structure of a variety of common flowering plants, including trees.

Notes and guidance (non-statutory):

Pupils should use the local environment throughout the year to explore and answer questions about plants growing in their habitat. Where possible, they should observe the growth of flowers and vegetables that they have planted. They should become familiar with common names of flowers, examples of deciduous and evergreen trees, and plant structures (including leaves, flowers (blossom), petals, fruit, roots, bulb, seed, trunk, branches, stem). Pupils might work scientifically by: observing closely, perhaps using magnifying glasses, and comparing and contrasting familiar plants; describing how they were able to identify and group them, and drawing diagrams showing the parts of different plants including trees. Pupils might keep records of how plants have changed over time, for example the leaves falling off trees and buds opening; and compare and contrast what they

have found out about different plants.

### **Year One: Animals: Statutory requirements:**

Pupils should use the local environment throughout the year to explore and answer questions about animals in their habitat.

### **Year Two: Living things and their habitats: Statutory requirements:**

Pupils should be taught to: identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other, identify and name a variety of plants and animals in their habitats, including microhabitats describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.

### **Year Two: Plants :Statutory requirements:**



Pupils should be taught to: observe and describe how seeds and bulbs grow into mature plants find out and describe how plants need water, light and a suitable temperature to grow and stay healthy

Notes and guidance (non-statutory)

Pupils should use the local environment throughout the year to observe how different plants grow. Pupils should be introduced to the requirements of plants for germination, growth and survival, as well as to the processes of reproduction and growth in plants. Note: Seeds and bulbs need water to grow but most do not need light; seeds and bulbs have a store of food inside them. Pupils might work scientifically by: observing and recording, with some accuracy, the growth of a variety of plants as they change over time from a seed or bulb, or observing similar plants at different stages of growth

**Year Three: Plants: Statutory requirements:**

Pupils should be taught to: identify and describe the functions of different parts of flowering plants:

roots, stem/trunk, leaves and flowers explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant, investigate the way in which water is transported within plants, explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.

## **Year Four: Living things and their habitats: Statutory requirements**

Pupils should be taught to: recognise that living things can be grouped in a variety of ways, explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment recognise that environments can change and that this can sometimes pose dangers to living things.

Notes and guidance (non-statutory) Pupils should use the local environment throughout the year to raise and answer questions that help them to identify and study plants and animals in their

habitat. They should identify how the habitat changes throughout the year. Pupils should explore possible ways of grouping a wide selection of living things that include animals and flowering plants and non-flowering plants.

Pupils should explore examples of human impact (both positive and negative) on environments, for example, the positive effects of nature reserves, ecologically planned parks, or garden ponds, and the negative effects of population and development, litter or deforestation.

### **Year Five: Living things and their habitats: Statutory requirements**

Pupils should be taught to: describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird describe the life process of reproduction in some plants and animals.

Notes and guidance (non-statutory) Pupils should study and raise questions about their local environment throughout the year. They

should observe life-cycle changes in a variety of living things, for example, plants in the vegetable garden or flower border, and animals in the local environment. They should find out about the work of naturalists and animal behaviourists, for example, David Attenborough and Jane Goodall.

Pupils should find out about different types of reproduction, including sexual and asexual reproduction in plants, and sexual reproduction in animals.

In addition Bee Positive provides pupils with opportunities to participate in their own communities and take an active citizenship role as highlighted in the statutory guidelines for PSHE by Planting Seeds of Hope and helping to create the change that is needed if we are to reverse biodiversity loss and tackle the challenges facing our environment.

Our world is facing a number of ecological crises and as parents and teachers we face the

challenging job of equipping, educating and inspiring our children, but also protecting them from problems that are bigger than they are. Bee Positive seeks to plant seeds of hope, as well as environmental change, by giving our children a means to take safe but positive environmental action, to understand their own importance in conservation, and to realise that they are not alone.

We warmly invite your school to sign up for Planting Seeds of Hope and connect up with other schools and community groups also taking part. All our primary school resources are free.

*Professor Graham Roberts, Bee Positive,  
Education Advisor*