

# Our School Grounds: Everything you need to improve your school grounds for pollinators

## Creating Habitat for Pollinators:

Pollinator friendly habitat is easy to incorporate into school grounds. Our goal is to support teachers, pupils, parents, guardians, after school programs, and youth groups, amongst others, to create [feeding, nesting and shelter habitat](#) for pollinators.

The ideas, resources and links in this document will help you plan and design the changes within your schools grounds, introduce you to some of the many insect pollinators these changes will benefit and provide tips, guidance and other teaching materials.

If you have not already done so we recommend taking part in the **Polli:Nation Survey**, this will help you identify which habitat types you already have within your school grounds and which ones you might want to create. It will also allow you to look at how the habitat changes you make affect the number and variety of pollinating insects that visit your school.

You should be able to find everything you need to know about how to create a particular kind of habitat and its value to pollinators by following the links contained in this document. For tips and practical guidance on how to begin making changes in your area see the ['Developing your Space'](#) section on our website or within this article. This section includes information on organising development days, volunteers and management and maintenance. If you are looking for information on a particular topic please use the image on the next page to help you navigate through these pages, and through the corresponding website pages.



# POLLI:NATION

## Introductory activities page that covers:

- Importance of pollinator habitat
- Using your survey results
- Links through to overviews of the 3 pollinator habitat groupings

## Our School ground - creating habitat for pollinators

### Pollinator habitat groupings pages:

- Introductory information about how these habitats help pollinators
- Clickable links to 9 specific habitat improvement pages

### Specific habitat improvements pages, all have links to:

- 'How to's'
- Link to 'making it happen' page

### Feeding habitat

Flower beds or pots

Wildflowers

Trees

### Nesting and Shelter habitat

Bare ground

Man-made homes

Damp places

Bare walls or fences

Concrete or tarmac

Grasslands

### Other habitat

Habitat for butterflies

Habitat for bees

A page which centralises all of the resources schools might need for implementing and maintaining habitat change (see below)

## Developing your space

Downloadable documents or links on the following:

Designing your space

Making change happen

Maintenance

Volunteers

Calendars



## Creating Feeding Habitat

### What do pollinators need?

Different types of pollinating insects have different requirements. All adult pollinators feed on nectar, which provides energy in the form of sugar, and many also feed on pollen, which provides protein. Bees feed their larvae on both pollen and nectar. Hoverflies have particularly varied life-cycles and they feed their larvae on crop pests such as aphids, making these insects doubly useful. Butterfly larvae (caterpillars) feed on plant leaves, different species need different larval plants - if the plant isn't present in the landscape you won't see these types of butterflies. For example the caterpillars of Holly Blue butterflies feed on Holly plants in the spring and Ivy in the summer.

### What can you do?

Ideal feeding habitat for pollinating insects will be warm, sunny, and sheltered from wind. It should contain a range of pollen and nectar-producing plants that flower between March until September. It is important to choose the right location for any planting, a sunny sheltered area is ideal.

Click on the links below to discover more about planting flower beds and pots, wildflower meadows and trees and shrubs for pollinators.

### Practical guidance and ideas for creating:

- [Flower beds and pots](#)
- [Wildflowers](#)
- [Trees](#)

There are two separate pages where you can find out about the lifecycle and habitat requirements of two particularly popular groups of pollinators, bees and butterflies. To find out how to create habitat specifically for these groups click on the following links:

- [Creating feeding habitat for bees](#)
- [Creating feeding habitat for butterflies](#)

## Creating Nesting and Shelter Habitat

### What do pollinators need?

In addition to food requirements, pollinating insects need the right sort of habitat to complete their life cycle. Bees in particular need suitable places to build their nests, which may be bare ground (mining bees and many bumble bees), in dense vegetation (carder bumblebees) or in holes in logs, plant stems, or man-made insect homes (mason and leaf cutter bees). Pollinating flies rely on damp places such as pools, ditches, damp soil and animal dung for their larval development.

### What can you do?

Pollinators need a variety of nesting and shelter habitat to complete their life cycles. Thankfully, there are lots of things that you can do to create a varied habitat for pollinators. Clicks on the links below to find out how.

### Practical guidance and ideas for creating:

- [Bare ground](#)
- [Man-made insect homes](#)
- [Damp places \(ponds and bog gardens\)](#)

## Improving other habitat

### What do pollinators need?

Pollinators need a variety of feeding, nesting and shelter habitat to complete their life cycles. Short grass, concrete or tarmac, and bare walls and fences are common features in a man-made landscape, but they are not very good for pollinators – they are a bit like a desert for these insects providing little water, food or shelter.

### What you can do?

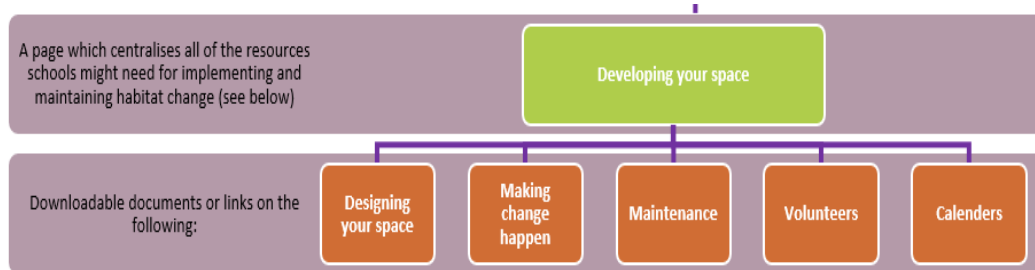
Although short grass, concrete and tarmac, bare walls and fences are not very good habitat for pollinators there is lots that you can do to improve these types of features for pollinators. Click on the links below to find out how.

### Practical guidance and ideas for improving:

- [Bare walls and fences](#)
- [Concrete or tarmac](#)
- [Grassland](#)

# Developing your Space

Making change happen in your school:



You are at the beginning of a very exciting journey to see your school grounds transformed. The changes you make, with due thought and clear planning, will have a lasting impact for students for many years to come.

If you are unsure whether you are ready – have a look at the [Process of Change](#) for some guidance as to where you are in this process.

There are a range of resources to support the design and planning of your school grounds project – click [here](#) to explore them all.

Most importantly changes to your school grounds need to be sustainable – easy to manage, easy to maintain and part of your school plan with wide support from senior staff and other teachers.

Have a look through the following resources to help get your school project underway:



Thinking about Maintenance



Working with Volunteers



Calendar of Developments



Grounds Development Happen

## Making change happen in your school

There are a variety of ways in which schools across the country are making changes to their school grounds. Here we have highlighted a few ways in which schools have made developments happen **in school time**.

- Curriculum Power
- Inter house/Year group activities
- Transition Days
- Existing Award schemes and clubs

### Curriculum power

So much of your project can fit in to curriculum work – whether it is designing a space, (paths/planters/benches/orchards) working out the best place to site your development (sunlight/ wind/ access etc) or creating artwork for your space – all of these elements can give purpose to required curriculum content that students can take part in.

**Action:** Speak with your Design & Technology, Art, Maths & Science teachers – outline your proposal and action points for what needs to be done to make it happen.

**Some ideas on how different areas of the curriculum can provide practical lessons and wider involvement in your school project include:**

Measuring the spaces you have (ready for drawing/making scale designs)

Measuring abiotic factors at different points around the school (sunlight, wind speed, soil moisture, pH)

Designing a space (give a design brief to students or let them create one (see resource [here](#)).

Designing artwork for the space / posters to advertise your activities.

### Inter-house / year group work days



### Case study – Brannel Pollination Challenge –

Each house group were given responsibility to survey parts of the grounds and decide how they could make improvements to this area.

Using school time, Heads of House and representatives in each house led the planning and development of changes to their school grounds.

Participation – This method ensures widespread participation and engagement across the whole school. It brought a large number of teachers & students in to the project giving ownership of space within their school.

Time – The school have allocated time each month for the Brannel Challenge to ensure on going development and time for maintenance.

### Transition Days

A number of schools are using their transition time (between primary and secondary) to engage their upcoming students in the Polli:Nation project

Case Study: Castle Manor made over 100 bee and bug hotels during their end of year transition days making for a great activity and working with 100 new students.

### RHS School Gardening Awards

There are 5 school awards that can be gained by joining an RHS School Gardening Scheme. They can also provide invaluable support, reward & recognition for your work. The RHS schools programs have a range of complimentary resources to support your school through there grounds development.

Find out more about RHS resources and Awards here [ [hyperlink to activity page to be added](#) ]

### Eco-Schools Award



Many schools participate in this fantastic award – by providing students with practical experience & skills developing their grounds and improving habitat for what lives there you will be able to cover some of the key criteria.

Environmental review of the school

Activities for their noticeboard

Action plan including school grounds developments

More information [here](#)

### Duke of Edinburgh (DofE)

Working on the Pollination development in your school is a fantastic way to meet the community criteria of the DofE award.

Find out more [here](#)

### John Muir Award

The John Muir Award follows a simple structure

Discover – Explore- Conserve – Share

With lots of opportunity to provide support and direct involvement with your Polli:Nation project. Click [here](#) for more information

### The Hive

Using your interested students to help begin development work, shout about what's being done (assemblies posters/newsletters) and organise and recruit more volunteers within school.

Find more resources [here](#)

You could approach existing clubs to see how they would like to support the project