

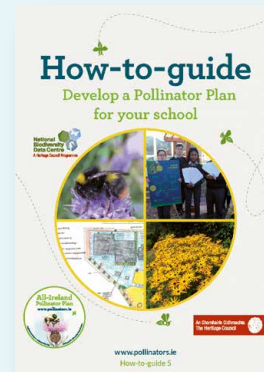
08

Lesson Plan

Taking action for Pollinators

Suitable for Junior Infants to 6th Class

Use our School Resources at www.pollinators.ie/schools including the Junior Pollinator Plan (also available in Irish) and the 'How-to-guide: Develop a Pollinator Plan for your School'



Objectives

In this lesson, students will:

- ✓ Learn to work together to come up with a plan for action.
- ✓ Learn how to follow a step-by-step guide and critically assess which actions are suitable for their school.
- ✓ Work with caretaker and teachers to implement those actions.
- ✓ Create signage for protected areas & posters to explain to other students the schools pollinator-friendly actions.

To begin, download the All-Ireland Pollinator Plan's guide to developing a Pollinator Plan for your School from <https://pollinators.ie/schools/>

This guide provides detailed steps to create a pollinator-friendly school.

Decide together which actions you would like to take to improve your school's pollinator score.

Once you have picked the actions you want to take, make a list and give copies to all teachers and care taking staff and arrange a meeting to discuss how to implement these actions.



Note To Teachers

Links to Curriculum:

Developing a School Pollinator Plan will help students develop skills through observing and exploring the richness of the immediate environs of the school. This involves the children in recording, questioning, and experimenting with the features of their natural environment. It also helps to teach environmental awareness, living sustainably; what it means to be an active citizen, with rights and responsibilities in local and wider contexts; and responsible consumption and production. The Pollinator Team will develop the following Key Skills: Staying Well; Being Creative; Communicating; Working with others; Managing information and thinking.



A School Pollinator Plan can be used to teach students how to conduct a habitat study; research and investigate the adaptation, competition and interdependence of organisms within specific habitats and communities. Through learning about pollination and the importance of pollinators, students can also learn to evaluate how humans can successfully conserve ecological biodiversity and contribute to global food production; and appreciate the benefits that people obtain from ecosystems.

Eco-Schools/Green Flag:

Developing a school pollinator plan will go a long way towards helping your school apply for this internationally recognised Award.

Healthy walking route:

Providing more flowers for pollinators will also make your school a more attractive place for everyone. You could create a 'Pollinator/Nature walking route' that passes all your different actions you've taken in your school grounds. Create a map and measure your route so everyone knows the distance they walked.



Ionad Tacaíochta
Oideacháis Laoise
Laois Education
Support Centre



Sample Actions

1 Protect areas that are already good for pollinators

Walk around the school grounds and look for areas that are **already** pollinator friendly. These might be areas of longer grass with wildflowers; flower beds; areas where plants like dandelions and clover are allowed to grow; native trees; wild corners; native flowering hedgerows; the wild base of hedgerows; or bare ground for nesting solitary bees. Mark all these areas on your map. You could put up signs to identify these areas and to help protect them in future years.

You can make **'Protected for pollinators'** signs or print special Pollinator Plan **'Managed for Wildlife'** signs from the 'Resources' section of our website, www.pollinators.ie



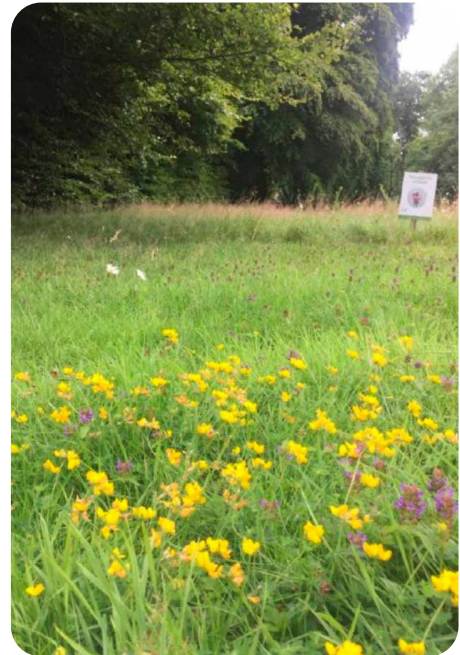
This pollinator mural was created at Lough Neagh Discovery Centre, Oxford Island, Northern Ireland.

Sample Actions

1 Protect areas that are already good for pollinators

Do you have native hedgerows that could be allowed to flower to provide food for pollinators?

If your school has a hedgerow, these are vital for pollinators! Rural schools may have native Hawthorn and Blackthorn hedgerows around their boundaries. If these are managed so that they are allowed to flower, they will provide lots of food for bees and other insects. Cut every three years, or one-third of your hedge each year to make sure there are always spring flowers available.



Are there corners with bramble or Ivy you could protect?

Are there corners of your school grounds where there are wildflowers already growing?

Could you put up a sign to protect these areas from mowing/spraying?

Sample Actions

2 Reduce mowing

Perhaps you have areas around the edges of your playing fields where you could reduce mowing and let the dandelions and clover bloom to feed pollinators?



Pitches for Pollinators: leave your school playing fields unmown over the summer to let wildflowers grow and feed our hungry pollinators.



Where a school has green space, it is very important of course to have areas of short grass for playing and for sports. However, there may be areas on the margins of playing fields where the grass could be mown less frequently to allow wildflowers to grow.

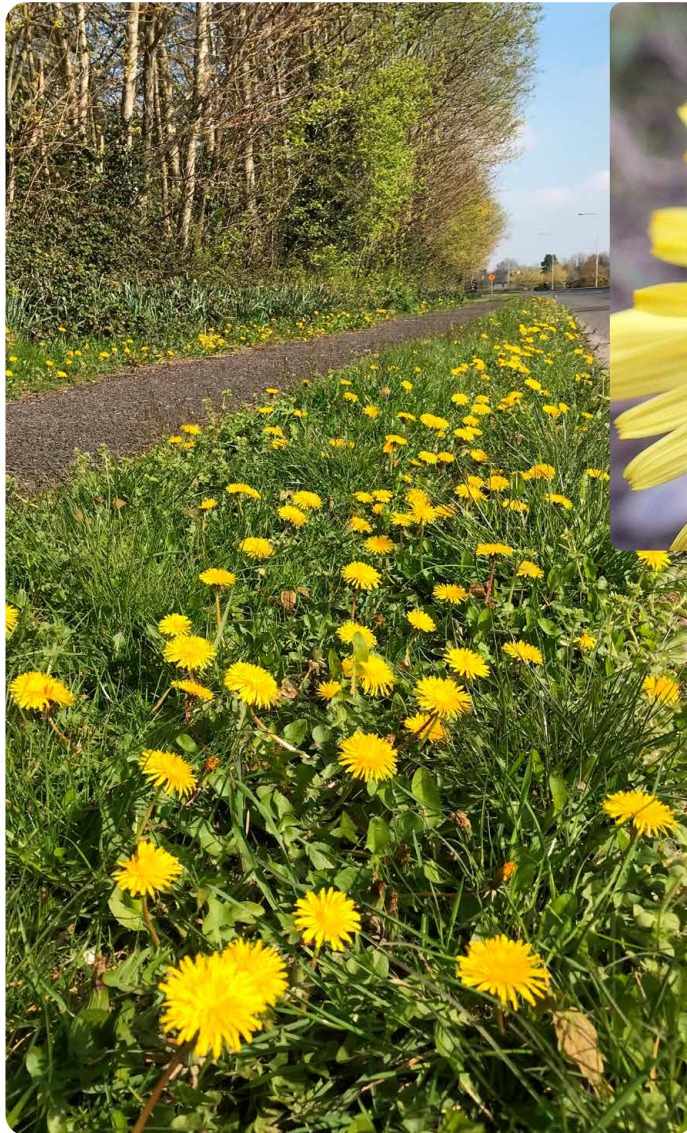
Walk around the school grounds again and see if there are areas that could be mown less frequently. You will have to liaise with ground staff/landscapers to make this happen. Your school caretaker may like to be involved in choosing suitable areas for this. It is very useful to put up a sign to explain to everyone why the grass is being allowed to grow longer, and you might like to design your own signs that suit your school.



Sample Actions

3 Let the Dandelions bloom

Don't mow grass until mid-April to allow Dandelions to bloom to provide food for bees waking up from hibernation.



A Queen Bumblebee must feed on 6,000 flowers a day just to get enough energy to brood her first batch of eggs!

Sample Actions

4 Plant some pollinator-friendly trees

Trees are very important sources of food for pollinators in spring. If you are planning to plant any new trees, why not choose a variety that is pollinator friendly?

Apple blossom



The best native trees for pollinators include Willow, Hawthorn, Blackthorn, Wild Cherry, and Crab Apple.

You could also plant some fruit trees. The bees enjoy feeding on the flowers and then you can pick the fruit in autumn!

Whitethorn tree



Our Native tree swatch will help you identify trees around your school



Sample Actions

5 Plant some pollinator-friendly flowers or shrubs

Pollinator-friendly plants for Your Garden

Our pollinating insects are in decline. One third of our 100 wild bee species are at risk of extinction. By choosing pollen-rich flowers for your garden, you will help provide much-needed food our Bumblebees and other pollinating insects as well as creating a beautiful colourful garden. There are lots of pollinator-friendly plants to choose from.

To learn more about the All-Ireland Pollinator Plan, see www.pollinators.ie

NOTE: Daffodils, Tulips, and traditional bedding plants like Geraniums, Begonias, busy Lizzy, Petunias, Polyanthus or Salvia splendens have virtually no pollen and nectar and are of little value to pollinators.



If your school plants bulbs, try to encourage them to include Crocus, which is a great source of food for pollinators in spring.

Humans like Daffodils and Tulips because they're pretty, but pollinators don't because Daffodils and Tulips produce hardly any pollen or nectar!



Rudbeckia



Aster



Mahonia



Crocus



Heathers



Salvia



Willow



Snowdrop



Eupatorium



Single flowered Dahlia



Viburnum



Helleborus

Autumn

Winter



Grape hyacinth



Broom



Allium



Bellflower



Stonecrop



Wallflower



Rosemary



Foxglove



Scabious



Verbena



Lungwort



Borage



Catmint



Lamb's-ear



Lavender



Berberis



Comfrey



Calamint



Globe thistle



Sneezeweed

Spring

Summer

Sample Actions

6 Make a sensory or herb garden

Project:

Sensory gardens are places where we can connect with nature through the five senses: sight, sound, touch, smell, and taste. Colourful flowers like Catmint, Heathers and Coneflowers, and tasty, sweet-smelling herbs like Rosemary, Oregano, and Thyme are excellent sources of food for pollinators. Think about making a school sensory garden or herb bed that can be used by bees, as well as pupils, staff and the school canteen.

Culinary Herbs

Angelica



Chives



Fennel



Sage



Mint



Oregano



Rosemary



Summer & Winter Savoury



Thyme



Medicinal Herbs

Bergamot



Borage



Chicory



Echinacea



Hyssop



Lavender



Lemonbalm



Marigold



Tansy

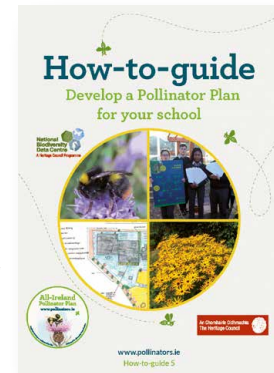


Sample Actions

7 Make some nesting sites for bees

It is very easy to provide nesting sites for wild bees. Walk around the school grounds to check for areas where you could provide safe nesting sites for bumblebees (long grass), mining solitary bees (bare soil) and cavity nesting solitary bees (bee nest boxes).

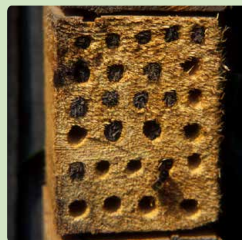
To learn more about wild bee nesting see our **Junior All-Ireland Pollinator Plan** and our **How-to-guide 'Creating wild pollinator nesting habitat'**. These are freely downloadable from the 'Resources' section on www.pollinators.ie.



It is easy to provide nesting areas for our mining solitary bees as they just need exposed soil on a south-facing bank. You can use a spade to scrape away vegetation to create these areas. Cavity-nesting solitary bees use holes in wood or stone walls.

Project: Make nest boxes for cavity-nesting solitary bees. This could be done in collaboration with your school caretaker.

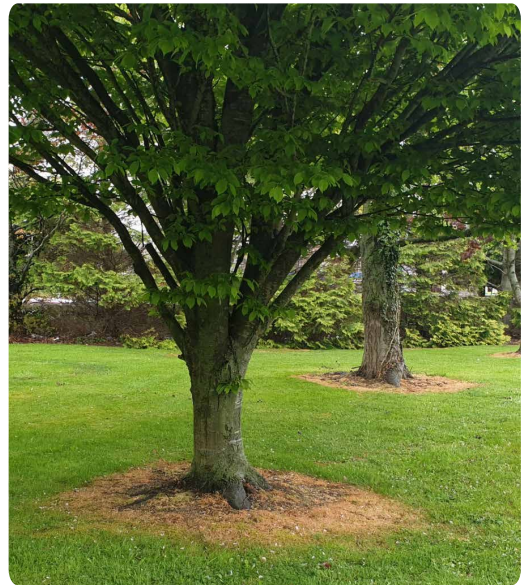
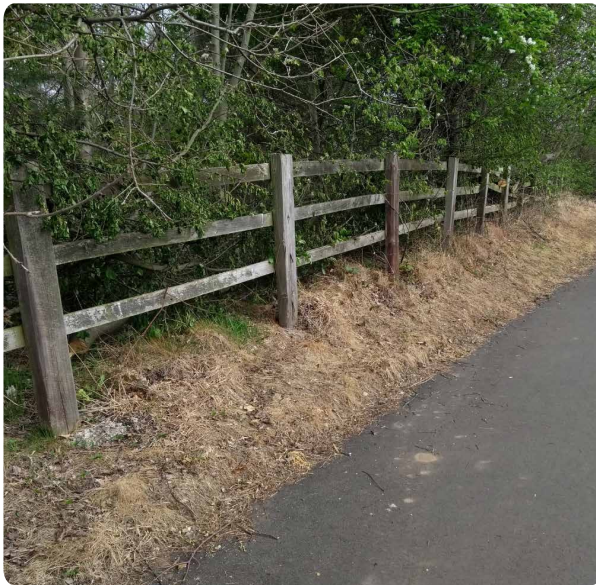
Small nest boxes are recommended over very large bug hotels. See our how-to-guide 'Creating wild pollinator nesting habitat'.



Sample Actions

8 Reduce or eliminate the use of pesticides

Speak to your School Caretaker to see how much pesticide is being used and try to reduce this. Most schools probably don't use insecticide but might use herbicide to kill weeds. If herbicide is being used, try to make sure it is only for health and safety reasons (e.g. to stop paths becoming slippery) and not to tidy up 'weeds', which are actually wildflowers that feed our hungry pollinators.



Project:

Eliminate pesticide completely and have a weeding- by-hand day in the school in areas where weeds need to be removed.



DON'T SPRAY

The overuse of herbicides is making it difficult for pollinators to find enough flowers to feed from.



Design some signs or posters to explain your school's pesticide policy

Sample Actions

9 Create a Biodiversity Walking Trail

Many sports clubs have space around the perimeter of the site where people in the community come to walk or jog. These walking routes could be incorporated into a biodiversity trail along interesting existing habitats, such as hedgerow, as well as supplementing the trail with wildflower meadows; planting of native trees, a mini-woodland or orchard.

- Native trees can be planted along the route to create a 'Native Tree trail' and each tree could be identified using small signs.
- Create bee banks or erect bee hotels at points around the trail. Bird or bat boxes could also be placed on trees.
- Parts of the walking route can follow paths through meadows, created by reduced mowing.
- Foraging sites for blackberries (Bramble), elderberries (Elder trees) among others, could be marked on your biodiversity trail map.

