



Biodiversity

in your school



Cork
County Council
Comhairle Contae Chorcaí



Biological Diversity

Biological diversity means the variety of life. This includes plants, animals, the habitats in which they live and all the natural activities that link these things together. It is not just rare or threatened species but includes all living things. Scientists currently estimate that there is 1.9 million different species of living things on earth but they also think that this is only a small portion of what is really out there.

All of us can help in keeping all these species safe. We don't have to travel to exotic forests or high mountains; we can act locally to help with the protection of Ireland's biodiversity. By encouraging our local biodiversity in school gardens it;

- Helps us to learn about and enjoy our Irish wildlife;
- Makes all our school visitors and local communities aware of Ireland's important biodiversity. This can help with people's attitude towards nature;
- Helps to pass on a healthy and functioning planet to all the future generations, a bio-diverse community is a healthy one.

Ecosystems, which are the woodlands, lakes and all different habitat types

you can think of, support us in many ways. They provide services that protect us from bad weather events such as floods. The animals that inhabit them pollinate fruit which we can then harvest. Insects keep our soils fertile and full of nutrients so that we can grow food and other plants. Clean air to breath is ensured by the diversity of trees present in many different habitats. All these reasons and a lot more make biodiversity highly important to us having healthy and happy lives.

There are lots of ways to encourage biodiversity in your school garden. By following some very simple steps you can create many mini habitats for communities of bugs, grow mini woodlands and meadows, attract many different types of birds and even invite a mammal or two into your garden.



Moving in...



Habitats do not have to be huge forests or vast deserts. One of the most important contributors to biodiversity in woodlands is dead or decaying wood. This can come from fallen or old trees or from piles left after a tree has been chopped down. These logs or dead wood can provide a mini-habitat for bugs and insects, mosses, fungi and different mushroom types, amphibians such as frogs and even some small mammals like hedgehogs. It is simple to make a log pile in your garden and in doing so you create many mini habitats and places for animals to feed, rest and eat. Any branches, pieces of wood or cuttings you have can be loosely put together in a not too shady but not too sunny area to create the right conditions for plenty

of animals to move in.

Log piles can be important for biodiversity in a number of ways. Not only do they provide a habitat for animals but they can provide shelter for some animals to hide from predators, provide dark and moist places for fungi and plants to grow on and bugs to hide in. These provide a food source for birds and mammals such as hedgehogs. Log piles and old wood are most effective when there is moisture present so burying some of them slightly may increase your chances of attracting some visitors.

Similarly, rock piles and leaf piles can provide shelter for insects, birds, amphibians and mammals. They can





also create moist areas by preventing the soil surface from drying out. Setting these up is very similar to setting up a log-pile. Loosely arrange the rocks or leaves where they will be able to retain some moisture, which means not in direct sunlight!

Use bundles of twigs or bound up straw in and around the log or rock piles. They will provide resting and hibernation hideaways for insects.

Even if you cannot make a log pile, you can make a simple bug box. You can just make a small box out of wood, put some different sized holes in the walls to allow the bugs to get in, fill it with some old plant stems and mount it on a tree or wall. It will be an ideal place for insects such as ladybirds.



Getting wet

You could consider building a small pond or water feature. You may then find insects different from those in your

other mini-habitats. You will find new plants that require certain moisture conditions and maybe even some amphibians.







Height and Light

Vegetation in the wild is split into a number of different layers; the flower layer is close to the ground with the shrub layer being higher than that but not as high as the tree layer. Creating different plant layers in your garden can encourage biodiversity as different insects and other animals may live at different levels.

If you don't have space to have different layers in your garden there is no need to worry, as other ways of attracting different animals can be used. By using plants of different sizes and growth patterns, you can create areas of light and shade in your garden. This means that animals that like shaded areas may live there as well as animals that spend more time in the open. Try and keep grasses at different heights, some short and some long. This will create a wider variety of grass habitat for insects. You can make the most of the space you have by planting some creeping plants near walls or on a trellis - Gardens can go up as well as spread out!



Invite birds into your garden with these food species

(some are good for insects too!)

- Bramble
- Crab Apple
- Hawthorn
- Holly
- Elder
- Broom





By planting a wildflower meadow or a border of flowering plants you might encourage some butterflies and other insects into your garden. Try to plant species that are rich in nectar or pollen and you will attract more insects. By planting species which are rich in berries and seeds you will attract more bird species.

When planting, make sure you plant native species of flowers, grasses, shrubs and trees. Using native species means they will be more suited to your soils and will prevent the spread of species that are not welcome here.

Bring in some insects with these species

- Devils-bit Scabious
- Common nettle
- Thistle species
- Honeysuckle

Even without planting you can encourage an increase in biodiversity by leaving a 'wild corner' in your garden. By leaving plants grow to different sizes without cutting and managing them you leave plenty of mini habitats for small creatures and insects.

Flying visits

Building bird tables or bird boxes will attract the bird species to your garden also. To invite in some more flying creatures you can put up some bat boxes. Make sure your bird boxes do not face into direct sunlight and are sheltered from the rain to provide the best homes for visiting birds. Hopefully you will see your boxes occupied in the Spring by new families of birds.

To attract different types of birds to your garden you can provide different types of food. Nuts, seeds, fruit, some kitchen scraps and even some fat from cooking will attract different bird types. Maybe you can do a weekly small collection of food from home in your class, or make some feeders? Just make sure and move the feeding spots regularly to avoid against an unwelcome visitors.

Some two winged visitors you might attract

- Wren
- Blackbird
- Chaffinch
- Robin
- Goldfinch
- Blue tit
- Song Thrush
- Greenfinch
- Siskin





Birdwatch Ireland have an easy to follow factsheet on building bird boxes on their website and have lots of advice and tips on feeding birds too!
www.birdwatchireland.ie

Bat Conservation Ireland have guidelines for building bat boxes on their website under 'publications'.
www.batconservationireland.org

Unwanted guests

Some insects and bugs might seem like unwanted guests in your garden. They may feed on some of the plants that establish themselves in your habitats. Pesticides that are used to kill off unwanted insects are not good for biodiversity and will cause an upset in the natural balance of your garden. You can however control unwanted invaders naturally with species that will feed on them. This in turn will increase your biodiversity value! Greenfly can form huge populations in a garden and eat their way through your vegetables and delicate plants. Other bugs and small creatures such as ladybirds and lacewings feed on these and keep them under control. The bug boxes and straw bunches are perfect habitat for these feeders and they will help keep your nasties at a controllable level. Hedgehogs too can be a great friend to the gardener as they love to eat slugs.

There are certain species of plants that are not native to Ireland which can actually cause a decrease in biodiversity. These plants should not be planted as they spread easily in the wild because they have no natural predators to control them. This means that they can outcompete our own native species for light and space.

Do not plant these aliens!

- Himalayan balsam
- Pot marigold
- Yellow corydalis
- Sticky groundsel
- Water primrose
- Pennywort

These are just examples so make sure and check
www.invasivespeciesireland.ie
if you are unsure.





Habitats for biodiversity

Many of these methods are based around creating 'mini-habitats'. Generally if you have more mini-habitats in your garden you will find more bio-diverse communities of animals. Mini-habitats create different niches for animals to live in. Think about creating habitats such as a hedgerow, a meadow, a mini woodland, a stone wall or a pond for example.



Learn More

www.batconservation.org

Information on Irelands bat species and their conservation.

www.birdwatchireland.ie

Lots of information on Irelands birdlife. The kids zone section of the website has easy to follow information and instructions about feeding garden birds.

www.greenschoolsireland.org has lots of information about biodiversity in gardens as well as biodiversity generally.

www.heritagecouncil.ie

Download Eanna Ní Lamhnas Wild Things at School Booklet and explore the Heritage In Schools Programme on this website.

www.noticenature.ie

Access the notice nature junior page for lots of information about Irelands biodiversity.

www.wildflowersofireland.net

A brilliant resource showcasing Irelands wild flowers by season and colour.

www.geneticheritageireland.ie/growingwild/

Some good tips on eco friendly gardening and getting your wild garden started.







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This leaflet can be downloaded from www.corkcoco.ie/heritage