



ISSU
IRISH SECOND-LEVEL
STUDENTS' UNION

Be Kind to Biodiversity

A guide to how schools can contribute to the conservation of biodiversity within their community

Irish Second-Level Students' Union (ISSU)

The Irish Second-Level Students' Union (ISSU) is the national representative body for second-level school students in the Republic of Ireland. The ISSU aims to work towards an education system in which the views, opinions and contributions of students are respected and in which students are recognised as an official partner in creating an education that is centered around and caters best for students.

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Foreword by the Sustainability Officer

'Be Kind to Biodiversity' focuses on a key aspect of human life and a core element of every school community. Biodiversity is a sustainable concept, it has to and will last for thousands of years into the future. No matter how digital the world will become, human life simply will not sustain without biodiversity. A key aspect of biodiversity is the education surrounding it. Biodiversity education helps students develop an environmental awareness and understand the crucial role they play in preserving the planet's natural resources. Education on biodiversity promotes scientific literacy and helps students develop critical thinking skills. By learning about the complexity of ecosystems, students can develop an appreciation for the interdependence of species and the impact that human actions can have on the environment. Understanding biodiversity can also lead to exciting careers in fields such as conservation biology, ecology, and environmental science. These are all reasons why we should implement adequate Education for Sustainable Development and Biodiversity Education into all levels of education, especially in second-level institutes. This education can open doors to many fulfilling and impactful careers that students may not have considered otherwise. This resource aims to make our school communities appear that slightly bit greener, but in reality, we will make each area and our future thousands of shades brighter.



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Sustainability Officer 2022/23

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Chapter 1: Biodiversity

What is biodiversity and how does it impact students?

Biodiversity is the “variety of plant and animal life in the world or in a particular habitat, a high level of which is usually considered to be important and desirable”, by textbook definition. In simpler terms, it means the different living things living in various places. Biodiversity is everywhere and surrounds us. Examples of biodiversity are not only amazingly enormous, like waterfalls but also the tiny beetles and bugs found in forests and even the distinct species of pinewood. All these things in our environment play a key role in our lives even if you may not think so.



If our precious trees and grass were not here, we would have little oxygen left that could sustain us. If certain species of animals went extinct, the wildlife would suffer, and we might lose them as a result as well. A more local impact would be people littering. Littering causes an unsafe environment for animals to reproduce and make a home. These things may not affect us too badly right now, but they will in the future and already nature and the animals are suffering because of it. We as young people can do things to help stop this, stop the suffering. We are the future. This document sets out ways in which you can help through the ways listed below and make a difference so we can have a more sustainable, greener future for all where we preserve our unique heritage.

What can you do to help?

You could talk to your teacher, probably for science or geography, to do something for their class. You could hold a class where you and other members of the Green Schools Committee talk about what biodiversity is, why it's important and what students can do to help. If you don't have a Green Schools Committee, we suggest talking to your student council about setting one up and even having someone on the student council be a Sustainability Officer involved in overlooking that.



After you have a class discussion on that throughout the school, you could ask students to chip in with a small amount of money to plant greenery around the school. Any extra funds could go to one of the charities listed below (one that the Green Schools Committee picks). You could even do a survey on what plants students want and where they want them. Once you have done this, a team will be needed to care for these plants.

To get more student involvement it would be a clever idea to form a group with TY and LCA students (although the involvement of students from all years will expand the knowledge of biodiversity further throughout your school and community) and even get them to plant the plants. They would check up on them to make sure they're growing properly once a week or more. You could make this whole project more fun by asking the students to nominate a name for the plants per year group and make the whole school vote. To help you with this project, you could also look at 'Biodiversity in Schools'. They have lots of resources and even a similar workshop, we recommend checking them out!

Some things you could do to raise awareness of issues surrounding this are to reach out to different charities. Lots of charities/organisations do webinars, trainings and in-person workshops with schools.

The Irish Wildlife Trust (IWT) is a well-established organisation that runs online webinars and events. They run a 'People For Bees' workshop which is very topical and useful. Their website is great for other wanted information.

BurrenBeo Trust, Irish Peatland Conservation Council, Easy Treesie, Irish Seed Savers and BirdWatch Ireland are all great charities to look at. There are many more out there so don't be afraid to research charities more to your liking. You could also raise money with your school to donate to these charities instead.

Presentations and Quizzes:

There are so many different variations of powerpoints on biodiversity available online that you and the Green Schools Committee could run for all students in your school. Here are some tips on how to get started:

- Think about creating different presentations with a wide range of content for different school groups. For example, one presentation for Junior



Students and one for Senior Students. While you could focus on more in-depth topics for the older students, a wide range of knowledge spread across the entire student body could make more productive Green Schools Committee and Student Council meetings, where every student has received information in a different area of biodiversity.

- Topics could range from a specific issue the committee or council want publicised, such as wildlife conservation or tree planting, to more local and across-the-board topics like appreciating Ireland's natural landscapes.
- Think about featuring a charity or charities on the presentations to raise awareness for the work that they do to uphold our environment.
- Make use of professional apps like PowerPoint, Google Slides or Canva to make attractive and appealing presentations for the students. Using websites such as Canva means you can use many colours, designs and features to display the information you want, all for free.
- Try not to make it exceedingly long and wordy. Visuals, graphics and diagrams help to keep students engaged, making it more likely to be remembered and not forgotten straight away. One way to make it interactive is to make an easy quiz for the students at the end. You could make it online on an app like Kahoot or use a pre-made one.
- Enquire with local charities or climate conservation groups to see if they give talks to secondary school students.

Talk to your Decision Makers:

Engaging directly with your local decision makers is often seen as the best and easiest way to bring about change. Here are some tips and important things to remember when reaching out to local County or City Councillors, TDs or Ministers:

- Firstly, you will need to find out who your local representatives are.
 - To find your local councillors, the gov.ie website contains the links to all local authority websites in Ireland. Each council website contains a list of all councillors by Local Electoral Area (LEA).

- To find a local TD or Senator, the Oireachtas website contains a search function where you can filter all members, past and present, by constituency, party or Seanad panel.
- Utilise the template email to decision makers in Appendix 1 of this resource and change it based on what you are emailing about. Make sure the language used is formal and correct. Always try to address and close the email as Gaeilge.
- Don't worry if you do not get a response, especially from high-ranking TDs and Senators. You can always follow up with them after a week or two to reiterate what you are writing to them about.



Biodiversity Map:

An amazing way of increasing awareness about biodiversity amongst students and staff in the school is by creating a unique biodiversity map to display in a well-visited area, perhaps the canteen or common area.

To begin, a group of students should be selected from different year groups (perhaps Junior Cycle as it links into the Junior Cycle Science Curriculum) with the initial aim of drawing up a map of their school grounds. They must include buildings, walkways, green areas, water sources etc. Step two would be to highlight the different habitats and species on the map and highlight this diversity with the use of different coloured sections. A key should be included so that those who see the map are aware of the different species and plant varieties on the grounds.

An additional and recommended step to take is to include an extra section that indicates the work that your school is doing to help the conservation of each of the species, for example, if littering is forbidden on the pitch, this is an example of a biodiversity conscious action being taken in this area. Therefore, whenever anyone looks at the map, they are aware of the action that is being taken across the grounds.

The goal of this activity overall would be to create awareness about the biodiversity that surrounds us in our everyday lives at school and to aid students and staff in understanding how their actions across the campus affect the different species present. We believe that creating a map that is aesthetically pleasing and comprehensive should certainly do the trick in helping the conservation of biodiversity as it increases awareness within the school community.

Biodiversity Linked Transition Year Mini-Companies

Across Ireland, many Transition Years students set up mini companies to enhance their enterprise, teamwork, presentation, communication and creativity skills during the year. It is a great opportunity and an amazing chance to receive an insight into the world of business and to learn from a hands-on perspective.

We strongly recommend encouraging students to take consideration of the environment when brainstorming ideas for their selected companies as in today's society, this is of utmost vitality. There are so many ways in which they can be linked to biodiversity conservation. Some ideas of ours include:

- Homemade bird feeders
- Wildflower seeds
- Mini gardening sets
- Bird feed

Transition Years who select ideas that have a connection to biodiversity for their mini company not only are taking their own stance in promotion of biodiversity but also would undeniably be of great help in spreading awareness about its importance across the school community and the target audience to which they aim to sell their products to!

Butterfly Garden:

Butterflies are great for your school grounds as they are attracted to bright flowers and need to feed on nectar. When this has been done, they carry pollen to other plants helping fruits, flowers and vegetables to produce new seeds. However, we often overlook the importance of butterflies in our daily lives even though they are very beneficial. That is why we believe setting up a butterfly garden in your school is a great way to help their preservation.

Your school's Green Schools Committee could take charge of this action; however, it is an action that the whole school community could get involved in! Firstly, a plot of land should be decided on with the help of a teacher. The size of the plot can be big or small depending on the amount of land available to you. It is then important to decide on a budget for the garden and to brainstorm ideas on what plants you would like to include in your plot. Some suggestions are buddleia, red valerian, holly, buckthorn and wildflower mix. Ask in your local gardening centre what options are available to you. Next it is important to plant the plants accordingly in the plot and to signpost the different types of plants. This might even inspire students to set up their own butterfly gardens at home! Be sure to keep an eye out for any visitors to the garden!

Biodiversity Walks:

Another way to spread awareness about biodiversity amongst the school community is by taking part in biodiversity walks in your locality. If your school is fortunate enough to have a local town park rich with biodiversity, this is an amazing resource to make use of for this activity. However, we are firm believers that biodiversity is present everywhere and so, even if you are not lucky enough to have a park nearby, you should still be able to do this activity with students on the school grounds.

Evidently, a key aim of these walks is to allow students to observe the wide variety of species in their own local communities.

However, aside from raising awareness about what biodiversity is present, we believe these walks would also be beneficial in encouraging students to take action and be more environmentally conscious when they are out and about in future. As little as highlighting the positive impact that not littering has on the species they are observing first-hand on this walk proves this to be a useful activity.

Some recommended guidelines for these walks include:

- Groups for these biodiversity walks should be relatively small so that students find them as beneficial as possible.
- We recommend that all distractions are left behind e.g. phones so that the aims of the walk are achieved.
- Ensure no littering takes place on these walks
- Design a quiz with a prize to be completed after the walk so as to encourage students to really listen during the exercise.
- Get students to prepare and then lead the activity for their peers. It is often said that our peers inspire us to learn more than our teachers!
- Depending on your preference, students can bring notebooks to take notes about their observations. Afterwards, the different observations/ patterns/ questions students may have can be discussed in class with the peer group.
- Set a challenge amongst students regarding who can find the widest variety of species throughout the walk.

Chapter 2: Food Waste

Food Waste Quiz

An excellent method of implementing the school food waste policy is through education. So why not make it fun?! Your Student Council can organise a food waste quiz. Perhaps for 1st year or 4th years, or get the whole school involved! Consider using platforms such as Kahoot or Blooket therefore removing paper use from the process.



The quiz can be used to educate students on how to discard waste or teach them the value of food through some more general questions.

Here's some question ideas:

- What percentage of food produced gets waste? (A: 25%+)
- What colour bin should food waste go into? (A: Brown*)
- What percentage of global greenhouse gas emissions comes from food waste? (A: 8-10%)

*Note this may vary by school

Guest Speaker - The Value of Food

Guest speakers can be used for forwarding a proposal or policy the Student Council is trying to implement. This can work for food waste policies! Your Student Council can invite a guest speaker to your school to speak on the value of food.

Some potential guest speakers may be:

- A speaker from a food waste or environmentally focused charity e.g. A speaker from Food Cloud or VOICE
- An ISSU Officer (online)

Canteens and Sustainable Materials

Once goods are unpacked, the packaging becomes waste. Ireland generated 1.12 million tonnes of packaging waste in 2020 (EPA). Canteens account for this waste also! The question to consider is how do we reduce food packaging waste in canteens?

Canteens should strive to achieve a zero plastic policy and your Student Council can help achieve this by advocating for these policies:

- Ensuring plates, glasses and cutlery used in the company canteen are completely biodegradable and compostable. (Compostable sugarcane cutlery is an excellent alternative).
- Advocating the abolishment of plastic bottles to be replaced by a refill bottle system.

The 3 Bin System

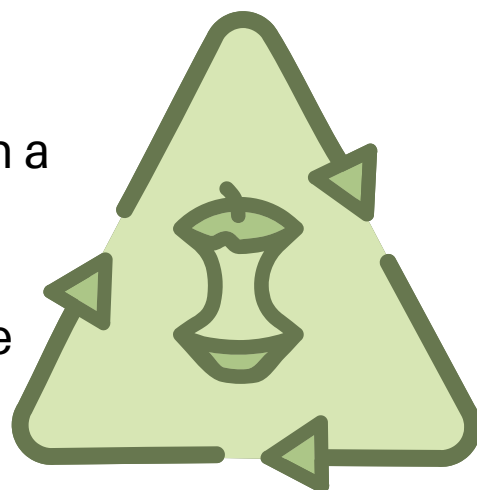
Having 3 different bins each in canteens, home economics kitchen, staff room will help encourage people to dispose of their waste correctly. Each bin has a specific purpose, which is listed below. These bins need to be colour coordinated and labelled.

- Recyclables Bin:
 - This bin should be the same colour throughout the school, e.g. blue.
 - This bin must have a clearly legible label on it/near it to let people know what it is for. This label could include a list of some common recyclable items, e.g., plastic bottles, extra paper, cardboard.
 - NOTE: All recyclables must be clean, milk cartons etc. must be rinsed out with water before being put into the recyclables bin.

- **Compostable Bin:**
 - This bin should be the same colour throughout the school, e.g. brown.
 - This bin must have a clearly legible label on it/near it to let people know what it is for. This label could include a list of some common compostable items that CAN be put into this bin, e.g., banana peels, teabags, eggshells.
 - It is important that people using this bin know that not all food waste can be put into it. A list of common food waste items that cannot be put into this bin should be provided on the label. Including items such as meat/fish scraps, dairy products.
 - This bin must be emptied into the school compost heap/bin.
- **Waste Bin:**
 - This bin should be the same colour throughout the school, e.g. black.
 - This bin must have a clearly legible label on it/near it to let people know what it is for. This label could include a list of some common items that should go into this bin, e.g., used tissues, contaminated food containers, broken crockery.
 - NOTE: Some items may be recyclable, but if they cannot be cleaned, they must be put into the waste bin, e.g., greasy pizza boxes.

How to Compost: A Quick Guide

Composters are a brilliant thing to have in your school. It is important that you know how to compost. Below is a short, how to guide on composting.



1. Start your compost pile on bare earth.
You may want to have your compost in a compost bin, just make sure that the bottom is open to let worms, microorganisms and other bugs aerate the compost.
2. Lay some dry, compostable materials first. Some twigs or dry straw/grass, about 10cm deep. This will aid drainage and help aerate the compost.
3. Alternate moist and dry layers of compost.
 - a. Dry compostable materials include:
 - i. Sawdust
 - ii. Dry leaves
 - b. Moist compostable materials include:
 - i. Teabags
 - ii. Food scraps (banana peels, eggshells).
4. Add a nitrogen source/manure. Grass clippings would be the most easily accessible. This will activate the compost pile and help speed up the composting process.
5. Cover your compost bin/heap with a tarp, a lid etc. Anything that will retain moisture and heat. Covering the compost will help prevent it from getting over-watered from rain.
6. It is important to keep compost moist. Occasionally water it or open it and let the rain into the compost. It should be kept moist, not soaking.
7. Turn the compost. Every 2-3 weeks, using a shovel or pitchfork mix/turn the compost. This will aerate the pile and add oxygen into the compost.

8. Once you have an established compost pile, add new materials by mixing them in, instead of in layers.

Important: Do NOT put meat/fish scraps, dairy products, ashes or pet waste into your compost.

School Garden & Composting

School Garden:

- Having a school garden is a really sustainable way to reduce food waste in your school.
- The food grown in the school garden will be used by the canteen and home economics students to make healthy meals and this will reduce the amount spent on food by the school.
- Students may be more inclined to eat the food as they have grown it themselves.
- Students learn patience and the value of teamwork.

Composting within the School Garden:

- If you have a school garden, it would be really worthwhile introducing a compost bin or compost heap into your school. This would be a great way to dispose of any grass clippings and food waste from the garden.
- Follow the advice above about composting and get started! (“How to Compost: A Quick Guide”)

Appendix 1: Template Email to Decision Makers

Councillor/Deputy/Senator *[last name]*, a chara,

Tá suil agam go bhfuil tú go maith. My name is *[full name]* and I am a *xth* year student in *[school name, school county]*. I serve as the *[position title]* on the school's Student Council/Green Schools Committee. I am writing to you today to raise a very important topic to students and young people in *[Constituency name]*, *[topic: what you want to talk about]*.

[This paragraph can be full of facts, figures and information on what you are contacting the decision maker about.]

[This paragraph can include a possible solution or solutions that you would like to further discuss with the decision maker. Remember, it is always good to ask the decision maker for a meeting where you can meet and discuss the issues raised over email.]

Thank you for taking the time to read my email and I look forward to your response.

Is mise le meas,

[Full name]

[Position title]

[School]

[School address]



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