

Green-Schools

Autumn Seminar 2022



Biodiversity Theme

Green-Schools is in the: Environmental Education Unit of An Taisce



Green-Schools: The Programme



- **International Environmental Programme**
- **Award Scheme**
- **Long-term programme**
- **Holistic**
- **Ethos**
- **Whole-school Action**

Green-Schools for Everyone – Inclusivity Statement

Green-Schools' mission is to protect planet Earth - our shared home to which we all belong -and we want everyone involved!



We warmly welcome students of all backgrounds, cultures, races and ethnicities, religions and belief systems, abilities, sexual orientations and gender identities. Equity, diversity and social justice are fundamental to our values – so whoever you are, we can't wait to have YOU involved

Green-Schools: In Ireland 2022



- >92% of all schools in Ireland
- 3,708 schools registered
- 3,398 schools awarded
- 81,013 teachers
- 889,612 pupils

Schools

Industry

Sponsors

Local
Authorities

An Taisce



Green-Schools

 An Taisce

Partnership

Green-Schools Themes



9: GC Travel



10: GC Food & Biodiversity



1: Litter & Waste



2: Water



8: GC Marine Environment

Green- Schools
Themes



3: Energy



7: GC Energy



6: GC Litter & Waste



5: Biodiversity



4: Travel

The National Parks and Wildlife Service support the Biodiversity Theme



An Roinn
Cultúir, Oidhreacht agus Gaeltachta
Department of
Culture, Heritage and the Gaeltacht



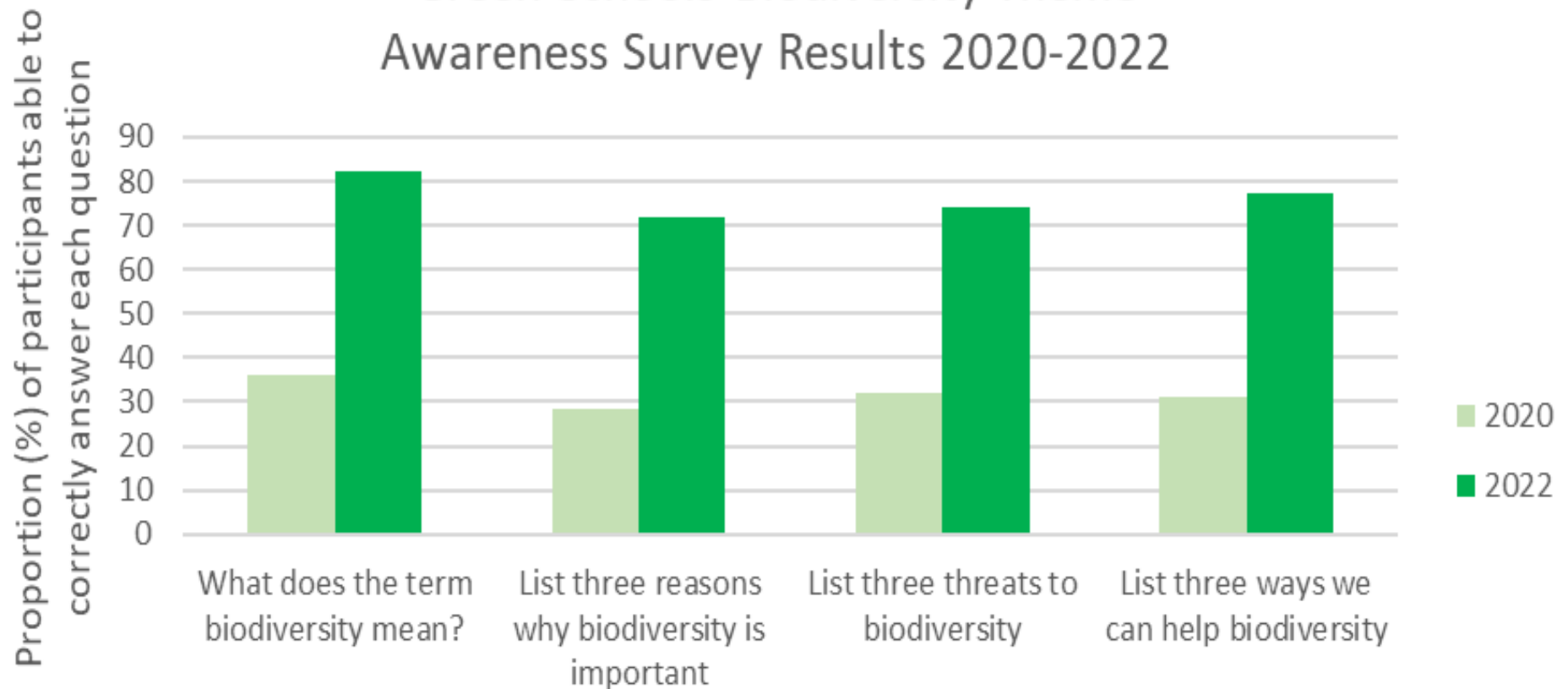
Ireland's 3rd Biodiversity Action Plan

Objective 3:

*“Increase awareness and
appreciation of biodiversity
and ecosystem services”*

Does Green-Schools Make a Difference?

Green-Schools Biodiversity Theme
Awareness Survey Results 2020-2022



(n=108 Schools, >25,000 students)

Does Green-Schools Make a Difference?



GREEN-SCHOOLS SAVINGS 2021/2022



642 schools awarded

LITTER&WASTE

53 first green flags awarded
77% of schools reduced their landfill waste
57% carried out a community clean up



WATER

88% of schools had excellent awareness about water
77% have a water butt and/or a rainwater harvesting system and 56% carried out a cleanup of a beach/river/canal



TRAVEL

86% of schools recorded an increase in sustainable travel
20,725 students participated in 855 WOW days



BIODIVERSITY

77% of the students understand how to help biodiversity.
3608 trees planted and 304 new bug hotels



GLOBAL CITIZENSHIP

30,000 students increased knowledge on global citizenship to good and even excellent
528 Irish students participated in the Global Classroom project

MARINE ENVIRONMENT

95% of schools investigated marine litter prevention
59% of schools investigated Global Goal 14: Life Below Water



FOOD AND BIODIVERSITY

100% of schools grew crops on their school grounds
52% of schools did Cooking Skills Workshops
More than 95% of schools took part in two or more cooking activities



www.greenschoolsireland.org

2021/2022 In Review



>3500 trees planted

>250 new vegetable gardens developed

>600 bird feeding stations were created

100 s of bug hotels, log piles, leaf piles, ponds, bat boxes, bird nest-boxes and so much more!

What is Biodiversity?

Biodiversity, or *biological diversity*, is the variety of life forms; from the tiniest flower on your lawn to the largest animals at sea



A high level of diversity is considered to be very important and desirable.

Biodiversity in Ireland



- ❑ 815 flowering plants
- ❑ 78 native ferns
- ❑ 21 broad-leaved native trees
- ❑ 23 native trees
- ❑ 759 mosses and liverworts
- ❑ 3,000 fungi
- ❑ 1,050 lichens
- ❑ 1,400 algae
- ❑ 50 mammals
- ❑ 22 land mammals
- ❑ 425 birds recorded
- ❑ 27 freshwater fish
- ❑ 5 marine turtles
- ❑ 3 amphibians
- ❑ 1 reptile
- ❑ Unknown invertebrates...
15,000 documented to date



Why is biodiversity so important?



Why is biodiversity so important to us?



... Other reasons

- Many species are of unknown value to us
- Many species not yet discovered may be of value to us
- All biodiversity is intrinsically valuable for itself



'The Social and Economic Aspects of Biodiversity in Ireland'

DEHLG 2008

In Ireland, each year:

- Biodiversity is valued at > €2.6 billion
- Earthworms' work is valued at €1 billion
- Pollination is valued at €52 million

Could we afford to replace these services?



What is happening to Biodiversity?



Habitat loss, fragmentation & destruction

- Loss and fragmentation are the main threats to biodiversity around the world and here in Ireland
 - E.G. Rainforest, palm oil & Peatlands
- Habitat destruction changes the conditions needed for particular plants and animals to survive
 - E.G. Wetland drainage



Litter & Pollution

- Causes the death for millions of animals and plants each year
- Globally, over 1 million sea birds, 100,000 turtles and sea mammals are killed by litter every year!



Climate Change

- Change in 1 or 2°C will affect the habitats in which species live
 - E.g. Polar regions
- Some habitats may even become uninhabitable to some species
- Because Ireland is an island some species may not be able to migrate and may become extinct



Invasive (alien) species

- Non-native to a particular area
- Often introduced by humans
 - E.g. Australia – Cane Toad
- Spread very quickly
- Can affect food webs



Over-exploitation

- Removal of plants and/or animals from a habitat to the point of no return!
- Example - over fishing of a single fish species e.g. Cod





Green-Schools 7 Steps

&

Ways in which we can help
BIODIVERSITY



Step 1: Green-Schools Committee



Step 1: Green-Schools Committee

- Students (N.B. student led)
- Co-ordinator
- **Optional**
 - Sub-Committee for previous theme
 - Other staff
 - Parents
 - Community Members
- Remember! Whole school involvement!



Step 2: Review (- BEFORE taking action!)

There are 2 ESSENTIAL actions:

1. Biodiversity Awareness Survey (4 essential questions to be answered)
2. Compile a Habitat Map

Revisit previous themes & link with Biodiversity theme, and remember your Action Day!

Biodiversity Awareness Survey

Year 1

	Survey 1
Date Survey Conducted	
What % of students and staff knew what the term biodiversity meant?	
What % of students and staff were able to list 3 reasons why biodiversity is so important?	
What % of students and staff were able to list 3 threats to biodiversity?	
What % of students and staff were able to list 3 ways in which we can help biodiversity?	

Habitat Mapping

A **habitat map** shows the geographic distribution of different habitats within a particular area

What is the purpose of habitat mapping?

- Gives a baseline/start point for your school
- Identifies priority areas/species that you might wish to protect

Your school's habitat map should:

- Show the layout of your grounds
- Include any and all types of habitats on the grounds including yard, pitches, trees, hedging, raised beds etc.
- Help identify areas needing improvement



Habitat Mapping



We have lots of resources to help you create a habitat map with your class.

- [Presentation](#) and [Webinar](#) recording for teachers
- [Lesson Plan](#) to use in school

Step 2: Review

Recommended Actions

Investigate your habitats & Record findings



How to record/investigate

Ask yourself some questions & record the answers in your Nature Notebook

- What am I going to investigate: trees, plants, animals, invertebrates?
- Bring any identification materials that you have access too, or alternatively: Bring your phone, take photos to compare with nature identification sheets when you're back in the class.
- What time of the year is it, spring, summer, autumn or winter?
- What time of the day is it?
- What is the weather like?
- Where are you/what habitat are you investigating?



Step 3: Action Plan

Two overall objectives

1) Increase levels of awareness

2) Practical improvements



Step 3: Action Plan

1) Increase levels of awareness

- Follow along with our "[Nature's Calendar](#)" for seasonal actions and activities.
- Habitat/species surveys (home/school/local area)
- Find out about species that are specific to local area
- Develop nature trails
- Schedule time outside with planned activities
- Examine food chains (top predator present?)
- Letters home
- Share results of Awareness Survey
- Develop a connection with nature



Step 3: Action Plan

2) Practical improvements

- Leave areas 'unmanaged' (hedgerows/grass areas)
- Plant native trees/flowers
- Develop an organic garden
- Create a pond/log pile/leaf mould/wildlife area/'mini-beast' hotel
- Build bird boxes (unused/old wood)





Online supports to help with identification

e.g.

- National Biodiversity Data Centre
- Birdwatch Ireland
- Irish Wildlife Trust
- Tree Council of Ireland
- Wildflowers of Ireland
- Many expert sites exist for a variety of animals/plants/fungi etc
- For example, Butterflies
 - www.irishbutterflies.com
 - www.butterflyconservation.ie
 - www.irishmoths.net



Further actions

- Get involved in national surveys in conjunction with The National Biodiversity Data Centre (e.g. Butterfly/Bumblebee surveys) www.biodiversityireland.ie
- Download their All Ireland Pollinator Plan or the JUNIOR Pollinator Plan for information and tips on how to make your school more pollinator-friendly.
- NPWS – why not investigate one of Ireland's six National Parks and find out why they are so important



National Parks & Wildlife Service

Sample Action Plan

Action	Person/Group Responsible	Time Frame
Send a letter home to parents informing them that the school is now participating in Green-Schools Biodiversity.	Green-Schools Coordinator	Early September
Carry out a Biodiversity Awareness Survey to examine the level of awareness among students and staff	Green-Schools Committee	Early to mid September
Habitat Map the school grounds and do up a list of the biodiversity in our school	Green-Schools Committee	Early to mid September
Quantify & Display the results of the surveys on the Green-Schools notice board	Green-Schools Committee	Mid September
Analyse the survey and suggest recommendations.	Senior classes	During maths periods mid-late September.
Hold a poster/slogan competition to come up with a new Green Code relating to biodiversity	Whole school	Late September – early October

Step 4: Monitoring & Evaluation

(mini reviews at key stages)

Increasing the numbers of animals visiting your school takes time. It is also tricky to evaluate! Don't be discouraged, action is as important as results!

1) Evaluate levels of awareness

- Repeat the Biodiversity Awareness Survey

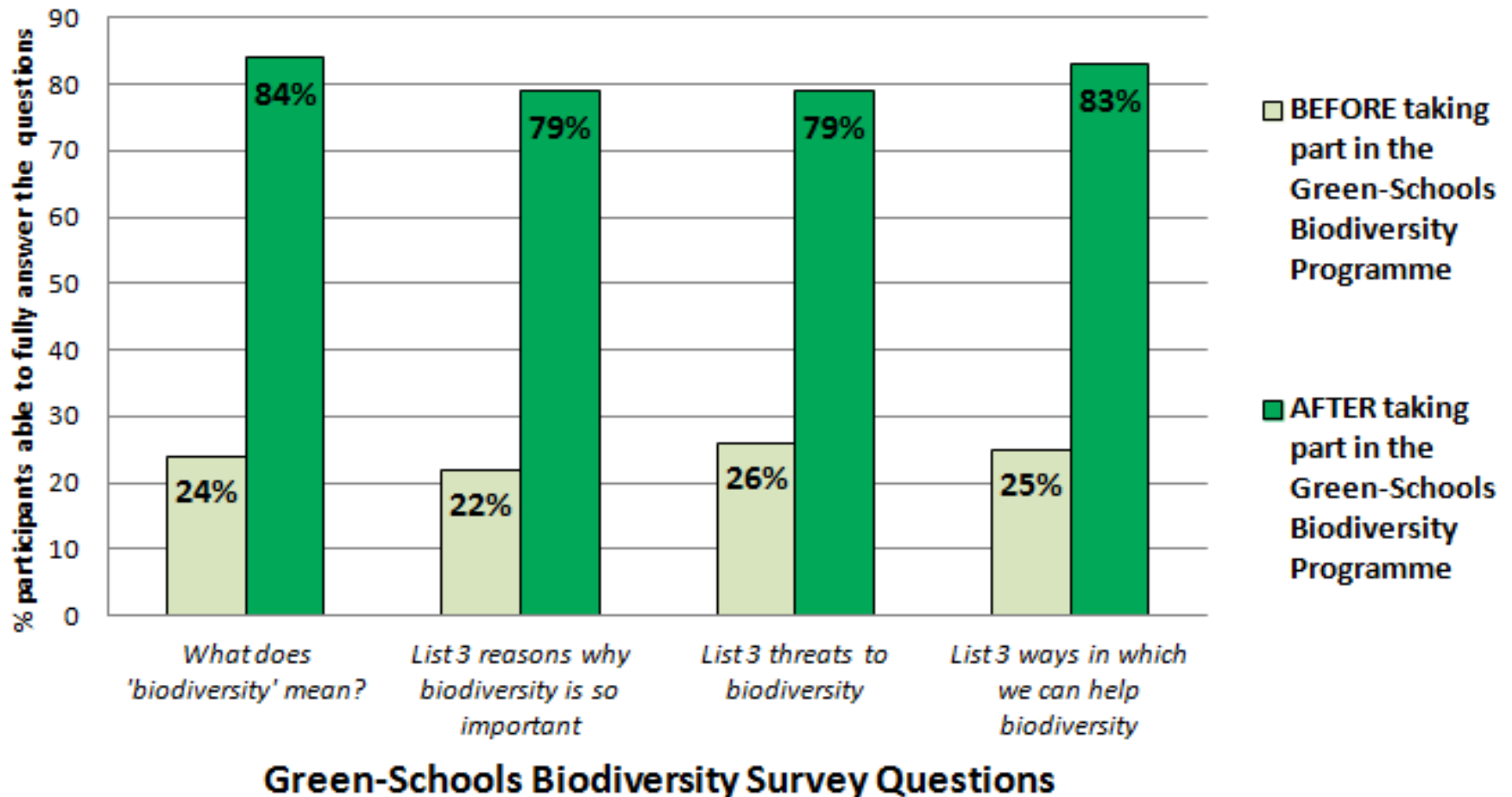
2) Evaluate progress on practical improvements

- Create a new Habitat Map in Year 2
- Identify practical improvements (log pile/bird box)
- Has the no. of sightings/no. of species increased?
- Has species richness increased?



Sample graph showing typical % increase in level of awareness between Year 1 & Year 2

Proportion (%) of students and staff who could answer the Green-Schools Biodiversity Survey Questions

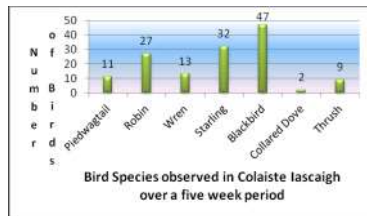


Habitat Map Year 2



The Habitat Map in year two should show any practical improvements made to improve biodiversity in the school. Note any trees planted, wildflower areas installed, areas where bird feeders were hung etc.

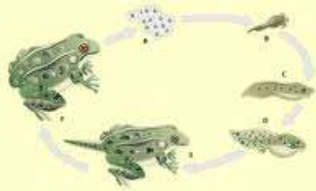
Step 5: Curriculum Work



Maths

Provide real life situations for mathematical analysis (graphs/charts)

Life Cycle of a Frog



SESE Science

The living things strand, study of habitats & species



Art

Poster design promoting biodiversity

Step 5: Curriculum Work



Home Economics

Examine where our food & textiles come from



Woodwork

Design & construct bird tables/boxes



History

Loss of habitats & species throughout time

Step 6: Informing & Involving

- Green-Schools Notice Board
- Local Press
- School Newsletter
- Action Day (International Biodiversity Day 22nd May, Tree week, National Spring Clean event, Clean Coast Event)
- Parents/Grandparents/Neighbours
- National Parks & Wildlife Service



Step 7: Green Code

Aim: To show your school's commitment to the environment.

- Display on your Green-Schools notice board
- Poster/slogan competition
 - Rap/Song/Poem/Code of Conduct

**Stokane National School,
Co. Sligo**

*'Let our generation protect
all creation'*

**Roscommon Community College,
Co. Roscommon**

*'Ecosystems can be a bog, a
bush or a hedge,
So protect and promote, Be a
ledge!'*



Images from Biodiversity schools



Renewal Process

- Online Application Form – **to be submitted by Friday, March 24th 2023**
- **You must have received your visit before you submit your application form,**
- Renewal visit can take place at any stage during Year 2
- National Awards Ceremony May (tbc)
- Flag raising ceremony



Green-Schools website

www.greenschoolsireland.org

- General information on biodiversity
- Presentations
- The 7 steps
- Case studies
- Worksheets
- Links to other useful sites



Biodiversity Events - Dates for your Diary

National Tree Week

- March 20th – 26th in 2023.
- Green-Schools will celebrate this with interactive events.

International Biodiversity Day & National Biodiversity Week

- Friday, May 22nd is International Biodiversity Day.
- Ireland's National Biodiversity Week is celebrated around this day.
- A great day & week to hold a "Day of Action"
- Green-Schools Biodiversity will host an event during this week – so mark it in your diary!





Applications open from September 19th to October 23rd: www.climateambassador.ie

Instagram @climateambassador

Twitter @climate_ambass

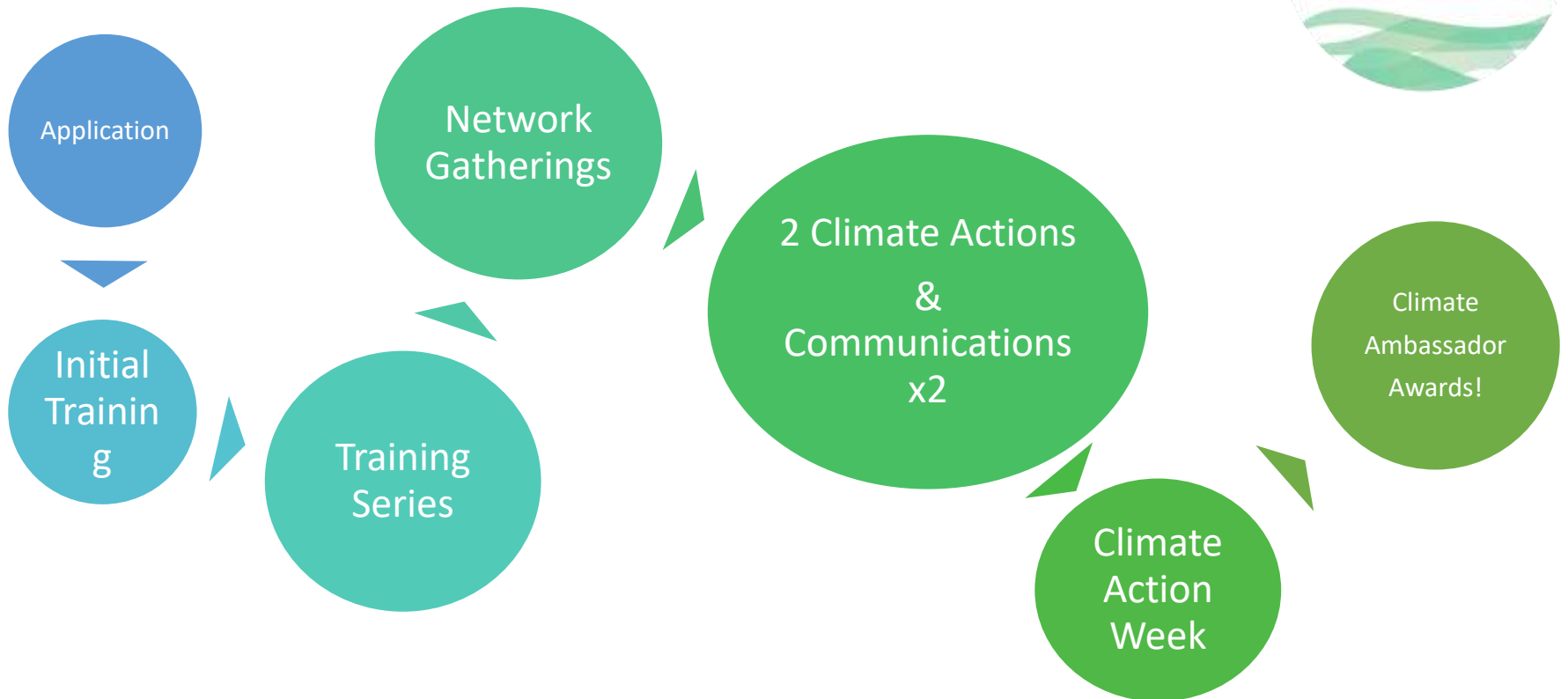
Facebook @ClimateAmbassador

Gary Tyrrell gtyrrell@eeu.antaisce.org

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Climate Ambassador Programme



2021 RESULTS



193 TRAINED
CLIMATE
AMBASSADORS



731 CLIMATE
ACTIONS

1,727 CLIMATE
COMMUNICATIONS



79 EVENTS



651,000+
PEOPLE ENGAGED

35 million
PEOPLE REACHED



Rialtas na hÉireann
Government of Ireland

Young Reporters for the Environment

- ▶ YRE platforms student voices and their solutions for Climate Action across all themes - See our Exposure site for past entries.
- ▶ You can enter anytime. Entries accepted until April 2023.
- ▶ Chance to share in €1,500 prize fund!
- ▶ Free access to online skills courses - Article Writing, Videography, Photojournalism Skills
- ▶ Register now for 1st webinar 11th October with Sylvia Thompson - The Irish Times



How to Enter - YRE's 4 Steps

1. Uncover an environmental issue in your area
2. Research a solution for it
3. Create an article, photo or video to communicate your findings (as a group or individually)
4. Share your work in your school, home and community

- ▶ Register here:
<https://forms.office.com/r/q0EG82h0dH>
- ▶ Contact Eoin at yre@eeu.antaisce.org
- ▶ [@yreireland](#) on Instagram



Child Protection and Garda Vetting

- An Taisce's Child Protection Policies and Procedures are regularly reviewed and have recently been updated.
- A summary and link to these policies will be sent to all schools later in October
- Our Safeguarding Statement will be available shortly on our website
- Garda Vetting:
 - all An Taisce staff regularly working with children are vetted on a biennial basis
 - vetting to be renewed for all staff in November
 - schools may request a Joint Agreement to obtain vetting results
 - if any school wishes they can choose to vet our staff member themselves
 - For all queries or requests related to vetting please contact:
vetting@eeu.antaisce.org

Thank you for your attention!



Any questions?

Contact: Méabh Boylan

E-mail: mboylan@eeu.antaisce.org

Website: www.greenschoolsireland.org

Helpful Resources

- [Biodiversity Handbook in English and Irish](#)
- [Biodiversity Video playlist](#)
- Habitat Mapping [Lesson Plan](#) and [As Gaeilge](#)
- [Primary School Video Case Study](#)
- [Secondary School Video Case Study](#)
- [Awareness Survey](#)
- [Seasonal Nature Resource](#)
- [Application Forms \(submit.com\)](#)
- [Biodiversity Theme Page](#)