Green-Schools
Biodiversity Theme

Green-Schools

An Taisce

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Themes

Litter & Waste

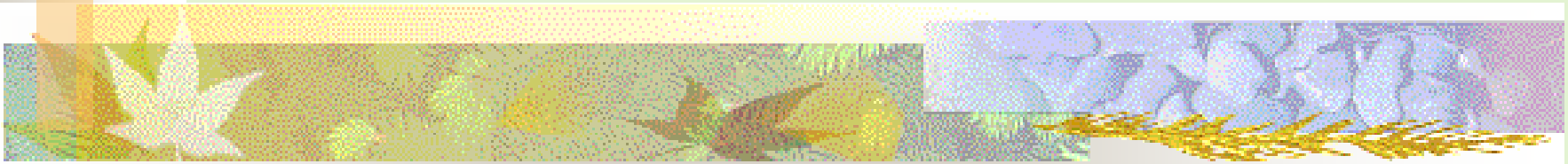
Energy

Water

Travel

Biodiversity

What does the term BIODIVERSITY mean?



Biodiversity
(flora & fauna)

Biodiversity is the huge variety & variation of life that surrounds us, from the tiniest bugs to the biggest whales in the sea

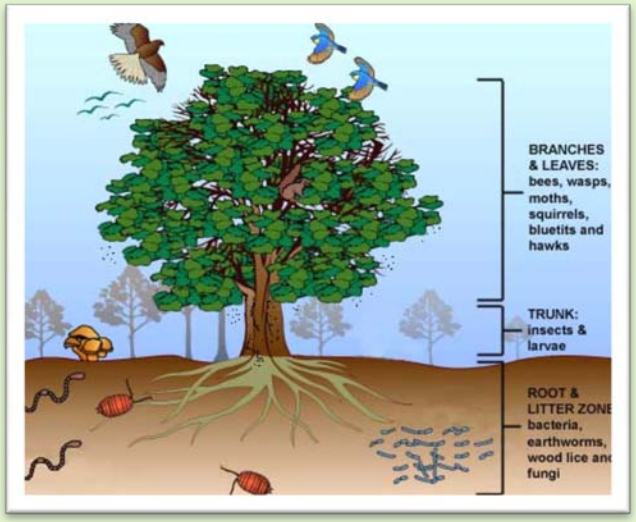
Biodiversity in Ireland

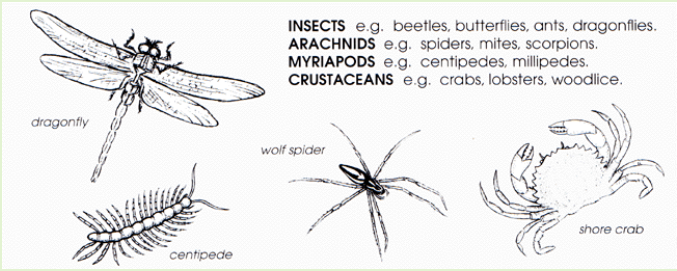
- 815 flowering plants
- 78 native ferns
- 21 broad-leaved native trees
- 23 native trees
- 759 mosses and liverworts
- 3,000 fungi
- 1,050 lichens
- 1,400 algae

- 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

Example: Oak tree

- OAK IS A SPECIES
- AN OAK TREE IS A HABITAT (HOME) FOR LOTS OF OTHER DIFFERENT SPECIES
- AN OAK WOODLAND IS AN ECO-SYSTEM





Why is BIODIVERSITY so important ?

Here are just some of the reasons!

- Gives us the air we breath
- Provides us with food, medicine, fuel, fibre
- Pollination & biological control

- Protection from soil erosion & flooding
- Recycling of nutrients (composting)

Biodiversity is all around us!

- Food
- Medicine
- Furniture
- Clothes
- Trees
- Insects
- Plants

.....etc.

Biodiversity keeps us alive! It’s up to all of us to protect it!

What is happening to BIODIVERSITY?

Litter & Pollution

- Can cause the death for millions of wildlife each year
  - Estimated over 1 million sea birds, 100,000 turtles and sea mammals are killed by litter every year!

Habitat loss, fragmentation & destruction

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

Climate Change

- Change in 1 or 2°C will affect the habitats in which species live
- 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
- Spread very quickly
- Can affect food webs
  - E.G. Grey Squirrel

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

Remember.....

EVERYTHING we do has an impact on the biodiversity that surrounds us, near and far, both GOOD and BAD!!

LEAVE NO TRACE OUTDOOR ETHICS

Green-Schools
&
The 7 Steps

Step 1 - Green-Schools Committee

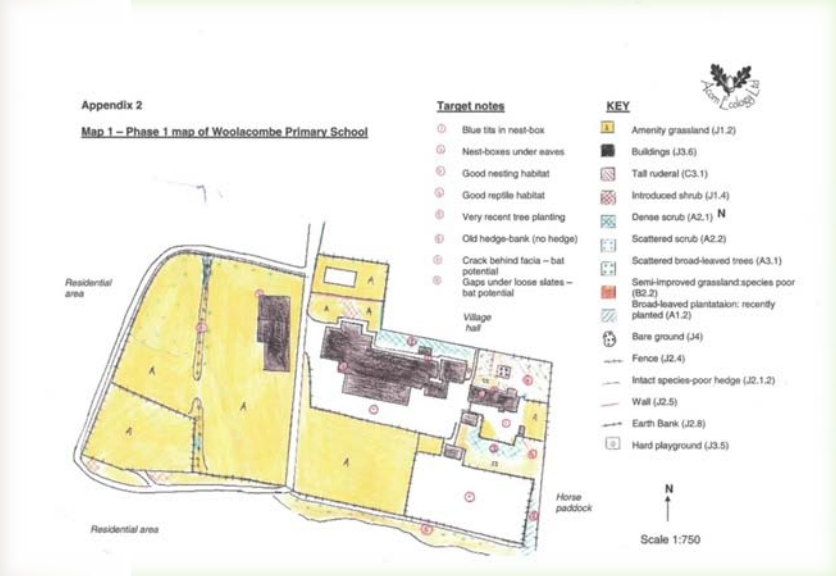
Step 2 Review

1. **Revisit previous themes** – see page 7 of the Biodiversity Handbook

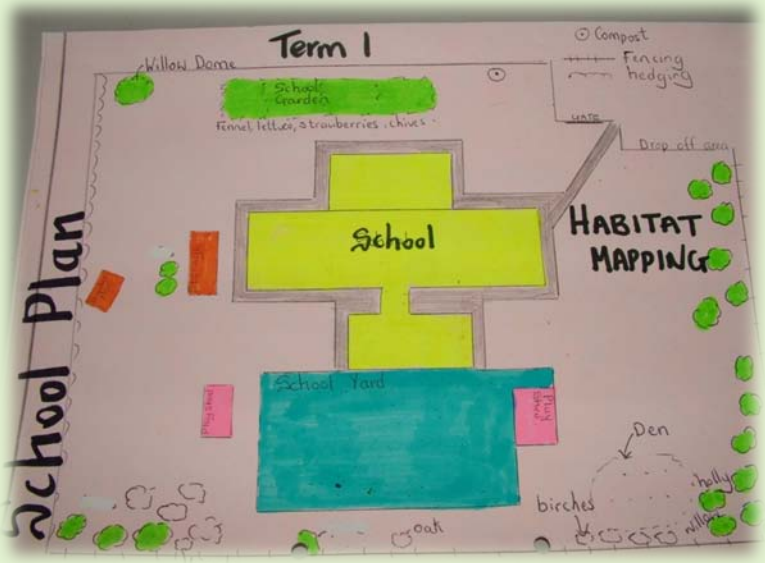
1. **Assess/survey levels of awareness** – see page 8

2. **Create a habitat map the school grounds** – see page 9 & 10

Habitat Mapping



Habitat Mapping



Investigate your surroundings....

- Ask yourself some questions & record the answers in your Notebook
  - 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?
  - What am I going to investigate.....trees, plants, animals, invertebrates (mini-beasts)?

How to record……

Example of Biological Record Sheet

(from the National Bio. Data Centre)

Similar record sheets can be used in you school

Name of recorder*	Species name*	Grid reference (6 figure if possible)*	Date*	Location*	County	Abundance	Comment
The name of the person(s) that made the observation.	The name of the recorded species.	A *six-figure grid reference*, employing three digits in each coordinate, to determine a 100 m square. The preferred format is:	The date that the observation was recorded.	A description of where the organism was observed. For example: "A kilometre north of Maam Cross". Ideally supply appropriate Ordnance Survey maps feature names or townland names if available.			
Rachel Boyle	Tortoisesshell Butterfly	M518152	dd/mm/yyyy		Kerry	1	Resting

•The first 5 columns are mandatory

•The optional columns are recommended by the Data Centre for use where appropriate. You may want to add additional columns yourself to suit your own data e.g., altitude, status, life stage. You can add as many of these as you like.

Step 3 - Action Plan

- Realistic , quantifiable targets based on review
- Display on Notice Board

What	How	Person (s) Responsible	To be achieved by:
Inc. biodiv. around the sch. grounds	Planting/leave an area uncut	Whole school	Sept '13
Raise awareness about local biodiversity	Poster competition	Green School Coordinator	Dec '13
Reduce Litter in playground	By not allowing pupils to bring food out into the playground	Staff and pupils	Ongoing

Step 3 Action Plan

- Aim 1 - Increase levels of awareness
  - Letters home to inform about the new theme
  - Discuss the importance of biodiversity
  - Discuss the threats to biodiversity
  - Examine food chains
  - Develop new Green Code (poster/slogan competition)
  - Habitat map & species surveys
  - Develop a connection with nature/nature trails
  - Find out about species specific to local area

Step 3 Action Plan

- Aim 2 - Increase richness & numbers of species
  - Build bird boxes/tables (unused/old wood)
  - Create a pond/log pile/leaf mould/wildlife area/'mini-beast' hotel
  - Develop an organic garden
  - Leave areas 'unmanaged' (hedgerows/grass areas)
  - Plant native tress/flowers

Step 4 Monitoring & Evaluation

(mini reviews at key stages)

- Repeat the Awareness Survey

(see page 17 of the Biodiversity Handbook)

- Evaluate progress on practical improvements
  - Habitat Map for Year 2
  - Recording species (trees/flowers/birds/insects)

NATIONAL BIODIVERSITY DATA CENTRE

Documenting Ireland's Wildlife

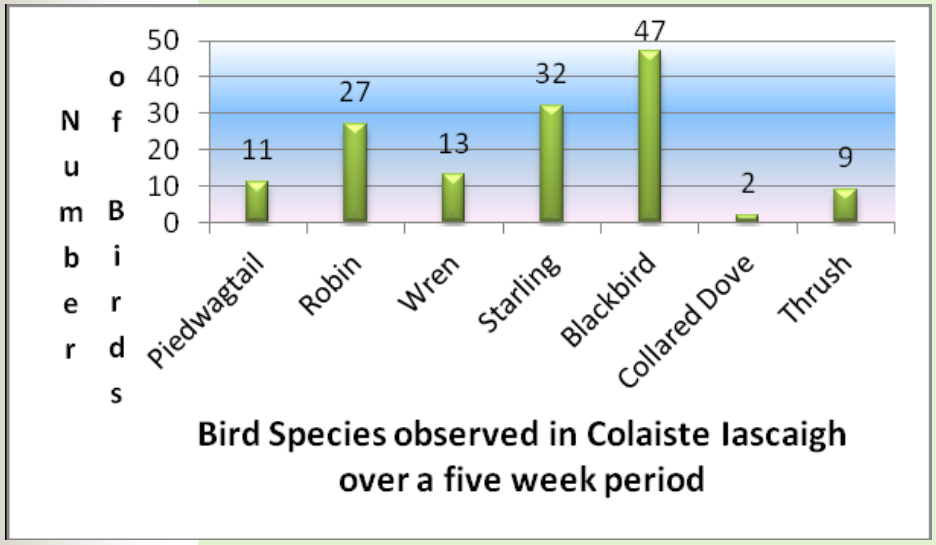
noticenature

www.noticenature.ie

Step 5 - Curriculum Work

Some examples:

- Maths: Provide real life situations for mathematical analysis
  - Bar-charts and Graphs



- Art: Poster design promoting biodiversity

- Languages: Essay topics, new Green Code, species names as Gaeilge
- Science : Animal families, structure of plants
- Geography: Mapping the school grounds

- Home Economics: Examine where our food & textiles come from

  - St. Joseph of Cluny

- Woodwork: Design & construct bird tables/boxes

  - Colaiste Iascaigh Secondary School, Co. Sligo

Step 6 - Informing & Involving

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

Biodiversity Project:

As you all know we are continuing to pilot the Biodiversity Project. We continue to learn a great deal and have lately been focusing our attention on TREES! Junior Infants—2nd recently enjoyed a wonderful guided tour around Hazelwood and learned a great deal. The senior classes completed a number of Tree related tasks this term including a Biodiversity Survey and a Tree Trail around our school environment. We also continue to work on keeping our school Litter Free so we ask you all to help us should you see any litter about.

SWIMMING CLASSES

As part of our PE curriculum, Swimming Classes for 3rd—6th Classes get underway when we return after the Easter Holidays in Waterpoint Leisure Centre..

COIRM GAEL LINN

Comhghairdeas to all the young actors and actresses from 3rd & 4th class who competed so wonderfully in Coirm Gael Linn at the hawks Well Theatre, Sligo on the 3rd March. Their performance of Pláiríní Sneachta secured two well deserved awards while their standard of Irish was a joy to listen to. Fantastic work everyone!

CHERNOBYL

Many thanks to all who participated in the fundraising effort for the Chernobyl Appeal

Confirmation and Communio

After all the months hard work and prepa the Confirmation and Holy Communion are only a few weeks awa excitement levels of involved are easy to s Keep up the good wor

EASTER HOLIDAYS

Easter holidays are upon us. We hope t everyone has a wond break. See you all a on 12th April. Domh Cáisce shone daoibh léir!

Gaelic Training

Gaelic Training with students will continue after Easter. Make sure to practise your skills during the brea

Step 7 - Green Code

Aim: To state the objectives that demonstrate the school's commitment to environmentally friendly actions

- Competition
- Rap/Song/Poem
- Code of Conduct
- Display on your Green-Schools notice board

Colaiste Iascaigh Co. Sligo

Biodiversity is so cool you should follow every rule

Biodiversity is cool so don't break the rules

Save the water, plant some plants, in order to have oxygen and food

Biodiversity is the key, keep our world green

Biodiversity is a necessity for creatures big and small-birds and bees will live life free if we diversify their needs

Treat life as if it were your wife

Biodiversity is so cool, don't litter or you'll have no food

Green is grass, blue is sky-don't ruin it or else you die!

Biodiversity is so cool, we can help out with it around the school

United Nations Decade on Biodiversity

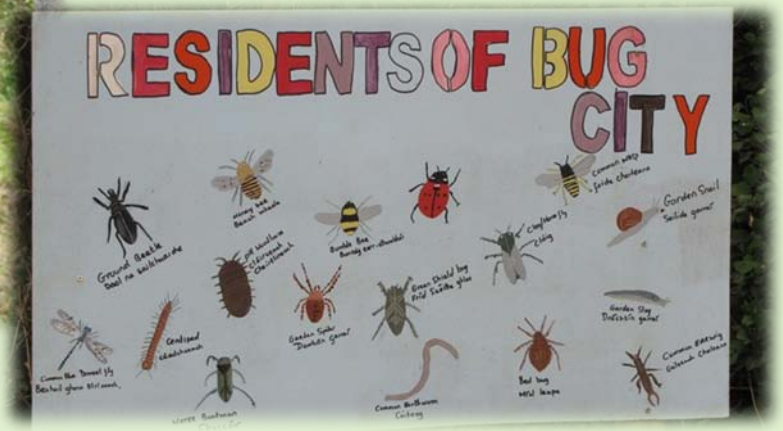
'Biodiversity underpins the functioning of the ecosystems on which we depend for food and fresh water, health and recreation, and protection from natural disasters. Its loss affects us culturally and spiritually'

Ban Ki-moon, Secretary General of the United Nations

Images from secondary schools

Green Schools Action Day
HOW IS OUR SCHOOL A GREENSCHOOL ?

BUTTERFLY


RESIDENTS OF BUG CITY

Thank you for your attention!

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