

# Green-Schools Biodiversity Theme



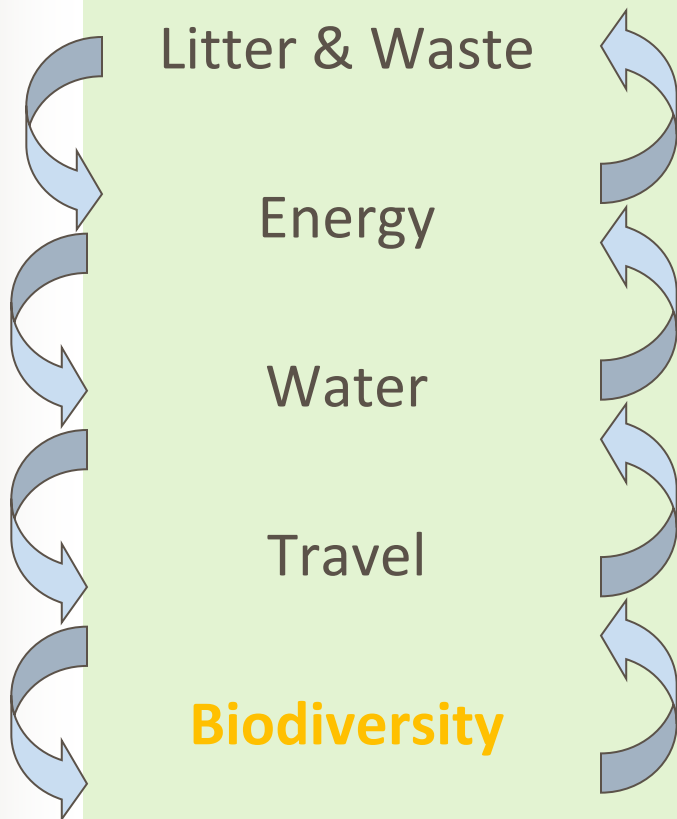
**Green-Schools**

 An Taisce



notice**nature**  
[www.noticenature.ie](http://www.noticenature.ie)

# Themes





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



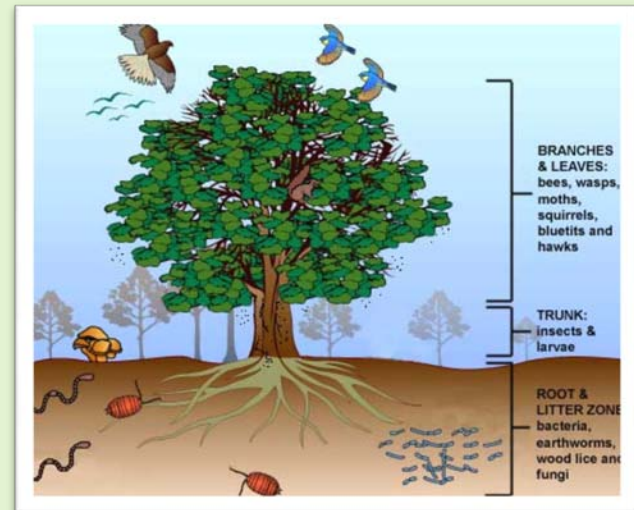
- ❑ 815 flowering plants
- ❑ 78 native ferns
- ❑ 21 broad-leaved native trees
- ❑ 23 native trees
- ❑ 759 mosses and liverworts
- ❑ 3,000 fungi
- ❑ 1,050 lichens
- ❑ 1,400 algae



- ❑ 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!!



# Green-Schools & The 7 Steps



# Step 1 - Green-Schools Committee

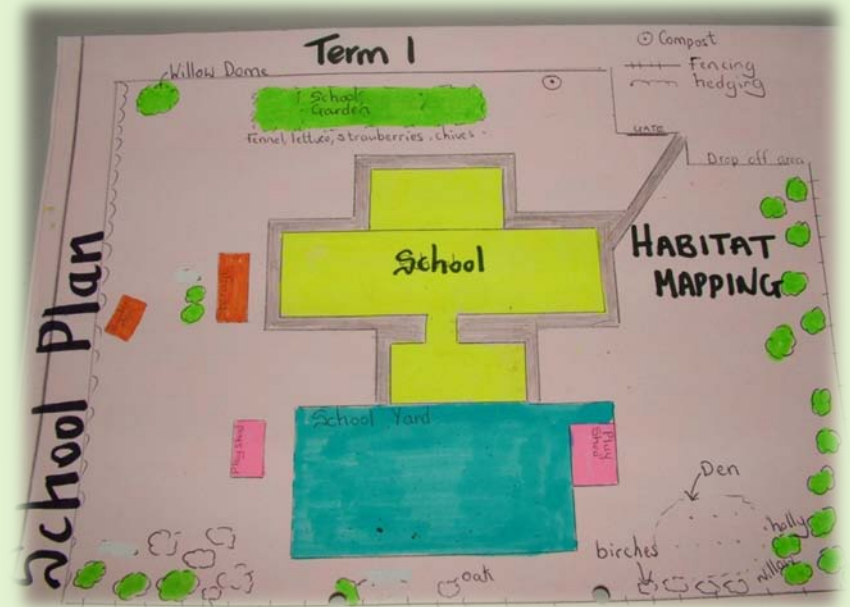
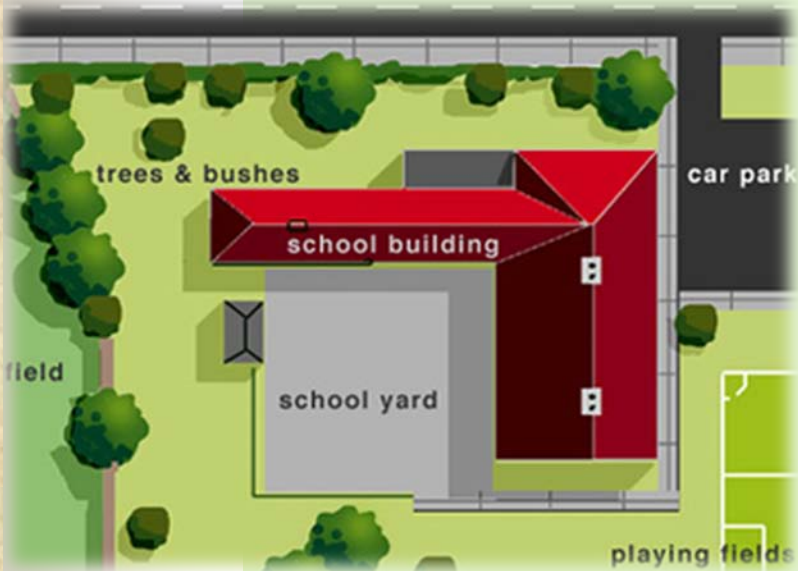


# Step 2 Review

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

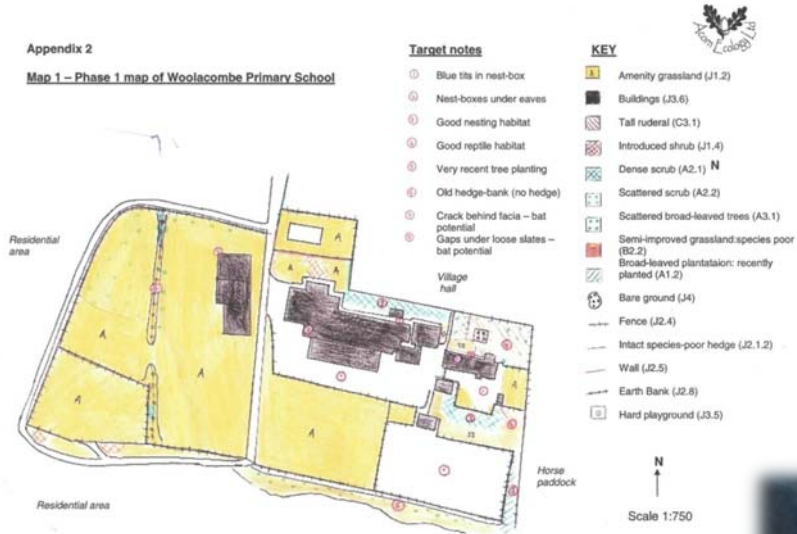


# Habitat mapping in your school



Appendix 2

Map 1 – Phase 1 map of Woolacombe Primary School



Become a nature detective....



# To be a nature detective you must.....

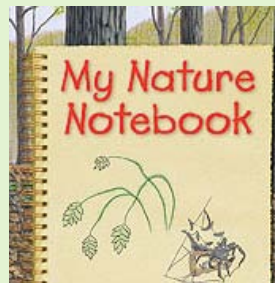
- Ask yourself some questions & Record the answers in your Nature Notebook
  - What time of the year is it? (spring, summer, autumn or winter)
  - What time of the day is it?
  - What is the weather like?
  - Where are you/what habitat are you investigating?
  - What am I going to investigate.....trees, plants, animals, invertebrates (mini-beasts)





# Look, Listen & record!

- Make your own Nature Notebook so you remember all the wonderful things you saw & watch how they change during the year!
- You will need:
  - A notebook
  - A pencil
  - Some coloured pencils or markers

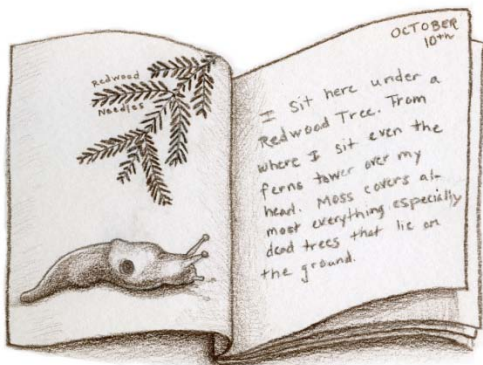


I spy.....



# A nature detectives notebook!

Date	Weather	Place	Habitat	Notes
6 <sup>th</sup> of May	Windy	Oak Woods	Mixed woodland	Tortoiseshell Butterfly
30 <sup>th</sup> of July	Cloudy	Walk to the Pond	Shallow lake (lots of plants)	Spotted a frog
3 <sup>rd</sup> of August	Sunny & breezy	Walk to school	Hedgerows	Lots of small birds
14 <sup>th</sup> of September	Sunny	The park	Mixed (grasses/trees/shurbs)	





# Step 3 - Action Plan

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

<b>What</b>	<b>How</b>	<b>Person (s) Responsible</b>	<b>To be achieved by:</b>
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 trees/flowers



# Step 4 Monitoring & Evaluation

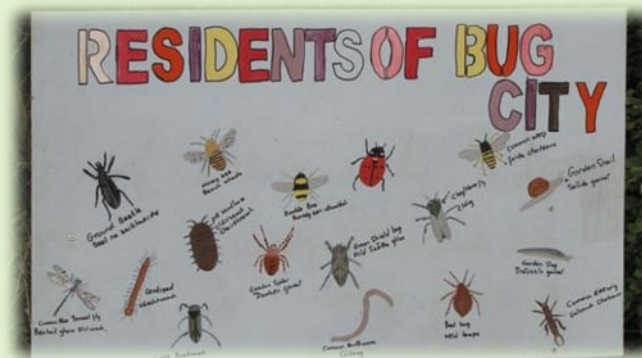
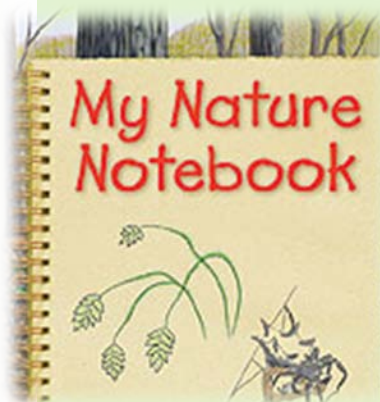
(mini reviews at key stages)

## ❑ Repeat the Awareness Survey

(see page 17 of the Biodiversity Handbook)

## ❑ Evaluate progress on practical improvements

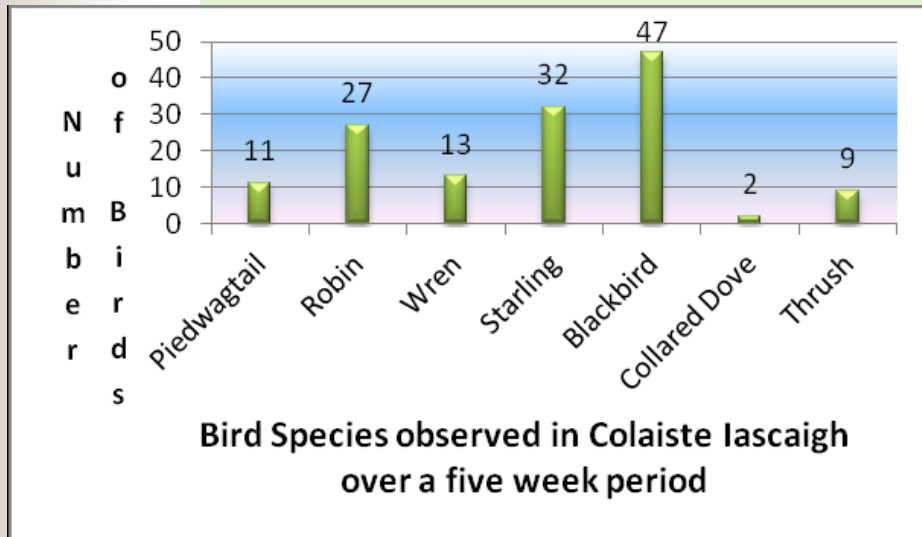
- ❑ Habitat Map for Year 2
- ❑ Recording species (trees/flowers/birds/insects)



# Step 5 - Curriculum Work

Some examples:

## Maths: Bar-charts and Graphs





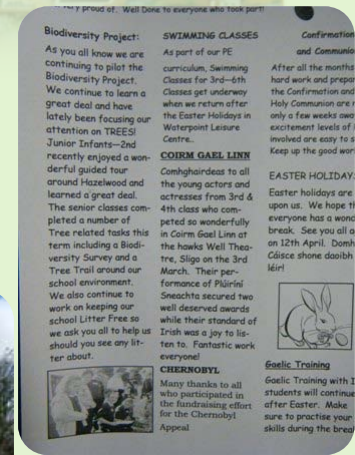
## ❑ Art: Posters/projects



- ❑ Languages: Essay topics, new Green Code
- ❑ SESE Science : The living things strand, study of habitats and species (e.g. Life cycle of the frog)
- ❑ Geography: Mapping the school grounds

# Step 6 - Informing & Involving

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





# 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

***'Let out generation protect all creation'***

Stokane NS, Sligo.

# Examples

*'More plants so more insects so more birds'*

Killocraun NS, Mayo.

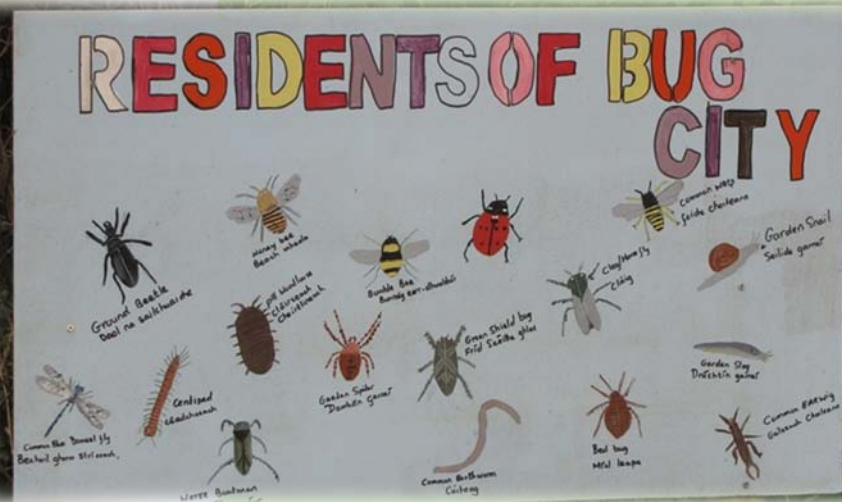
*'Ballintogher has the Biodiversity Factor'*


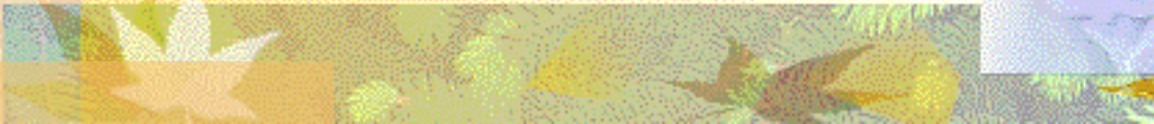
*Scoil Naomh Treasa, Sligo.*



# Images from Biodiversity schools







# Thank you for your attention!



Rachel Boyle  
Tele: 086-3765466  
E-mail: [rboyle@eeu.antaisce.org](mailto:rboyle@eeu.antaisce.org)