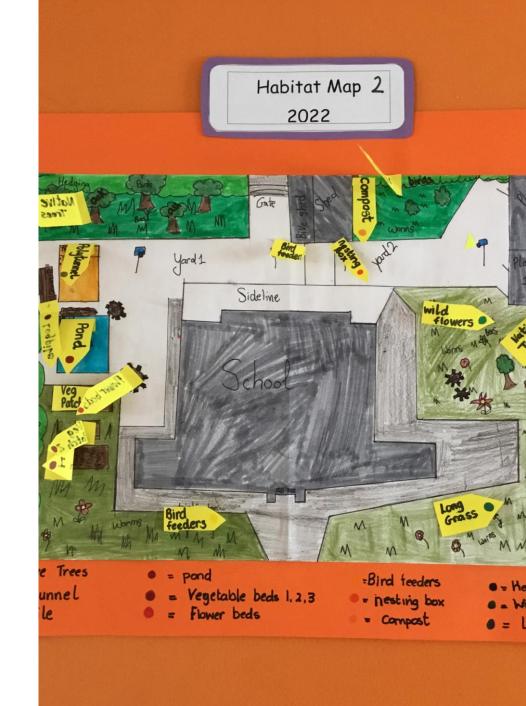




Food Habitat Mapping teacher seminar

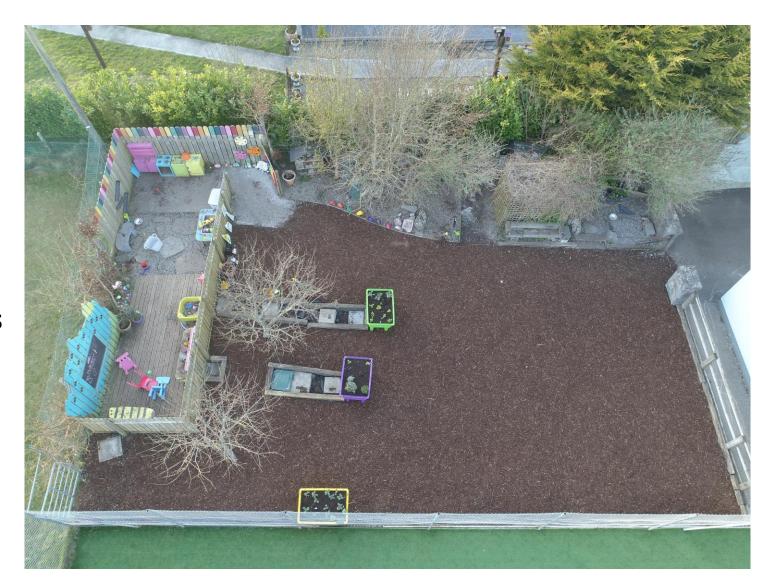
What is a Food Habitat Map?

- Visual representation of your school grounds
- Drawing/Sketch/Model
- Shows all areas connected to food in your school and on grounds, including where food is sold, stored, composted etc as well as areas food is grown or has the potential to be grown.
- Any areas related to biodiversity should also be included, particularly those that relate to growing, for example areas to attract pollinators, natural predators of pests etc.



Why create one?

- To show how many areas are connected to food/growing.
- To identify suitable areas for planting or growing in containers inside.
- To assess if there are any wild foods currently growing on school grounds.
- To show other habitats related to Biodiversity and learn if they are connected to growing food.
- Should be created early in year 1 of the theme. Will be repeated in year



Who?

Primary:

- GS Committee
- One class could be given responsibility to create and maintain, 4th to 6th would be most suitable

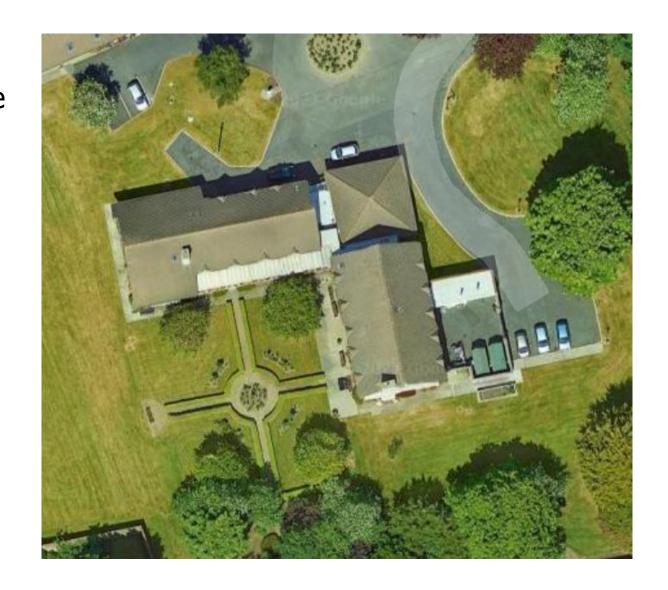
Secondary

- GS Committee
- TY Class
- JC Geography Class



Preparation

- You may have an old Habitat Map from the Biodiversity theme or access to old planning documents/fire drill map for your school and grounds. These will give so help with the shape of buildings, grounds etc.
- Or you can look up your school on google maps "satellite view". This will clearly show the shape of your boundaries and relative position of buildings, yard etc.
- Talk about what features students are already aware of that are related to food, growing or biodiversity.
- Discuss as a group what you will be looking out for and what you aim to show on the map.



Assigning Roles

- Depending on the size of the group taking part you may wish to split into groups and divide up the following tasks:
 - Filling in the indoor/outside sections
 - Marking on habitats, buildings, features to map.
 - Checking off features/ideas on checklist
 - Identifying plants and animals seen
 - Taking pictures/making sketches



Mapping Inside

- Assign one group/person to create one map just based on the indoor elements of the school.
- Sketch the shape of the school, allowing this to take up most of the page.
- Walk through the school and mark on any important areas including canteen, shop that sells food etc.
- Note on the map which classrooms/side of the school has windows suitable for starting off crops inside. Which side(s) gets the most sunshine.
- Note what kind of bins are available inside for food waste/packaging.
- Any other issues like litter, food waste etc. you notice.



Mapping Outside

- Use a different page to the one you used for the indoor map. Before you go out mark in a key features like the buildings, yard, school gate etc. These do not need to be to scale. Keep space for adding in things you find outside!
- Once you head outside orient yourselves with the map. Ask students to identify where they are on the map. Use landmarks already on the map. Do this regularly as you move around.
- Walk around the entire grounds and mark all areas you find on the map. Use codes/symbols. Don't worry if it is messy, this is just the sketch.
- Notice and mark in on map and checklist as much information as possible.
- Identify as many different species as you can but don't worry about ones you don't know.
- Photograph or sketch interesting or important areas.



Things to include

Raised beds, planters, pots or any places where food is/has been planted before

Any wild food that is growing including blackberries, hazel trees, apple trees, nettles etc.

Wildflowers, areas of uncut grass, patches of ivy etc

Water butt, rain barrel, outdoor tap

Compost bin, leaf mulch pile

Trees and bushes

Bird Feeders, Bird/Box Boxes, Insect Hotels

Any animal sightings or signs they have been there

Any time the surface/habitat/plant species changes

Questions to ask

Has there ever been food grown before? Where?

If there are raised beds/planters etc- what condition are they in?

Are there any areas that would be suitable for growing? What parts of the grounds get the most sunshine? Are likely to avoid being hit by footballs during yard etc.

Did you find any wild food growing? Have you ever eaten it before?

Is there any compost bins/leaf mulch on the grounds? Is that being used in the garden?



Animal Spotting



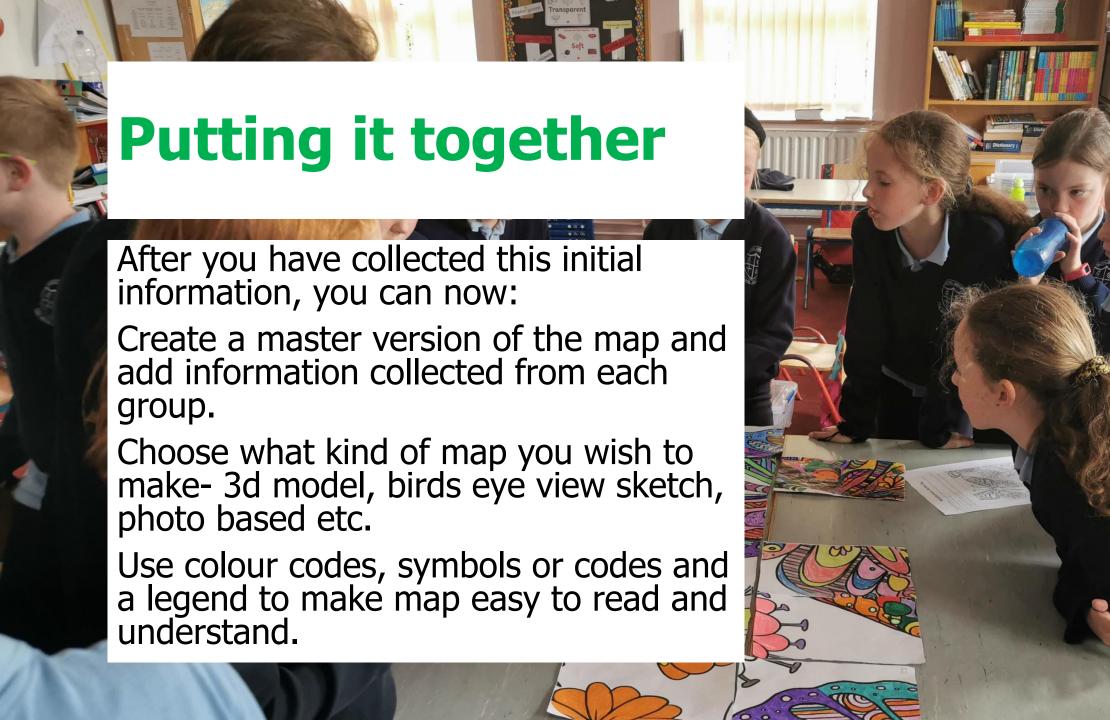
Pay special attention to any animals observed including birds and insects



Note what kind of habitat they were in/on. Are they close to the areas you grow food? Are they helpful to food growing?



Look out for any signs that animals have been present including tracks, trails, feathers, fur or droppings.



Sample Map

Note the following features on this map:

- Colour Coding
- Mixture of drawings, symbols and numbers as codes on map
- Legend with descriptions
- Creation of tree trail



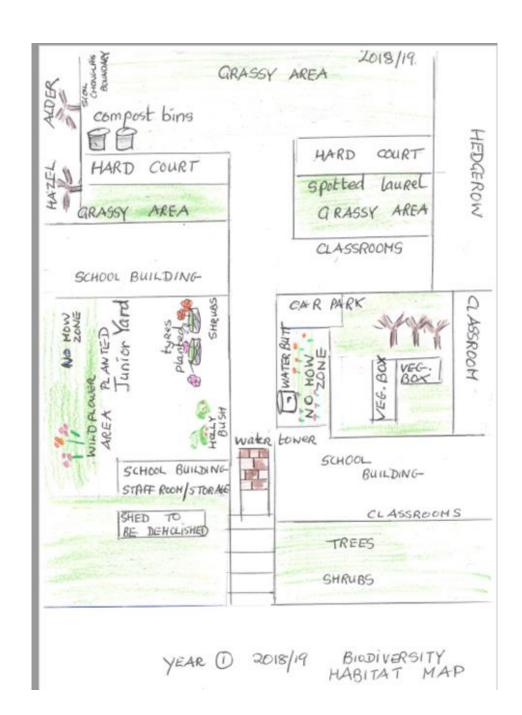
Stick on Features

- Create a blank map and allow students to draw/take pictures of different features- this is especially useful for junior classes.
- This allows more people to be involved and you can easily add to the map as more features are created on your grounds.
- You can keep track of crops as you plant and harvest them with this method.

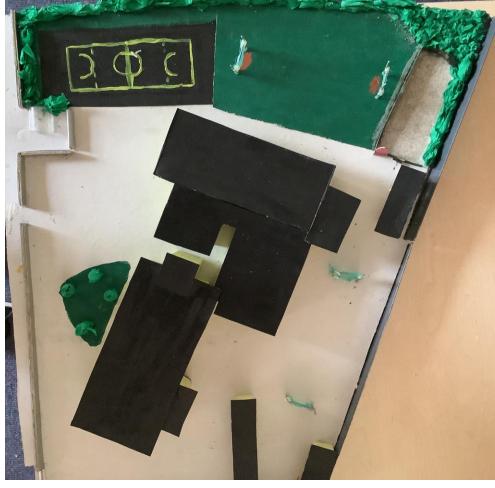


Simple Sketch

You can alternate between writing in descriptions and drawings and avoid using a legend if you have enough room







3D Model

Can use variety of materials including lego, figurines, arts and crafts materials etc.

Follow on Questions

- Did you notice any issues to be resolved when making the map?
- Litter in the school/on the grounds
- Compost not being used
- Broken raised beds
- Can you use the map to identify places inside and outside that can be used to grow food this year?
- Can you improve the grounds for biodiversity and encourage positive connections between growing and wildlife.



Planning any changes inside

- Consider what crops you will be growing and how many of them need to be started off inside.
- Does every classroom have enough space/suitable light/water source.
- Is there any other spaces besides classrooms that could be used.
- Were there any issues around food storage/waste to consider?



Planning your growing outside with little space

- Consider any existing growing spaces/resources. Will they be enough for what you plan this year.
- You can grow many of the recommended crops in pots, growing sacks, hanging baskets, recycled materials like broken wheelbarrows, old tyres etc.
- You can also make a small raised bed(s) in limited space. Try our <u>"Cardboard bed"</u> for a simple option.
- Is there a woodwork programme in your school or a neighbouring school? Or a "men's shed"? They may be able to make some planters for you. What do staff and students have out in their sheds that could be used?



Planning your growing outside with lots of space

- Consider any existing growing spaces/resources. Will they be enough for what you plan this year.
- Is there sufficient room/resources for a small greenhouse? Additional beds/pots etc.
- How will you divide up the beds/planters? Consider who is planting each crop and what space will need.
- You do not need to have all of your planting areas together but think about ease of access, distance to a water source etc.



Biodiversity and Growing

- Discuss the links between biodiversity and growing food. Can you add anything to your grounds to improve these links?
- Bees and butterflies help to pollinate some of our food crops like strawberries, apples, tomatoes and courgettes. We can try to attract pollinators by adding bee hotels, planting pollinator friendly flowers and leaving areas of bare soil for overwintering solitary bees.
- Slugs and snails may eat our crops. Try to attract animals that eat them like hedgehogs and birds. Create bird houses and hedgehog homes. Ladybirds are another way to control garden pests. They feed on aphids- green flies that create havoc in the garden. Plant lavender, thyme and chives to attract ladybirds and keep the aphids away!
- Worms and other small creatures in the soil are very important for recycling nutrients that plants need to grow. You could create a wormery or add compost, leaf mulch etc to the soil to encourage them.



Other options for the garden

- Create a nature trail around the school with key habitats, features, species names marked on.
- Create signage showing for example what crops have been planted, what kind of insects may visit the bug hotel, birds use the feeders, wildflowers have been planted
- Survey the birds visiting feeders, insects visiting wildflower area etc.
 - Make this an interclass competition
 - Submit your findings to a citizen science project
 - Carry out a project on what kind of bird food/sheltered/exposed areas attract the most birds
 - Track the increase in for example pollinators as you create wildflower areas



Choosing which improvements to make

Space

Cost

Aims

- Grow a crop per class
- Attract beneficial wildlife for growing food
- Improve space for outdoor learning
- Draw more attention/create access to wild foods.
- Improve biodiversity in general
- Make the outdoor space as easy and attractive as possible for all staff and students



SEASONAL/ PRACTICAL CHANGES

Use pictures to show how your grounds change with the seasons or as you add features.

You will need...

- At least two blank maps with boundaries and buildings marked on.
- Habitat Mapping Lesson Plan and Checklist
- Wildlife Id Books/Swatches/Charts. See examples below. Use a combination of what you have available.
 - Nature Spotter Sheets
 - Foraging in Schools. Guide to wild foods
 - Collins Complete Guide to Irish Wildlife
- Camera/Tablet to take pictures
- Paper and pencils to take notes, draw sketches etc.



Helpful Resources

For Mapping	For making practical improvements
Habitat Mapping Presentation and Lesson Plan	Making a simple cardboard bed
Nature Spotter Sheets from Woodland Trust	Pollinator Plan
Edible Plants in School Grounds	Gardening for Biodiversity
Identify flowers by colour Wildflowers.ie	Create a mini pond

Any Questions?
Contact Clare at cpatten@eeu.antaisce.org

