

TEACHER Support Sheet 4

BIODIVERSITY IN AN CHOILL BHEAG (ASSIST WITH STUDENT WORKSHEET 4)

AN CHOILL
BHEAG

How does An Choill Bheag help support wildlife and increase biodiversity in our school grounds?

Benefit	How does an choill bhead do this work and provide this benefit?
Shelter	<ul style="list-style-type: none">- Birds nesting and hiding- Insects on the top or underside of leaves- Spiders webs- Logs, dead wood, wood clippings, bark mulch, dead leaves
Food	<ul style="list-style-type: none">- Birds feeding on berries, looking in bark mulch for insects- Spiders catching flies- Ladybirds eating aphids
Wildlife corridor	<ul style="list-style-type: none">- A wildlife (or ecological) corridor is a place where wildlife feels safe travelling from one place to another, under the cover of trees, hedges, logs and long grass- Is there a connection to the existing school or local hedge?- This can be done by planting more trees to connect the two habitats
Safe space	<ul style="list-style-type: none">- Birds, mammals, frogs and insects need to feel safe and secure where they live- They need places to hide (under leaves/branches/in trees/under logs)- They need to be able to move around through long grass and hedges and trees- Creatures such as birds want to be able to see without themselves being seen
Nesting	<ul style="list-style-type: none">- Birds nest in different habitats- Bigger birds like thrush and blackbird want their nests to be at least 2 metres from the ground to feel safe- Other birds like wrens like to make their nests in stone walls and earth banks- Owls and other birds will only nest in holes in old trees so that will be a while away!- By law, we cannot cut trees or hedges from the 1st March until the 31st August (unless they are causing an obstruction to visibility on roads/are unsafe)

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Insect life

- Bumble bees make nests in earthen embankments and collect nectar and pollen from the flowering trees, e.g. Rowan, Holly, Elder and climbers like Ivy
- Flies do a lot of the pollination work too, on many flowers of trees and other plants
- You may find lots of stages of development on the undersides of leaves, e.g. Ladybirds at larval, pupate and adult stage (use pictures in ID sheets to know which stage you are looking at)

Linking habitats

- It is really important to link An Choill Bheag to other habitats in the school grounds
- They make the best insect hotels as they are a living space, full of insects and creature
- They need connection to hedges and other trees (wildlife corridors)
- If you are growing a school organic garden, make sure An Choill Bheag is connected as part of a school grounds nature trail, visiting a number of habitats, biodiversity hot-spots and pollinator/insect friendly plants. Planting List: <http://pollinators.ie/app/uploads/2018/04/Planting-Code-2018-WEB.pdf>

Supporting biodiversity

- By linking the school garden with An Choill Bheag, we are showing the interdependence of all living things.
- We need pollinators to grow many foods, fruit and wild plants
- The pollinators need safe spaces to live and have families, just like us humans!
- The highest areas of biodiversity are where the 'edge' of one habitat meets the 'edge' of another habitats, e.g. hedge and meadow, An Choill Bheag and meadow, An Choill Bheag and water in school pond or stream

Water

- Prevents flooding by slowing down the flow of water with it's roots and soil
- A mature tree can drink 100 gallons/380 litres per day
- Cleans our water by filtering it naturally

Cooling down the planet

- Storing carbon, which is produced by burning fossil fuels, like oil
- A 40 year old tree can absorb approx. 20 kg of carbon per year, which adds up to 1 tonne!
- Trees create micro-climates and cool down cities

Soil

- Create soil with dead matter. Roots keep soil intact. Symbiotic relationship with other trees and plants through underground network of fungi (*mushrooms and mycelium*).
- It can take anything from 200-400 years to make 1cm of soil!

 An Taisce



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What is the best time of the year to plant An Choill Bheag?

- The best time to plant is when the deciduous trees are dormant and they have no leaves
- *Early October to End of March* is the best time for bare-rooted trees
- They should not require any watering if they are planted at this time

What is a tree called when you can see its roots and you can plant it in the winter?

- This means a tree is **Bare-rooted**
- You can see its roots and there is no soil around it
- It is really important that the roots do not dry out as the tree may die after it has been planted as they cannot recover from drying out – keep them in the sacks until you are planting them

Outdoor Classroom

Seating, logs to sit on

Spend time in nature

- Create a classroom space by placing logs or tree stumps around the edge of the circular area. Make sure there is enough space for an entire class to sit
- Use An Choill Bheag to study trees, plants and insects/biodiversity
- Use An Choill Bheag as a quiet space, recreational space, for art, story telling, etc.
- A space for quiet time and wellbeing

Nature Trails, Signs, Signs on Trees, Map of An Choill Bheag on notice board

- Signs are essential as they let the wider community know about the tree planting, its educational value, why it is in the school grounds and helping with identifying trees
- A main sign explaining about An Choill Bheag and the woodland habitats in the school grounds
- We aim to have one representative of each species planted around the inner circle seating area and these are signed individually. Students have to look for the same trees in the forest, using their identification and observation skills
- Create a simple nature trail through An Choill Bheag, so that the students can enter it from one point and make their way to the seating area. This can be done easily with pruning any branches or twigs that come out at eye height (child and grown up eyes!)

How many different tree species are there in An Choill Bheag?

- This varies according to the site and soil
- On average 14-15 species of trees

Name the different species

Canopy Layer: Alder, Birch, Oak, Wild Cherry, Yew
Understory Layer: Blackthorn, Crab Apple, Elder, Guelder Rose, Holly, Hazel, Hawthorn, Rowan, Spindle, Wayfaring Tree, Willow