

LIFE IP Wild Atlantic Nature Blanket Bogs Facilitator's Guide



Table of Contents

Facilitator's guide introduction	2
Session plan	4
Blanket bog follow up project	5
Bog book activity	6
Layers of the bog in the field	7
Layers of the bog in class	8





LIFE IP Wild Atlantic Nature Facilitator's guide introduction

This information pack and associated video and presentation is intended for delivery to the senior end of primary schools as part of the community outreach in the LIFE IP Wild Atlantic Nature project. The gap between the public understanding of what bog habitat delivers for us all and the ecosystem services that peatlands actually provide is large. There is little understanding of the biodiversity that is supported by peatlands and the roles bogs can play in flood control, water filtration and most importantly, climate change.

There is little public understanding of the capacity of healthy peatlands to both sequester and store carbon. With our ever-increasing carbon levels in the atmosphere as well as more sporadic and often intense patterns of rainfall, peatlands in Ireland have a vital role to play in our battle against climate change. Recent surveys conducted by the Environmental Protection Agency demonstrate a strong understanding around the concept of climate change and an equally strong desire to take appropriate action. What is missing, in relation to peatland habitat, is public knowledge around the role that peatlands can play in this climate change battle.

As has been demonstrated in the past, attempting to legislate for changes in behavior around the management of peatlands without prior education can become quite difficult. This program is an excellent opportunity to increase understanding around peatlands and what they can do for us. Starting with the youngest members of our society can be a powerful catalyst for change, as other education programs demonstrate.

The presentation part of this education pack is laid out in a number of sections. The first 13 slides explore some of the wonders of bog habitat, with many potential discussion points contained within. Slides 14 - 21 explore what makes peat different to other soil types and explains how blanket bog specifically has

formed over the years. Slides 22 - 29 explore in greater depth what blanket bog habitat delivers for us in terms of eco-system services. Slides 30 - 50 tease through the scoresheet, which has been modified slightly to suit the younger minds. Breaking it into sections and explaining each section with the students in the class is time well spent. They will be able to complete the form with reasonable efficiency once on the field. Slides 51 - 56 have instructions around some other optional activities for students to attempt.

Facilitators will, of course, have their own take and methods around bog education. These resources are meant as a tool to use as much as the facilitator wishes. What is important however, is that the main key learnings are delivered through the process. The process itself is delivered in three phases.

Phase 1 Students watching pre-prepared video.

Phase 2 In class teaching followed by hands on field trip.

Phase 3 Follow up project by students.

This allows for three separate opportunities to deliver the key learning outcomes. Those learning outcomes are:

- **What defines, in simple terms, a blanket bog habitat.**
- **Greater understanding of why peat is different from other soils.**
- **An understanding of how blanket bog habitat has formed.**
- **Increased knowledge of what blanket bog and other peat habitats do for us in terms of ecosystem services.**



All of these outcomes are covered in both the introductory video and the class presentation. They are covered for a third time through the project that the class completes after the visit. The field trip is based around the modified score card. Starting with section A of the score card, plants are identified with the help of swatches provided, and sections B and C tackle the threats to bog habitat. These sections of the field trip offer plenty of opportunity to discuss the good and bad management of bog habitat. As traditions around turf cutting and other uses of our bog habitat can be emotionally charged, this way of exploring the issues leaves plenty of room for healthy debate and discussion.

Session plan

Initial preparation

- School identified through the Heritage in Schools Scheme.
- Once contact has been established with the school, suggest a suitable bog site. They might have their own site that they want to explore or you might contact a local ranger to identify a safe bog site at a viable distance from the school.
- Verify if permission is required to gain entrance to the bog.
- Check for safe access points.
- Ask school to book bus for approximately 11.30am.
- Send video and ask the school to watch the day before.
- Ask school to give you access to a screen for the presentation.
- Ask for students to have warm clothes, rain gear, wellington boots, sunscreen and a packed lunch if possible.

Equipment

- First aid kit ● White trays ● Long handled pond net ● Rainproof clipboards ● Wild Atlantic Bog Plants identification swatches.

Day of session

All of these are only suggestions but this timeline has been piloted and has worked well.

- | | |
|-------------|-----------------------------|
| 9.30-10.30 | Presentation, slides 1–29. |
| 10.30-10.40 | Short break. |
| 10.40-11.10 | Presentation, slides 30–50. |
| 11.10-11.30 | Food and bathroom break. |
| 11.30 - end | Bog visit. |

Bog visit suggested sequence

- | | |
|-------------|---|
| 12.00-12.20 | Initial walkover setting the scene and getting a feel for the condition of the site. |
| 12.20-13.00 | Identifying vegetation and scoring. Working in groups, spend 20 minutes identifying indicator species. |
| 13.00-13.20 | Lunch. |
| 13.20-14.00 | Sections B and C of the worksheet (second page). |
| 14.00-14.15 | Add up scores and any other fun features or a short 'layers of the bog' activity. |
| 14.15 | Bus back to school. Ask the teacher to create a project the following day as suggested below and send to you. Keep a copy of one of the completed score sheets for reference. |

Useful links:

Wild Atlantic Nature - www.wildatlanticnature.ie

Irish Peatland Conservation Council - www.ipcc.ie

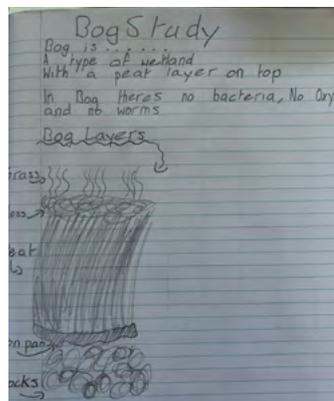
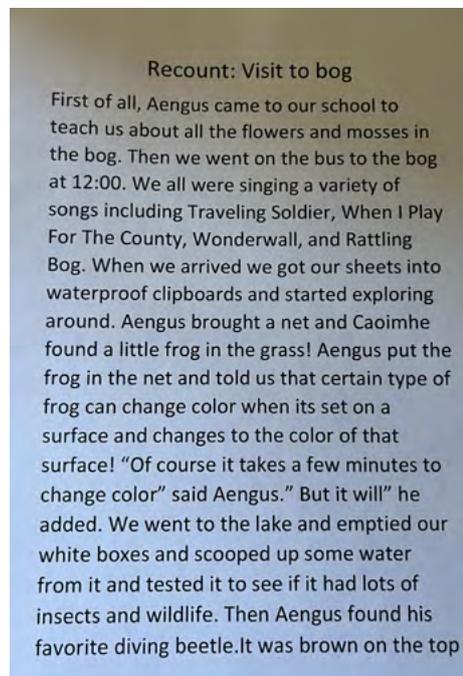
Peatlands for life - LIFE IP Information
<https://cinea.ec.europa.eu/system/files/2021-02/PeatlandsforLIFE-19062020.pdf>

Peatlands Matter for Climate and Biodiversity - Green European Journal article
www.greeneuropeanjournal.eu/peatlands-matter-for-climate-and-biodiversity/

Blanket bog follow up project

Create a poster or a book documenting the learning and experiences from your trip.

- 1 A picture of the layers of a bog.
- 2 Three key learning outcomes about why bogs are so important for us all.
- 3 List some of the threats to blanket bog habitat
- 4 Main factors that make bogs different from other wetland habitats.
- 5 A short story about your trip to the bog.



Once completed, ask the teacher to send you photos of the projects.

Bog book activity

This activity can be done in the bog habitat.

Materials prepared beforehand:

Card cut in to A5 sheets

Double sided sticky tape or squares

Small squares of paper (less than A6)

Glue sticks

- 1 In class ask the students to fold their A5 sheet neatly in half.
- 2 Stick the edge of the smaller sheet with a glue-stick inside the folded card to make a small book.
- 3 Stick two strips of double-sided tape on the other inside page, keeping the top piece of tape on so the book won't stick together.
- 4 Bring the book and a pencil on your bog trip.
- 5 Find plants that are abundant and use as samples to stick into the book.
Don't pick isolated plants or rare plants such as sundew.
- 6 For each plant the students gather, peel back a small bit of their tape cover and stick on the plant. Label it with the pencil.
- 7 Use the rest of the space to write observations, notes or a poem.



Our Visit to the Bog

Yesterday we went to the bog with a man called Aengus. First we started walking around the bog with our teams, looking for the plants on our list. I was teamed up with Carrie, Hannah, Aoife and Charlie. Eventually, we found most of the plants and then we did more exploring. We found the corpse of a tree, which was pretty cool. So far, so good. After that we went to the nearby lake. We got to use Aengus's net and found lots of diving beetles and realized the layer of peat in the ground is GIGNORMOUS. The net completely (almost) sank in! We then went to take shelter from the wind behind a hill. As we were walking over we realized that the ground was too soggy so we had to go around it. After that we corrected our sheets, and then went back to school. We learnt that peat is very different to mud. It has no oxygen, no bacteria or insects. Yet we saw that man-made had lots of insects. In the bog we found we found dear grass, bog bean, heather etc. I found it fun and hope we can go again soon, (well, mostly!)

The End!

Layers of the bog in the field

This activity can be done on the bog with natural materials and a tray.

Materials needed in the field:

- Large white tray or sheet.
- Red-ish leaves or seeds (or any gathered natural materials)
- Peat
- Moss
- Shrubs and grasses.

Recreate the layers as shown in the picture below.



← Grass/shrub layer

← Moss layer

← Peat layer

← Iron pan layer

← Bedrock layer

Layers of the bog in classroom

This activity can be done in the classroom using coloured paper.

Materials needed:

- Large sheet of card for background
- Different coloured crepe paper, a colour for each layer, Grey – Red – Brown/Black –Orange/Green – Green strips (for the grasses)
- Glue/gluesticks.

- 1 Start with a white tray or sheet.
- 2 Create the layer of bedrock with grey/black paper.
- 3 Create iron pan layer with crepe paper and card.
- 4 Create deep peat layer with black card/paper.
- 5 Create moss layer with orange and green shredded paper.
- 6 Create grass and shrub layer with plants or thin strips of green paper.

Recreate the layers as shown in the picture below.



← Grass/shrub layer

← Moss layer

← Peat layer

← Iron pan layer

← Bedrock layer

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