LIFE IP Wild Atlantic Nature

Blanket Bogs Teacher's Guide











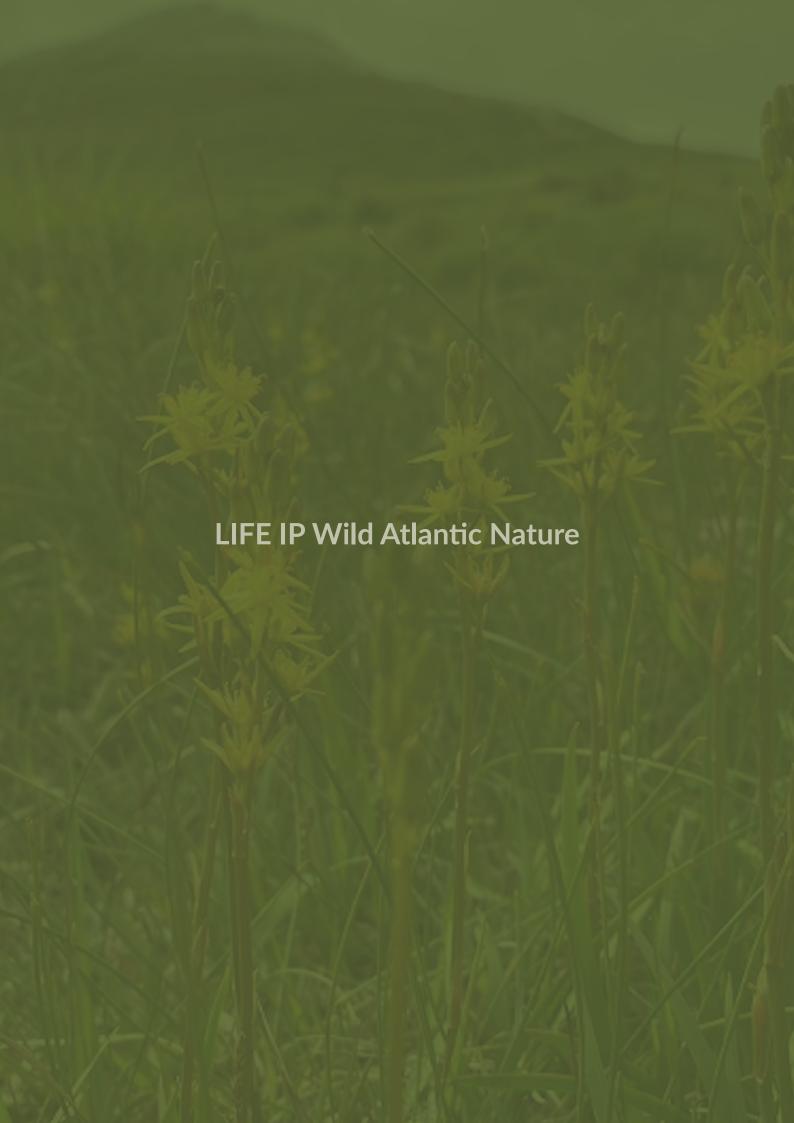


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1 LIFE IP Wild Atlantic Nature primary school programme

Welcome to the LIFE IP Wild Atlantic Nature primary school programme. In the LIFE IP Wild Atlantic Nature target area, schools are invited to take part in an educational programme delivered through the Heritage Council's Heritage in Schools Scheme. Thank you for choosing to take part. The Heritage in Schools Scheme provides a panel of Heritage Specialists who visit primary schools (in-person or virtually) to help children and their teachers learn about and appreciate their local heritage. The Scheme supports the stated aims and objectives of the Social, Scientific and Environmental Education (SESE) curriculum and provides an additional educational tool and resource for teachers.

Shortly you will be introduced to your Heritage in Schools Specialist who will guide you through the LIFE IP Wild Atlantic Nature education programme which will include:

- 1 A video which goes through the key learning outcomes sent by the specialist. Please show this to the students the day before the visit.
- 2 A PowerPoint presentation introducing the LIFE IP Wild Atlantic Nature project and information on the formation of blanket bog, the flora and fauna they support and a section on completing the score card.
- 3 A field visit to a local blanket bog habitat to undertake a peatland habitat assessment.
- 4 Guidance to help complete a follow-on project based on learnings from the video and the day.

2 Introduction to LIFE IP Wild Atlantic Nature

LIFE IP Wild Atlantic Nature, a 9-year EU-funded LIFE Integrated Project, works with farmers, local communities (including schools) and landowners to add value to the wide range of services provided from our Special Area of Conservation (SAC) network of blanket bogs and associated areas. Intact peatlands provide clean drinking water, store carbon, support biodiversity, produce high quality food and support resilient rural economies and livelihoods through farming, tourism, recreation and other activities.

The project, coordinated by the Department of Housing, Local Government and Heritage, focuses on 35 blanket bog project sites in counties Donegal, Leitrim, Sligo, Mayo and Galway. As well as working closely with farmers and local communities, the project brings together the experience and knowledge of associated partners including the Department of Agriculture, Food and the Marine, RTÉ, Coillte, Fáilte Ireland, The Heritage Council, Bord na Móna, Teagasc, Northern & Western Regional Assembly, and Universidade de Santiago de Compostela in Spain. The primary school education programme within the project is managed by associate partner, The Heritage Council.



You can introduce the LIFE IP Wild Atlantic Nature to your students by watching a short introductory video. You can access this directly on YouTube

www.youtube.com/watch?v=w60zGMdUIx8

3 The importance of blanket bogs



Blanket bogs are peatland habitats that have formed over the past 7,000 – 10,000 years and are valuable wetlands that are important from a social, economic, environmental and cultural perspective. Intact peatlands provide our drinking water, store huge amounts of carbon, provide habitats for biodiversity, and a home for many of our most endangered species. They also provide us with high quality food. Without these crucial services, we would be left with considerable challenges to the way we live. The conservation of blanket bogs is important for numerous reasons:

- Ireland is the only EU Member State with significant representation of Atlantic blanket bog habitat, making an improvement in its conservation status an important objective from the EU perspective. Globally, Ireland contains 8% of the world's blanket bog.
- Blanket bog habitat supports a rich diversity of species including several rare plants and vulnerable species and provides an essential feeding and breeding habitat for wetland birds like curlew.
- Blanket bogs are important agricultural lands commonly used as rough grazing land for sheep and cattle.
- Blanket bogs are extremely important for climate change mitigation as they store millions of tonnes of carbon. Peat forming plants such as sphagnum moss and sedges remove carbon from the atmosphere and lock the carbon away in the form of peat.
- Blanket bogs help to improve water quality through natural filtration.
 They play an important role in flood management by storing and slowly releasing surface water run-off (known as flood-water attenuation).
- Blanket bogs are important archaeological sites as they preserve ancient landscapes and artefacts within and beneath the peat.
- Blanket bogs provide important scientific insights into changing atmospheric conditions and regional ecological and environmental conditions.
- Blanket bogs are important recreational sites used by walkers, runners, anglers, photographers, nature and outdoor enthusiasts, among others.

4 Optional student activities

A. Record your community's blanket bog stories

As your school is located close to one of the LIFE IP Wild Atlantic Nature sites it can be expected that your students' family and friends will have a connection to the blanket bogs within your community. Peatlands offer many services to the local community, referred to as ecosystem services and these are the benefits we all receive from nature.

While many of the ecosystem services of peatlands are still active today, some of the traditional practices are being replaced with modern conveniences both at home and in your community. It is important to remember and record community's traditional peatland practices and stories, which are fondly remembered by older members of your community today. One of the most well-known examples of recording student stories, daily lives and regional folklore is The School's Collection of the National Folklore Collection. More than 50,000 primary school students interviewed older relatives and recorded their stories between 1937 and 1939.

This activity asks your students to create a 'Community Peatland Memory Record' for your school.



Print and provide each student with a copy of the recording sheet located on page 7 of this booklet. Ask each of your students to sit down or go for a walk with a grandparent, neighbour, family friend, uncle or aunt asking them to share their stories of the local bog. Encourage your students to draw pictures, write poems or take photographs to attach with their community peatland memory record.

Prior to the interviews you can support your students by having a classroom discussion exploring questions they may ask. Some examples include, but are not limited to:

- Did you ever work on the blanket bog in our local area?
- Did you ever play on the blanket bog in our local area?
- Have you any stories about our local blanket bog?
- Did you hear of anyone collecting anything from our local blanket bog?

Finally ask the students to return their completed record sheet encouraging each student to share with their class the memories and stories they recorded. Create a classroom display with the records collected before storing all the collected records in a folder for your school library.

Discuss with the students the importance of recording stories, and of treating these stories and the people they interview with respect. Ensure that consent is obtained from participants if interviews will be presented publicly. Guidelines for recording oral history from the Oral History Network of Ireland here: oralhistorynetworkireland.ie/practical-guidelines



Community Peatland Memory Card Student name: _____ Interviewee name: Location: Share your story: Draw pictures, write poems or take photographs and attach to this.



B. Make your own grass rope

This activity will ask your students to make their own grass rope. Purple moor-grass is a common peatland plant on blanket bog habitat. Each winter the leaves are shed and turn a yellow colour that forms a bundle at the base of the tussock, known as leaf litter. Ask your students to collect leaf litter from purple moor-grass to make their own grass rope, if they don't have access to purple moor-grass use hay.



Steps

- Organise your students in pairs with each pair taking a bundle of leaf litter or hay.
- 2 One student should take a small bundle of leaf litter or hay and hold it at both ends.
- 3 The student should begin to twist the leaf litter in the middle and as the twist is being formed fold the leaf litter or hay in half.
- 4 Continue to twist both ends with the second student now supporting by holding the leaf litter or hay at the point where it was folded.
- 5 Continue to twist the two ends and the students should begin to see the rope being formed but also notice that they will run out of leaf litter or hay to twist.
- 6 Take another bundle of leaf litter or hay and place it on one of the ends and continue to twist, it will quickly weave itself into the rope. Advise the students they should take a smaller amount of leaf litter or hay than their original amount so their rope maintains the same size.
- 7 Continue to add leaf litter or hay and twist to make the rope the length the students would like. Also encourage your students to swop their positions so they each get an opportunity to twist to form the rope.
- 8 To finish tie the two loose ends together with a simple overhand knot so the rope does not unwind.

There are many YouTube videos available online, one suggestion to help students follow the steps is: www.youtube.com/watch?v=5DG26XDPpB8

Student stories might include the harvesting of peatland plants for use around the home or the land. Heather was once collected to make a sweeping brush for the kitchen and in The Schools' Collection, Volume 0416, Page 047 a student describes how hay was collected to make rope. Visit www.duchas.ie and read the

description with your students.



C. Encourage your students to become citizen scientists

The common frog (*Rana temporaria*) is Ireland's only species of frog. It is a protected species in Ireland and is listed in Annex V of the European Union Habitats Directive which means we have to take special care to look after it. Citizen Science is the collection of data from the natural world by members of the public. The National Biodiversity Data Centre works to make biodiversity data more freely available in order to better understand and assist the protection of Ireland's biodiversity. Encourage your students to record the various stages of the common frog lifecycle in your local area and submit their records to the National Biodiversity Data Centre by visiting records.biodiversityireland.ie. Frog facts and life cycle are available at www.ipcc.ie/a-to-z-peatlands/frogs.

Why encourage your students to record their frog sightings? Frogs are indicator species. This means that they are sensitive to changes in the environment around them such as pollution and global warming. They make good indicator species because they live in two environments - land and water and have thin skin that they breathe through. Their skin can absorb toxic chemicals and diseases. If the common frog was to disappear from your local environment it may be a sign that it has become polluted. Likewise, if there are lots of common frogs in your area it means your local environment is healthy. The common frog is an important source of food for predators including birds, foxes and otters, while the common frog itself helps to manage pests as they feed on slugs, snails and flies.

It is easy for your students to become citizen scientists. Ask each of your students to go frog watching, it could be a fun homework activity! Students should watch for all stages of the frog lifecycle including frog spawn, tadpoles and adult frogs. Advise students to always bring an adult with them if they are going to look in local habitats away from their home gardens. You could also make it a class group activity by looking for frogs in your school grounds. Each student that observes a stage of the common frog lifecycle should:

- **1** Make a note of the location and the surrounding habitat e.g., garden, pond, ditch, bog.
- 2 Record the stage of the lifecycle e.g., adult frog, tadpole, leggy tadpole, frog spawn.
- 3 Record the date of their sighting.



- 4 On return from their frog recording students should submit their record online by visiting <u>records.biodiversityireland.ie</u>. You could choose to make this a fun classroom ICT activity for students.
- 5 Students can also record the other wildlife they see in their local area all records are valuable.

5 Preparing for your peatland visit



In advance of your students' field trip to your local blanket bog here are some tips for you from the Irish Peatland Conservation Council:

- 1 Location: Ensure to inform the Principal or designated teacher/secretary of the location of your field visit, leave a contact mobile number for your class and advise them of your departure/arrival times.
- 2 Clothing and lunch: Students and teachers should wear appropriate outdoor clothing and dress for the weather i.e. hiking boots/wellies, rain jacket, sunscreen or sun hat. Avoid chill while outside, especially on the bog. Dress in layers. Advise school groups of the danger of midge, mosquito, tick and horsefly bites while on the bog. Insect repellents can be suggested to parents in advance. All students and teachers should bring a packed lunch and a drink to their peatland field visit.
- 3 Weather: Check the weather forecast the day before your school visit. In the event of storms, heavy rainfall or extreme weather, postpone your field visit due to unsuitable conditions.
- 4 Preparation for departure from school: Ensure all students have used the bathroom before departure. You should ensure all medical requirements for students are met by bringing asthma inhalers, EpiPens or other medical treatments if required. Bring a First Aid Kit. Keep hands free on the trip, advise students to store lunch, worksheets, equipment and keys in back packs so that their hands are free. We recommend supervision of at least 1 teacher for every 10 students.

- 5 Travel and managing groups outdoors: If walking to your local peatland, students should walk in a sandwich formation with the facilitator in the lead to monitor traffic on public roads and teachers to the rear. Do not get distracted walking down country roads and stick to the right side, facing oncoming traffic. Do not get distracted while getting on and off the bus or out of a car. Watch out for hazards in the countryside. On bogs these could be wet holes, pine stumps, soft bare peat and shrinkage cracks concealed by heather at the edge of the bog. Appoint a partner for walking and working together during the visit.
- 6 Managing groups on peatlands: Set boundaries if sending students on excursions. Be vigilant near areas of open water. Keep students away from open water, deep ponds or drains where possible. If walking along open water the facilitator/teachers should position themselves between the water and the students. Safe areas on the bog are generally where heathers are found. Unsafe areas are the bright green patches of wet bog moss. Advise students to try to fall forwards with arms outstretched, calling for help if the ground is soft where they walk. Daisy flower circle formation for instructions and discussions while on field work. This means that the students stand in a circle around the teacher or facilitator so that each one can see what is being demonstrated and hear instructions being given.
- 7 Departure from peatland habitat: Do a quick survey of the site to ensure no litter is left behind. Follow Leave No Trace principals, learn more by visiting <u>www.leavenotraceireland.org</u>.
- 8 Hygiene: Wash your hands thoroughly after the field trip. Parents should check children for ticks as a precaution against Lyme disease.



Useful links for further information

LIFE IP Wild Atlantic Nature	www.wildatlanticnature.ie
National Parks and Wildlife Service	www.npws.ie
The Heritage Council	www.heritagecouncil.ie
The Heritage in Schools Scheme	www.heritageinschools.ie
The National Biodiversity Data Centre	www.biodiversityireland.ie
Irish Peatland Conservation Council	www.ipcc.ie
Leave No Trace	www.leavenotraceireland.org
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Visitor Attractions to learn more:

Museum of Country Life	www.museum.ie
Glenveagh National Park	www.glenveaghnationalpark.ie
Connemara National Park	www.connemaranationalpark.ie
Wild Nephin National Park	www.wildnephinnationalpark.ie
Céide Fields	www.ceidefields.com

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