RHET
The Royal Highland Education Trust

Peatland restoration

Suggested participants – Third/Fourth level

Peatland Restoration is a term used to describe management measures that aim to restore the original form and function of peatland habitats to favourable conservation status (International Peatland Society). The restoration work involves rewetting and replanting degraded peatlands to restore their natural functions, such as carbon storage, biodiversity support, and flood regulation. This process typically includes blocking drainage ditches, managing water levels, and reintroducing native vegetation like sphagnum moss. Peatland restoration activities link directly to understanding how human activity impacts the environment (science), investigating land use and sustainability (social studies) and applying problem-solving in environmental contexts (technologies). The topic also supports Learning for Sustainability by fostering awareness of climate change, biodiversity, and the role of young people in environmental stewardship.

What this pack contains:

- All the resources to undertake a peatland restoration discovery activity with your class.
- Learning Intentions, Success Criteria and Suggested Experiences & Outcomes.
- Learning for Sustainability links.
- Lesson plan.
- Suggested additional activities.
- Teacher information and learner vegetable tasting worksheet

Learning Outcomes

- We are learning to appreciate how we can improve the environment.
- We are learning about the value of peatlands for planet and people.
- We are investigating careers in restoring peatlands.
- We are learning about the technology used in peatland restoration.

Success Criteria

- I can understand what peatland restoration is and why it is important.
- I can share information about how peatlands are restored.
- I can understand the role of healthy peatlands.

Experiences and Outcomes

- **SCN 3-05b** I can explain some of the processes which contribute to climate change and discuss the possible impact of atmospheric change on the survival of living things.
- **SCN 4-05b** Through exploring the carbon cycle, I can describe the processes involved in maintaining the balance of gases in the air, considering causes and implications of changes in the balance.
- **SOC 3-08a** I can identify the possible consequences of an environmental issue and make informed suggestions about ways to manage the impact.
- **SOC 4-08a** I can discuss the sustainability of key natural resources and analyse the possible implications for human activity.
- **TCH 3-06a** I can identify the costs and benefits of using technologies to reduce the impact of our activities on the environment and business.

Learning for Sustainability

- **Goal 3 Good Health and Wellbeing:** Ensure healthy lives and promote well-being for all at all ages.
- **Goal 4 Quality education:** achieve literacy and numeracy.
- **Goal 6 Clean water and sanitation:** Ensure availability and sustainable management of water and sanitation for all.
- **Goal 12:** Ensure sustainable consumption and production patterns.

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Peatland restoration Lesson Plan

Introduction

- Share/discuss the learning intentions and success criteria.
- Our peatland learning pack provides sections covering what peat is and how it forms, sphagnum, why peatland is important, biodiversity and interdependence, peatland restoration techniques, data analysis, people and jobs.
- Find out more about peatlands and how they are being restoration using the powerpoint provided (includes notes).
- You can use the pack, powerpoints and videos to cover environmental, social and economic issues at a local and global level and the supporting interactive resource can be used directly with pupils.
- Talk about the range of careers in the sector

Suggested discussion points

- Can you explain how peat can both store and release carbon?
- Can you think of any conflicts that may arise when restoring peatlands?
- What are the key abiotic factors to consider in peatland restoration?
- List three ways to improve the health of peatland.
- What are the biodiversity benefits of restoring a peatbog?
- What type of species are found in peatland habitats?
- What conditions are required for sphagnum re-colonisation to be effective?
- Can you think of any plant adaptations to living in a peat bog

Learning

- **Social studies:** The ability to discuss the role of human interventions in environmental management.
- **Science:** The ability to discuss the role of peatlands in relation to climate change.
- **Technologies:** The ability to discuss the use of technology in reducing environmental impact.

Additional tasks

- Further explore the wildlife you might find in a peatland and use this as a basis for making a key.
- Visit a peatland site and find out more about the restoration work going on locally, your local RHET coordinator may be able to assist with this.

More information

- Our People place and environment lesson plan covers the role of agriculture in shaping people, place and environment is key to combating both the climate and biodiversity crisis.
- Our Farming habitats and biodiversity lesson plan highlights the importance of producing food in harmony with nature.

Social media

Please tag **therhet.bsky.social (Bluesky)** or **@TheRoyalHighlandEducationTrust (Facebook)** in your lesson photos/comments.