



Comprehension Text: Peatlands – How They Formed and Why They Mattered

How Peatlands Were Created

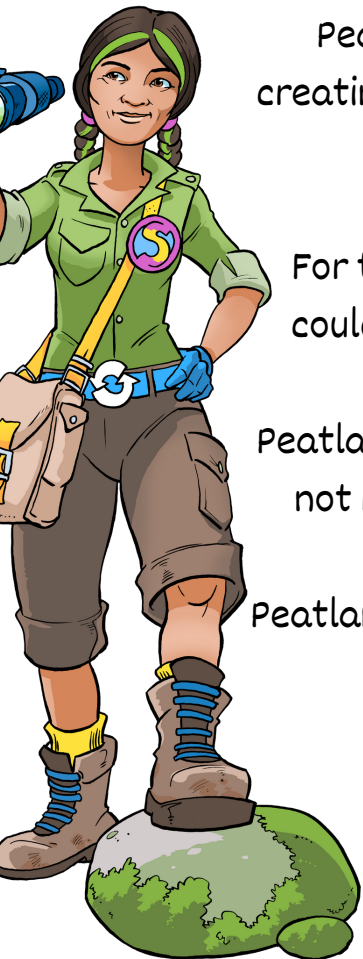
Peatlands began forming in Northern Europe, including Northern Ireland, after the last Ice Age, around 10,000 years ago. When the glaciers melted, they left behind hollows and flat land that filled with water. In these waterlogged places, special plants such as sphagnum moss began to grow.

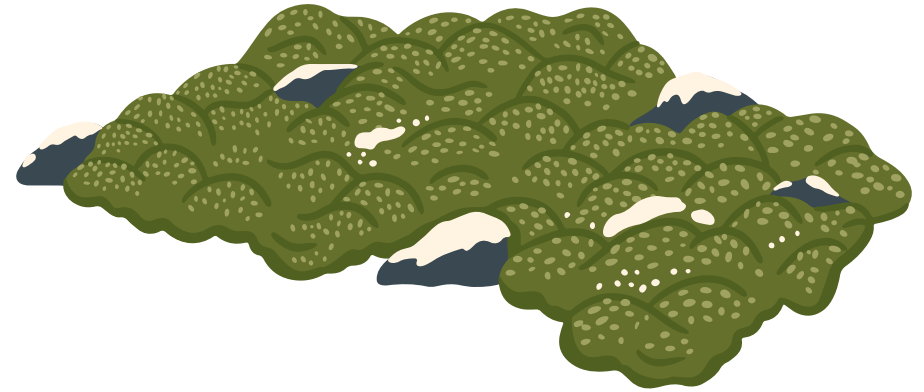
Sphagnum moss acts like a sponge, holding water and making the land permanently wet. It also releases chemicals that make the water acidic and low in nutrients. In these conditions, dead plants do not fully decompose (rot away), because there is little oxygen and few microbes to break them down. Instead, the remains of moss and other plants slowly built up in layers, becoming peat.

Peat grows very slowly — only about 1 millimetre each year. Over thousands of years, thick layers built up, creating raised bogs and blanket bogs across Northern Ireland. These peatlands are natural carbon sinks, locking away carbon that plants absorbed from the air during photosynthesis.

Why Peatlands Were Important in the Past

For thousands of years, humans have relied on peatlands. People discovered that dried peat, also called turf, could be used as fuel. Before coal and oil were widely used, turf fires heated homes and cooked food. Families often worked together to cut and stack turf during the summer, an important seasonal tradition. Peatlands also preserved objects from the past. Because peat is acidic and has little oxygen, things buried in it do not rot quickly. Wooden tools, leather shoes, and even ancient human remains known as bog bodies have been found. These discoveries give archaeologists amazing evidence about how people lived long ago. Peatlands shaped local culture and survival. They were a vital resource for warmth, cooking, and farming, but also acted as natural archives, holding secrets of the past.





Comprehension Questions Upper Primary

Recall

1. Around how many years ago did peatlands begin to form in Northern Europe?
2. Which plant is the most important in starting peatland formation?
3. Why do dead plants not fully decompose in a bog?
4. What is dried peat used for?

Understanding

1. Explain why peat builds up so slowly.
2. How does sphagnum moss make conditions difficult for decomposers?
3. Why are peatlands called carbon sinks?
4. How can archaeologists use peatlands to learn about the past?

Application

1. Imagine you lived in Northern Ireland 200 years ago. How would peatlands have affected your daily life?
2. Why might scientists and historians today both be interested in protecting peatlands?

Challenge (Thinking Like a Scientist & Historian)

1. Write a short paragraph explaining how the biology of sphagnum moss and the chemistry of decomposition link to the history of peat as fuel and as a preserver of ancient artefacts.