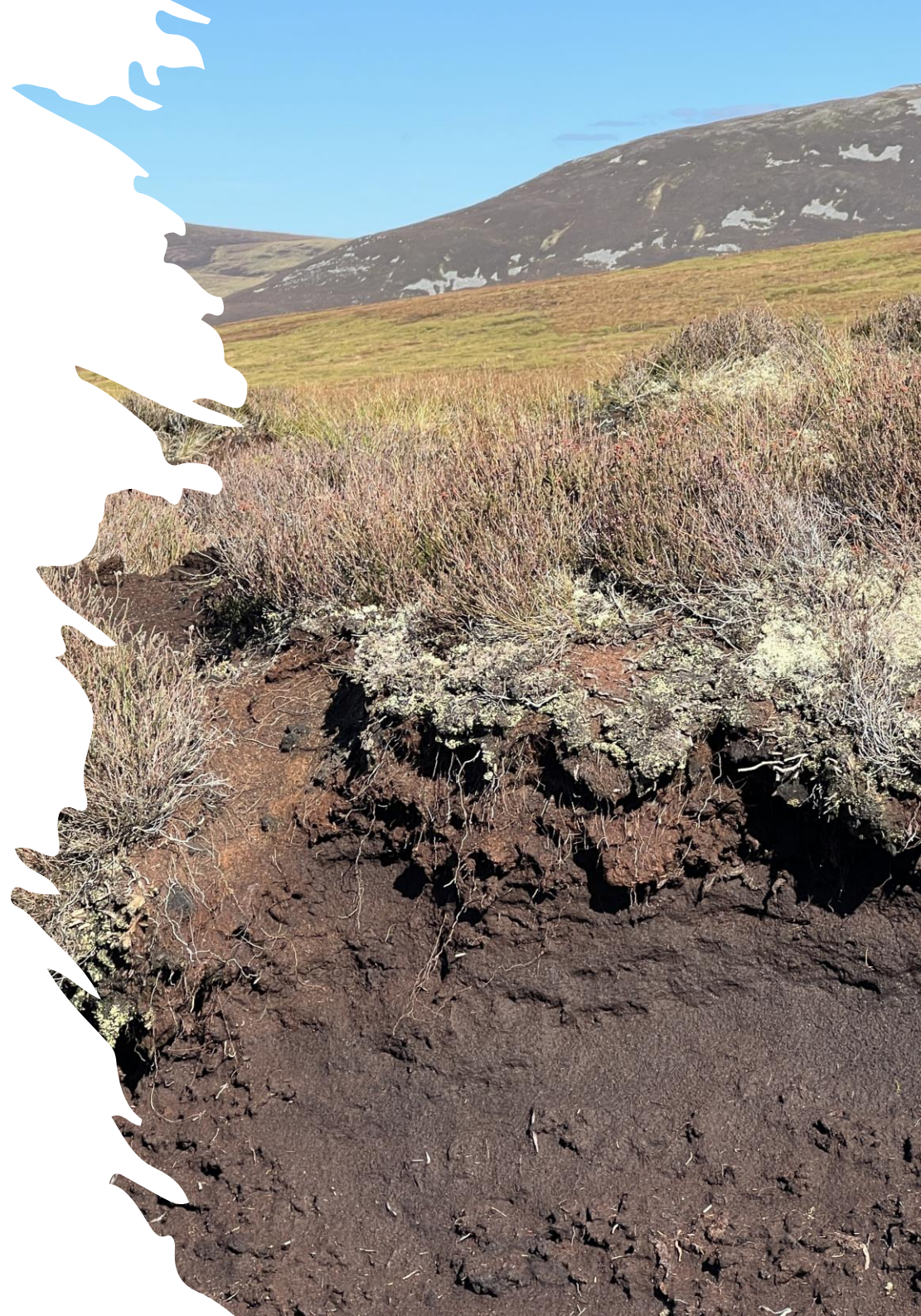


What do Peatlands do for Us?

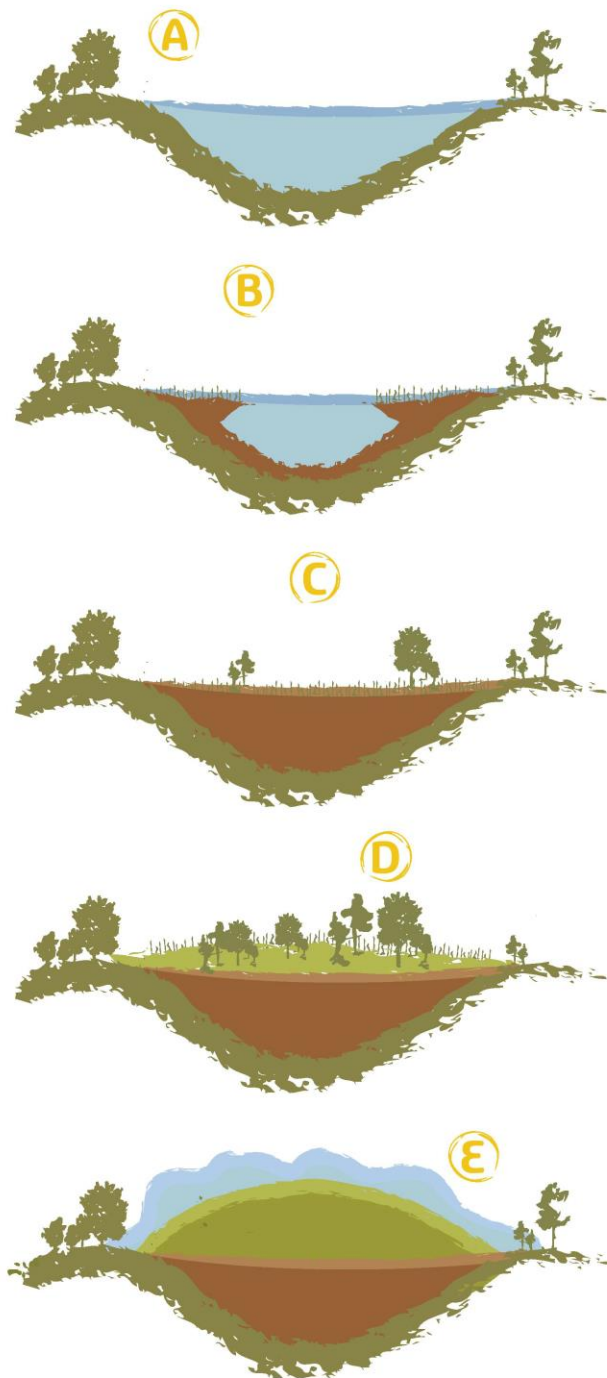


What is Peat?

- Peat is soil!
- Peat is formed when organic material, mostly plants, does not fully decompose due to waterlogging, oxygen and nutrient deficiency, and high acidity conditions.
- In the UK and RoI, peat has been accumulating since the last ice age, around 12,000 years ago. But peat takes a very long time to form. In 1 year only [1mm](#) of peat will be produced, therefore 1 metre of peat has taken around 1000 years to form.



5 stages of Raised Bog development

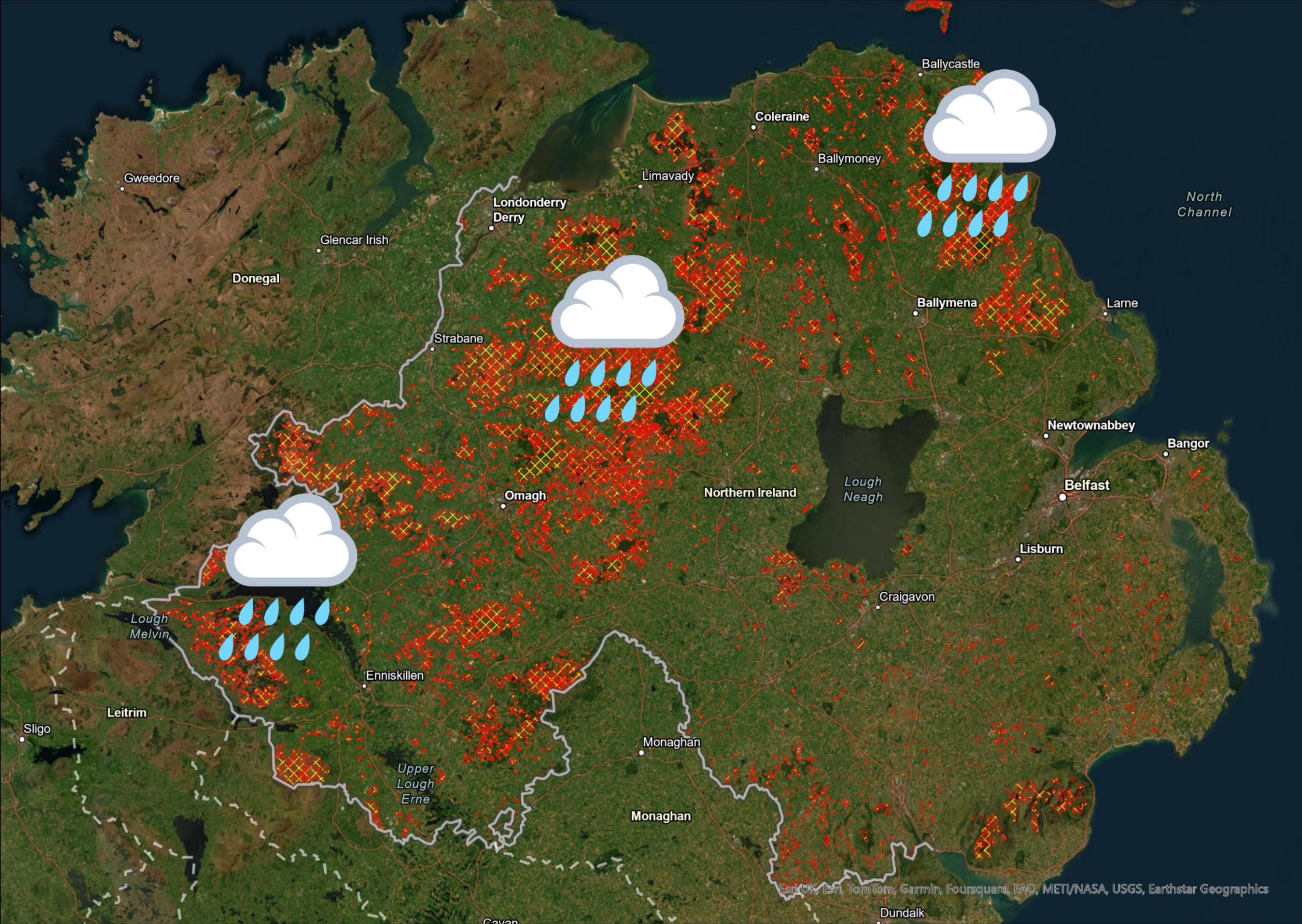




Where is the Peat?

- Peat soils cover approx. **18%** of NI's land surface
- As much as **300,000ha!**
- Major peatland habitats inc Blanket Bogs, Heathlands, Raised Bogs and Fens and they cover **12%** of Northern Irelands land!





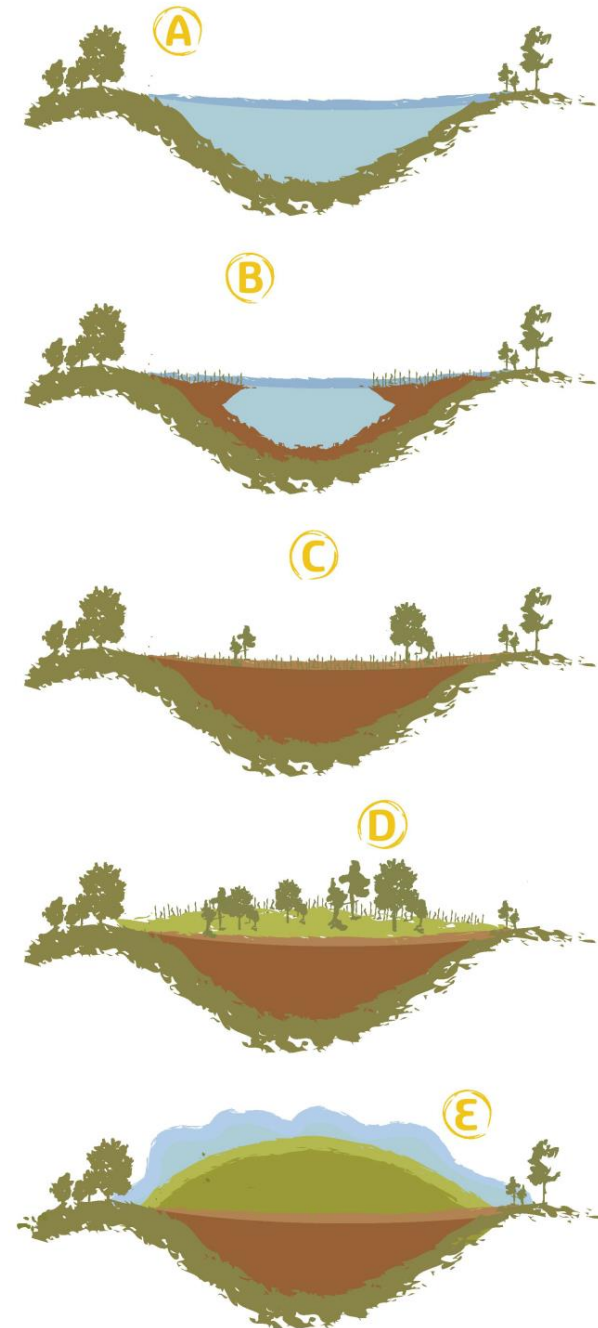
Why is it important?

- Carbon storage
- Biodiversity
- Water storage
- Water quality
- Flood mitigation



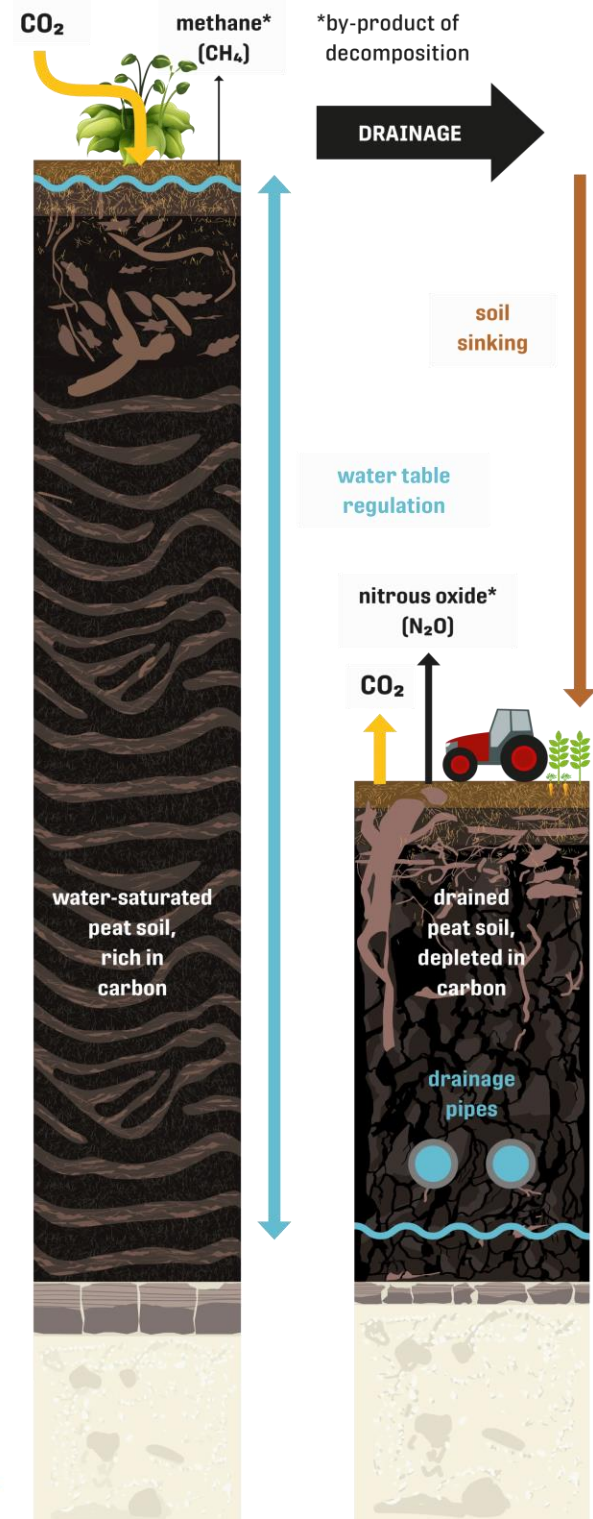
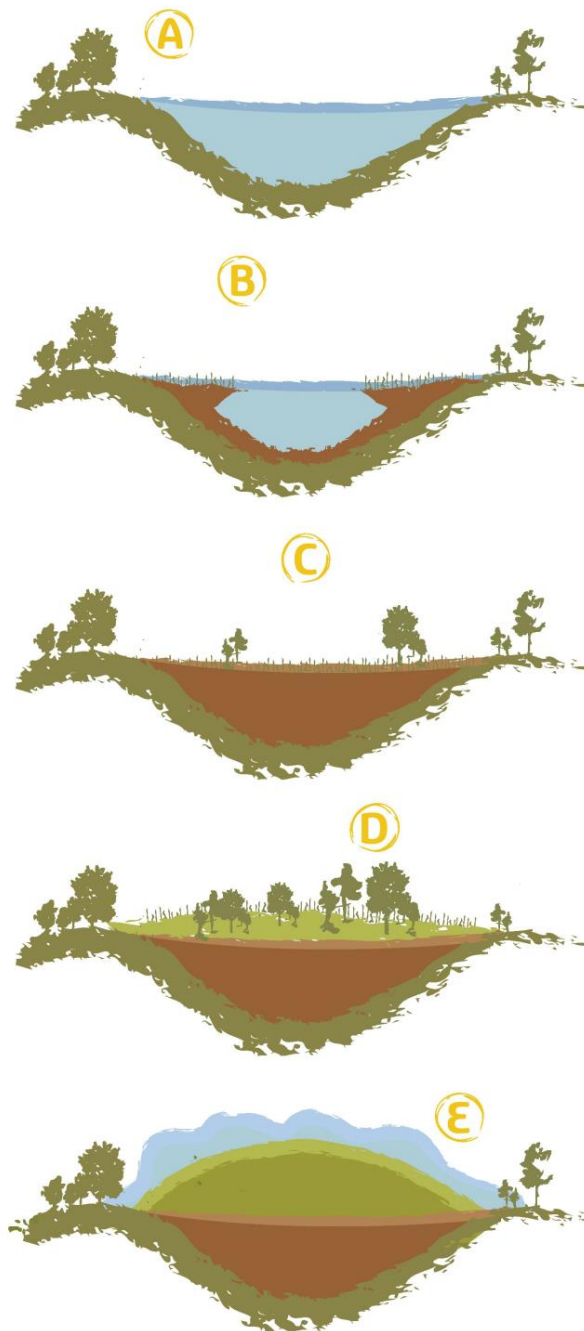
Carbon Storage – #Stop the Loss

- Peat accumulates naturally at roughly 0.5–1mm of depth per year — meaning a 1-metre depth of peat takes around 1,000 years to form
- Imagine vacuum packing vegetation into a bath, no air, no decomposition
- When we say carbon, we are not talking about gas or air we are just talking about plants and any organic material
- A UK Wildlife Trusts estimate puts carbon storage at around 8,000t of carbon per hectare in a 2-metre-deep peatland



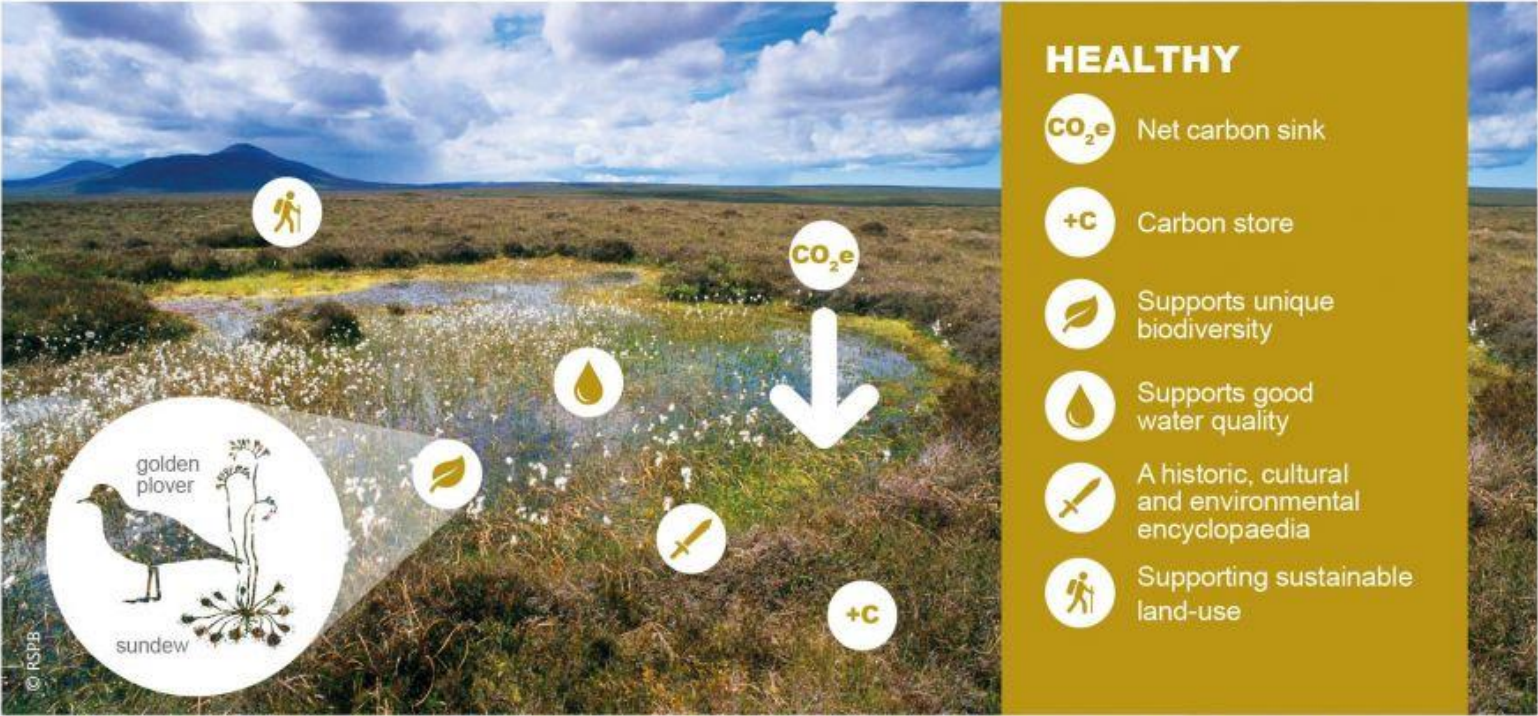


5 stages of Raised Bog development



#Stop the Loss

ECOSYSTEM SERVICES IN A HEALTHY PEATLAND



- Estimated to store 3.2 billion tonnes of CO_2 in the UK
- Could be emitting as much as 20 million tonnes of CO_2 per annum!

IMPACT ON ECOSYSTEM SERVICES IN A DAMAGED PEATLAND



- That's as much as between 4-5 million petrol cars emit each year!!!

- If we were to treat peat as a renewable resource, then we would need to extract it at the same rate at which it forms
- This would mean extracting it at a rate of 1mm per year!





Biodiversity

Water Storage



Water Quality



Flood Mitigation

But! They only do this if they are healthy

- After centuries of pressure we think that more than 80% of NI's peatland habitats are in poor condition.
- When they aren't healthy then all of these ecosystem services are lost



**Restoration
is key!**



Questions?

