

This week on Ireland’s Classic Hits Radio we’re looking at the work of the Community Wetlands Forum in peat land preservation.

**Why are peatlands important?**

Peatlands are among the most carbon-rich ecosystems on Earth. In a natural condition, peatlands have a net cooling effect on climate, reduce flood risk, and support biodiversity. Healthy peatlands can reduce flood risk by slowing the flow of water from the uplands, and by providing floodplain storage in the lowlands. They also provide important nesting and feeding grounds for many wading birds, as well as important habitats for rare insects and plants.

**How do healthy peatlands mitigate climate change?**

Healthy peatlands capture CO2 from the atmosphere through photosynthesis. Because the plants that grow on peatlands do not fully decompose under wet conditions, they do not release carbon which would otherwise be returned to the atmosphere as CO2. Peatlands store vast quantities of carbon, and where peat continues to form this helps to offset the effects of human activities (such as fossil fuel burning) that are raising CO2 levels in the atmosphere, leading to climate change.

**What is the impact of peatland degradation?**

* Draining the soil so it is not waterlogged, in order to make it suitable for crop and tree growth leads to the decomposition of plant material and soil shrinkage. This releases carbon into the air and is thereby a source of CO2 emissions into the atmosphere. While it takes 1,000 years for 1m of peat to build up, drainage means the land surface reduces an average of 1cm to 2 cm per year through subsidence due to peat oxidation.
* The creation of ditches to enable drainage also provides channels for the rapid flow of water, which may increase flood risk downstream
* Drying out the peat soil allows shrubby vegetation to grow, and makes the land more vulnerable to severe wildfires.

**For more information:**

[www.communitywetlandsforum.ie](http://www.communitywetlandsforum.ie)

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