

## Peatland Restoration at Glen Dye Moor

Our peatlands are an amazing store of carbon. Peatland in a natural waterlogged state prevents carbon within organic matter at the surface oxidising and being released as carbon dioxide – in other words, it prevents dead vegetation decomposing. This dead vegetation accumulates to form peat, which stores the carbon the plants absorbed from the atmosphere.

It is estimated that 80% of Scotland's peatlands are damaged. This affects their ability to capture and store carbon, instead degraded peatland results in the emission of carbon dioxide. Degradation has mainly happened due to past attempts to drain peatlands for agricultural improvement, along with other past management practices.

Peatland restoration involves un-doing these previous practices through raising the water table and re-establishing bog vegetation to prevent carbon being oxidised and released as carbon dioxide.



A Feasibility Study is being carried out at Glen Dye Moor to identify and map areas of potential peatland restoration. This includes detailed survey work to establish peat depth and peatland condition. It also identifies the most appropriate techniques for restoration. The areas are also surveyed for other features, such as breeding birds and archaeology. This ensures that other features are not adversely impacted by the peatland restoration itself.

Techniques for peatland restoration includes blocking man-made ditches, reprofiling gullies and eroded hags, and re-vegetating through collecting on-site plant material and relocating it locally in eroded areas.

The restored areas are monitored to ensure that restoration is occurring. Any maintenance operations, such as reforming dams, are also carried out to keep the restoration process on track.

Peatlands in good condition provide important wildlife habitat. There is an increase in invertebrate numbers, which benefit many bird species that live in the peatlands. Peatlands also help to regulate water flow and water quality. This makes them important for downstream river quality, drinking water quality and for flood regulation.

