

MOORLAND RESTORATION

Much of the UK's moorland is heavily eroded due to pollution, over grazing and drainage. Heavy erosion of the peat in these areas increases water runoff from the moorland which adds to the flood risk downstream, contributing to flash floods. Restoring moorland can reduce the impact of flooding downstream by increasing the time it takes for rainwater to reach the rivers. Increasing surface roughness with vegetation results in overland flow rates being reduced, creating a 'wetter' catchment.

Stabilising Bare Peat

Heather brash and geo-textiles are used to form a network of vegetation to reduce peat erosion. Grasses are then sown and lime fertiliser is used to increase the pH of the soil to encourage the growth of vegetation, stabilising peat and reducing erosion.

Gully and Grip Blocking

Blocking grips and natural gullies traps water and sediment which slows the flow of water and raises the water table.

Impermeable (plastic) dams can be used to trap water, or permeable dams made of heather or peat, can be used to slow water and trap sediment.

Sphagnum Moss

This species of moss is an important building block of peat formation, acting like a sponge soaking up more than 8 times its weight in water and staying wet long after soil has dried out. It helps to restore water tables, slow down water discharge and improve water quality.

Benefits

- Reduces downstream flood risk by increasing water storage and slowing down the flow of water across the land.
- Improves water quality.
- Improves biodiversity by recovering moorland habitats.
- Reduces soil erosion and the amount of sediment entering rivers.
- Re-wetting can minimise the severity of wildfires and the effects of droughts.
- Reduced amount of CO₂ in the atmosphere and regulation of climate change through storing carbon as peatlands are one of the world's largest carbon sinks.



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