

Restoring Peatlands

Deep peat habitat covers at least 2 million ha in the UK (around 8% of the UK land area). This peatland is still largely in an active state and capable of forming peat but much of it has been damaged by activity such as peat extraction, burning, grazing, drainage and forestry planting. The damage affects the peatland ecosystem in many ways with losses of biodiversity, archeological preserves, and of the carbon storing and water management functions. Restoration techniques aim to restore the vegetation and hydrology and return the system to one that is capable of supporting the full natural range of ecosystem services that peatlands offer.

Without restoration, damaged peatlands will continue to deteriorate and in extreme situations this can occur at an alarming rate, with dramatic bog bursts and severe erosion causing costly damage to infrastructure such as water supplies. The carbon consequences can also be high, with estimates of 10 million tonnes of carbon dioxide being lost each year from the UK's damaged peatlands. The longer the damage continues the more difficult and costly it becomes to restore the peatland back to a functioning system.

Peatland restoration is also an effective means of climate-proofing our important landscapes. The rising temperatures and increase in extreme rainfall events will put peatland habitats under considerable stress. The scientific evidence suggests that in a healthy condition they can adapt to the changing climate and continue to provide their vital services. In a damaged state however the peatlands could be further compromised by a changing climate resulting in a more rapid loss of important biodiversity, carbon stores, and water management function.

Action taken now to restore peatlands could prevent massive future costs arising from the breakdown of the peatland ecosystem. In the last few decades, several major peatland restoration initiatives have taken place across the UK. These have often attracted matched funding from the EU in recognition of the high environmental priority of peatland habitats and wildlife. Some of the projects have also involved the private sector with land managers, farmers and crofters taking up peatland restoration measures under rural development programmes. In peatlands damaged by forestry plantations, the Forestry Commission supports restoration measures in the national estate and on private land.

Recently there has been support for peatland restoration by the business community. Water companies for example, faced with spending millions of pounds for water treatment in damaged peatland catchments have begun habitat restoration as a long term cost saving exercise with benefits in some catchments of up to £2.5 million.

A long experience of peatland restoration expertise should allow the UK to be recognized as being at the forefront of the worlds efforts to reverse the damage done to these fragile systems. However, even with the outlined initiatives and our proven abilities to restore

peatland habitat, the scale of activity is small compared to the extent of damage inflicted on the UK's peatlands.

Urgent action is needed now to stop the deterioration of our damaged peatlands.

Considering the urgency of climate change and the degraded state of many of our peatlands, renewed effort is required to bring about large scale peatland restoration with coordinated effort across government departments statutory agencies and the private sector. In any review of national and EU funding streams it is important to recognize the cost effectiveness of action taken now to stop further peatland deterioration and the multiple benefits to be gained from healthy functioning peatland ecosystems.

Case studies

Caithness and Sutherland Peatlands

Probably the largest area of Atlantic Blanket bog in the World, this 400,000ha blanket bog is one of the UK's showcase peatlands of international importance. A partnership of statutory bodies, NGOs and private individuals have agreed a strategy to help restore damaged habitat, secure sustainable development and promote the benefits of a healthy peatland ecosystem. With the benefit of EU Life funding, large areas of drains have been blocked and plantation trees removed to help restore the peatland.

Moors for Future

Moors for the Future Partnership is a private-public upland partnership project to restore the Peak District moors in England. Past damage from land management and pollution has led to some of the worst erosion of a peatland in the UK with consequent losses to amenity recreation, sporting interests and water management companies. With over 10 million day visits made each year this popular area is now the focus for major restoration efforts to revegetate bare eroding peat surfaces

Peatscapes

Peatscapes is a collaborative project that aims to conserve and enhance the internationally important peatland resource within the North Pennines Area of Outstanding Natural Beauty (AONB). In 2008/09 over 270 kilometres of moorland drains were blocked helping restore 1266ha blanket bog at a cost of around £300,000.