

# Peatlands: UK Restoration Opportunities



Peatlands are soils that are rich in organic plant material that accumulates slowly under environmental conditions that limit degradation. UK peatlands may contain up to 55% of total UK soil carbon (10 billion tonnes) and are important rare wildlife habitats, but 80% are considered degraded as a result of drainage for agriculture and harvesting for fuel, making them a significant source of carbon dioxide emissions<sup>2</sup>. Innovative approaches are therefore needed to fund restoration and restore crucial peatland functions.

## Peatland Functions

Healthy peatlands gradually accumulate carbon over time presenting an opportunity to mitigate the UK's carbon emissions and meet obligations under the 2008 Climate Change Act. Alongside their role as a carbon store, 70% of UK drinking water is derived from upland catchment areas, and intact peatlands may also mitigate flood risks in lowland areas. Additionally peatlands are a globally rare habitat and protected under national and international conventions<sup>3</sup>. Furthermore 24% of UK peatlands are under agriculture. Drained peatlands, however, are associated with significantly higher carbon dioxide production than intact peat, contributing to global warming.

## Peatland Restoration Strategies

Peatland restoration is currently undertaken by devolved public bodies such as Natural England, alongside local wildlife trusts and local land managers, including farmers<sup>3</sup>. Innovative research-led restoration strategies include the blocking of drainage ditches to allow the re-wetting of peatlands, and the re-introduction of crucial peatland species, including varieties of *Sphagnum* moss<sup>1</sup>.

## Policy Options

As well as restoring an important habitat, restoration represents a cost effective approach for mitigating the UK's greenhouse gas production. Restoration costs are estimated at £100 - £200 per hectare, with net costs of £60 - £120 million over a six year period across the

## Executive Summary

- Peatlands cover 3% of the Earth's land area and 12% of the UK, but are badly degraded due to exploitation for fuel and agriculture<sup>1</sup>.
- Peatland restoration can reduce greenhouse gas emissions, reduce flood risks and regenerate important wildlife habitats.
- Reform of the Common Agricultural Policy (CAP) on leaving the EU gives the opportunity of developing and funding new innovative management strategies that support sustainable management of peatlands and their functions.

whole of the UK<sup>4</sup>. Failing to implement a comprehensive peatland restoration policy has been estimated to cost up to £280 million over the same six year period.

Enhanced investment in peatland restoration offers significant opportunities to both meet the UK's legal obligations under the 2008 Climate Change Act, which includes an 80% reduction in greenhouse gas emissions relative to 1990 levels, the possibility of restoring an important wildlife habitat, and reducing flood risks. Areas of national and international significance may be targeted as a restoration priority.

Leaving the European Union provides the opportunity for significant reform of farming and land management policy currently subject to the CAP. The development of a new suite of innovative policies could include payments for non-market public benefits including carbon storage, water management and habitat conservation.

## Conclusions and Recommendations

Peatlands provide a range of crucial functions, including mitigating the UK's carbon dioxide production and meeting national emissions targets, water management and food production. Peatland restoration therefore offers multiple cost-effective benefits which can be delivered working in conjunction with stakeholders. Leaving the EU and the CAP provides an alternative route for funding innovative restoration work and promoting the sustainable management of peatlands.

## References

1. The Wildlife Trusts (2016), Restoring the UK's peatlands. <http://www.wildlifetrusts.org/peatlands>
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3. Natural England (2010) England's peatlands Carbon storage and greenhouse gases. <http://publications.naturalengland.org.uk/publication/30021>
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