

PEATLAND RESTORATION



THE RATIONALE FOR RESTORATION

Scotland is uniquely rich in peatlands, with over 13% of the world's blanket bog covering large swathes of the country.

These habitats have long been undervalued and, as a result, many of our peatlands have become degraded, jeopardising their ability to store carbon and support rare wildlife. But awareness of the need to restore these ecosystems is now growing fast and, underpinned by the emerging carbon markets, are providing land managers with an opportunity: to generate a reliable source of long-term revenue while enhancing their land's ability to combat climate change and biodiversity loss.



What?

Peatlands, also known as mires, form where waterlogged conditions prevent the full decomposition of dead plant matter, leading to a build up of organic material over time

All peatlands are wetlands, but they can be categorised into different types depending on how they formed.

In Scotland, we have many different types of peatland including:

- Fens
- (Upland) Blanket Bogs
- (Lowland) Raised Bogs
- Bog Woodland

In near-natural or pristine condition, peatlands act as carbon sinks, sequestering atmospheric CO₂ and storing it for millennia.

When degraded, peatlands become a net source of greenhouse gas (GHG) emissions.

How much?

Scotland's peatlands cover 1.8 million hectares, more than 23% of the country's land mass. The country contains 13% of the world's blanket bog, with nearly 5% found in the Flow Country in Caithness and Sutherland – Europe's largest expanse of blanket bog. These peatlands store an estimated 1.7 billion tonnes of carbon, more than 30 x the amount stored in all our trees and forests.

What's the problem?

More than 75% of Scotland's blanket bogs are degraded in some way. In total, Scotland's peatlands are emitting >9.5Mt CO₂e each year – nearly five times the emissions from Scotland's international aviation and shipping sectors in 2019.

More than just a carbon store

Scotland's peatlands support unique biodiversity, including rare and charismatic species like greenshank, black throated divers, dwarf birch and marsh saxifrage.

These areas are hugely important for storing and filtering rainwater. Up to 70% of Scotland's drinking water is sourced from catchments dominated by peatland habitat.

Degraded peatlands leach carbon into watercourses, and this dissolved organic carbon (DOC) has to be removed from drinking water through costly treatment processes.

“Peatland restoration can help your landholding to become a net carbon sink and also generate a reliable source of long-term revenue.”



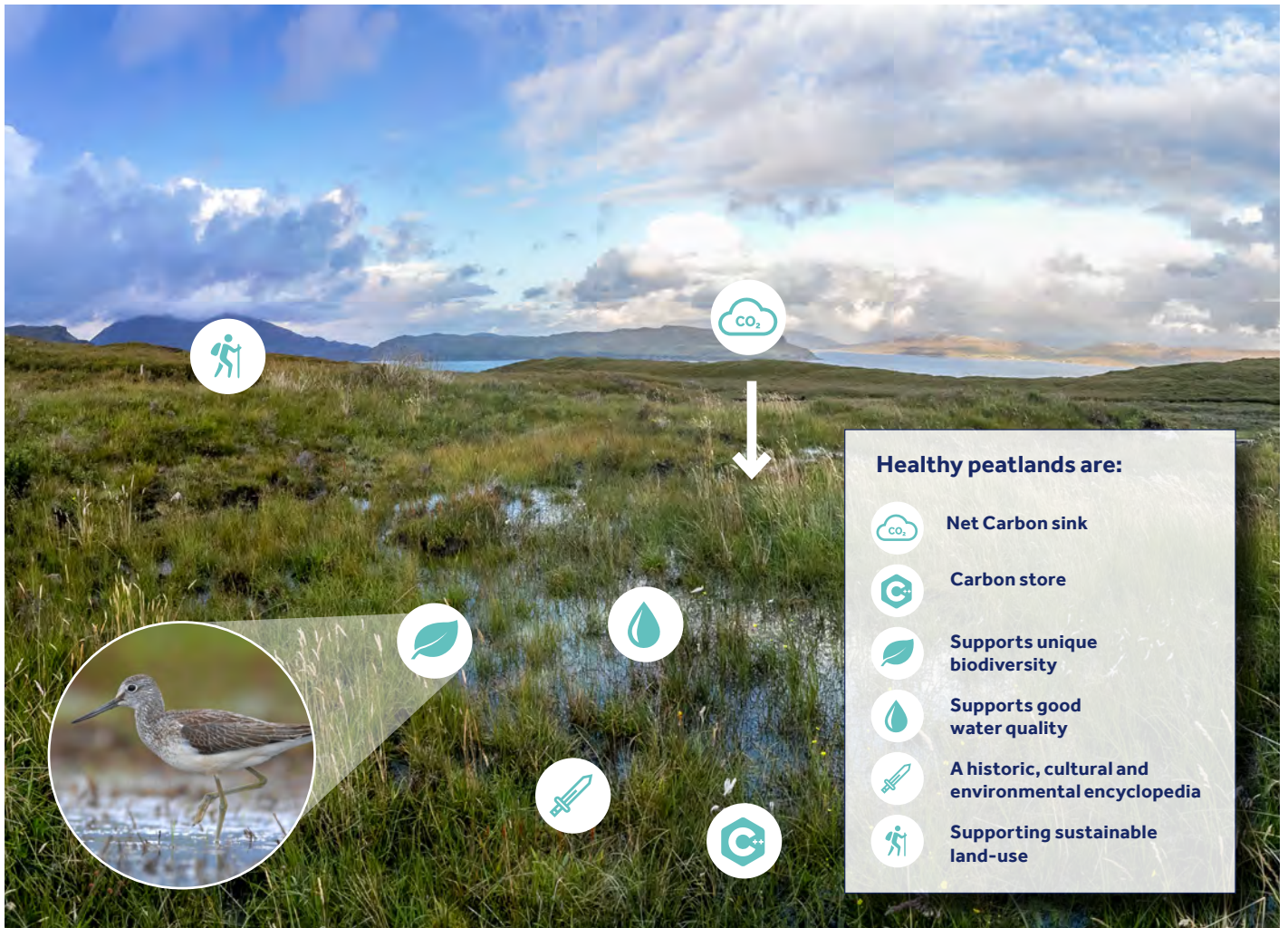
RESTORING PEATLANDS

The Scottish Government has pledged to restore 20,000ha of peatland each year, targeting 250,000ha of restoration by 2030. £250M of public funding is available for peatland restoration over the next decade.

This money is being channeled through the National Parks, Scottish Water, Forestry and Land Scotland and NatureScot's Peatland ACTION programme with restoration works typically occurring during late summer, autumn and winter.

Landowners undertaking peatland restoration on deep peat (i.e. depths >50cm) can also generate carbon credits by validating their projects with the IUCN's Peatland Code. These carbon credits are based on the GHG emissions avoided as a result of peatland restoration. Typically, one hectare of restored peatland will avoid 80 – 200 tonnes CO₂e over a duration of 50 years.

Emissions from peatlands represent 20% of Scotland's net total emissions.



OUR SERVICES

Peatland assessment

We have in-house experts who can assess the peatlands on your landholding to understand their condition, if they are degraded and, if so, to what extent.

Our familiarity with public and private sources of funding for peatland restoration, including carbon finance, means we are well placed to both design restoration projects and recommend options for funding the works.

Our team have unparalleled experience in delivering peatland restoration at a landscape scale having managed a regional project spanning 14 estates in the Monadhliath.

This, combined with Bidwells' experience in managing over one million acres of land across the UK, means we understand how peatlands fit into wider estate objectives and can work with you to design restoration programmes that integrate well with your land management objectives.

Mapping and surveying

Our team uses GIS and other mapping software to appraise and quantify peatland restoration opportunities for our clients.

With extensive knowledge of the requirements of both Peatland ACTION and the Peatland Code, we can ensure that projects are surveyed, mapped and baselined to comply with the funding guidelines.

In addition, we are able to assess the climate mitigation potential of peatland restoration, outlining the quantity of carbon credits that could be generated over a given timeframe.

Restoration management

Getting the best results from a peatland restoration project requires coordination and an eye for detail. We have decades of experience in land management across the UK.

Our consultants also have an in-depth understanding of both the hydrology of peatlands and the techniques that are deployed in their restoration. This gives us the ability to both design and manage projects, ensuring high quality output from the contracts we work with.

In addition to designing a programme of restoration works, our in-house team can tender for the appropriate contractors to deliver the work and provide on-site management and supervision.

Working closely with contractors on the ground is essential to ensuring that works are delivered on time and to the highest standard. It also provides opportunities for learning and innovation as restoration techniques and expertise in Scotland continue to evolve.

Carbon credit generation

With degraded peatland emitting more than nine million tonnes of CO₂e each year in Scotland alone, restoration offers huge potential for climate mitigation.

Through government-backed carbon standards, like the IUCN Peatland Code, landowners who undertake restoration can market and sell the climate benefits that accrue to businesses and individuals in the private sector.

Selling these benefits as carbon credits allows landowners to monetise one of the key ecosystem services peatlands deliver.

At Bidwells, we are at the forefront of developing new and innovative payment structures, building relationships between land managers and businesses to provide the best route to market for peatland carbon.

We have extensive experience in negotiating leases and building joint ventures. We can help broker the type of partnership that best suits you, ensuring maximum benefit from any peatland restoration projects on your land.

Funding ecosystem services

As well as being vital stores of carbon, peatlands also provide a variety of other important ecosystem services including:

- Water storage, filtration and purification
- Natural flood mitigation (NFM)
- Habitat for rare and unique wildlife
- Livestock grazing
- Recreation and tourism

Increasingly, the value of these other ecosystem services is being recognised financially, with markets for biodiversity, water storage and nutrient neutrality all emerging.

Our knowledge of the sector - and of the businesses looking to invest in these ecosystem services - means we are well placed to help you think strategically about designing, marketing and funding projects that deliver multiple ecosystem services beyond carbon capture and storage.

Asset management

Bidwells has extensive experience in strategic management of natural and green assets, using our cross-sectoral knowledge to ensure we are always capturing the maximum value for our clients.

For peatlands, our management can include post-restoration surveys and monitoring, carbon code verifications and assessments of new or enhanced ecosystem services being delivered by a restored peatland.

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