

Caring for our peatlands: NatureScot's submission to the Scottish Parliament's Rural Affairs Committee

NatureScot's role in caring for Scotland's peatlands

- **NatureScot is Scotland's Nature agency – charged with delivering a nature rich and resilient Scotland that benefits all people.** To care for our peatlands, we:
 - provide advice on valuing, protecting, restoring, managing and monitoring peatlands.
 - manage a number of National Nature Reserves that showcase the best of Scotland's peatlands, for example, Flanders Moss and Blawhorn Moss.
 - are the lead agency delivering peatland restoration – with over 65% of Scotland's restoration managed through NatureScot as part of its contribution to the Scottish Government led Peatland ACTION Partnership.
 - are developing the restoration sector to facilitate expansion of Peatland ACTION, for example, sharing case studies, providing technical advice and offering training.

Why care for our peatlands?

- Peat is a wetland soil made up of dead and decaying plants. When wet conditions persist, it can't fully decompose and gradually grows and becomes compressed over 1000s of years – forming peatlands.
- **Scotland's peatlands cover about 25% of the country's land and when in good and functioning condition, provide multiple benefits for society.** This increases our resilience to the potential catastrophic threats from climate change. For example, peatlands can:
 - store carbon and act as a massive natural defence against climate change.
 - provide habitat to support our threatened wildlife.
 - improve the quality of our drinking water and rivers by reducing sediment runoff.
 - hold water and be a natural solution to flood, fire risk and drought.
 - bring benefits to farmers and land managers by supporting grazing capacity.
- Our peatlands also have global significance, holding 13% of the world's blanket bog.
- Unfortunately, approximately 70% of our peatlands are degraded. This is largely on account of historic drainage and tree planting; and further eroded by overgrazing (by sheep and deer) and being extracted/disturbed to allow road, renewables and other development.
- As a result, our degraded peatlands:
 - contribute 15% of all Scotland's total carbon emissions – the same as from our domestic car fleet.
 - do not provide the same biodiversity benefits or help to provide clean drinking water, or help reduce flood and wildfire risks.

The challenge is therefore to value, protect, restore, manage and monitor our peatlands – a collective package of actions to make Scotland's peatlands wet again.

How do we care for our peatlands?

Caring for our peatlands – getting them thriving again – is central to the Climate Change Plan and Scottish Biodiversity Strategy. To support implementation of these, our actions are focused on:

- **Valuing** – sharing evidence and practical experiences of the benefits of thriving peatlands with policy makers, landowners, managers and communities. For example, our evidence underpinned the case for the designation of the Flow Country UNESCO World Heritage Site.
- **Protecting** – providing advice and guidance on plans, proposals and protected areas that will support the resilience of peatlands. Our commitment to develop Scotland's first Peatland Standard will provide a quality framework for this advice.
- **Restoring** – delivering successful restoration by
 - o Generating the demand to restore peatlands by explaining the range of benefits and the opportunities from a more climate resilient asset.
 - o Designing a pipeline of quality projects that will restore hydrology and reprofile eroded areas. When combined with a reduction in potential impacts from trampling, grazing and disturbance/extraction, these actions will support revegetation and put degraded peatlands on the road to recover.
 - o Delivering restoration through technical advice and financial support (currently up to 100% funding) from both the public purse and private investment, and an upskilled and expanded workforce.
- **Managing** – providing the technical guidance to manage peatlands and advice on funding to look after the protected and restored peatlands.
- **Monitoring** – knowing the impact we have made and providing the evidence and experiences to underpin our work. This is being progressed through our:
 - o site condition monitoring of our protected areas.
 - o ongoing peatland monitoring fund to support stakeholders assess recovery.
 - o Peatland ACTION restoration monitoring network, including data capture from hydrology loggers and flux towers.

We recently published a report <https://www.nature.scot/doc/naturescot-research-report-1426-peatland-action-reviewing-wide-range-benefits-restored-peatlands> to help us show the benefits return after restoration activity.

- **We are not working alone** - we are working with academics, training providers and the other Peatland ACTION Delivery partners (the two National Parks, Forestry and Land Scotland and Scottish Water) to make sure the public get an informed and joined-up service. We are also working with other stakeholders who use our peatlands – particularly farmers, crofters, foresters, developers – and supporting a just transition to net zero by ensuring that wider interests are pursued alongside our peat ambitions.

How are we getting on with caring for our peatlands?

- The Peatland ACTION Partnership has put over 80,000 hectares of degraded peatland on the road to recovery. With restoration prior to the Partnership, this equates to delivering over 20% of our Climate Change Plan (CCP) target for restoring 400,000 ha of degraded peatland by 2040. This is illustrated in annex 1 and has:

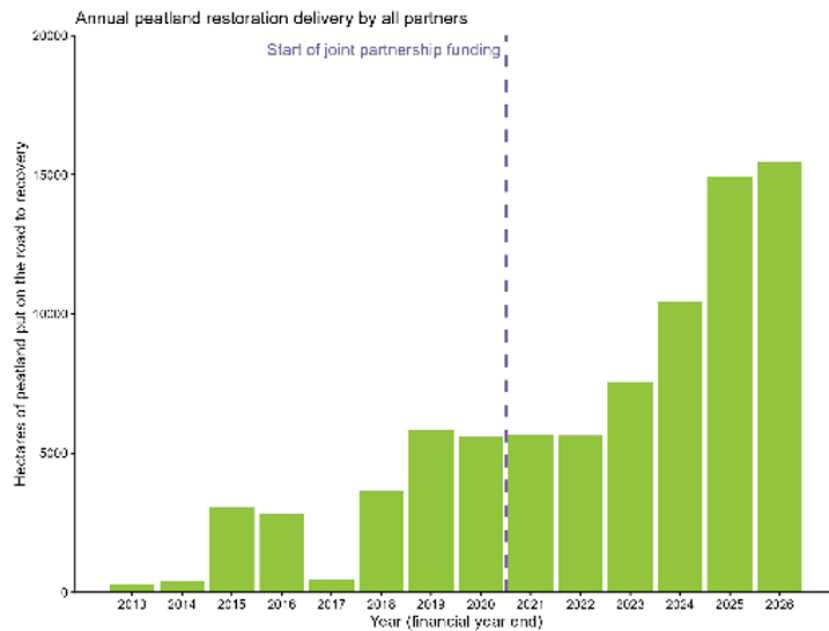
- reduced carbon emissions through peatland restoration (see Annex 1). It is one of the cheapest ways of removing 1 tonne of carbon and we estimate that Scotland's GHG emissions have reduced by 1.18Mt CO₂e since the start of Peatland ACTION in 2012. This equates to a reduction in annual emissions from 300,000 petrol cars.
 - improved Biodiversity. From research, we know we have a return of peatland specialist species, such as birds like greenshank, golden plover and dunlins.
 - supported effective land management, e.g. improved access, better water quality and reduced risk of flooding from restored peatland sites.
 - generated over 400 FTE jobs, many of which are in fragile rural communities.
- **Investing in peatlands has saved public money.** The preventative spend on peatlands has reduced the required public investment in infrastructure such as carbon capture, flood management and water treatment. **For example,**
- **our peatland and nature restoration on Ben Wyvis and the wider River Peffery catchment, has reduced the risk to local businesses in Dingwall of being flooded.**
 - our initial learning from fire in the Cairngorms has shown that peatlands help us have the right water in the right place. They will be an essential part of making our landscapes resilient to extreme climate events – whether that's increased wildfires, flooding or drought.

But we still have a long way to go. To date, we have only put ~ 7% of Scotland's degraded peatlands on the road to recovery.

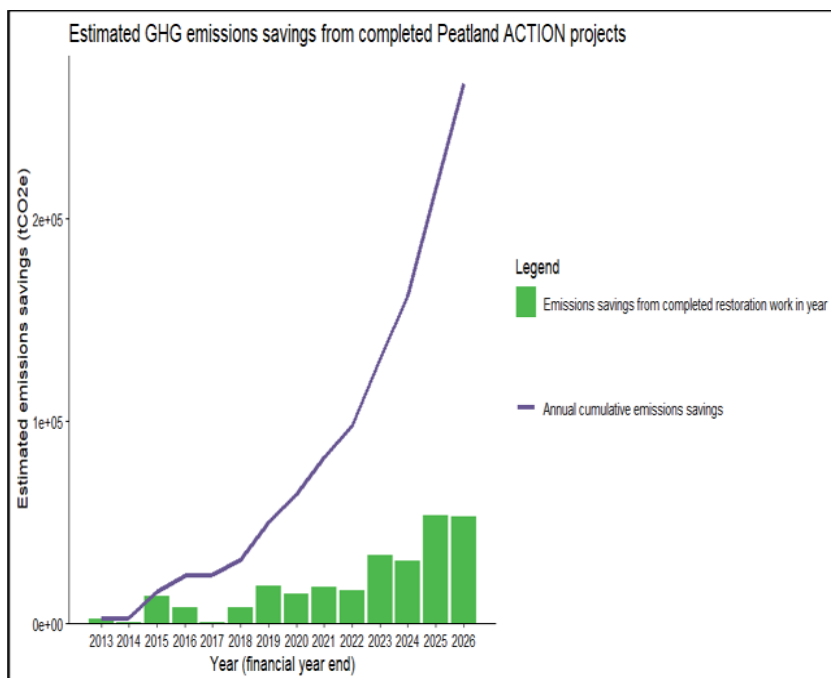
What more do we need to do to care for our peatlands?

- Our current actions have made significant progress in caring for Scotland's peatlands with annual increases in hectares put on the road to recovery since 2021. However, more work is needed and we consider that there is a need to increase efforts to:
 1. **Gather and share evidence of the multiple benefits** to help people 'value' peatlands and generate further demand to care for them. Through research, we will fill in the evidence gaps identified in the recently published benefits review.
 2. **Safeguard good/functioning peatlands** and stop making the peatland challenge even harder. This will require difficult decisions by regulators on where to locate development. But our new Scottish Planning Biodiversity Metric can help this.
 3. **Expand the pipeline of quality restoration projects** and provide certainty for investment. To meet the CCP target, we need to double the size of our restoration project pipeline.
 4. **Develop expertise and the workforce** to tackle complexity and achieve quality. The new Peatland Standard will support this and we are upskilling the next generation of the required workforce - many of whom are still at school and live in remote areas.
 5. **Double delivery of restoration** by targeting public funds at the most impactful projects. We estimate that at current levels of expenditure and forecast public funding, we will need to either reduce our costs by 50% or get 50% of our costs met by blended finance to meet the ambitious CCP target.
 6. **Provide incentives and obligations for management** to protect our investment. Our future agricultural/rural support is an opportunity to fund positive peatland works.
 7. **Monitor the impact of our work** to ensure that our investment has made a difference and realised multiple benefits for all.

Annex 1: Illustrative progress with of output and outcome of peatland restoration in two charts



Output: Annual peatland restoration delivered by Peatland ACTION



Outcome: Estimated GHG emission savings from peatland restoration delivered by Peatland ACTION