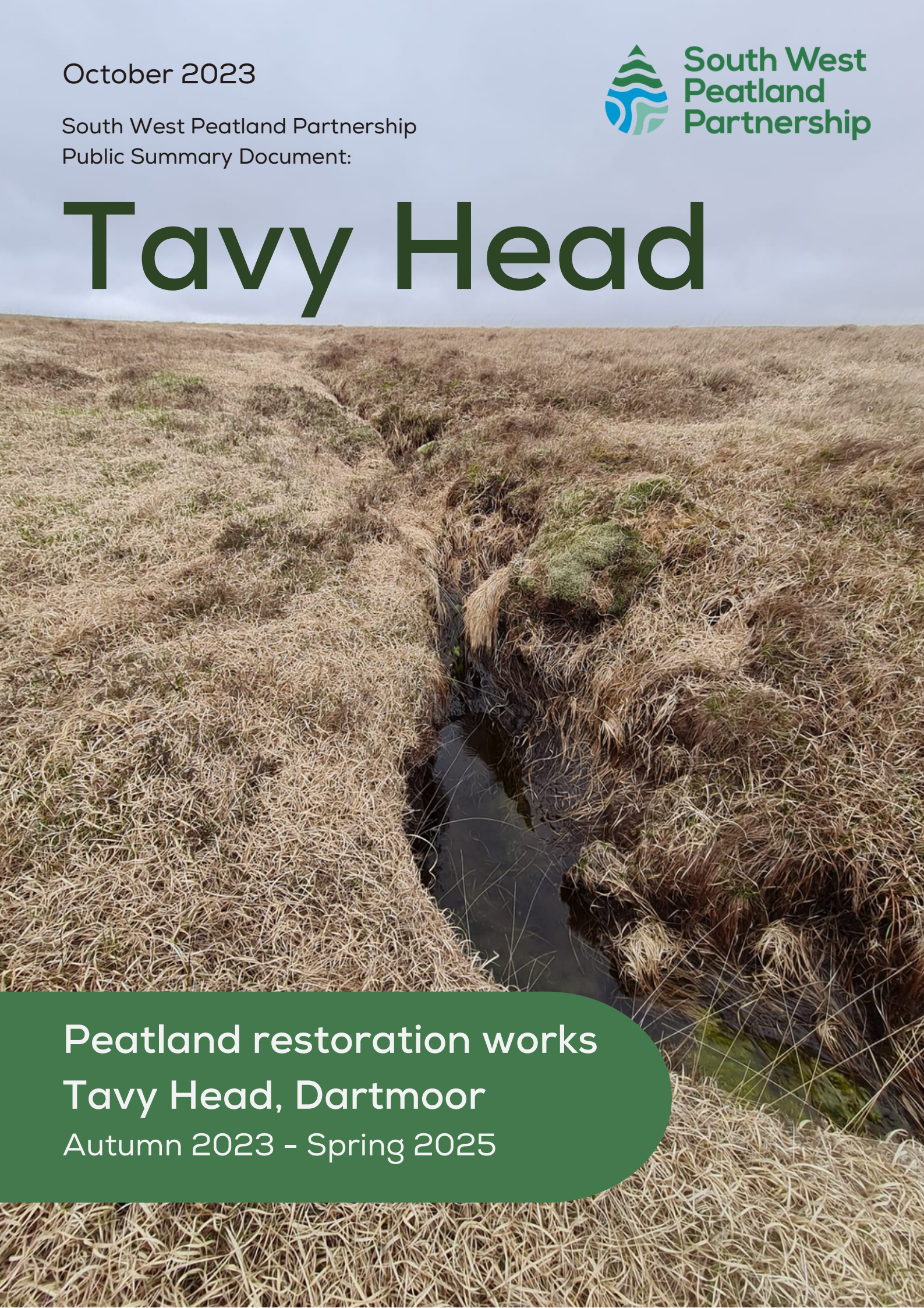
October 2023

South West Peatland Partnership
Public Summary Document:

Tavy Head



Peatland restoration works
Tavy Head, Dartmoor
Autumn 2023 - Spring 2025

Why restoration on Dartmoor?

Peatlands are wetland habitats that cover much of our upland landscapes. They are formed by plants dying in waterlogged conditions meaning that they stay in a semi-decomposed state, creating peat.

Healthy peatlands are vital for water quality & quantity regulation, carbon storage, wildlife habitat, plant species, recreation, farming and preserving a rich historic environment.

However, research estimates that less than 1% of Dartmoor's blanket bog is still functionally intact*, meaning that these benefits are not being seen. This is due to a range of past drying and draining methods to allow for historic activities such as mining and peat extraction.

The SWPP is a collective of organisations working in partnership across Exmoor, Dartmoor and Cornwall to restore areas of degrading peatland like at Tavy Head and prevent further erosion.

The SWPP works, using a range of methods, to simply restore water to the landscape, slow the flow off the peat, increasing the water table and crucially, keeping this at a more stable level year round. This will have benefits for wildlife diversity, carbon storage, livestock water supply and, in time, help create conditions where sphagnum moss can colonise and peat begin to form again.

There is also great value from peatland restoration in safeguarding our cultural, historical and archaeological environment.

Map

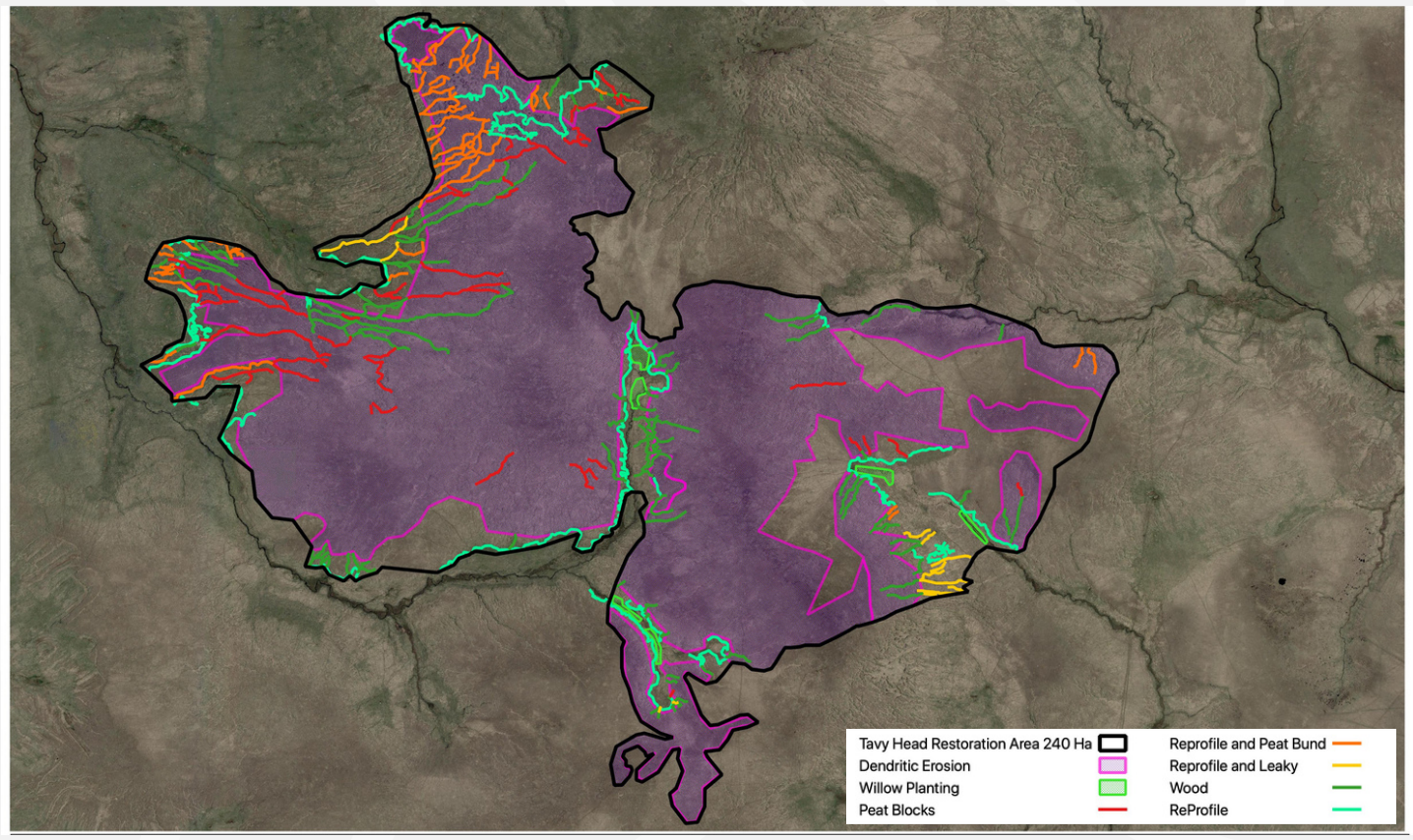


Figure 1: Map of planned restoration works and different methods to be used.

*Mires on the Moors, Science and Evidence Report, 2020

SWPP approach at Tavy Head

Tavy Head is found at the centre of the North Moor, on land owned by the Duchy of Cornwall, SWPP funder and partner. Some of the deepest peat on Dartmoor is in this area, at over 6 metres deep in places.
While parts of the site retain relatively intact bog , much of the area's peat is damaged due to the cumulative impacts of past human activity. This has led to complex issues including actively eroding gullies and 'cliff-edges' of exposed peat at the head of tin-streamed valleys.

Restoration works taking place aim to restore hydrological function to the peatland in this area. Contractors working with SWPP will use re-profiling methods (see Fig.3) to stabilize erosion of bare peat hags and gulley sides. The water table will be raised by installing wooden blocks and peat blocks to slow the flow of water running through erosion gullies. Pools of water with shallow gradient edges will form, over time encouraging a more diverse range of bog plant species i.e. Sphagnum mosses to colonise.

Practical works are scheduled to begin in October 2023. Local contractors, using several wide tracked low-ground pressure machinery will carry out the works. This machinery enables our work to take place across this large (240 hectare) area throughout the winter before bird nesting season.

Access will be from different approaches cooperating with the MOD and firing dates, Machinery will fan out to avoid repetitive driving across the same areas of moorland. We are working with commoners, the Duchy of Cornwall and Natural England to use the route of machinery to form a fire break through the suppression of molinia grass, to help reduce the distance fires might travel across the area.

Figure 2 : An example of an eroding gulley at Tavy Head. Water can be seen running off the peat, which will be taking peat and dissolved organic carbon away with it. Peat will continue to erode and carbon be lost into the atmosphere and waterways unless works such as reprofiling and blocking gulleys take place.

SWPP staff will be present on site at Tavy Head during restoration works throughout the winter. Historic Environment officers ensure both accessing the site and carrying out the works do not damage archaeological or historic features.

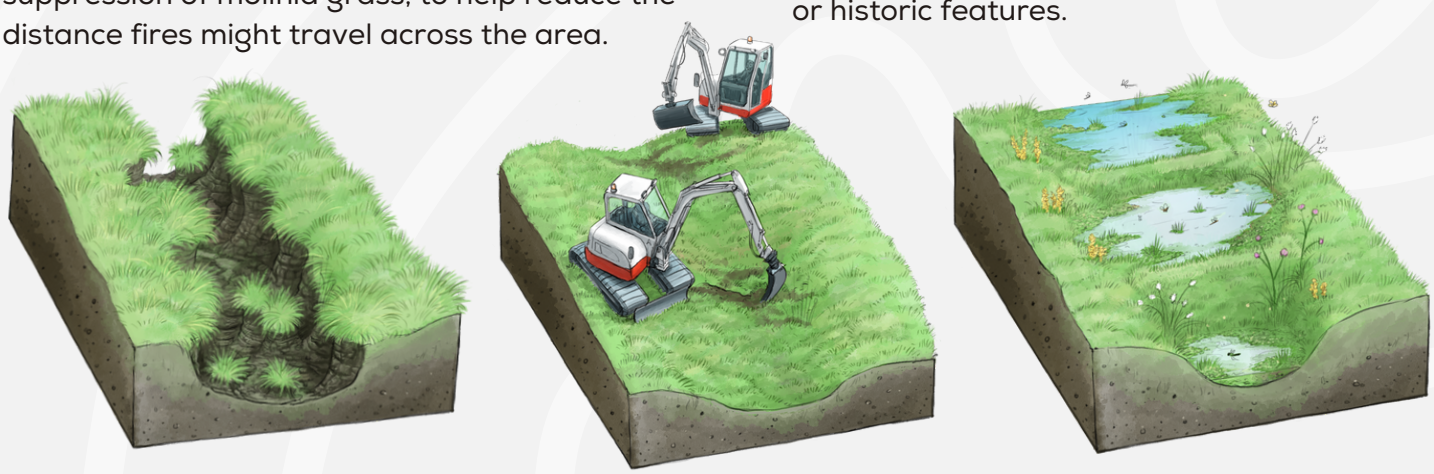


Figure 3 : Illustrations showing the process of reprofiling peat hags and erosion gullies into a shallower gradient, and adding peat bunds, will overtime slow the flow of water and reduce erosion of the exposed peat.

FAQs

What do you aim to achieve?

SWPP will be working to restore the hydrology and ecological function of the vital habitats, halt peat erosion and conserve the historic environment of the peatland at Tavy Head.

Why was this site chosen?

The peat surrounding Tavy Head is an important, but really challenging site to work at. Remote and approximately 240hectares in size, this site has 5 streams leading from it feeding into 3 rivers. This makes it a key area chosen for works to help improve water quality downstream and slow the flow of water off the area. With over 6 metres of peat in some places sitting directly behind an eroding hag, without action, this incredibly huge store of carbon, palaeoecology and peat will continue to erode and wash away.

What process have you gone through to begin works?

The SWPP has carried out a large body of work to compile a restoration plan for this site. These extensive documents contain details of site ecology, historic environment, landscape, access, land management, ditch blocking areas, timings and costs. All restoration plans are consulted and agreed upon by appropriate government bodies, landowners, farmers and commoners, following sector guidance and best practice for working on peatlands. Amongst others, key stakeholders involved include Duchy of Cornwall, Forest of Dartmoor Commoners Association, Natural England, Environment Agency, Dartmoor National Park Authority, Ministry of Defence.

How are you protecting archaeology and other historical features?

The historic features of Tavy Head were examined by the Historic Environment Officer (HEO) through methods such as examining historic maps, photography and LiDAR survey, reviewing past reports and carrying out walkover surveys of the site. Mitigation methods have been included in planned works, including the use of wide-tracked vehicles, briefings for contractors by the HEO and work and access exclusion zones established to protect features such as Tinner's huts. Palaeoenvironmental records should also be enhanced overall by restoration works; raising and stabilizing the water table will improve preservation of organic material and palaeoenvironmental evidence.

Can I still walk here?

Yes, Where sites are on open-access land, the area remains open to all. However, if you're planning on visiting these areas during works please do not approach machinery, and follow signage or contractor advice to safely enjoy the landscape whilst the restoration work takes place. It's very important to follow MoD guidance on access during firing times, even if you see machinery and workers in the area, as this has been pre-agreed.

What can we expect to see as a result of restoration?

Peatland restoration will create pools of water across the Tavy Head area. Over time, sphagnum mosses will colonise the pools and help create conditions where peat can form once more. Gullies where peat is visible and eroding will be reprofiled. It's our aim that restoration will bring about a more diverse range of bog plants and wildlife too.

What monitoring of your work are you doing?

Monitoring of the site pre, during and post restoration includes monitoring of vegetation, hydrology, peat depth, fixed-point photography and wildlife surveys. Restoration officers will also accompany contractors supervising practical works and monitoring progress. Regular reporting and monitoring is fed back to our partners and funders.

Can I get involved?

You can help us make a difference by getting involved in our team of volunteers, carrying out everything from willow planting to further historical research. Follow along on our website and social media channels, and feel free to get in touch with any further questions or to volunteer on southwestpeatlandpartnership@gmail.com