

# Moss of Cree Case Study



Moss of Cree is a successful forest-to-bog project in south west Scotland. It was achieved over three phases, all managed by a local landowner working directly with a Peatland ACTION project officer to plan and deliver over 60ha of peatland restoration.

01/01/2015

Ground smoothing in progress. ©Stuart Evans/Conservfor

## Vital statistics

**Landowner:** I & A & N McCreath

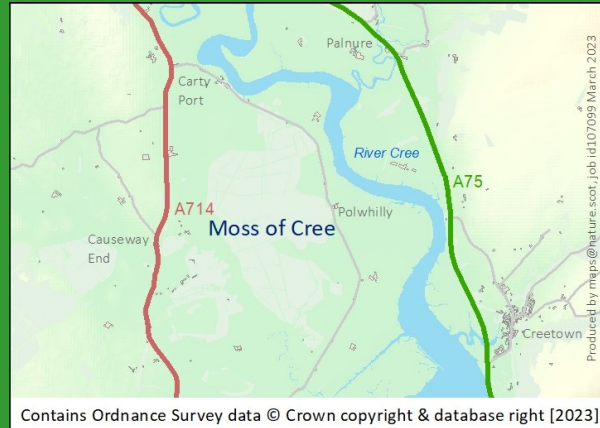
**Lead organisation:**  
**Crichton Carbon Centre**  
**Emily Taylor, Peatland ACTION**  
**project officer**

**Location:**  
Moss of Cree, near Newton Stewart,  
Dumfries & Galloway

**Grid reference:** NX440 604

**When:** 2017-2020

**Area of project:**  
62ha



### Key restoration techniques carried out:

- Ground smoothing
- Scrub removal
- Ditch blocking

## Summary

**The Moss of Cree project shows how Peatland ACTION can support landowners and managers throughout the whole process of peatland restoration from initial ideas and planning through to successful delivery.**

Landowner Ian McCreath worked closely with Peatland ACTION project officer Emily Taylor, of the Crichton Carbon Centre, who helped him put in a successful funding application and bring this 62ha forest-to-bog restoration project to fruition. Over three phases from 2017 to 2020 invading scrub was removed, ditches blocked, and a range of ground smoothing techniques employed to put this former lowland raised bog on the road to recovery.

### The project

Landowner Ian McCreath and his family purchased Moss of Cree in 2015 with a view to using the site for a solar array. However when the energy market changed he looked for other ways to use it to help tackle climate change—and peatland restoration seemed a natural solution for the site.

Before Ian acquired the site it was owned and managed by Forest Enterprise Scotland (FES). They had harvested it in 2004, and since then it had become overgrown with scrub and conifer regeneration, with the deep furrows and planting ridges still criss-crossing it. As a result although the planted Sitka spruce and lodge pole pine had been removed a lot more work was needed to restore Moss of Cree to a functioning raised bog.

Ian decided to restore Moss of Cree after meeting Peatland ACTION project officer Emily Taylor from the Crichton Carbon Centre. She was well acquainted with the site having worked with Forestry & Land Scotland to assess the site and trial the most recent restoration techniques.



Moss of Cree before peatland restoration.  
©Emily Taylor/  
Crichton Carbon Centre

With her support Ian put in a successful funding application in 2017, which led to the three phases of restoration work. This support included designing the project to establish what work would be needed, and where, and carrying out the necessary surveys. Before you can apply for funding peat depth and hydrological surveys need to be carried out, although in the case of the Moss of Cree peat depths had been surveyed for the trial. Once approval was given and work started she also supported Ian with project management and monitored the project as it progressed, using her extensive knowledge of peatland restoration techniques to ensure that the work was carried out successfully. After three phases, all supported by Emily, the whole site has been put on the road to recovery.

Commenting on the process, Ian McCreath said:

**'Emily's knowledge of peatlands made it easy to facilitate the process. The finances worked like clockwork.'**

The majority of the work involved a technique called ground smoothing. The ridges and furrows across the site meant that the water table was unable to rise to the surface again, leaving the ground too dry to allow the peatland to recover. The scrub and regrowth were also sucking the water out of the peat, making the problem worse.



After the final ground smoothing work was completed.  
© Stuart Evans/Conservfor

Ground smoothing involved the flipping over, digging in and tracking over of the tree stumps and scrub using low ground pressure excavators to flatten the site and stop the site from drying out. It took two digger drivers around four months each year over the three years to complete the work. This dealt with both issues at Moss of Cree at once.

In addition peat bunds were created at some points around the site, slowing the loss of water to the surrounding area, and helping keep the peatland wet. After three phases, each around 20ha, work is now complete at Moss of Cree.



**Our attitude to climate change has changed as we feel we now take action by managing this important carbon store**

*Ian McCreath, landowner*

©Swift Films/NatureScot



As with all projects there were challenges. Ian is grappling with the regrowth of Sitka and gorse, which is currently being monitored to assess the extent of the problem so that solutions can be discussed.

### Successful outcomes

However following completion of the work the water table has risen dramatically, and with it the biodiversity. Over the last few years Ian says hen harriers have been spotted quartering the bog, while invertebrate numbers have increased significantly.

Asked if he had a message for other peatland landowners, Ian McCreath commented:

**'Personally speaking doing this restoration has been important for me. It's become a sort of legacy for the future. We feel we should do the right thing for mankind and nature, while we are stewards of this area.'**

**'I would say do it to any peatland owners considering restoration—it's all positive. It is the right thing to do for peatlands—they are one of the world's great carbon stores.'**

## Get in touch

We want to build on our restoration efforts to create a healthier peatland landscape for people and nature.

We offer funding for suitable restoration projects across Scotland.

We have officers who can help develop your project and complete applications.

We fund up to 100% of the capital costs for work.

We fund much of the pre-application work, for example, peat depth surveys and feasibility studies.

Please visit our web pages for more information:

[www.nature.scot/peatlandaction](http://www.nature.scot/peatlandaction)

To contact the Peatland ACTION team with details of any potential projects, please email: [peatlandaction@nature.scot](mailto:peatlandaction@nature.scot)



Restoring  
Scotland's Peatlands  
Ath-stèidheachadh  
Talamh Mònach  
na h-Alba

Peatland ACTION is funded by the Scottish Government and delivered in partnership with NatureScot and other agencies.