



# The Sundew

## Cumbrian BogsLIFE project newsletter

**Welcome** to the South Solway Mosses edition of *The Sundew*.

With more than 90% of the UK's original lowland peatlands destroyed or damaged, the South Solway Mosses are recognised as some of the best examples of remaining lowland raised peatbogs in England. There are areas of the mosses on the Solway that are actively accumulating peat now, but also areas that we know are capable of being restored to a peat forming, carbon capturing state within the next 30 years.

The Cumbrian BogsLIFE project at Wedholme Flow National Nature Reserve (part of the South Solway Mosses), has focused on an area of the peatbog, where commercial milling formerly took place.

### In this issue:

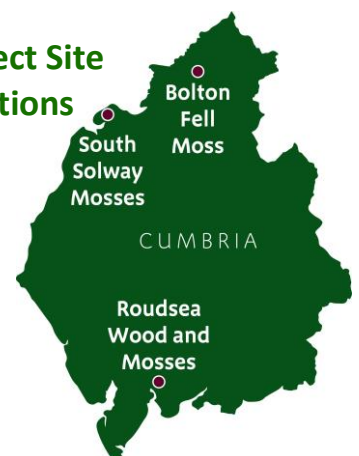
- The designations of Wedholme Flow as part of the South Solway Mosses
- Interview with new Senior Reserve Manager, Emma Austin
- Bowness Peninsular Facilitation Fund visit to Wedholme Flow
- Bowness Common's 'donation' to the Wedholme Flow restoration works



©Natural England

Sphagnum moss retain water more than 8 times their weight.

### Project Site Locations



## Wedholme Flow Moss: Understanding its landscape and habitat designations

Important landscapes and habitats are often legally designated and labelled with so many different acronyms that it can be easy to lose your way with what they all mean. Explained here are the key acronyms relating to Wedholme Flow and its context within the South Solway Mosses.

Wedholme Flow is a Site of Special Scientific Interest or SSSI under UK legislation and as such, has been around for longer than other European designations for nature conservancy. Since the 1980s, Natural England (NE) (previously the Nature Conservancy Council and then English Nature), has been acquiring SSSI land by sale or lease. Approximately 60% of SSSIs are managed by NE. Other owners include public bodies, charitable trusts and private landowners.

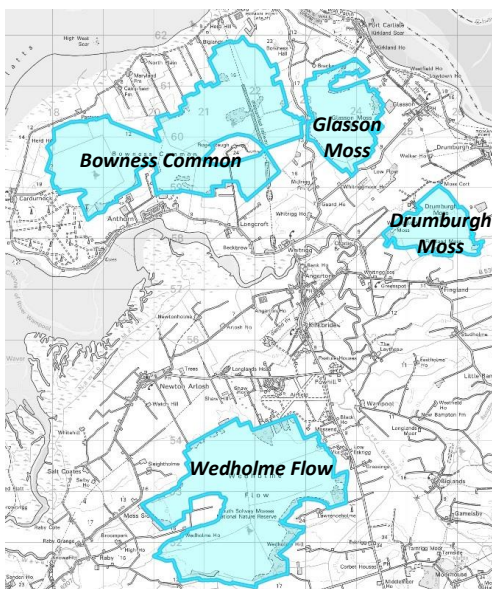
Within Wedholme Flow, there is its boundary as part of the South Solway Mosses National Nature Reserve (NNR) as shown in blue on the bottom right map. NNRs are nationally recognised places for wildlife and natural features, and provide opportunities for public access and scientific research. The irregular shape of the NNR at Wedholme Flow sits within the natural boundary of the peatbog, which is shared with other landowners including farmers who have adjacent agricultural land and those owning the long thin moss stints.

The South Solway Mosses (SSM) are a suite of mosses comprising Wedholme Flow, Bowness Common, Glasson Moss and Drumburgh Moss.

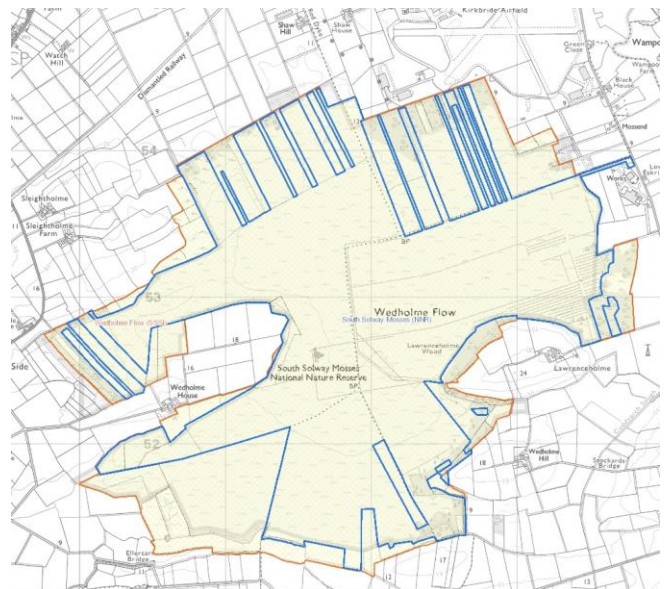
All are SSSI's. They are also all designated as the South Solway Mosses NNR, although Drumburgh Moss is a NNR in its own right and is managed by Cumbria Wildlife Trust rather than NE. The four mosses have been recognised by the EC as the South Solway Mosses Special Area of Conservation (SAC). This means they form part of the European-wide network of high quality conservation sites that help safeguard the list of 189 habitat types and 788 species that have been considered to be most at risk in Europe.

Some parts of Wedholme Flow are still actively forming peatbog. However, other sections were drained and milled, leaving exposed and degraded peat which had lost all its water-holding and peat-forming properties. The milled section of Wedholme Flow has been the focus of the Cumbrian BogsLIFE restoration works and its regeneration will greatly enhance the overall quality of the site.

Works on the site have presented many challenges as some areas are deeper, drier and more degraded than others; but all have to work part and parcel within the overall functionality of the peat body. Building relationships and working together with all the landowners of Wedholme Flow, and particularly those with farmlands adjacent to the peat boundary, has been an essential part of the process. Natural England staff are keen for this to continue as part of the AfterLIFE care of the project.



South Solway Mosses – Special Area of Conservation (SAC)



Wedholme Flow SSSI (orange) and NNR (blue) boundaries

## Meet Emma Austin, Senior Nature Reserve Manager with responsibility for the South Solway Mosses, including Wedholme Flow



© Natural England

### What are the key aspects of your job?

It's very important that I meet and work with all the farmers and landowners to get to know the best ways we can achieve the best restoration for the site and manage it in a good way so as to not impact on neighbouring farmland. The best outcome is where everyone benefits from the fact that the peatland is working naturally again.

### Now that the restoration works at this part of Wedholme Flow have been completed, is it 'job done' and just a matter of watching the peat bog vegetation grow back again?

Unlike an active raised peatbog dome, the milled area of Wedholme Flow is like a gouged out landscape. In just a few years' time, I expect you will see a transformation in that a living carpet of vegetation will replace what was a brown bare site. But it is complicated because you can't just walk away from it and let it grow. We will still need the engineered water control channels for some time into the future, to regulate the levels of water as the vegetation establishes, and peat begins to accumulate in the long term. At the moment the water level is maintained to keep water just at the peat surface only, and not to flood the new 'living carpet' of mosses that we have introduced. In the future, the bigger and deeper the peat body, the more rain water it can hold before it runs off. Once we start growing peat again, we are on the road towards a more natural peatland that is not only

storing carbon in the peat, but also smoothing out peaks in water flow after heavy rainfall. So it's going to need a bit of care to make sure the money and effort of the restoration work gets the best chance to work.

### What do you think is the value of peatbogs for people?

Well, people value the moss for different reasons. They remember growing up around them, playing on the cuttings, catching adders, working here. People's reasons for valuing places can vary – none's right and none's wrong. But I think what is special about this area is that it is a very unique landscape, with all these designations. And now we know how important these peatlands are in storing carbon and that by restoring them, they will capture more carbon and accumulate peat. It's one of the government's priority habitats for restoration and the species which thrive here are so rare and interesting. Hopefully these values sit alongside individual people's values.

### What do you like about the peatbog landscape?

I think they are such a surprise when you first come across them, so wide and open. You can drive around on the Solway plain which is so flat, and not realise that on the other side of a screen of birch trees is often this vast expanse of wild landscape that is in total contrast to the surrounding land. I've brought people who have never been on this type of landscape before and nearly every time everyone is like, "Oh my word, I just never knew that this existed."

The sphagnum colours on good intact moss are fantastic. Such a range colours. It doesn't matter if you know the name of the species or not. Anyone – from a young child to whatever age – can appreciate the colour as well as the fascinating tiny details of the sphagnum mosses if you were to look at them under a magnifying glass. I also love what the peat represents, that you are digging back down through hundreds and hundreds of years of history.

## Bowness Peninsular Facilitation Fund group visits Wedholme Flow

On 28 November, the Bowness Peninsular Facilitation Fund farmers group held an event on Wedholme Flow and Glasson Moss with Emma Austin and NE Communications Officer Keeley Spate.

As many of these farmers own land on the edge of the bog, its restoration is both of interest and concern to them. The day began by a fascinating overview of the history of the South Solway Mosses from the end of the Ice Age to recent times by Frank Mawby, previous Reserve Manager for many years. This was followed by a visit to the site of recent restoration works at Wedholme Flow and its importance to the local raised bog ecology. After lunch, there was a visit to Glasson Moss to look at restoration works several years on. There were also discussions regarding work along the edges of the bog and how this might affect adjacent farmland.

Over all, it was a very positive day with plenty of questions! It is envisaged that a future event will be held to discuss bog edge and countryside stewardship options in more detail. For more info, contact Emma Austin at her email below.

**LIFE+** The project is generously supported by the European Union's LIFE+ Nature and Biodiversity Programme, which is the funding instrument for the environment. Funding is awarded to best practice, innovative demonstration projects that contribute to the objectives of **Natura 2000** - a network of the very best areas for wildlife across Europe.

### Contact Us:

Tony Devos, Project Manager,  
[tony.devos@naturalengland.org.uk](mailto:tony.devos@naturalengland.org.uk)

Emma Austin, Senior Reserves Manager  
[emma.austin@naturalengland.org.uk](mailto:emma.austin@naturalengland.org.uk)

Keeley Spate, Communications Officer  
[keeley.spate@naturalengland.org.uk](mailto:keeley.spate@naturalengland.org.uk)

 [www.facebook.com/cumbriasnrs](https://www.facebook.com/cumbriasnrs)

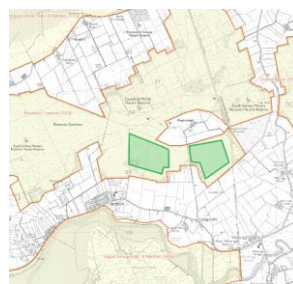
 @NECumbria

[www.gov.uk/government/publications/cumbrian-bogs-life-project](http://www.gov.uk/government/publications/cumbrian-bogs-life-project)

## Bowness Common acts as donor site for restoration works

Did you notice the machinery operating on Bowness Common in autumn 2017? Natural England worked with local landowners' permission to harvest sphagnum tips from an area of Bowness Common. These were then spread over the area of the Cumbrian BogsLIFE restoration works in Wedholme Flow, where, as a formerly milled site, very little sphagnum remained. Remarkably, sphagnum moss can regenerate and create new plants just from the tips.

Despite the unexpected drought in summer 2018, the sphagnum tips have survived and are slowly spreading across the area of restoration. The donation of this 'living carpet' from Bowness Common will be monitored by Natural England, and may become an important student dissertation project. Evidence from other sites has shown harvesting does not have a detrimental effect on the 'donor' site.



Green areas on Bowness Common indicate donor sites in the south and western part of the moss, which were used for the re-vegetation of Wedholme Flow

## Cumbrian Bogs LIFE+ Project Conference

7-8 May 2019 Newton Rigg Campus, CA11 0AH, FREE

This conference marks the end of the five year, EU LIFE-funded lowland raised peatbog restoration project, which has taken place over 3 sites in Cumbria including Wedholme Flow. The two-day event will explore the challenges and lessons learnt at each site, and what happens after LIFE.

The deadline for registration for the conference and the conference meal is 12<sup>th</sup> April 2019.

You can register for the conference on <https://cumbrian-bogs-life-2019.eventbrite.co.uk>

