Sphagnum reintroduction

Lessons from MoorLIFE and other projects

Matt Buckler

Moors for the Future Partnership

MoorLIFE/ MMU *Sphagnum* seminar

MoorLIFE/ MMU *Sphagnum* seminar

Aims

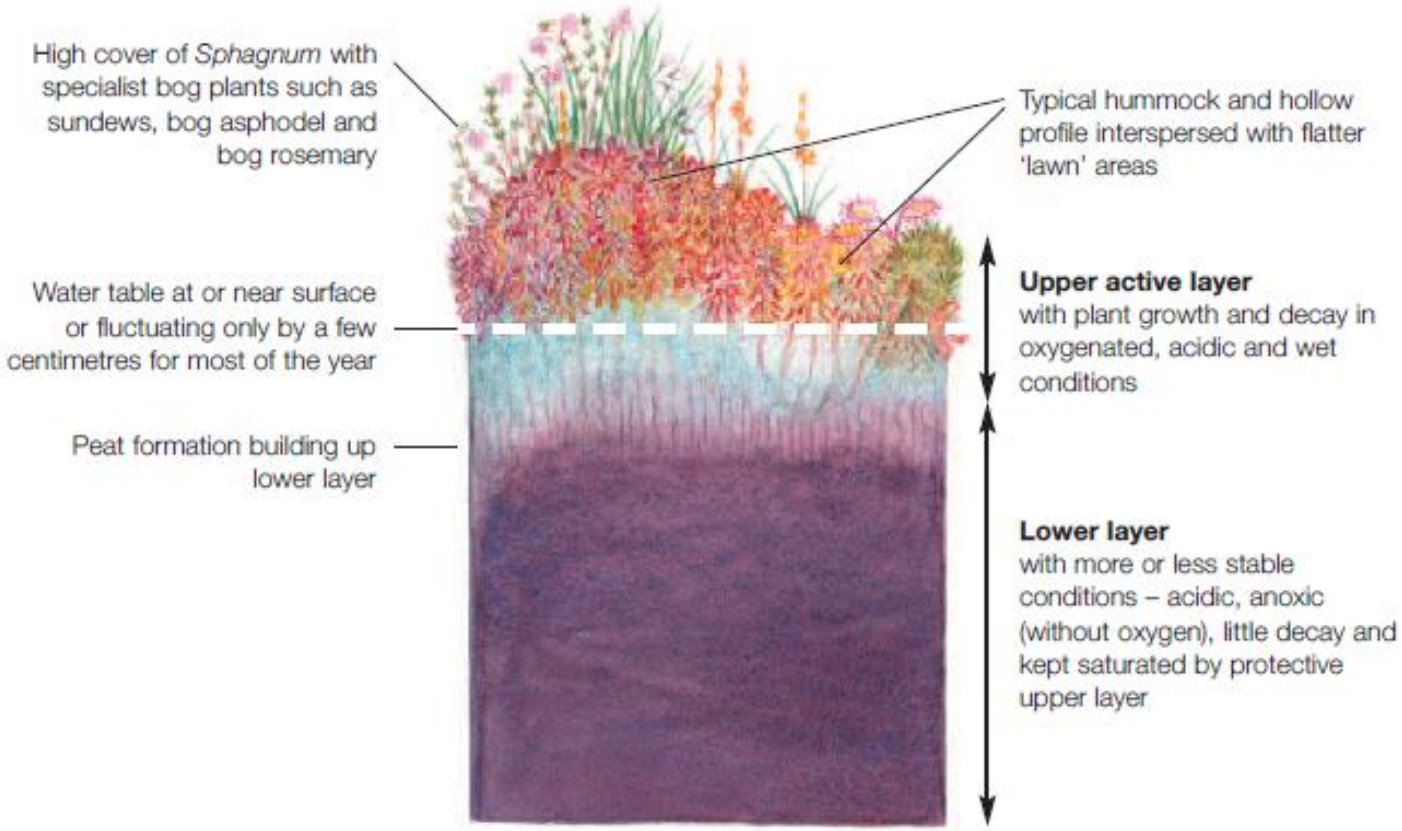
- Why is *Sphagnum* important?
- Put *Sphagnum* reintroduction into context – why are we where we are?
- What work is currently being done and what are we currently doing at a landscape scale
- What are the challenges and opportunities over the next 10-20 years?
- 2 workshops – focussing on current conservation actions and research and monitoring activities and questions

Why is *Sphagnum* important?

- **Blanket bogs in the UK <u>are</u> *Sphagnum***

Why is *Sphagnum* important?

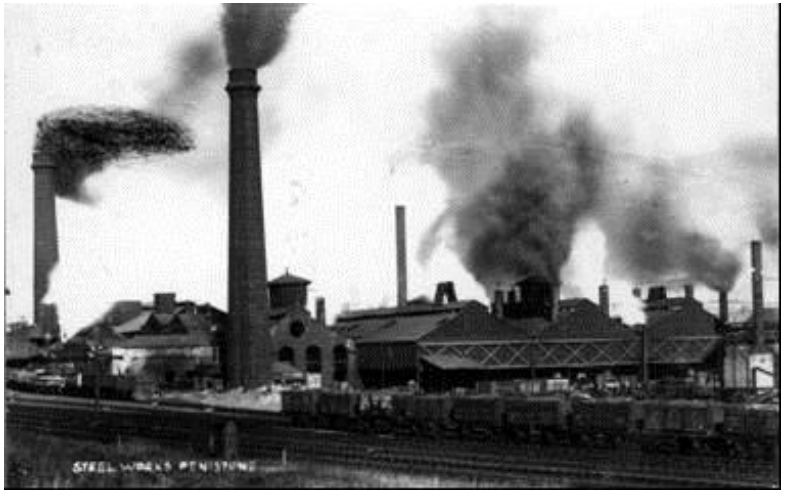
- **Blanket bogs in the UK <u>are</u> *Sphagnum***



Why is *Sphagnum* important?

- **Blanket bogs in the UK <u>are</u> *Sphagnum***
- Blanket bog is a rarer habitat than tropical rainforest
- More carbon stored in UK's peat than in all forests in UK, France and Germany
- Intact moors act as a filter for drinking water – Peak District and South Pennines supply drinking water to about 10 million people
- Intact moors slow the flow of rainfall into streams and rivers – beneficial for flooding and drought alleviation
- Industrial pollutants are stored within the peat

Why do we need to reintroduce it?



Why do we need to reintroduce it?

2008 MFFP report:

“Past damage probably main factor preventing recovery in South Pennines”

How are people reintroducing *Sphagnum?*

Sphagnum rich brash

- Lots of bare peat sites use heather brash for stabilisation – is *Sphagnum* introduced when this is cut from *Sphagnum* rich areas?

Sphagnum fragments

- Small pieces of plant material added
- Requires suitable source of material
- More susceptible to drying out, works well in wet areas
- Can be mulched with brash
- Commonly used in cut-over raised bog restoration

Sphagnum fragments

NORTH PENNINES
Area of Outstanding Natural Beauty

Whole *Sphagnum* plants - hummocks

- Collect material in handfuls and transplant whole handful to form new colony
- Can be within sites or moving from one site to another
- Can be done with flush or hummock forming species
- Requires sustainable source of material

Whole *Sphagnum* plants - hummocks

rspb giving nature a home

Sphagnum propagation

- Developed by Micropropagation Services, through discussions with MFF and MMU, due to absence of material in Dark Peak
- Requires very small amount of source material, bulked up through micro-propagation
- Most expensive techniques
- Any species or combination possible
- Beads, slime and plugs to date

The co-operative foundation

Sphagnum propagation

Manchester Metropolitan University

The co-operative foundation

Sphagnum seminar – Barriers to progress

1. Where are the sources of *Sphagnum*, including what is the impact of collection on donor sites and how much can be taken? Where can *Sphagnum* be collected from for adding to protected sites?
2. Coping with the long timescales for changes to become apparent
3. What is the end point we want? What trajectory will the vegetation on a site follow?
4. Will there be long term funding as re-establishing *Sphagnum* to a large area will be a long term project?
5. Can this be done at a very large scale with little follow-up possible?
6. What impact will a *Sphagnum* sward have on water quality or flows?
7. How can we show the importance to *Sphagnum* to private owners and tenants?
8. How can we make the public aware of the importance of *Sphagnum*?

What are MFFP doing?

MoorLIFE *Sphagnum*

- Bead application – Black Hill, Bleaklow, Rishworth Common, Turley Holes
- Plug plants – Bleaklow
- *Sphagnum* rich brash – Rishworth Common
- Hummocks – Bleaklow
- *Sphagnum cuspidatum* fragments – Bleaklow
- Applied to over 900 hectares

Other MFFP *Sphagnum*

Catchment Restoration Fund

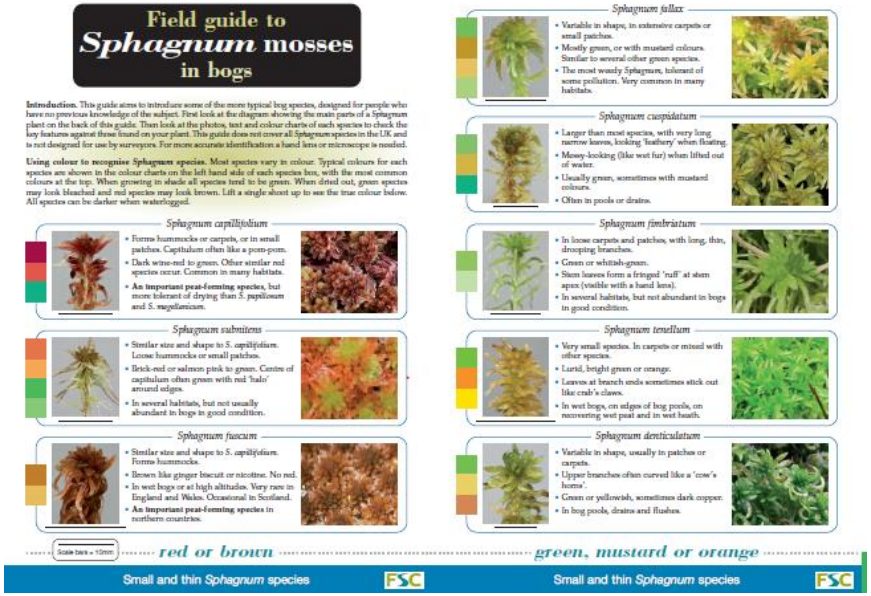
- What impact does *Sphagnum* dominated sward have on water quality and flow?

Sphagnum / Molinia trials

- 2012 – NE requested development of techniques for diversifying *Molinia* grassland with *Sphagnum*

Other MFFP *Sphagnum*

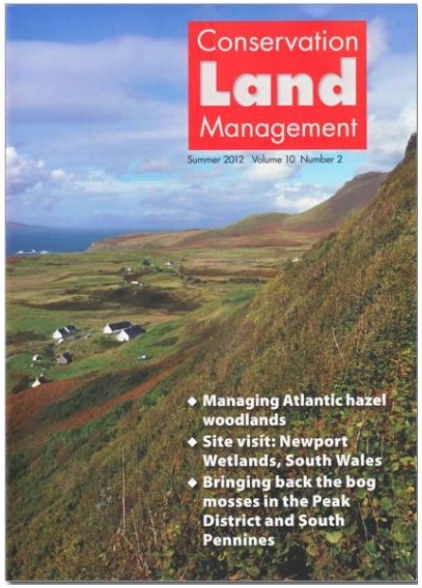
Raising awareness



FSC Field Guide

MoorMOSS

New App



Articles and publications

Thank you

More information:

matt.buckler@peakdistrict.gov.uk

Moors for the Future Partnership
Website: moorsforthefuture.org.uk
Facebook: Moors for the Future
Twitter: @moorsforfuture/ @moorsman