

Calderdale Sphagnum Project (Growing Moss for Peat's sake)

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Sphagnum Project Officer

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Calder Rivers Trust & Calderdale Council
Working together to mitigate Climate Change

Calderdale Sphagnum Project

- 4 year project funded by the National lottery
- Experimenting with growing sphagnum.
- Planting sphagnum
- Sharing what we learned



Why grow sphagnum?

- 29,871 tonnes of CO₂e per annum is released currently from the peat landscapes of Calderdale
- Peat makes up 3% worlds land surface but holds 30% land stored carbon.
- For many regions of UK, peat preservation and restoration is more critical than tree planting to mitigate climate change.
- £101,560,000 estimated cost to restore peat in Calderdale of which the largest expense is sphagnum moss planting.



What is Peat?

- Peat is made up of partly rotted living things
- When it is wet the conditions inside halts the rotting process.
- This means no carbon is released.
- Carbon from bodies of plants and animals from thousands of years ago is held in peat.



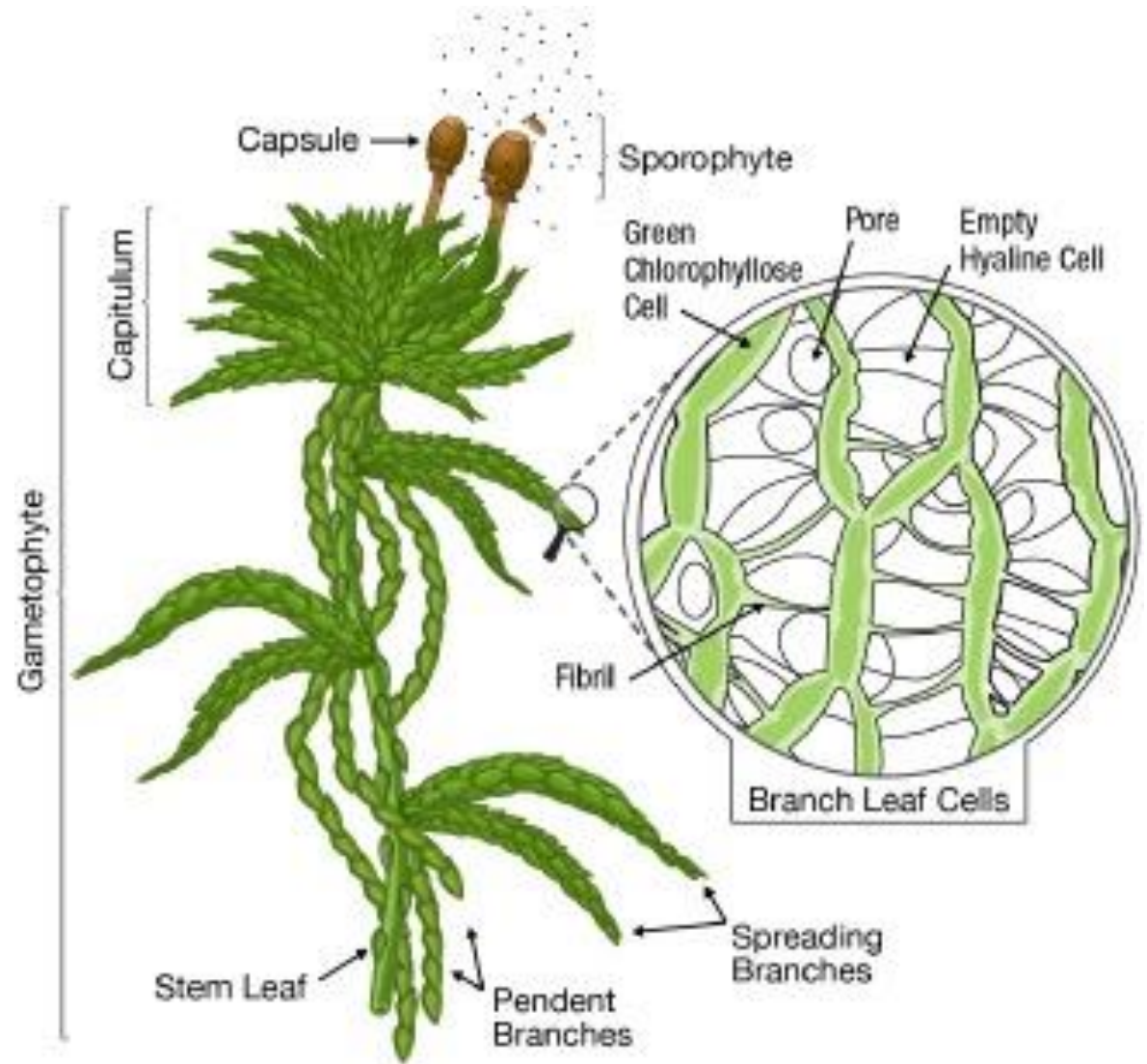
What is Sphagnum Moss?

None vascular.

NO ROOTS.

Has capitulum, stem, branches and leaves.

Absorbs water through every surface, as soon as it rains.



Holding water

- Bottom part of stem and branches dies over time but continues to hold water and wicks water to the living part of the plant.
- Sphagnum can hold 20 times its weight in water.
- Provides an 'anaerobic' environment.
- Produces an acid to pickle surrounding plants



Wet blanket of sphagnum moss makes more peat

- Sphagnum stops the other plants around it from rotting.
- Together as the sphagnum grows and the other plants die they form peat.



Causes and Effects



FLOOD MITIGATION



REDUCES MOORLAND
FIRE RISK



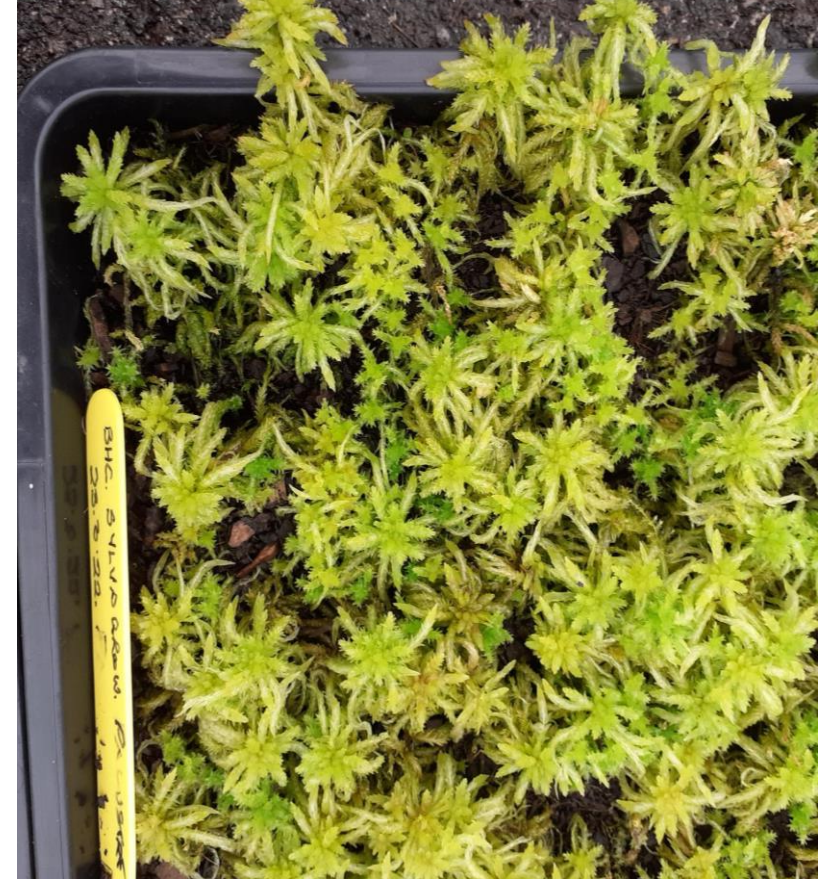
IMPROVES BIODIVERSITY



REDUCES ENERGY USAGE
OF WATER COMPANIES

How are we growing it?

- It likes rainwater, peat free ericaceous compost.
- Top watered to leach nutrients,
- Wet but not waterlogged.
- Needs to lie flat like laying a hedge to stimulate new vertical growth.
- Needs to be in contact with other pieces of sphagnum.
- Needs shelter and shade to prevent drying out



How are we sharing our knowledge?

- School visits, local fairs and open days. Sphagnum is a conversation starter around climate change.
- Visits from National Trust, Lancashire Peat Partnership, Yorkshire Peat Partnership, Yorkshire Water and Lindholme Old Moor Conservation group.
- At least 5 more nurseries in the pipeline as a result.
- Invitation to present at Eurosite Conservation NCO Peatland Restoration Group in Feb 2024.



Contact

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Usual Working days

Tuesdays, Wednesdays and Thursday morning



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