



Friends of Lindow Moss Launch Event

Saturday 3rd March 2024

Friends of Lindow Moss

Interim Committee Established at a meeting in Autumn 2023 initially as a group under the umbrella of Transition Wilmslow (a registered charity) to support, influence and play an active role in the future of Lindow Moss.

We aim to build on the work already undertaken by many in the past and to continue the journey to pass on this precious legacy with its rich biodiversity, historical and ecological significance to future generations and encourage public enjoyment of the Moss, in a sustainable and resilient way.


The successful recovery of the Moss will require careful support, investment and ongoing stewardship.

Current Interim FoLM Committee Membership

- **Honorary President:** Professor John Handley - University of Manchester School of Environment, Education and Development.
- **Vice Chair:** Dr Anna Gilchrist - University of Manchester School of Environment, Education and Development.
- **Committee Member:** Dr Alan Hill - Principal Program Manager – Shell International, Programme manager and technical specialist for soil and groundwater assessment, remediation, and risk and liability management.
- **Committee Member:** Dr David Hulme: Professor of Development Studies at the University of Manchester where he is Executive Director of the Global Development Institute and CEO of the Effective States and Inclusive Development Research Centre.
- **Committee Member:** Mathew Fox – Secretary.
- **Committee Member:** Emeritus Professor Anthony Jones - University of Manchester Division of Neuroscience & Experimental Psychology.
- **Chair :** Gary Parker – Board level experience in HR and General Management gained in a variety of public sector, private equity, listed and in public/private partnerships.

Committee Supported by:

- **Transition Wilmslow Trustee Link:** Georgie Johnson, Transition Wilmslow Trustee.
- **Legal Support and Advise:** Lisa McClory, Transition Wilmslow Trustee.



*Bog

~~Peatland~~ landscapes:
For the planet, for nature and
for people

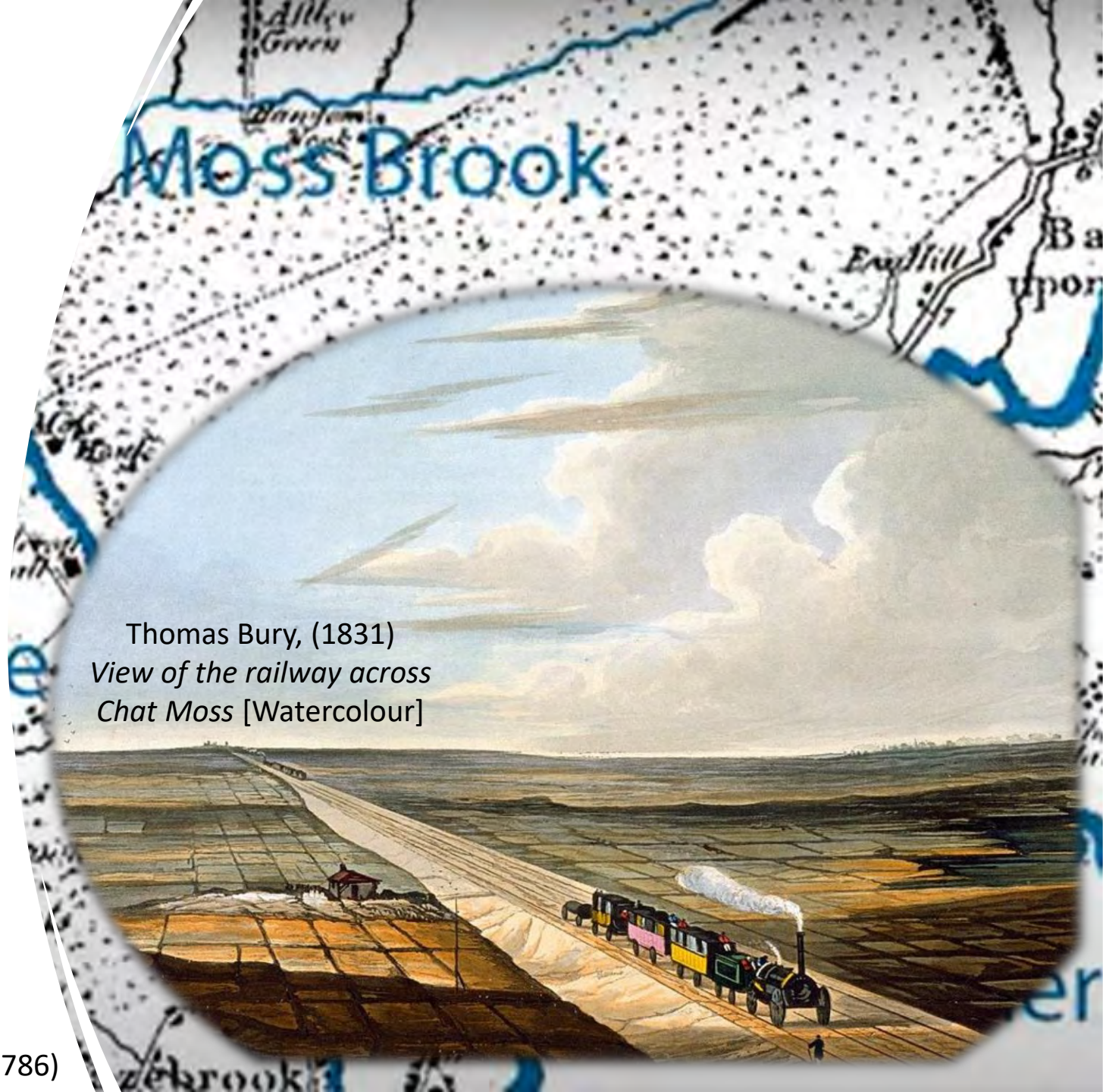
Dr Anna Gilchrist

De-foe of the bogs

“The surface, at a distance, looks black and dirty, and is indeed frightful to think of, for it will bear neither horse or man [...] What nature meant by such a useless production, 'tis hard to imagine; but the land is entirely waste...”

Daniel Defoe, 1724 ^[1]

Yates Map of Lancashire (1786)



Peatlands Today

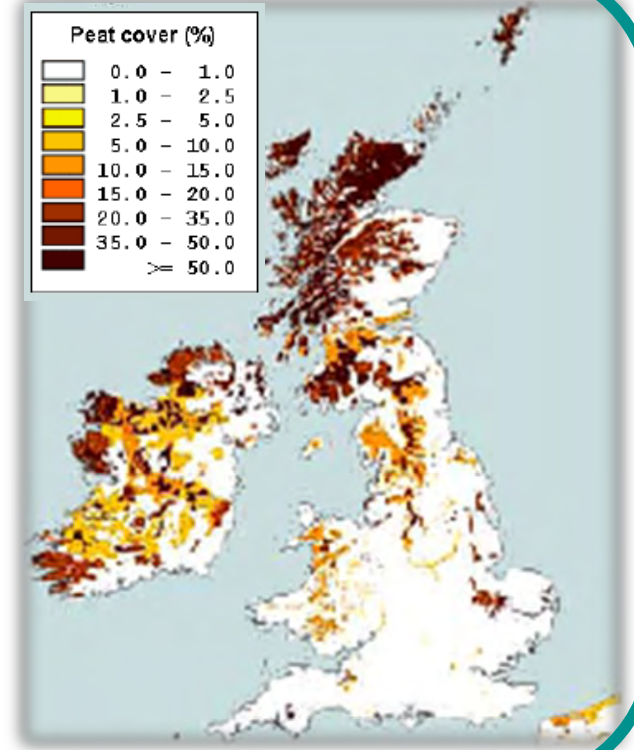


Globally, 25% of peatlands have been completely destroyed

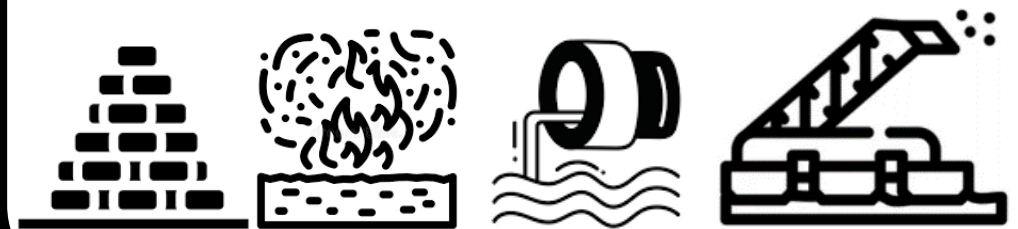
...and a further 12% have been drained or degraded [2]

Total area now approximately 4 million km²
...only 3% of global land surface

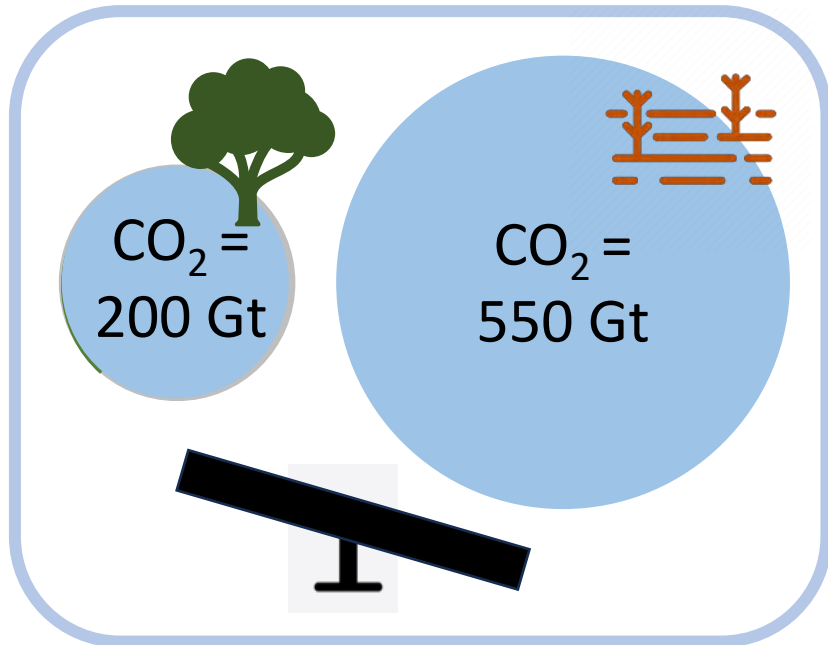
The UK is in the top 10 of countries for peatland area, covering 12% land area [3]



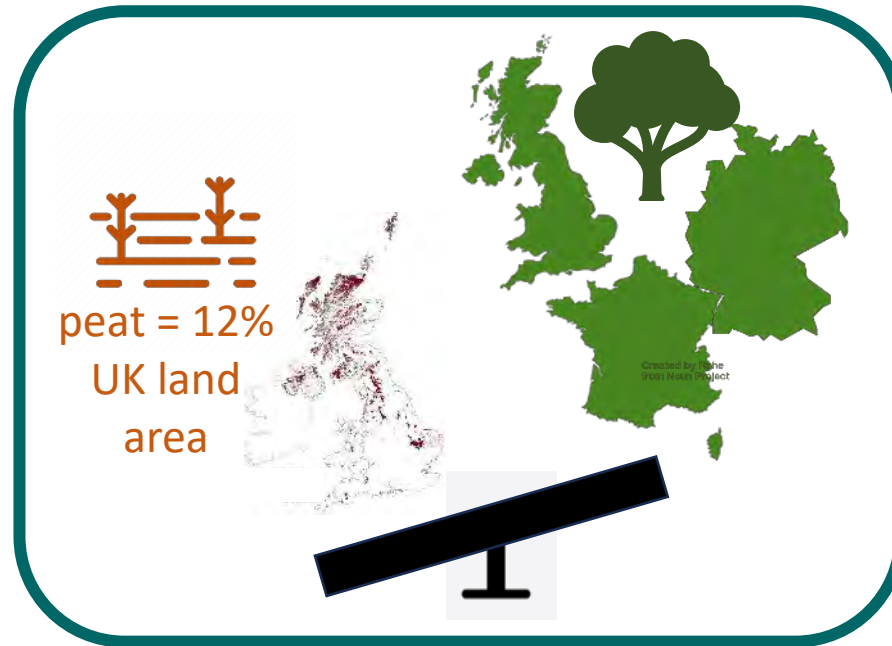
Yet 80% of UK peat bogs are now degraded [2]



For the planet: mind-**bog**glingly important



Global CO₂ storage [4]



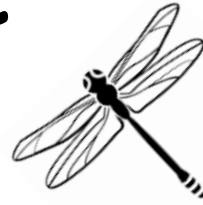
UK peat CO₂ storage = 3 bn tonnes [5]



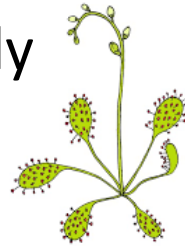
Deep peats intercept and retain a range of atmospheric pollutants [5]



Bogs For nature



- Due to harsh conditions, peat bogs are considered species-poor
- But they are inhabited by highly specialised (now very rare) species

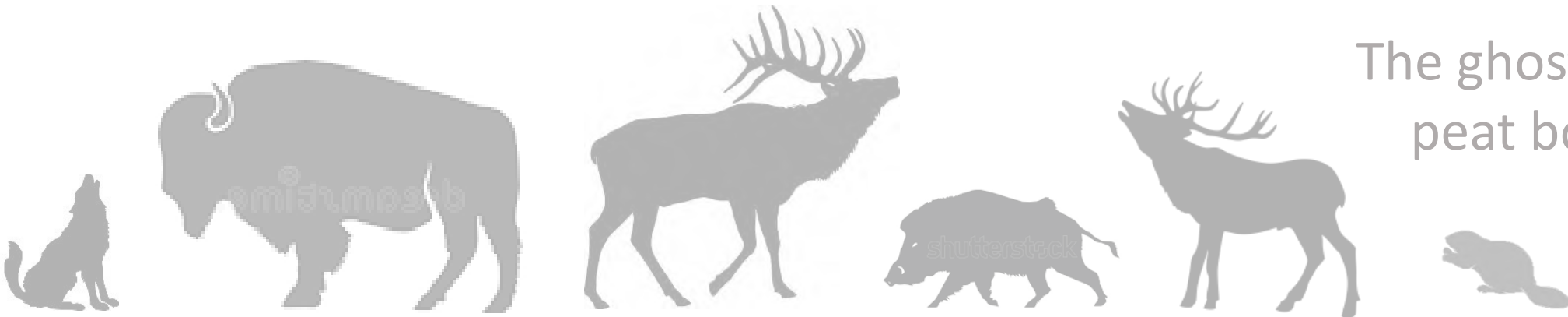


Peatbog restoration is leading to incredible 'auto-rewilding' of UK bog habitats



- Grey heron
- Purple heron
- Black-crowned night heron
- Eurasian bittern
- Little egret
- Great egret
- Western cattle egret ^[6]

The ghosts of UK peat bogs ^[7]



For people

ARCHAEOLOGY

Preservation



Slice of time

22,500 archaeological sites may survive beneath or within peat deposits in the UK [8]



Sense of Place



Education



HEALTHY LIFESTYLE

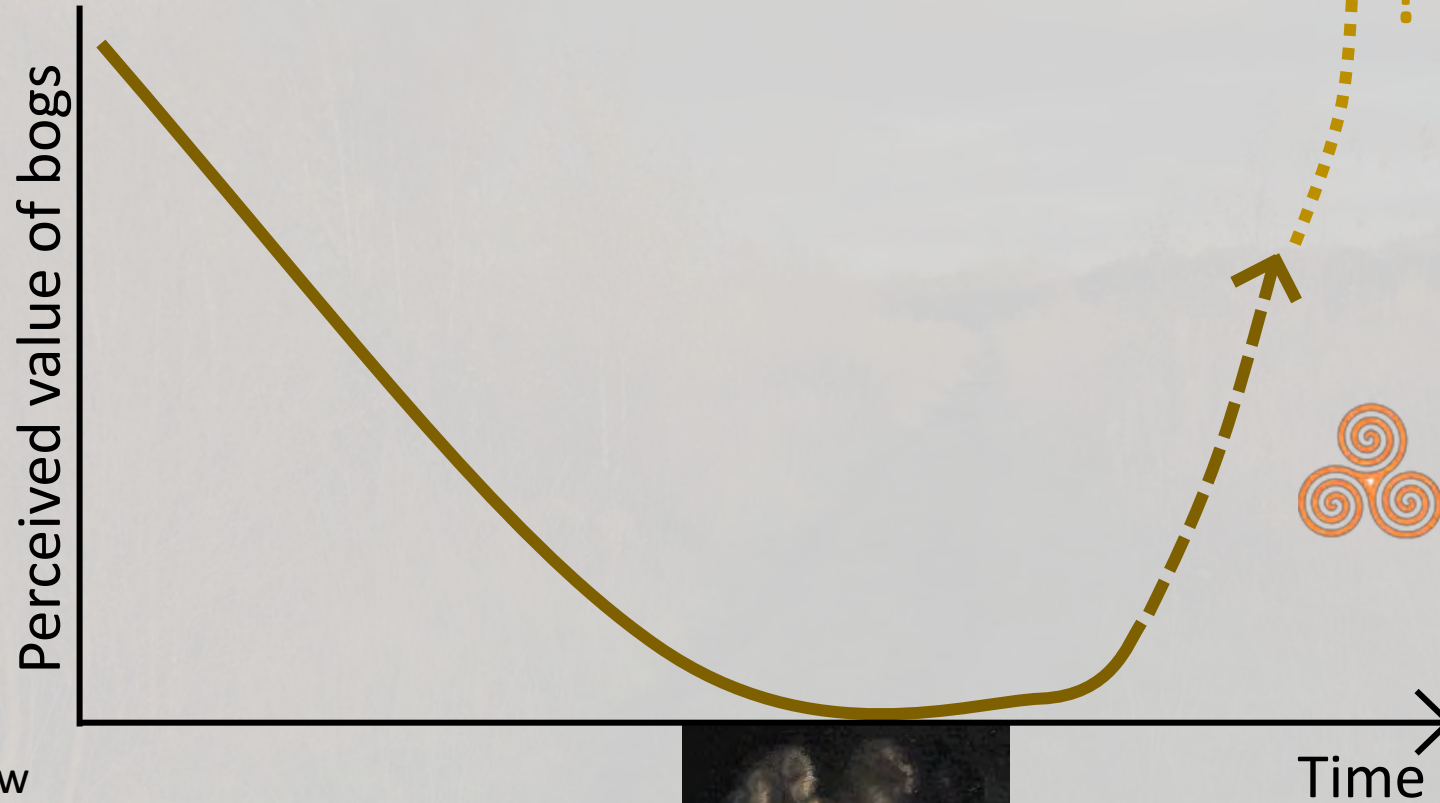
UK: Annual estimated recreation time spent on peatlands is 180 million hours valued at £274 million [5]

The mental health benefits of being in nature are now well-recognised, but new research is suggesting these benefits are greater in wilder, more natural areas [9]

The Bogattitude Scale



Lindow
Man



Daniel
Defoe



What can you do?

- Evangelise about bogs!
- Give the Moss a helping hand

Sources

1. Defoe, D. (1724) *A Tour Through The Whole Island of Great Britain*.
2. Bain, C.G., Bonn, A., Stoneman, R., Chapman, S., Coupar, A., Evans, M., *et al.* (2011) *IUCN UK Commission of Inquiry on Peatlands*. IUCN UK
3. Peatland Programme, Edinburgh. Montanarella, L., Jones, R.J. and Hiederer, R. (2006) The distribution of peatland in Europe. Available [here](#)
4. Bonn, A., Allott, T., Evans, M., Joosten, H. and Stoneman, R. eds. (2016) *Peatland restoration and ecosystem services: science, policy and practice*. Cambridge University Press.
5. Office for National Statistics (2019) *UK natural capital: peatlands*. Available [here](#). Accessed on 02/02/2024
6. Bird Guides (2020) Somerset's 'seven heron slam'. Available [here](#). Accessed on 02/02/2024
7. Rewilding Podcast (2023) Lille Vildmose, Denmark. Available [here](#). Accessed on 08/01/2024
8. Gearey, B. (2010) *Peatlands and the Historic Environment*. IUCN UK Peatlands Programme. Available [here](#). Accessed on 02/02/2024
9. Ewert, A. and Chang, Y. (2018) Levels of nature and stress response. *Behavioral Sciences*, 8(5), p.49.

Lindow Moss

The past, present and future of a Cheshire mossland

John Handley

Professor Emeritus, The University of Manchester & Hon. President of the Friends of Lindow Moss.

Wilmslow Guild FoLM Launch Event

February 3rd, 2024



Presentation Aim



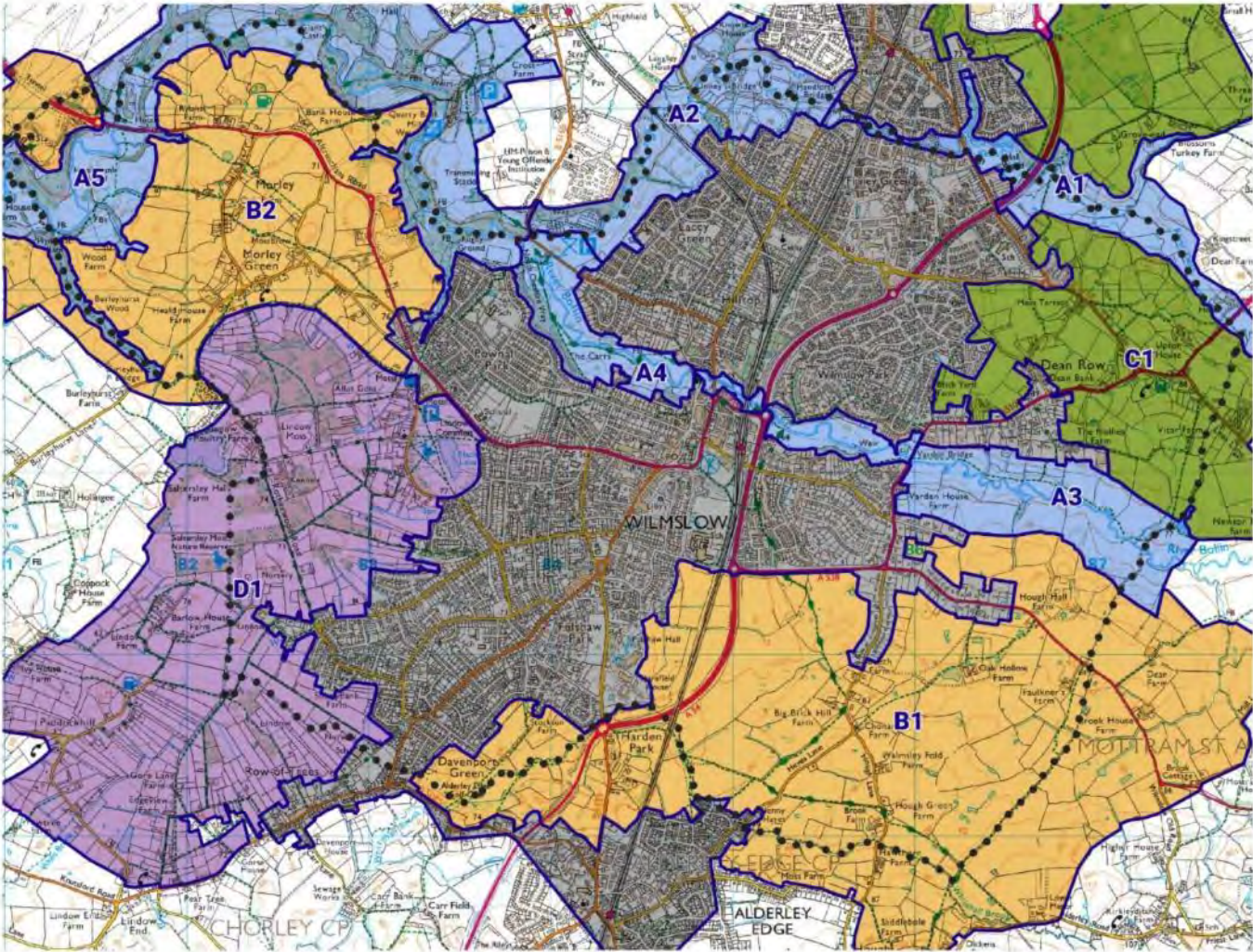
**To explore the origins,
development and
prospects of Lindow Moss
- a Cheshire mossland
landscape.**

Lindow's setting in the 18th Century



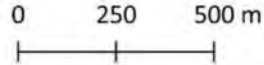
From Burdett's Map of Cheshire , 1777

Wilmslow Neighbourhood Plan
Landscape Character Assessment



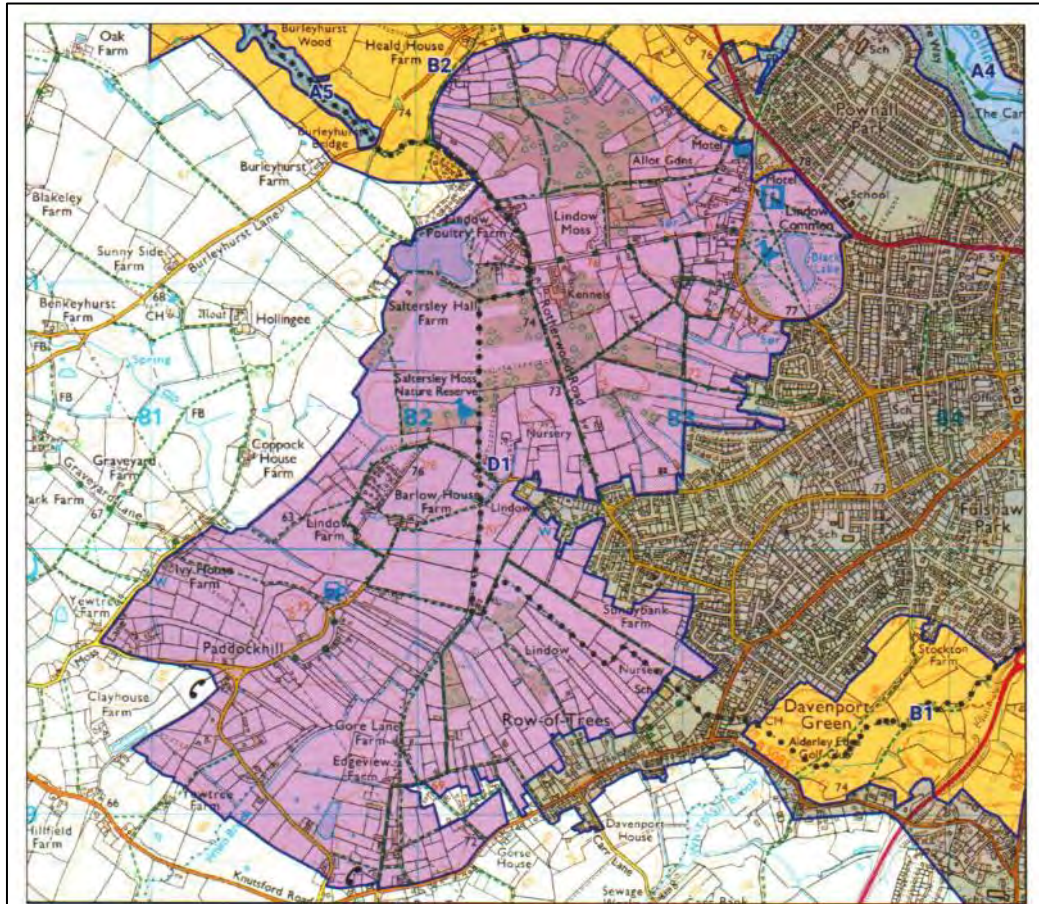
- Landscape Character Types
- Higher Wooded Farmland
 - Lower Wooded Farmland
 - Mossland
 - River Valley
 - Urban
 - Neighbourhood Plan Boundary
- Landscape Character Area
- A1 Upper Dean
 - A2 Lower Dean
 - A3 Upper Bollin
 - A4 Wilmslow Bollin
 - A5 Lower Bollin
 - B1 Chonar
 - B2 Morley
 - C1 Dean Row
 - D1 Lindow Moss

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Wilmslow, Landscape Character Types and Areas

Lindow Moss Landscape Character Area



Wilmslow Landscape Character Assessment

Lindow Moss
Landscape Character Area D1



0 250 500 m

••• Neighbourhood Plan Boundary

□ Landscape Character Area

Landscape Character Types

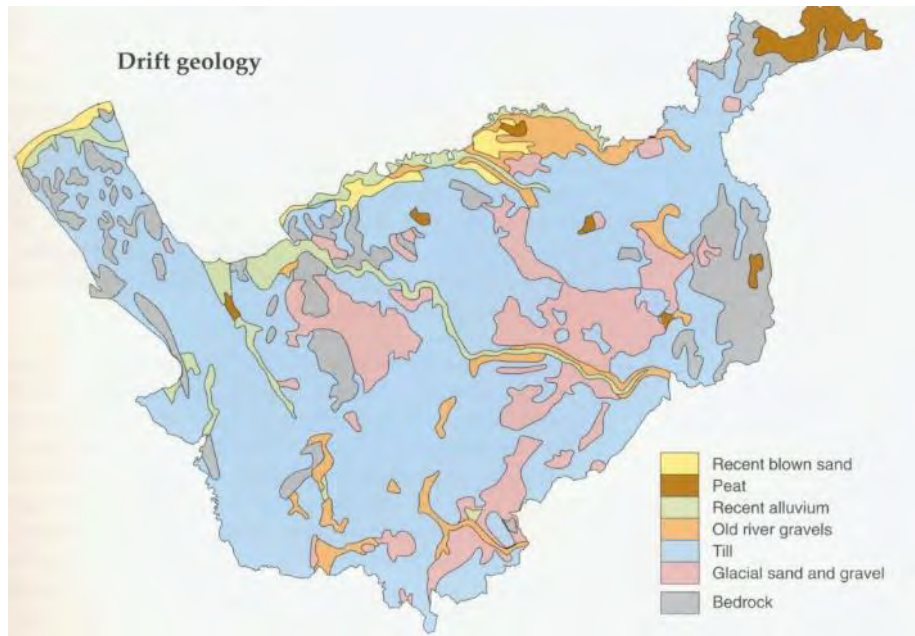
■ Lower Wooded Farmland

■ Mossland

■ River Valley

■ Urban

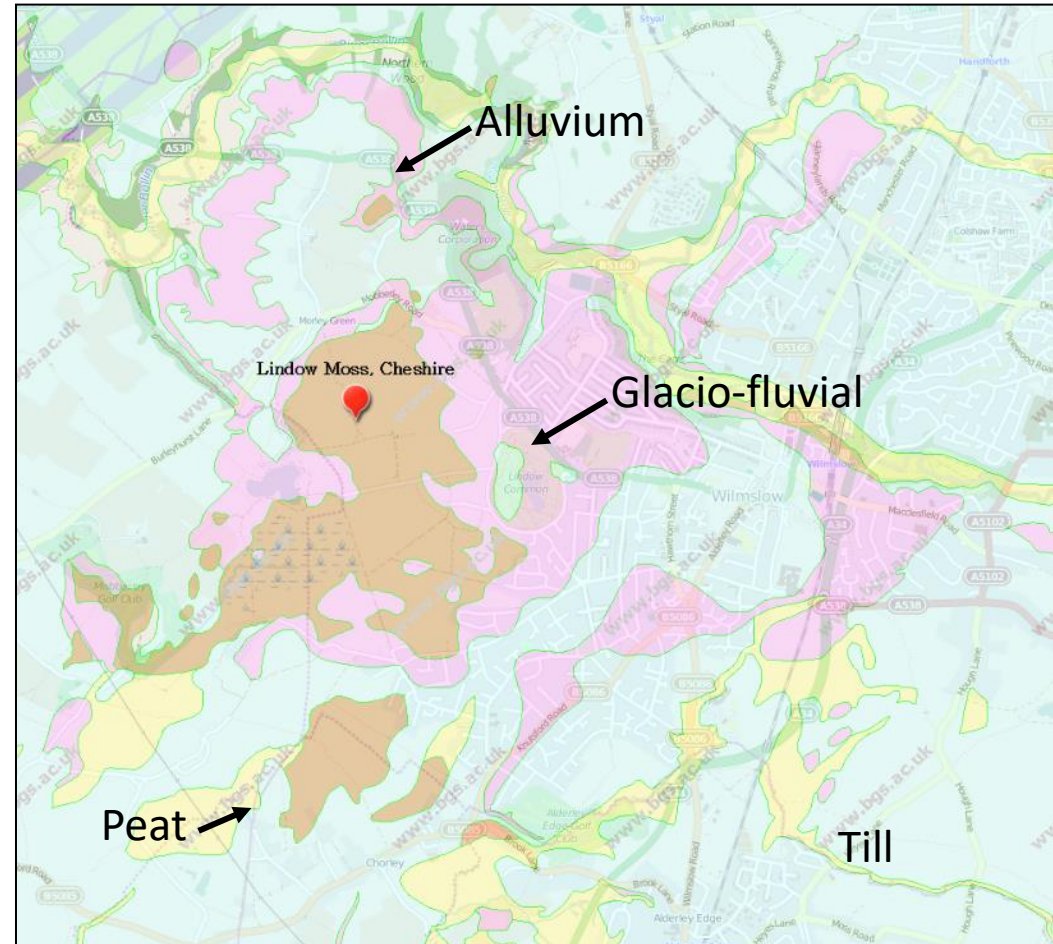
The Lindow Moss LCA covers 17.4 km squared (6.7 square miles); the cut-over peatbog 0.28 km squared (69 acres)



Source: Phillips & Phillips 2002, p5

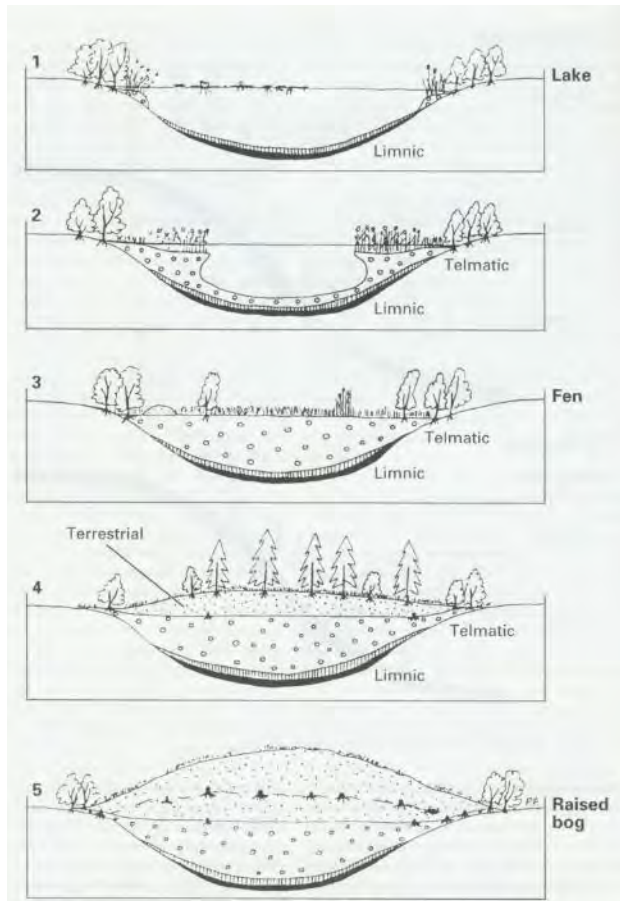
- **Quaternary** (2.6-0 Mya):
Tunnel valleys, meltwater erosion
– glacial sediments (till & sand)

Geological setting of Lindow Moss



Source: British Geological Survey

Lindow Moss stratigraphy



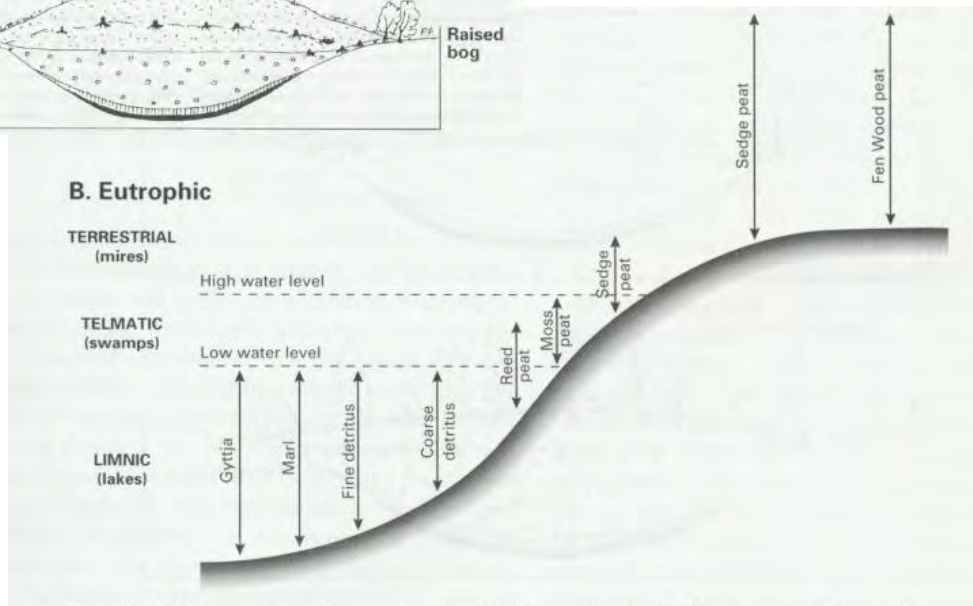
Reeds & sedge peat

↓
Fen carr

↓
Scheuzeria

↓
Wood peat (pine)

↓
Sphagnum



Sub-fossil pine at Lindow Moss, Cheshire



Recent excavations by Dr Jonathan Lageard at Lindow Moss



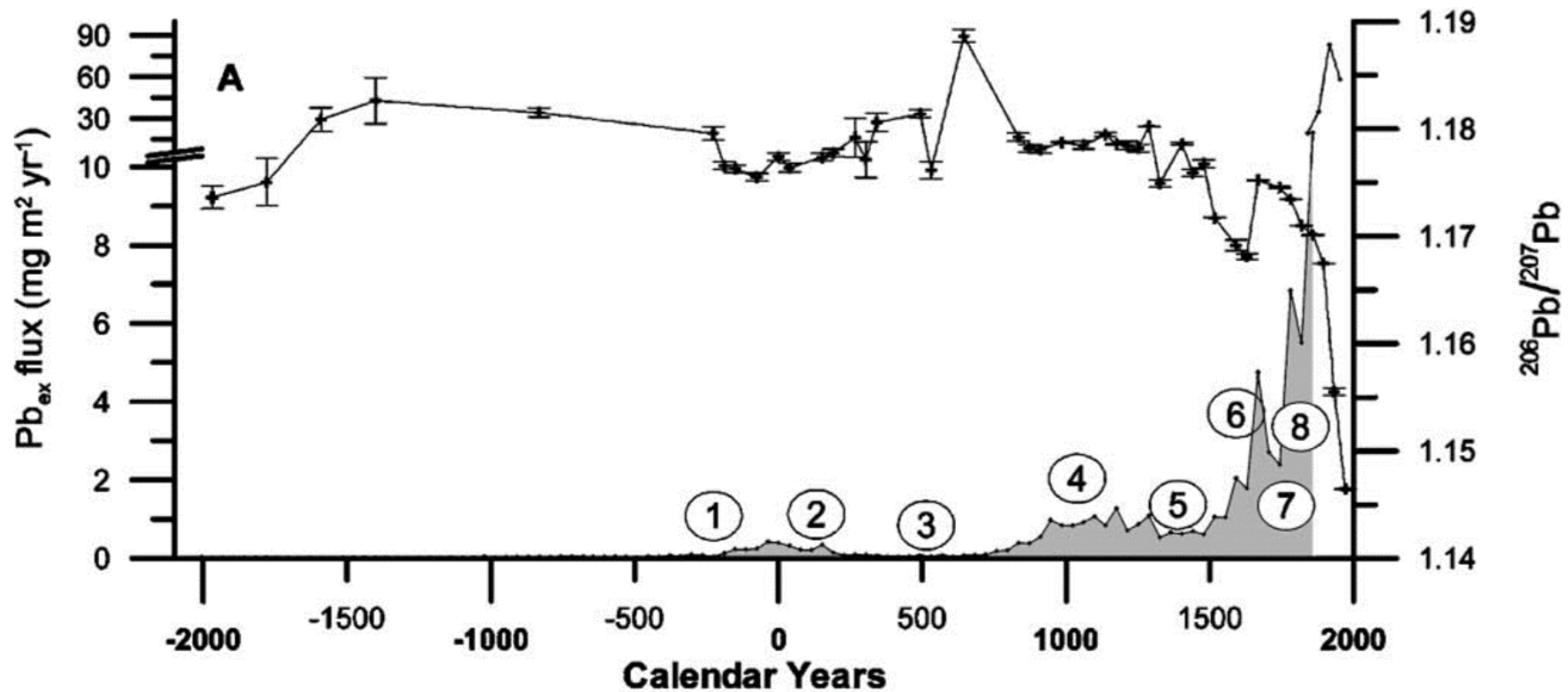
A Sphagnum Recurrence Surface



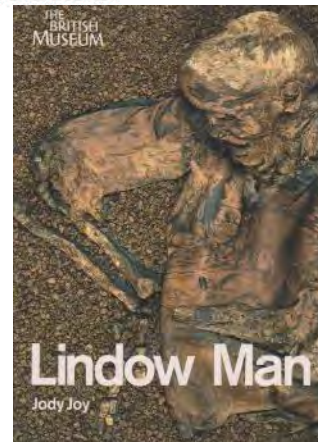
Peat: an important carbon store & palaeo - archive



Lindow Moss: Pollution Archive and Timeline



- 1 – Iron Age
- 2 – Roman 43BC – AD410
- 3 – Dark Ages
- 4 – Norman-Medieval
- 6 – C16th mining reorganization
- 8 – Industrial Revolution to AD1800



Source: Le Roux et al 2006

Remembering Lindow Man



The dawn walk for Lindow Man (August 2014)

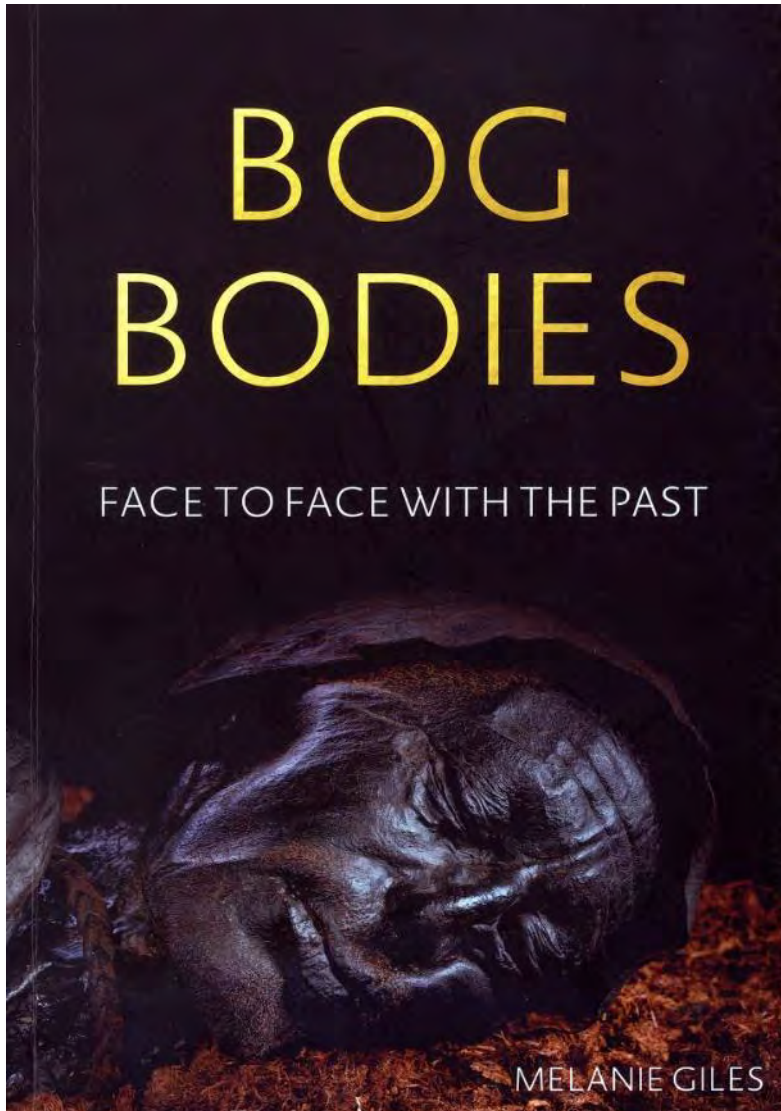


Rick Turner OBE



Source: British Museum

The Lindow Season 2024



A programme of public engagement with events, art work & a 12 week course at the Guild for Life Long Learning:-

'LINDOW MAN: HIS PEOPLE AND HIS LANDSCAPE'

Autumn term, 2024

Peat and Peat Working



Peat stooks drying on
Saltersley Common, 1900

Source: Hyde and Pemberton
2002 from Cheshire County
Council

Several Townships (Chorley, Fulshaw, Mobberley and Pownall Fee) bordered onto Lindow Moss and boundary disputes were frequent – ‘a major concern of the manorial courts in Wilmslow in the 17th Century’:

‘The Wetlands of Cheshire’ 1997 p91

Lindow Moss begins to shrink



From Bryant's Map of 1831

Detail of Fulshaw Tithe Map, 1842



Courtesy of Wilmslow Library and Wilmslow Historical Society

The Enclosure landscape reflects medieval moss rooms



Lindow Moss today



© 2016 Infoterra Ltd & Bluesky
© 2016 Google

Google Earth

Tour Guide 1945

Imagery Date: 6/2/2009 53°19'31.70" N 2°15'56.77" W elev 78 m eye alt 1.75 km

Lindow Moss – the cutover peat bog

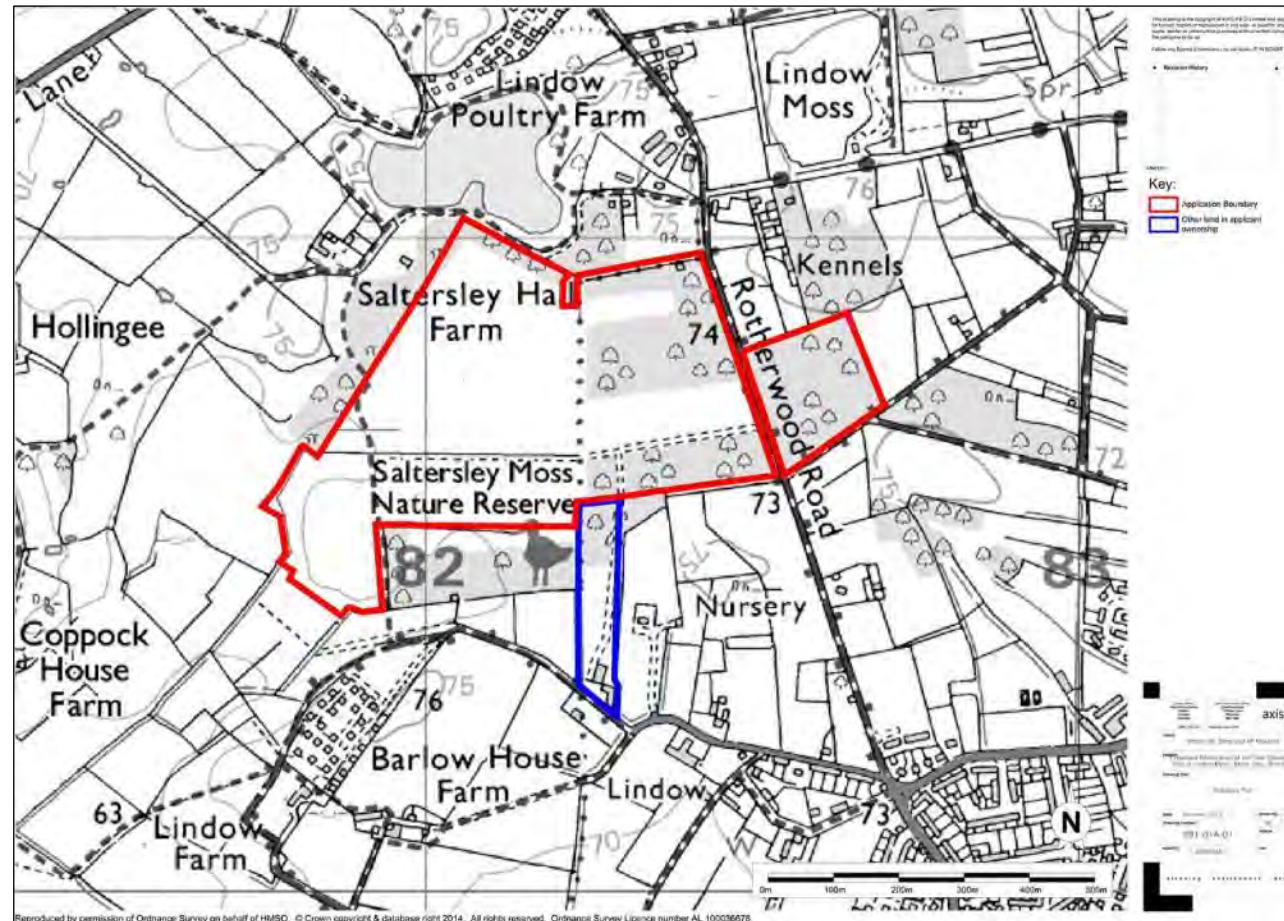
Planning consent to cut peat until 2042 & then a requirement to backfill with inert waste and restore to agriculture



Image Chris Hills - 2016

Lindow Moss Planning Applications - 2014

Applications by Messrs Bond and Rowland (Croghan Peat)



Cheshire East Planning consents, Feb 2019

- 14 houses in a Green Belt location (<2ha)
- Cessation of commercial peat extraction
- Ecological restoration of cutover peat bog (28ha)
- 20-year aftercare requirement
- Establish Lindow Moss Liaison Committee to ensure community engagement
- All secured by a legal agreement and Minerals Planning Bond

Housebuilding proceeding apace – Sept 2023



Restoration begins February 15, 2022



Image Brian Donohue

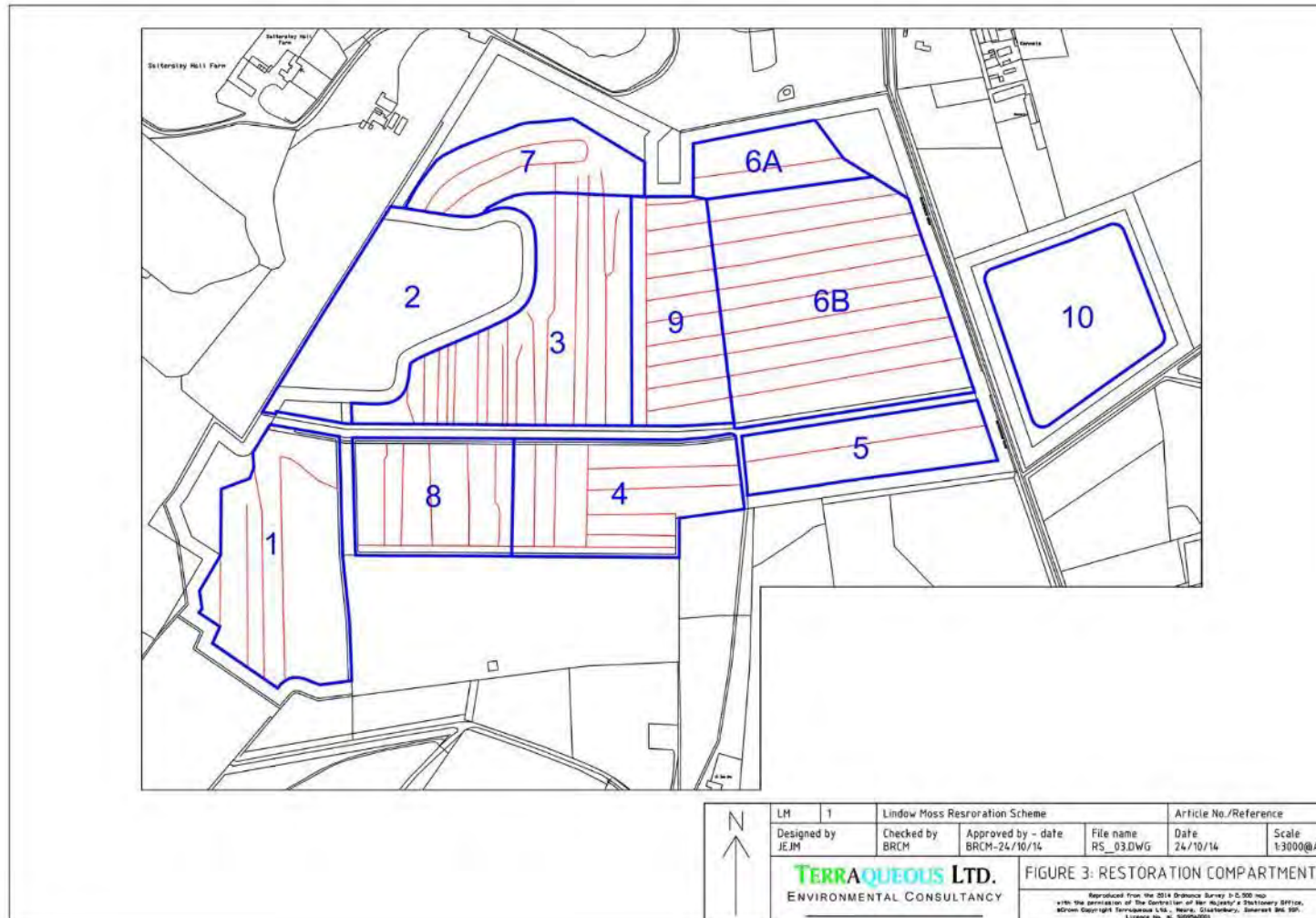
Stage 1 of Restoration

- Water Vole management scheme
- Open up Compartment 9
- Bird strike prevention scheme



Next steps in restoration

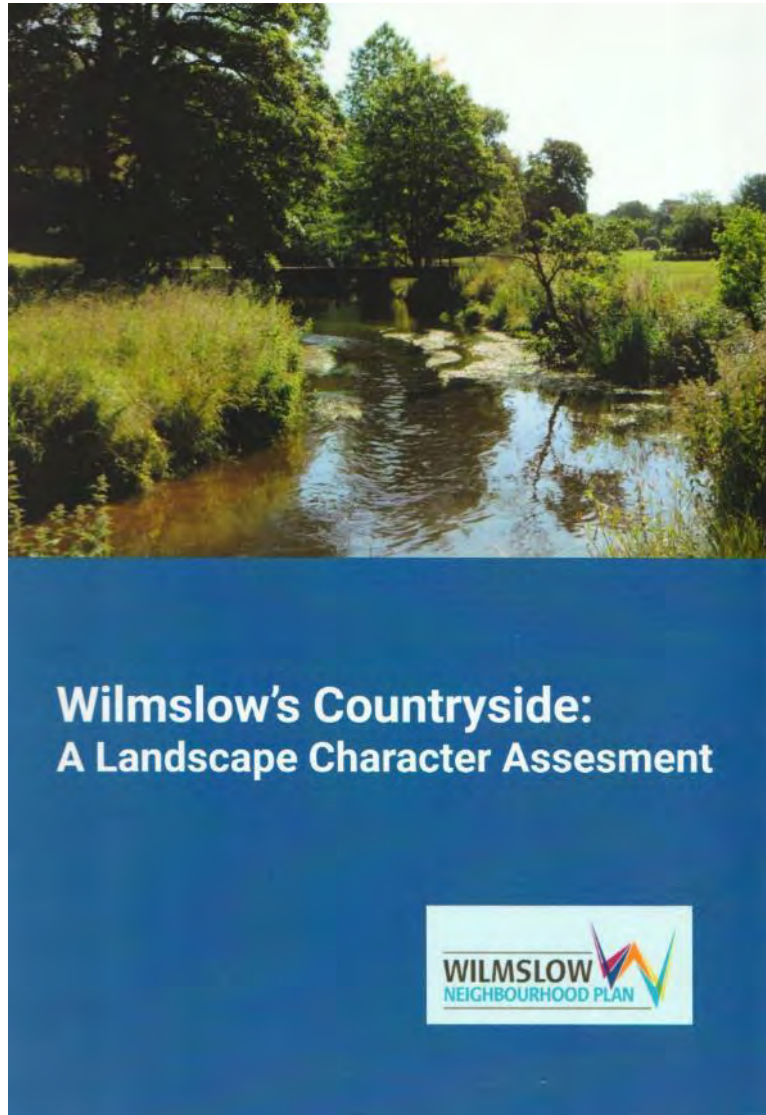
- Submit, consult and approve compartment restoration schemes (1 – 8 and 10) and then implement



Critical success factors for raised bog formation

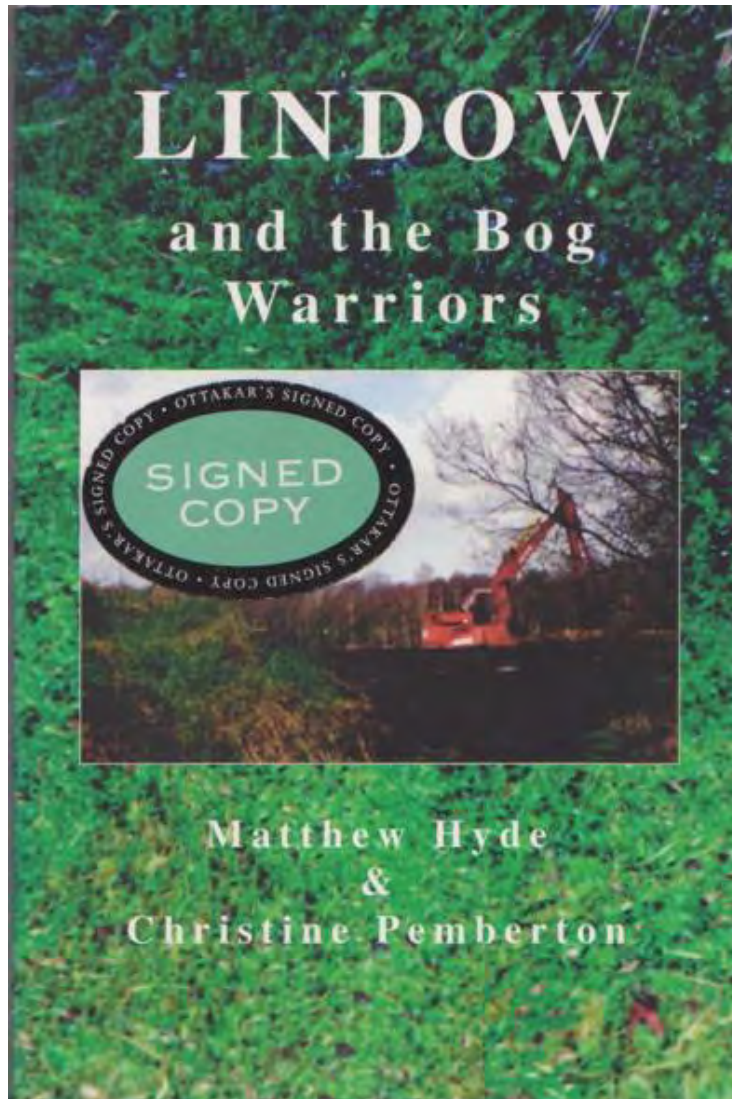


Prospects for the wider landscape



Wilmslow LCA documents the history and ecology of Wilmslow's distinctive landscapes and potential opportunities for the Neighbourhood Plan

Lindow Moss – a celebrated landscape



'Lindow Moss is archaeologically and historically one of the most important lowland wetlands in Britain.'

Professor Nick Higham, The University of Manchester

'Lindow Moss is an important cultural landscape extending back thousands of years which still retains its sense of enclosure and mystery.'

Rick Turner OBE

Wilmslow Neighbourhood Plan, 2019

- Designates the Lindow Moss Landscape Character Area as a Historic and Cultural Landscape
- Proposes a Lindow Moss Partnership to conserve, restore and interpret the wider landscape
- Supports the principle of enabling development to secure ecological restoration of the cut-over peat bog



Towards the Lindow Moss Partnership

- **Agreed aim:** *‘to conserve, restore and interpret the wider Lindow Moss landscape for the benefit of the people of Wilmslow and neighbouring parishes, those who live and work in the area’.....*
- **Groundwork** appointed as lead partner to build partnership and secure funding. Establish ‘Friends of Lindow Moss’
- **National Heritage Lottery Fund** supports landscape scale projects for *‘an area of landscape with natural, archaeology, built and cultural heritage features that give it a unique character and sense of place’*. **Bid now funded (Feb. 2024)**
- **What will the Partnership do?**

Conserve and restore the Moss Room landscapes



Develop a water management plan to conserve peat deposits, and ...



... combat soil shrinkage



Conserve and restore wildlife habitats



Lindow Moss Plant Hunt/Bioblitz, July 17 2021

Improve accessibility and enjoyment of the landscape



- Lindow Moss loop
- Heritage trail
- Nature walks



Mark and interpret:



- Lindow Man findspot
- Subfossil pine trees
- Volunteer rifle range
- Traditional peat working
- Moss room hedges



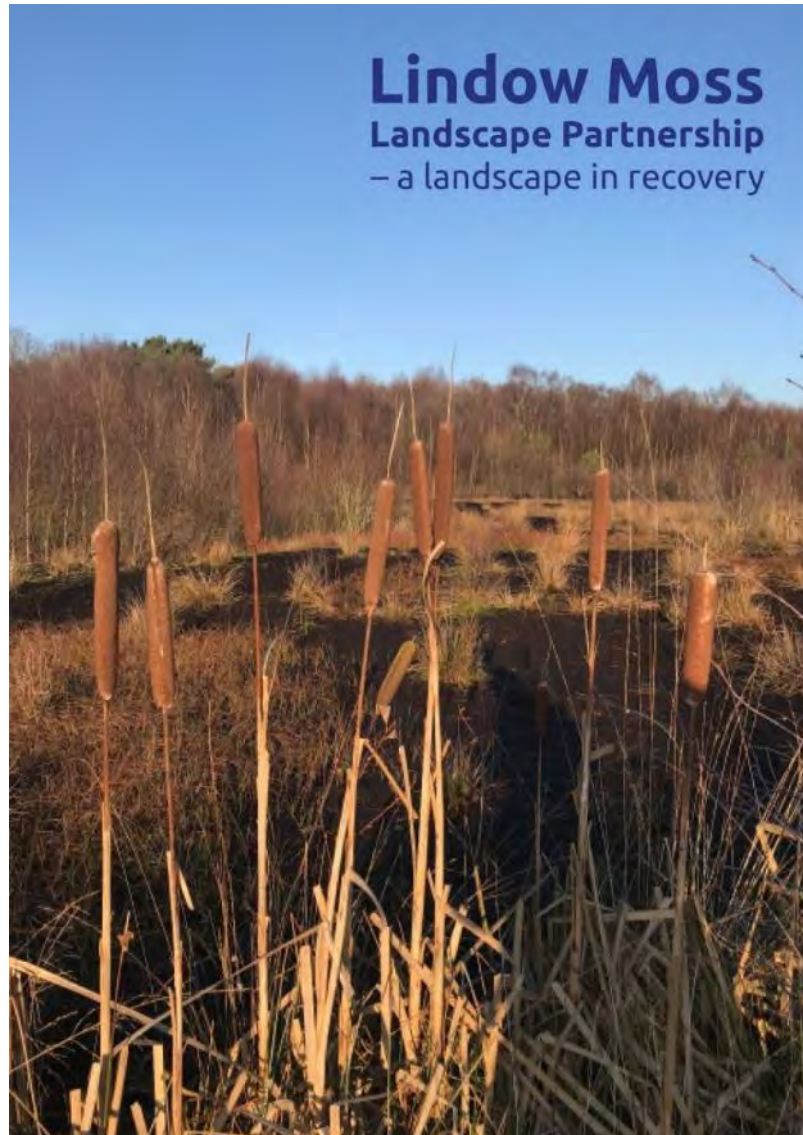
Animate the landscape through art and educational events

‘Window on Lindow’

Exhibition, guided walk and workshop



Lindow Moss Landscape Partnership



- 1st meeting of Partnership Steering Group 24/01/24
- Friends of Lindow Moss are Steering Group members
- Lindow Moss Prospectus sets out a 10 year vision for the wider landscape

Community Engagement is Vital through:

- The Lindow Moss Community Forum, established 2020 becomes Friends of Lindow Moss in 2024
- Volunteer work parties have cleared birch saplings, underplanted woodland and cleared Himalayan Balsam



Acknowledgements

Thank you to Chris Hills of the Wilmslow Photography Club for invaluable help with this presentation and to Dr Jonathan Lageard for permission to use his slides on vegetation history.



Nature on the bog: *back from the brink* by Simon Caporn



Drainage and Peat cutting caused:

- Ecosystem, Habitats and Species destroyed
- Too dry for bog plants and associated bog fauna
- Drained Peat is aerated, it shrinks and subsides
- Increased decomposition and soil respiration
- Emissions of CO₂



Actually, raised bog vegetation is present in local patches, where the peat is consistently wet



Sphagnum mosses

the 'key-stone' species and dominant plants of healthy peatbogs

Sphagnum is an ecological engineer, known to influence its local environment and create the raised bog habitat through peat formation

Surveys:

2008: 5 species

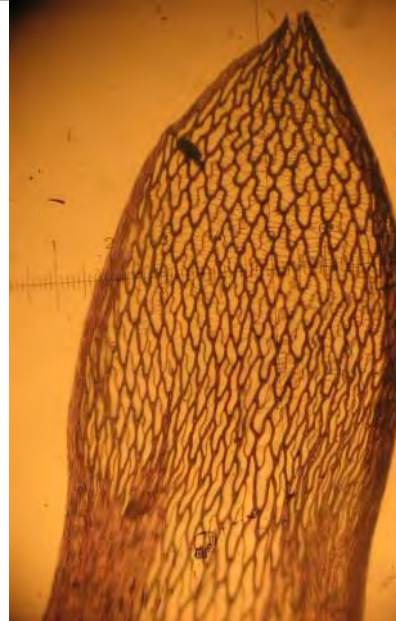
2024: 8 species and more widely dispersed



Sphagnum makes the peat and preserves things



Great Irish Elk
From Boglands by Seamus
Heaney in UC Dublin



"A valuable first-aid dressing for wounds"

SUCH is the testimony to Sphagnol of a well-known London Surgeon, whose report we quote below in full. All medical men should avail themselves at this time of this strikingly successful healing ointment. It is a distillate of Peat—is antiseptic—possesses remarkable healing properties—and is easily applied.

Jan. 16th, 1915.
"I have tried your Sphagnol preparations, ointment, and cream in certain chronic ulcers with remarkable success, and have recommended Sphagnol to a large number of people under training as a valuable first aid dressing for wounds."

Sphagnol

SPHAGNOL is the standard remedy of medical men in all cases of skin disease and inflammation. It is invaluable in the treatment of

"TRENCH SORES,"

EOZEMA, ULCERS, PSORIASIS, RING-WORM, ACNE, DANDRIF, PRURITIS, HERPES, HÆMORRHOIDS.

THE Institute of Hygiene have awarded their certificate for purity, merit, and quality to all Sphagnol Soaps and Ointment.



Important Offer.

Doctor's Outfit of Sphagnol Preparations, consisting of Ointments, Soaps, and Suppositories will be sent to every Doctor, R.A.M.C. Officer, and Red Cross Hospital Nurse on receipt of professional card.

A First-aid Outfit containing a liberal supply of Ointment and Soap will be sent upon request to any First-aid or Red Cross Worker.

Write to-day for the Free Outfit and medical testimony to

Peat Products (Sphagnol) Ltd
18a Queenhithe,
Upper Thames Street, London, E.C

Good bog plant indicators
on Lindow Moss – but
mainly in small patches:

- Sphagnum moss
- Cotton Grass, Cross-leaved Heath
- Cranberry, Sundew & more



Dragonflies recorded on Lindow Moss Plant hunt, July, 2021



Emerald damselfly



Black darter



Black-tailed skimmer



Four-spotted chaser



Broad-bodied chaser



Large red damselfly

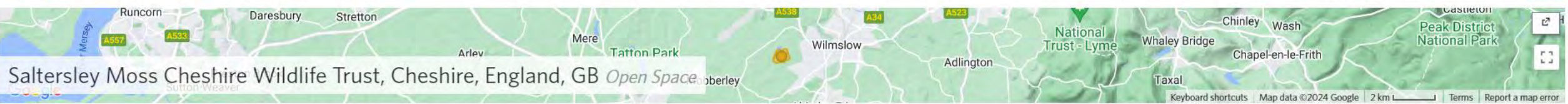


Emperor dragonfly

Monitoring and Recording – i-Naturalist

<https://www.inaturalist.org/home>

Places > Europe (Continent) > United Kingdom (Country) > England (State) > Cheshire (County) >



Saltersley Moss Cheshire Wildlife Trust, Cheshire, England, GB *Open Space*

Species Observations People About Saltersley Moss

Flag This Place | Embed place widget

Grid List Map

Map Satellite



https://www.inaturalist.org/observations/183750927

How will Restoration of the bog affect the Carbon balance?

'Peatlands in England have long been subjected to damaging land use, resulting in them becoming a large source of greenhouse gas emissions, releasing carbon previously stored for millennia

Natural England

'Restoration of peatlands is a low hanging fruit, and among the most cost-effective options for mitigating climate change'

Director UN Environment Programme (UNEP)

Restoration stages – in outline

Keep the peat wet to 10 cm



Bare peat



Recovering peatbog



Add Sphagnum



Help bog plants to recover or plant them in



Some areas recovering by themselves

Bare peat with expanding cover of common cotton grass



Ditch full of Sphagnum moss

Raised ditch banks with heather



Sundews within the cotton grass

marsh cinquefoil



and help may be gained from Lindow common

Bogbean



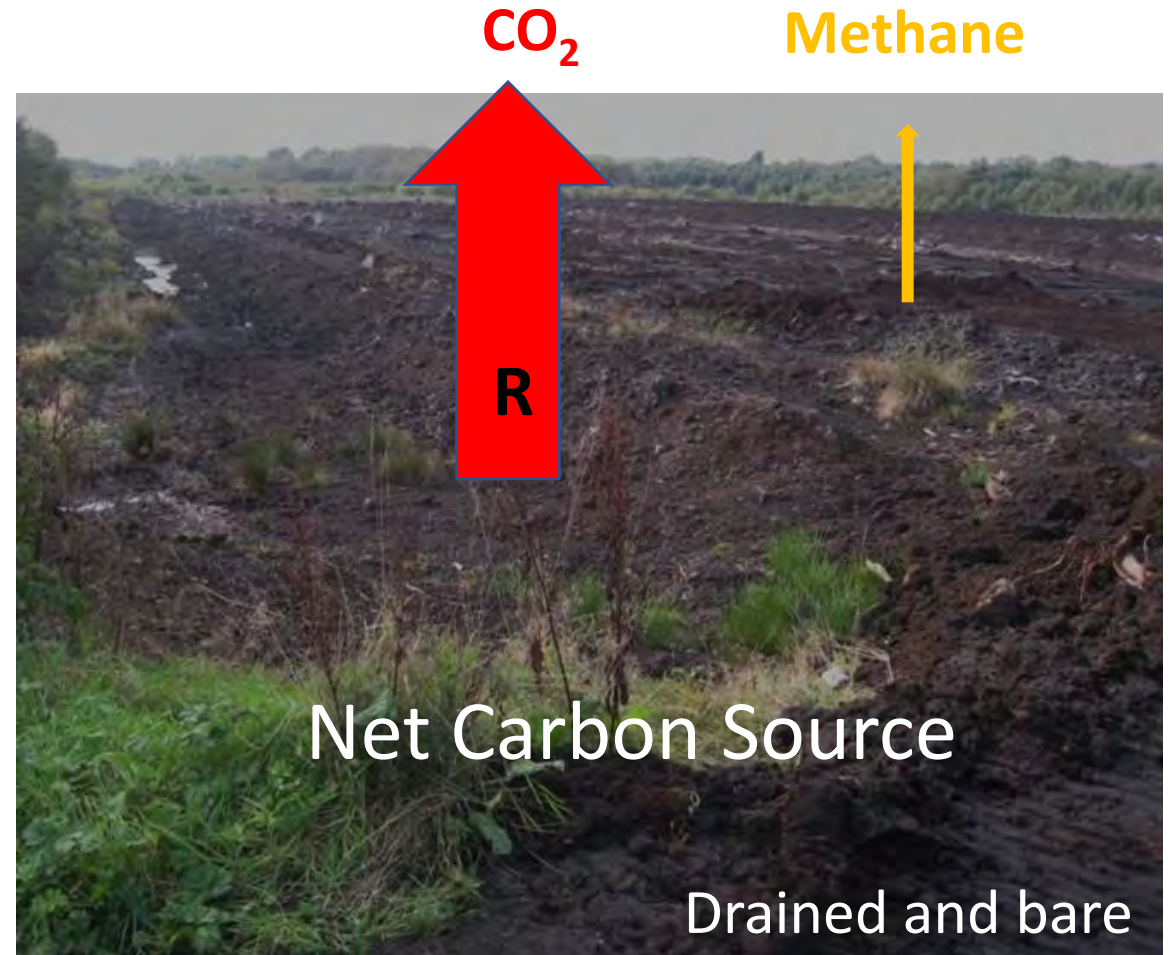
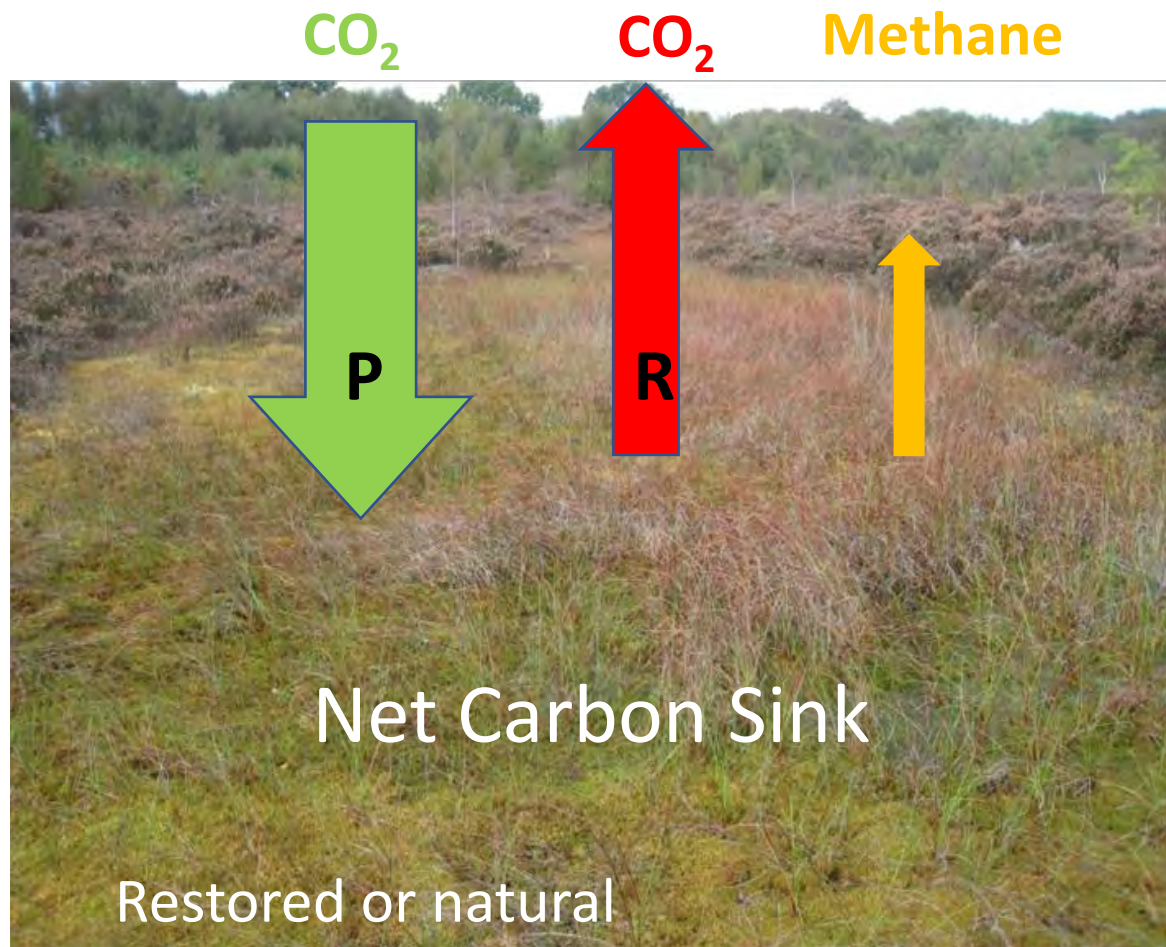
Timescale of re-vegetation – an example from Little Woolden Moss



Sphagnum and other bog plants are often introduced from commercial sources, or could be cultivated in community gardens



Carbon balance of intact and damaged peatlands

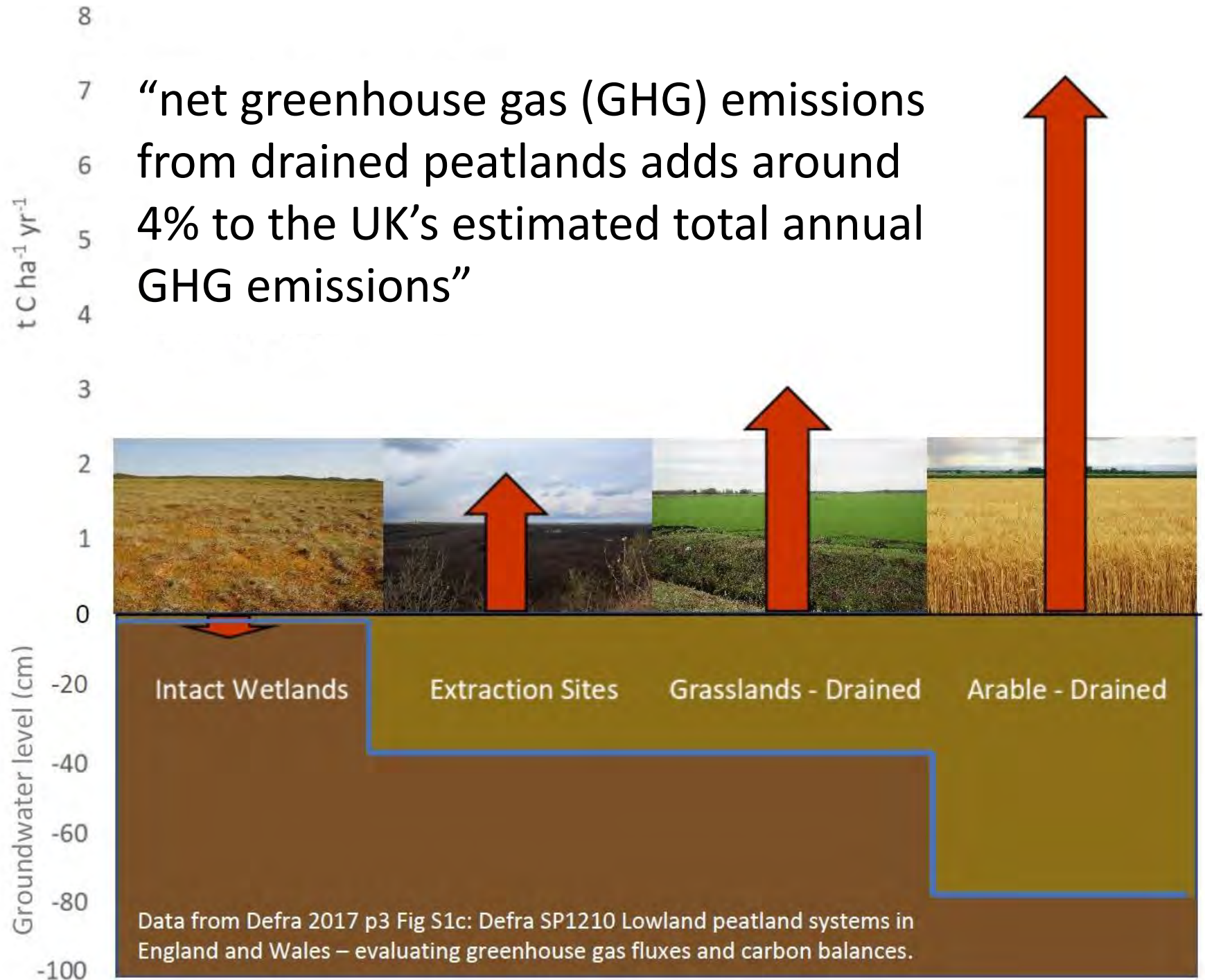


Carbon dioxide emissions from peat:

Wet Peat stores Carbon dioxide

Dry Peat releases Carbon dioxide

DBEI, 2017



The Winmarleigh Carbon farm trial

Growing a permanent crop of Sphagnum moss for storing and protecting carbon in peat soils

January 2020



May 2020



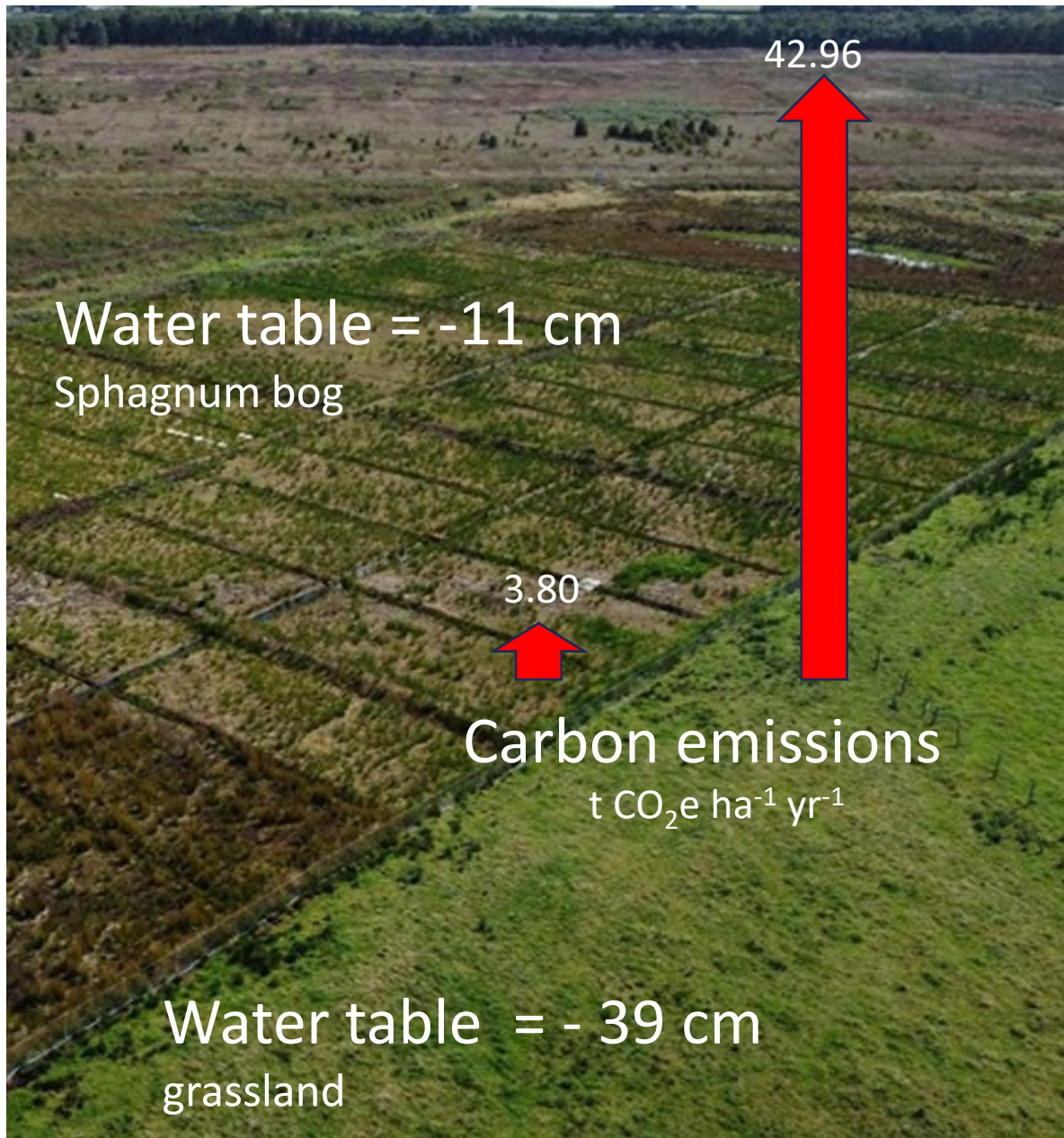
September 2020



August 2022



Winmarleigh Carbon Farm – Carbon benefits of re-wetting – Year 3

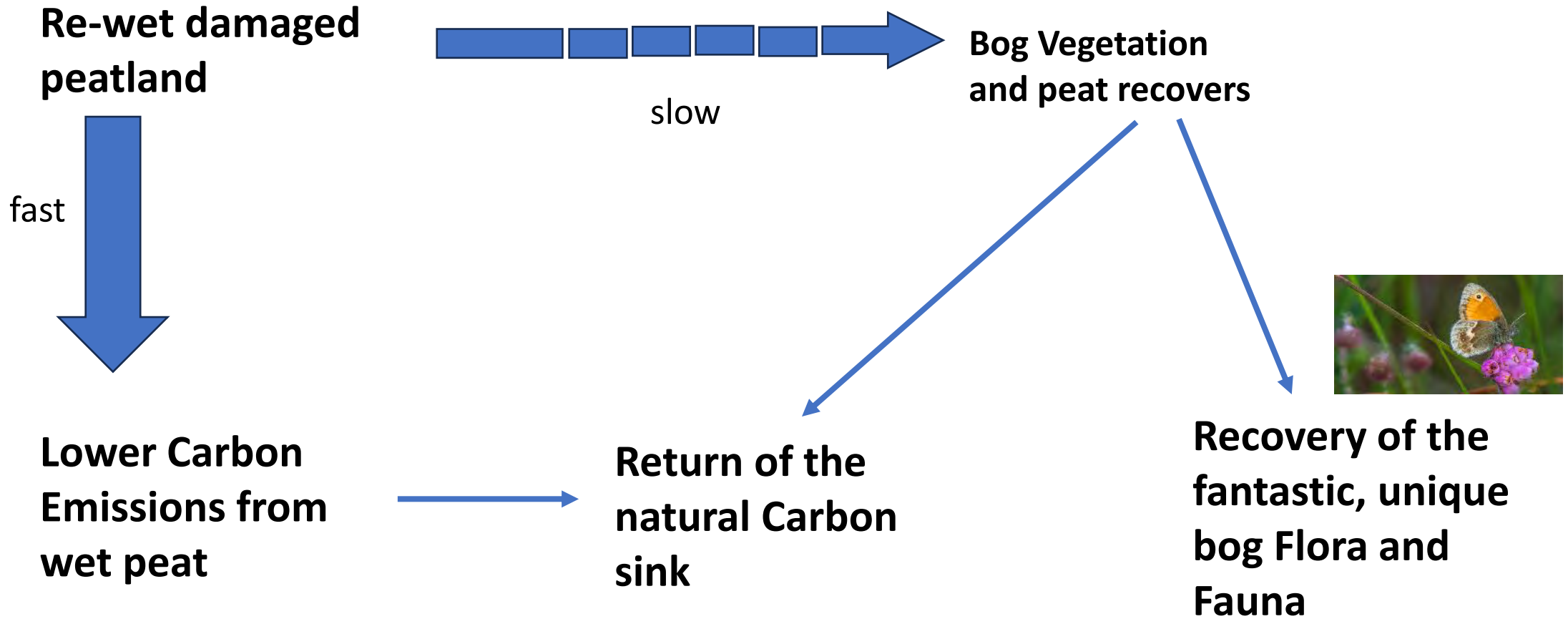


Re-wetting and Sphagnum planting
- reduced Carbon emissions by 91%

Next year ----net Carbon uptake?



Back from the brink...looking forward for nature and carbon on a restored bog





Thank you



A Living Landscape: contemporary perspectives of the Moss

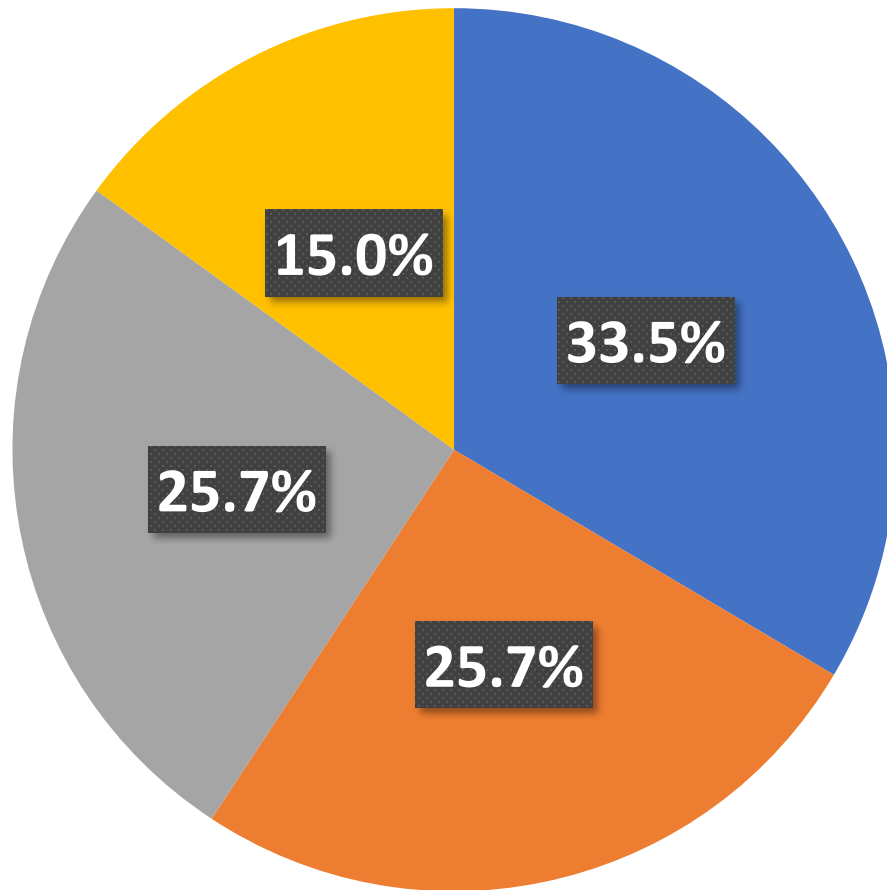
Professor David Hulme

Lindow Moss has a lot of friends

- 431 people completed the 2020 survey – virtual and face-to-face
- 82% of them joined the Transition email list for the Moss
- Walkers, dog-walkers, runners, cyclists, horse-riders, fisherfolk
- Good weather and bad weather, early and late in day/night (16/7)
- Wilmslow residents and visitors



What are user priorities?



- Personal Wellbeing
- Biodiversity
- Climate Change
- Local History

What would Moss users want Transition (FoLM) to focus on?

Respondents identified three main things they wanted:

1. Full RESTORATION and improvement of the Moss



2. Better COMMUNICATIONS – what is happening and why?



3. Active ENGAGEMENT with Moss's future – voice and management



Open question and other feedback

- Deep concern about land use change (peat-digging, rubble dumping, property development, etc.)
- Real significance of access to the Moss to people's quality of life
- Moss is used by Wilmslow residents and people from further away
- Most people did not recognise a boundary to the Moss – they saw it as Moss surrounds and Lindow Common – follow the footpaths
- Mixes of personal and social goals for the Moss, e.g., walk on it for my well-being and conserve its wildlife for future generations

A misty landscape with trees and a body of water, overlaid with the text "Any Questions?". The scene is hazy, with a soft orange glow on the horizon. The text is centered in a large, black, sans-serif font.

Any Questions?

Next Steps:

- Evaluate feedback from earlier session - **Imagining the Moss in the Future**".
- Undertake analysis and credibility assessment for a stand-alone (i.e. Separate from Transition Wilmslow) FoLM aiming to build a diverse and demographically dispersed membership including Chorley, Mobberley, and further afield. Then agree/confirm with **TW Trustees** the way forward. (**April 2024** has been suggested).
- On the assumption that it is agreed that the best way forward is to establish a stand-alone FoLM group, finalise the legal and governance options.(A Charitable Incorporated Organization which can own assets, sign leases, and employ people has been suggested). Seek to register this with the Charity Commission by September 2024 and hold the first AGM shortly after.
- Regularly up-date all attendees on progress through this process.

Next Steps : Additional Committee Roles

- **Membership Secretary**

- **Treasurer**

Volunteers Welcome!