



Sustainable Peatlands: A Win For All Key Lessons Learnt and Next Steps

*Jasper van de Belle, Van Hall Larenstein
Cisca Devereux, Bax & Company
14th October 2021*

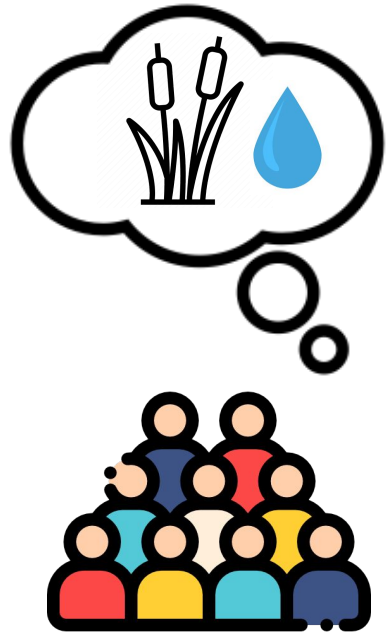
BAX & COMPANY /
VALUE FROM SCIENCE AND TECHNOLOGY

 **van hall
larenstein**
university of applied sciences

Interreg 
North-West Europe
CCONNECTS
European Regional Development Fund

Interreg 
North Sea Region
CANAPE
European Regional Development Fund EUROPEAN UNION

Sustainable Peatlands: *Key Lessons Learnt and Next Steps*



**6 sessions over 2 days
with over 40
speakers...**

>70 in-person

>100 online

**What have we learnt?
What can we
take-away?**

Next session:
Matchmaking Workshop



Keynote Speakers

People, planet,
profit

Niek De Boer
VHL Research Director

Rewetting is
inevitable and is
best done as fast
as possible

Hans Joosten
Greifswald Mire Centre

Keep the
dialogue with
farmers going,
Public support is
key

Douwe Hoogland
Province of Friesland

Adapting to different
landscapes and
environments - Do the right
things in the right places.

Don't let perfect be the
enemy of good.

Mark McCorry
Bord na Mona

Session I Ecosystem Restoration - Protecting Today's Environment (Challenges & Wins)

Lakes

Spatial and temporal variation in lakes is substantial.

GHG-emissions from lakes can be large, but bioturbation and macrophytes can reduce these.

Consider your stakeholders, prioritise at least one need per group.

Jasper Van De Belle
Emiel Galetzka
Dan Hoare
Sarian Kosten

Fens

Keep the fens and bogs wet! Where it is not, start rewetting

Fauna and flora are perfect indicators for 100% fen landscape

Also need to talk about money - buying land, contracts, funding technical solutions, EU Green Deal, researchers

Edgard Daemen
Gert-Jan van Duinen
Christian Fritz
Wiebe Borren

Bogs

Think big!

Always need a case for the long-term - no more pumpkin funds!

Restoring raised bog require patience. On the short term, raised bog restoration might not be a climate friendly action.

Continue the search after a restoration method that requires a minimum of GHG emission and management.

Frederik Naedts
Paul Leadbitter
Peter Hahn
Sarah Johnson

Session II Utilising Restored and Rewetted Peatlands

Fen Farming

Balancing act between maximizing biomass and delivering ecosystem services

Get the local stakeholders / farmers onboard from the beginning

There's a need for a viable alternative business model to get public support

Ivan Mettrop
Andrea Kelly
Peter Hann &
Marianne Fisker
Ellen Weerman

GHG & Biomass Valorization

Livestock farming can secure farmer livelihoods while preserving habitat

GHG emissions from medium wet sites can be higher than from dryer sites

Composting biomass can deliver a high quality product, incl. Potting soil from Typha

Veronique Chauvin
Peter Maenhout
Maarten de Boever
Annieke Borst

Sphagnum farming

Lower saxony are producing 20% of drained peatlands emissions of Germany!

Strong local stakeholders and consultation network key to success

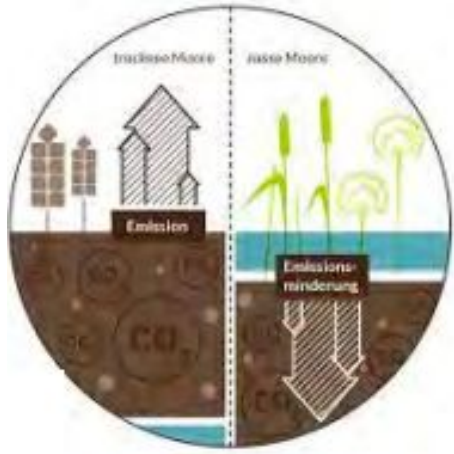
Large future potential of Sphagnum Farming that needs to be upscaled - only 30k ha in Germany currently

Sphagnum nurseries for restoration are a high price market

Jens-Uwe Holthuis
Christian Fritz
Kate Cartmell Done

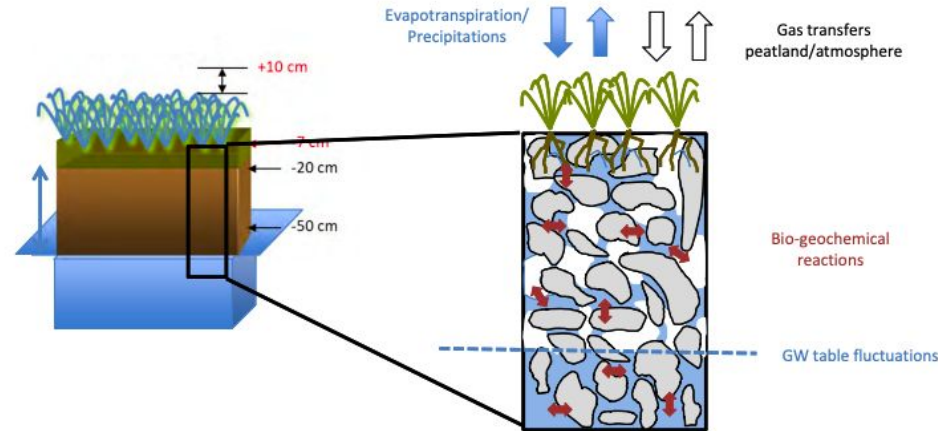
Session III Quantifying Ecosystem Services in Peatlands

Jasper van de Belle
Andre Laurent
Amey Tilak



Carbon Connects Site Emission Tool

GEST, extended version with 39 types (database from Couwenberg et. al) includes C fluxes, N2O fluxes, activity (diesel/kWh), product use



Care-Peat tool for managing scenarios of restoration

Model of the CO2 fluxes - weather station, underground sensors, daily co2 fluxes
Water level map + Model of gas transfer = CO2 fluxes map
Development of a Decision Support Tool for peatland managers



HYDRUS 1-D Modelling

Water movement processes with the drained blanket peatland located in Ireland
Important for the ecohydrological threshold of Sphagnum mosses

Session IV Business Models - Creating Business Opportunities



Market Products

Annieke Borst
Andrea Kelly
Peter Nailon
Peter v.d. Maas

- There's a range of potential products from Typha and machinery to harvest these.
- Work together to increase group learning and prevent making known mistakes.
- Get the help of specialised companies to reduce costs and maximise price.
- Maximum Sustainable Output can mean reducing stocking densities to minimize fixed and variable costs.
- Costs & benefits vary and uncertainty needs to be reduced to ensure profitability



PES

Patrick Crushall
Harry Mach
Rob Collins
Niall O Brolchain

- One big framework needed; local, regional, national and in the future European level
- Targets: CO2, ecosystem values, target special targets (PMP), biodiversity
- Keep on talking to offer result-based finance system
- Farmers need support to manage the system
- Certification for carbon or blue credits is necessary - demonstrations on regional level have been shown



Building Public Support

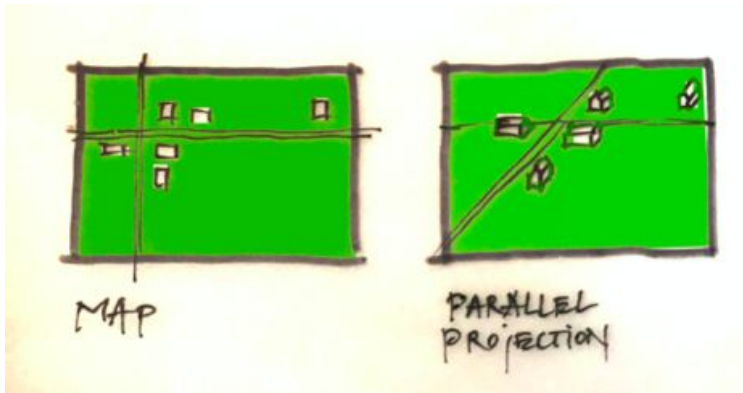
Nina Röhrig
Wilfried Heijnen
Bert van de Wiel
Job van de Crommert

- Farmers need incentives to talk about rewetting (payments to cover costs and for their long term compensation)
- Barriers: market and regulations -> currently creating the demand and supply, they need more recognition at EU level
- Change of mindset needed - going from resistance to support
- Enablers and barriers are really region specific ("kitchen-table interviews")
- Pay attention to the important interaction between farmers and retail

NOW: Session V Policy & Society for a Better Future



- **Design for a Transformation Process in the Context of Climate Policy**
- Dr. Laura Herzog, Osnabrück University
- **Peatlands Across Europe: Policy Recommendations**
- Amber De La Haye, Bax & Company
- **EU Policy on Carbon Farming**
- Niall Ó Brolcháin, NUI Galway
- **PEATland in progress: lost in translation and other issues in equations of social-ecological learning**
- Dr. Loes Witteveen, Brechtje Horsten, Van Hall Larenstein and Cisca Devereux, Bax & Company
- *& here we are now: Key Lessons Learnt and Next Steps*



Session VI What's next? Future Project Development

Next Session:
Matchmaking Workshop

Many questions & many opportunities!



Sustainable Peatlands: A Win For All - Key Lessons Learnt and Next Steps

Thank you!

Any questions?

*Jasper van de Belle, Van Hall Larenstein
Cisca Devereux, Bax & Company*

14th October 2021

Upscaling
rewetting...

Long-term
security for
farmers...

Reduce
uncertainties!!

Involving the
right
stakeholders

Business
Opportunities
& Carbon
Credits

... Need for
sound monitoring
techniques ...

...?