

#### RRR2021 Conference Programme Day 1 (9<sup>th</sup> of March)

Time (CET)	STAGE A		
08:30-08:45	Login & Warm Up		
08:45-08:55	Opening & Organisation (Greifswald Mire Centre)		
08:55-09:05	Welcome by Christian Holzleitner (European Commission, DG Clima)		
09:05-10:00	Keynote Hans Joosten (University of Greifswald, Germany)		
	Keynote Bärbel Tiemeyer (Thünen-	Institute, Germany)	
10:00-10:15	Break		
	STAGE A	STAGE B	STAGE C
10:15-11:15	Session 1.1 Biomass to product (Material use)	Session 1.2 Greenhouse gas emissions and other climate effects	Session 1.3a Sphagnum farming
	Anke Nordt	John Couwenberg	Matthias Krebs
	Biomass quality of paludiculture plants (Cattail and Common reed) for various utilisation options	Promising pathways to reduce GHG emissions by methane oxidation in rewetted peatlands including paludiculture lands	Paludiculture on former bog gras- sland: sustainable biomass produc- tion and benefits of a Sphagnum farming site in NW Germany
	Nora Köhn	Christian Fritz	Greta Gaudig
	Common reed for thatching in Northern Germany	Chimneys and blankets: species- dependent methane emission pathways in a rewetted dutch peatland	Establishing a landscape-scale carbon farm on former drained, agricultural pasture.
	Sabine Wichmann	Renske Vroom	Mike Longden
			Session 1.3b Sphagnum vegetation restoration
	Production of thatching materials	Persistently high CH <sub>4</sub> emissions 10 years after rewetting: The necessity for long-term observations when measuring GHG emissions of transitional systems	Restoring ecosystem functions and reversing land subsidence by growing <i>Sphagnum</i> on highly degraded eutrophic peat soils - a success story from the Netherlands
	Ruud Conijn	Danica Antonijevic	Bas van de Riet
	Wood foam from paludiculture as a novel insulation material	Effects of saltwater intrusion into freshwater rewetted coastal fen on methane cycling microbial community	OptiMOOR – optimizing management strategies for peat bog restoration after intensive agricultural use
	Steffen Sydow	Cordula Gutekunst	Gerald Jurasinski
11:15-11:30	Break		



	STAGE A	STAGE B	STAGE C
11:30-12:30	Session 2.1 Biomass to product (Energy) Paul Goriup	Session 2.2 Greenhouse gas emissions and other climate effects Christian Fritz	Session 2.3a <i>Sphagnum</i> vegetation restoration <i>Greta Gaudig</i>
	The optimal harvest date of <i>Typha</i> latifolia and <i>Phalaris arundinacea</i> as biogas substrates	Mitigation potential of paludiculture for five different Danish peatland sites under controlled water tables – a mesocosm study	Bog Growth- restoration of Sphagnum vegetation after peat extraction
	Christina Hartung	Claudia Nielsen	Jan Köbbing
	Anaerobic digestion of conservation biomass - a case study from NE Poland	A national research programme on greenhouse gas emissions and land subsidence from lowland peat in the Netherlands	Early stages of revegetation of a terminated extracted peatland after two years of rewetting
	Piotr Banaszuk	Gilles Erkens	Eva Weber
	Fuel quality and combustion behaviour of pure and kaolin additivated pellets from fen paludicultures in a small-scale biomass boiler	Carbon sequestration potential of a former cutaway Irish blanket Peatland located on Ireland's Western Coast	Rewetting of a transition mire by sprinkling with demineralised water
	Daniel Kuptz	Amey Tilak	Bernhard Hasch
	Energetic utilization of biomass		Session 2.3b Sphagnum farming & Drosera farming
	from rewetted peatlands at a 800 kW heating plant for community heating in Malchin	Poster*:	Posters*: Poster 2.3b.A Matthias Krebs Poster 2.3b.B Jens-Uwe Holthuis Poster 2.3b.C Laura Panitz
	Mirko Barz	Poster 2.2.A Philipp Köwitsch	Poster 2.3b.D Balázs Baranyai
	Poster*: Poster 2.1.A Tobias Dahms		
12:30-13:30	Break		
13:30-14:15	STAGE A: Virtual excursions (plenary session) Sabine Wichmann		
1	Sphagnum farming on 17 ha in the peatland Hankhauser Moor, NW Germany		
2	Greta Gaudig Sphagnum farm Barver		
3	Jens-Uwe Holthuis Sphagnum farming re-thought		
	Neal Wright		
4	Peat bog rewetting research sites in Northwestern Germany  Gerald Jurasinski		
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	STAGE A	STAGE B	STAGE C
14:30-15:30	Session 3.1 Biomass to product	Session 3.2 Greenhouse gas emissions and other climate effects	Session 3.3 Biodiversity at ecosystem level
	Tobias Dahms	Bärbel Tiemeyer	Nerjius Zableckis
	Cranberries on peatland in the Netherlands	Long-term observation of green- house gases of a Sphagnum far- ming area on former bog grassland in North-western Germany	Sphagnum farming in north-west Germany: is it offering a secondary habitat for bog-typical dragonfly species?
	Bart Crouwers	Caroline Daun	Daniel Brötzmann
	Reed canary grass as a potential agent for phytoremediation and phytomining of strategic elements	Greenhouse gas exchange of a Sphagnum paludiculture on a former peat extraction site in the late stages of the rotation cycle	Can paludiculture promote fen biodiversity? A literature-based review with focus on Europe
	Oliver Wiche	Laura Panitz	Felix Närmann
	Making use of peatland biomass - from theory to charcoal	Greenhouse gas benefits of Sphagnum farming using micro- propagated material in the UK	What does paludiculture contribute to arthropod diversity?
	Marcel Welle	Anna Keightley	Gert-Jan van Duinen
	Posters*: Poster 3.1.A Christina Hartung Poster 3.1.B Carsten Lühr Poster 3.1.C Anke Nordt	Posters*: Poster 3.2.A Christian Fritz Poster 3.2.B Hanna Kekkonen	Posters*: Poster 3.3.A Jürgen Müller Poster 3.3.B Monique Nerger Poster 3.3.C Teresa Rojas Lara
15:30-15:45	Break		
15:45-16:45	Session 4.1 Harvesting techniques	Session 4.2a Biodiversity within species (Genetics of Reed)	Session 4.3 Sphagnum propagules
	Wendelin Wichtmann	Gerald Jurasinski	Matthias Krebs
	Introduction of types of and challenges for machinery for paludiculture biomass harvest on wet peatlands	Population genetic structure of common reed ( <i>Phragmites australis</i> )	Selection of highly productive Sphagnum species and proven- ances in Europe to maximize the yield in Sphagnum farming
	Jan Pottgießer	Kristina Kuprina	Mira Kohl
	Special machines for working in wet areas with low ground pressure, development of new machine types for working on mires and wetlands  Holger Wolter	How can the population genetic diversity of common reed, <i>Phragmites australis</i> , change over 24 years?  Anna Rudyk	Axenic in-vitro cultivation of 19 peat-moss ( <i>Sphagnum</i> I.) species as a resource for basic biology, biotechnology and paludiculture  Melanie Heck
	Holger Wolter	Allia haayk	Sphagnum farming using micro-
	Cattail ( <i>Typha</i> ) harvesting technic development for Substrate and more	Poster*:	propagated <i>Sphagnum</i> and simulated rain irrigation to significantly improve production of a growing medium
	Robert Wellink	Poster 4.3.A Paul Muto	Neal Wright
	High-capacity machines for working in areas with fragile soil structure  Anne Wieb Dijkstra	Session 4.2b Peatland properties Posters*: Poster 4.2b.A Anna Kühnel Poster 4.2b.B Kerstin Fuhrmann Poster 4.2b.C Kilian Walz	Poster*: Poster 4.3.A Mira Kohl
16:45-17:00	Break		
17:00-18:00	Networking (Open space A)	Networking (Open space B)	Networking (Open space C)
20:00-22:00	Evening Programme		
	SLOW Session: Paludiculture & Art (via ZOOM)		



#### \*Posters day 1 (9<sup>th</sup> of March)

Poster 2.1.A Biomass to product (Energy)	A case for solid fuels. Comparing costs, energy consumption and greenhouse gas emissions of different fuels for the local heating plant in Malchin.		
	Tobias Dahms		
Poster 2.2.A GHG emissions and other climate effects	Effects of topsoil removal on greenhouse gas exchange and water quality of fen paludicultures in North-Western Germany  Philipp Köwitsch		
Poster 2.3b.A Sphagnum farming & Drosera farming	Optimising Sphagnum farming in water management, climate impact, biodiversity & product development – the new joint project OptiMOOS  Matthias Krebs		
Poster 2.3b.B Sphagnum farming & Drosera farming	Sphagnum farm Barver – creating a new perspective for peatland ecosystems  Jens-Uwe Holthuis		
Poster 2.3b.C Sphagnum farming & Drosera farming	Optimizing the management of Sphagnum paludicultures under difficult conditions – interaction of climate change, nutrient depositions, peat properties and vascular plant invasion  Laura Panitz		
Poster 2.3b.D Sphagnum farming & Drosera farming	Sundew cultivation (Drosera rotundifolia) on Sphagnum in paludiculture - the great potential of a tiny medicinal plant Balázs Baranyai		
Poster 3.1.A Biomass to product	Suitability of fen plants as growing media constituent in terms of chloride content  Christina Hartung		
Poster 3.1.B Biomass to product	Fenland biomass for a climate-friendly future - Development of value chains  Carsten Lühr		
Poster 3.1.C Biomass to product	The Paludi-tiny house  Anke Nordt		
Poster 3.2.A GHG emissions and other climate effects	The potential of automated transparant-chambers to detect 'cold spots' and 'hot moments' of carbon fluxes in periodically wet and rewetted peatlands  Christian Fritz		
Poster 3.2.B GHG emissions and other climate effects	Greenhouse gas emissions from energy willow, nature conservation field and grass on a cultivated peat soil  Hanna Kekkonen		
Poster 3.3.A Biodiversity at ecosystem level	Implementation of a water buffalo grazing system on a coastal wet grassland site interspersed with reed beds  Jürgen Müller		
Poster 3.3.B Biodiversity at ecosystem level	PaluDivers: Development and accompaniment of the testing of nature conservation minimum standards for the conservation and promotion of biodiversity in future paludicultures on agricultural land  Monique Nerger		
Poster 3.3.C Biodiversity at ecosystem level	Linking up Peatland Restoration with Community Empowerment and Orangutan Conservation Activities in Central Kalimantan, Indonesia Teresa Rojas Lara		
Poster 4.2a.A Biodiversity within species (Genetics of Reed)	Commercialising vegetative propagation systems for perennial grasses for paludiculture production using CEEDS™ technology.  Paul Muto		
Poster 4.2b.A Peatland properties	Peat soil in Bavaria - implications for agricultural and climate-change strategies from a century of archived peat soil data  Anna Kühnel		
Poster 4.2b.B Peatland properties	Mo(o)re balance – About losses of high elevation and water table dynamics in a water pumped catchment area  Kerstin Fuhrmann		



Poster 4.2b.C Peatland properties	Comparative studies on peatland properties along a land use gradient in Ireland Kilian Walz
Poster 4.3.A <i>Sphagnum</i> propagules	Selecting highly productive <i>Sphagnum</i> (peatmoss) provenances and their mass- propagation – results of the joint Sphagnum farming research project ,mooszucht' <b>Anja Prager &amp; Mira Kohl</b>



#### RRR2021 Conference Programme Day 2 (10<sup>th</sup> of March)

Time (CET)	STAGE A		
08:30-09:00	Login & Warm Up		
09:00-09:10	Welcome & Organisation (Greifswald Mire Centre)		
09:10-10:00	Keynote Zélie Peppiette (European Commission, Belgium)		
	Keynote Kristiina Regina (Natural Resources Institute Finland (Luke), Finland)		
10:00-10:15	Break		
	STAGE A	STAGE B	STAGE C
10:15-11:15	Session 5.1 Worldwide developments of paludiculture	Session 5.2 Yield, water and nutrient dynamics	Session 5.3 Regional and national transition of peatland use & socio-economics
	Hans Joosten	Jürgen Kreyling	Jan Peters
	Paludiculture worldwide: is there a need to differentiate the concept?	High water tables promote fast biomass production and long-term nutrient removal in Sphagnum farming	Towards net zero CO <sub>2</sub> in 2050: An emission reduction pathway for organic soils in Germany
	Wendelin Wichtmann	Renske Vroom	Franziska Tanneberger
	Paludiculture – first results from a global survey of practical paludiculture initiatives	Regulating alkalinity of water is a matter of life and death for Sphagnum farming	Will Dutch water management strategies result in a transition of peatland use?
	Rafael Ziegler	Adam Koks	Henk van Hardeveld
	Paludiculture in Indonesia	How much can <i>Carex</i> sp. contribute to peat formation and to counteract eutrophication in fen peatlands under different nutrient levels?	The WaterWorks project
	Haruni Krisnawati	Tjorven Hinzke	Jack Clough
	Posters**: Poster 5.1.A Faizal Parish Poster 5.1.B Mulyadi	Effects of harvest and fertilization frequency on protein yield and extractability from flood-tolerant perennial grasses cultivated on a fen peatland  Claudia Nielsen	GrasGoed (GrassGood) – Wetlands as part of a circular economy Katrien Wijns
11:15-11:30	Break		



	STAGE A	STAGE B	STAGE C	
11:30-12:30	Session 6.1 Finance options for livelihoods from wet peatlands (co-organised with FAO, UNEP, IUCN, WWF)	Session 6.2 Yield, water and nutrient dynamics	Session 6.3 Regional and national transition of peatland use & socio-economics	
	Maria Nuutinen	Jürgen Kreyling	Volker Beckmann	
	Results of the peatland management sessions, case and global consultations	Plant selection for paludiculture: water and nutrient level optima differ among <i>Typha</i> species	Abatement costs of climate friend- ly peatland management options for agriculture: case study results for two German peatland regions	
	Maria Nuutinen & Laura Villegas	Kerstin Haldan	Christoph Buschmann	
	Sustainable Land Use Finance – inspiring investment in Peatlands	Biomass utilization avenues and nutrient removal potential of Paludiculture crops <i>Phragmites</i> and <i>Typha</i> depend on harvesting season	Cost-effectiveness of measures to mitigate greenhouse gas emissions from drained peatlands	
	Dianna Kopansky	Christian Fritz	Ralph Temmink	
	Landscape finance: emerging models for financing peatland restoration at scale	The impact of wetland restoration on water retention in the catchment scale in the Neman basin – costs and benefits	Economic viability of Sphagnum farming on former bog grassland	
	Paul Chatterton Marta Stachowicz S		Sabine Wichmann	
	Investing in peatlands – from bankers to bogs  Clifton Bain, Emma Goodyer &	Posters**: Poster 6.2.A Marina Abramchuk Poster 6.2.B Doreen	Posters**: Poster 6.3.A Telse Vogel Poster 6.3.B Franz Wenzl	
	Renée Kerkvliet Hermans	Koltermann	Poster 6.3.C Bas Spanjers	
12:30-13:30	Break			
13:30-14:15	STAGE A: Virtual excursions (plena	ry session) Anke Nordt		
1	Field-scale <i>Typha</i> paludicultre in NE	Field-scale <i>Typha</i> paludicultre in NE Germany - Set-up and 1 <sup>st</sup> year's experiences		
	Sabine Wichmann			
2	Paludi-Tinyhouse			
2	Anke Nordt			
3	Max Wenzel	Paludiculture-biomass heating-plant at the Kummerower See – a virtual field trip		
4	Cattail ( <i>Typha</i> ), a multitalent for a r	ewetted landscape		
-	Aldert van Weeren			
14:15-14:30	Break			



	STAGE A	STAGE B	STAGE C
14:30-15:30	Session 7.1 Case studies (Southeast Asia)	Session 7.2 Framework conditions and policy support	Session 7.3 Regional and national transition of peatland use & socio-economics
	Addressing fragile peat ecosystems for the livelihoods of rural communities: lessons from Indonesia  Niken Sakuntaladewi  Calophyllum spp.: An endemic	Instruments for climate-friendly peatland use: Peatland protection in the EU-Common Agricultural Policy  Sophie Hirschelmann  Incentive based policy instruments	Potentials and capacities of climate change mitigation by peatland rewetting and wet agriculture on peatlands (paludiculture) in the Baltic countries  Andreas Haberl
	species for restoring tropical peatlands in Indonesia	guiding towards sustainable use of peatlands in EU	Challenges for paludiculture development in Estonia
	Mamat Rahmat	Cheng Chen	Jüri-Ott Salm
	Paludiculture practices by smallholder farmers in southern Sumatra of Indonesia: opportunities and challenges	Incentives for paludicultures to achieve the climate target 2030 and 2050	Potentials for paludicultures on rewetted peatlands in Latvia
	Sri Lestari	Achim Schäfer	Ilze Ozola
	Nature-based solution: A case study on community-based active-ties to safeguard peatlands in Pahang, Malaysia  Lew Sien Yan	Posters**: Poster 7.2.A Monika Hohlbein Poster 7.2.B Wendelin Wichtmann	First steps of paludiculture as sustainable use of rewetted peatlands in Lithuania  Nerijus Zableckis
15:30-15:45	Break		
15:45-16:15	STAGE A: Closing ceremony (plenary session)		
16:15-16:30	Break		
16:30-18:00	Workshop A	Workshop B	Networking (Open space D)
	Global network for paludiculture – needs & options for exchange  Rafael Ziegler & Susanne Abel	Photography Workshop: gifts from nature's peatlands  Tina Claffey	
20:00-22:00	Evening Programm		
	Literature Evening Hans Joosten (via ZOOM)		



#### \*\*Posters day 2 (10<sup>th</sup> of March)

Poster 5.1.A Worldwide developments of paludiculture	Peatland rehabilitation through multi-stakeholder partnership: Creating better livelihood for community in Malaysia
action primaries	Faizal Parish
Poster 5.1.B Worldwide developments of paludiculture	Peatland management based on local wisdom in Giam Siak Kecil Landscape in Riau Province, Indonesia Mulyadi
Poster 6.2.A Yield, water and nutrient dynamics	DESIRE: Development of Sustainable peatland management by restoration and paludiculture for nutrient retention and other ecosystem services in the Neman river catchment.  Marina Abramchuk
Poster 6.2.B Yield, water and nutrient dynamics	Growth development of selected paludicultures in mesocosms  Doreen Koltermann
Poster 6.3.A Regional and national transition of peatland use & socio-economics	Efficiency of cattail establishment on an eight-hectare fen sites in terms of working time and manpower requirements  Telse Vogel
Poster 6.3.B Regional and national transition of peatland use & socio-economics	Implementation of single-farm optimized wet grassland management on organic soils  Franz Wenzl
Poster 6.3.C Regional and national transition of peatland use & socio-economics	The climate friendly management of the agricultural peatlands in Brandenburg  Bas Spanjers
Poster 7.2.A Framework conditions and policy support	Vorpommern - Ready to rewet?  Monika Hohlbein
Poster 7.2.B Framework conditions and policy support	Certification of products from paludiculture: project design, potential, open questions, challenges  Wendelin Wichtmann
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