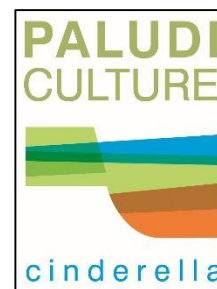


CINDERELLA - Update XII

April 2017, W. Wichtmann

“Comparative analysis, integration and exemplary implementation of climate smart land use practices on organic soils: progressing paludicultures after centuries of peatland destruction and neglect”



By irregular updates the CINDERELLA community and colleagues are informed about dates, news and other interesting issues within the scope of the CINDERELLA project, ref. paludiculture. All partners are kindly asked to provide current information which can be inserted here. The idea is to keep all project partners informed on the same level, to exchange information, to ask project related current questions, to arrange meetings and to make appointments as well as to prepare common activities (publications, new projects, etc.).

Short report on South German conference on conservation of peatlands

(Wendelin Wichtmann and Monika Hohlbein)

The conference on “Peatland protection in South Germany - situation, key factors, future” was held from the 26th to the 27th of April, 2017 at Biberach (Baden Württemberg). A talk on paludiculture by Wendelin Wichtmann raised interest of participants. During an excursion the next day to the Wurzacher Ried (<https://www.moorextrem.de/wurzacher-ried/>) persons in charge for nature protection could imagine to implement paludiculture as some kind of buffer zone management on peatlands at the edge of the protected area which now are used as arable land or drained grasslands.



Photo: Downhill view to the Wurzacher Ried with potential paludiculture buffer zones (grey, partly snow covered area in front of the forested area, W. Wichtmann)

The conference was followed by an excursion to the “Schwäbisches Donaumoos” a percolation mire (Durchströmungsmoor) near Ulm, Bavaria, guided by Ulrich Mäck (land care association, ARGE Donaumoos) the 28th of April. This more than 4.000 ha large peatland (average rainfall p.a. 680 mm). is divided by a drain channel (Grenzgraben) which has been dug in the 18th and 19th century at the border line between the federal states of Bavaria and Baden Württemberg (BW). On the BW side

currently effects of natural rewetting by beavers are visible. The dams constructed by beavers unfortunately are removed regularly by water authorities. On the Bavarian side some wet sites can be found on areas, where peat had been extracted long time ago which had been abandoned. Here shrubs have been removed some years ago by the landcare association, rewetting measures were implemented (see below) and regular pasture systems with Exmoor ponies and water buffaloes have been established exemplarily. In some very dry sites (peat ridges which have not been excavated), large dry cracks are recognizable which form strange patterns (photo below).



Photo: dry areas dominated by *Festuca ovina*, showing strange patterns with shrinking cracks (W. Wichtmann)

Parallel to the “Grenzgraben” a 3 km long subterranean pressure pipe (Nauleitung) has been built some years ago. It leads water from the small river Nau to the area via 4 outlets. By this measure, the lower (previously excavated) sites on the Bavarian side are rewetted.

Also for the “Schwäbisches Donaumoos” paludiculture seems to be a very good option for the implementation of buffer zones at the margins of protected areas, which are now used as arable land. The landcare association is very open for new ideas to change the drainage based agricultural use to paludiculture. A first step is to provide one site for rewetting and paludiculture research within the Bavarian project “MoorUse” which has recently started by Matthias Drösler from the University of applied sciences in Weihenstephan, Bavaria.

Online CINDERELLA Report to FACCE JPI

Additional to regular project activities the project has to give basic information on the project and on interim results to the implementing agency “Projektträger Jülich” who is also part of the international FACCE consortium. Besides general questions on project organization they asked for a project summary which compiles project aims, activities and the current state of the project. Thanks to all partners who contributed to this report on surveymonkey. Below you can find the CINDERELLA project summary that has been part of that report:

The main objective of Cinderella is to extend the scientific base for a sustainable use of wetlands and making alternative uses accessible to farmers and land authorities. The wet use of organic soils can supply large biomass yields when wetland crop species (PaludiCrops) are used for farming practices. Wet crop species such as Phragmites (reed) and Typha spp. (cattail) thrive under wet conditions and are adapted to flooding and water saturation of the organic soils. In this way, paludiculture is a peat-conserving, sustainable way of land use that effectively reduces GHG emissions and other forms of pollution that result from conventional, drainage based cultivation. Field and mesocosm investigations implemented by the project show good results which were communicated during field days to various stakeholders and presented at several conferences to the scientific community and practitioners. The potential area for paludiculture on the basis of degraded peatland area in European countries was analysed. These data are used for the assessment of current GHG emissions and scenarios for their reduction by rewetting and paludiculture. The legal framework for paludiculture has been assessed and proposals for optimization have been presented to authorities. The filter function and retention potential of wet peatlands and constructed wetlands could be approved and is a basis for further assessment of ecosystem services. The genetics of selected ecological types of paludiculture relevant plant species were analysed as a basis for recommendations for their utilization. Economics of different harvesting schemes has been evaluated and will be used for LCA and ecosystem services assessment.

Summary on the CINDERELLA meeting other FACCE funded Projects in Brussels (21.4.17)

(Wendelin Wichtmann)

The FACCE JPI organisation invited to a ‘must attend event’ meeting with all projects funded within FACCE programs dealing with Climate Smart Agriculture. The project representatives had the opportunity to present themselves within a three minutes time slot, orientating at an object representative for the project. I selected a small box with pellets and a sample of a reed based plate as potential products from paludiculture. As reported before, most of the projects are very different from ours, dealing with topics ranging from optimization of climate in cow barns to genetic research

on the adaptation of spider mites to climate change. The only project which deals also with peatlands is the CAOS project, coordinated by the Thünen Institute in Braunschweig (see last updates).

FACCE Valorisation workshop in Brussels (22.4.17) (excerpt from notes provided by Heather McCann/FACCE JPI secretariat, completed by Wendelin Wichtmann. The full protocol of this event can be provided on request)

FACCE has developed a Communication and Valorisation Strategy “Science for Policy and Impact” to show impact on the global societal challenge and to feed into policy and evidence-based decision making. The strategy calls for a series of workshops gathering together researchers and stakeholders. The first pilot valorisation workshop on FACCE’s projects focusing on policy aspects of climate impact on agriculture and food security was held in Brussels on the 22nd of March 2017 and gathered about 40 participants. Attendees came from a wide range of countries but with a large representation from Western European countries. The workshop benefited from the presence of relevant policy makers and end-users.

The objectives of the pilot valorisation workshop were to:

- Build a dialogue and common understanding between the climate-related policy needs and research results from funded FACCE-JPI projects related to climate;
- Identify the most urgent climate policy needs for which FACCE-JPI funded projects could contribute and identify projects whose results could feed into these needs;
- Build teams of researchers and stakeholders who could combine relevant climate policy questions with the results from different projects in order to co-construct key ideas / key-messages to be further developed as policy and / or practice brief(s).

Several topics were tackled in working groups. Here only the summary of the group discussion which dealt with CINDERELLA relevant issues. One general question discussed was possibilities to save C in peatlands. Joint products which will be provided by peatland related projects (CINDERELLA, CAOS), additional to their tasks covered by the projects:

- Summary for policy makers
- Joint EU workshop on peatlands and agricultural policy
- Provide a summary of the International conference (rrr2017) by CINDERELLA

→ recommendations to CAP

The key message was that “CAP needs to address better wet peatland management for less C loss”. In cooperation between the CAOS- and Cinderella projects, with support of FACCE secretariat until end of both projects (mid-2018) accepted to provide these additional activities. A general understanding could be developed that there is a need to make policy makers aware of the time scales of C storage/ loss and for a long term (LT) vision and LT monitoring. Desired product: soil database feeding into simple decision tools integrating inputs and considering economic aspects (e.g. subsidies).



Photo: during the group work within the valorization workshop (Heather McCann)

Upcoming: 2nd reed conference (rrr2017) in Greifswald: Current state

We are getting closer to the rrr2017 conference in Greifswald which will be held in September 2017 (<http://www.paludiculture.uni-greifswald.de/en/projekte/rrr2017/index.php>). In total now 104 abstracts have been accepted, 55 oral presentations and 49 posters. The programme now has been drafted so that we can inform about it internally. The oral presentations will be given within the following sessions: Biomass: production and utilisation (13), Case studies (9), Quality and quantity of water and nutrients (8), Socio-Economy & life cycle assessment (7), GHG emissions and other climate effects (7), Biodiversity (7) and 4 presentations on Legal and policy framework: incentives and constrains. The week starts with a national conference on climate protection and peatland utilization – potentials in Germany (Klimaschutz und Moornutzung: Potentiale in Deutschland; in German) Monday, 25th of September. The next day there will be excursions to several highlights nearby Greifswald.

26th of September: Day Trip Excursions

Vegetation, greenhouse gas balance and biomass use on rewetted peatlands near Malchin

Guides: Dr. Wendelin Wichtmann & Christian Schröder (+ local guides/farmers)

Highlights: Vegetation types and the greenhouse gas emission site type (GEST) approach in polder Randow-Rustow, boat trip on Peene river, mown rewetted peatland sites near lake Kummerower See, rare wetland plants favoured by mowing, the pioneering paludi-biomass heating plant in Malchin.

Land use history, mowing machinery and biomass use for building material at Peene river mouth

Guides: Dr. Franziska Tanneberger & Tobias Dahms (+ local guides/farmers)

Highlights: Harvesting machinery for reed cutting (tracked vehicles, vehicles with balloon tyres), harvesting sites for thatch, drained peatland used as grassland, large formerly drained peatland flooded and abandoned after dike break, cormorant colony and white-tailed sea eagles, tourist house insulated with cattail and thatched with reed, boat trip, light tractors for mowing wet peatlands, weaving loom for the production of mats from reed.

Peatland rewetting, land use and birds in Lower Peene river valley

Guides: Dr. Nina Seifert & Dr. Cosima Tegetmeyer (+ local guides/farmers)

Highlights: Nature park visitor centre in Stolpe, land use history, implementation of a large-scale peatland restoration project and designation of new nature reserves in 20,000 ha, breeding and migrating birds on flooded former polders near Anklam, organic farming and local marketing along the river valley, large-scale compensation project on peatland restoration and low-intensity grazing with horses and cattle, motor mower with ultra-wide cutter bars used for conservation management.

Peatland research on mown and grazed rewetted peatland in Recknitz and Trebel river valleys and on Darss peninsula

Guides: Anke Nordt & Andreas Haberl (+ local guides/ farmers)

Highlights: Study sites of the major research project on matter dynamics in rewetted peatlands of Greifswald and Rostock universities (funded under the regional excellence initiative), sites rewetted c. 15 years ago in a LIFE project, sites managed and monitored for biodiversity conservation, site-adapted mowing equipment, grazing sites with water buffalos on Darss peninsula, large flocks of migrating cranes.

Paludiculture on rewetted bogs near Oldenburg

Guides: Matthias Krebs (+ local guides/farmers)

Highlights: Sphagnum farming site, sundew cultivation and use opportunities for medicine or food, land use opportunities on bog grassland, peat extraction site, horticultural trials.

Paludiculture plants and salt meadows near Greifswald (*half day trip*)

Guides: Susanne Abel, Claudia Oehmke and John Couwenberg

Highlights: Paludiculture plants in the Botanical garden of Greifswald University; excursion to salt meadows "Karrendorfer Wiesen", study site of the large research project on matter dynamics in rewetted peatlands of Greifswald and Rostock universities, rewetted coastal flood peatland.



Photo: Natural near peatland in the Peene River lowlands near Murchin. Due to low nutrient status and stabilized water conditions the Salix shrubbery died off (W. Wichtmann)

Draft programme of the International Conference - 27th of September:

08:00 Registration

09:00 Welcome

09:20 Key note 1 Hans Joosten The contribution of paludiculture to climate change mitigation and adaptation

09:50 Key note 2 Faizal Parish Climate-smart peatland use to improve livelihoods

10:20 *Coffee break*

Session 1: Case studies		
10:50	Niels Thevs	Biomass and pathways for utilization of reed in the Ili Delta, Kazakhstan
11:10	Hesti Tata	Paludiculture in Indonesia: Current practice and its relevance on the strategy of peatland restoration
11:30	Lorna Parker	The Great Fen - A lowland peatland restoration
11:50	Marie Ferré	Sustainable management of cultivated peatlands: insights, challenges, and opportunities – A Swiss case
12:10	Anke Nordt	Evaluation of existing approaches for reduction of GHG emissions from drained peatlands

Session 2: Biomass: production and utilisation		
Aldert van Weeren		Using reed and Typha as building material, best practice tests on a realistic house restoration
Christel Oberpaur		Sustainable harvesting of Sphagnum magellanicum moss in Chile: a case analysis
Claudia Oehmke		Site management for biomass quality
Adam Dubowski		Three phase technology of harvesting and transportation of biomass from wetlands to nearby warehouses
Florence Renou-Wilson		Peatland forestry on wet ground ?

12:30 *Lunch and technics exhibition*

Session 1: Greenhouse gas emissions and other climate effects			Session 2: Biodiversity			Session 3: Socio-Economy & life cycle assessment		
14:30	Poul Erik Laerke	Greenhouse gas balance of paludiculture for biogas production	Carla Lambertini		Paludicrop plants have invasive traits - prevention is better than cure	Ivan Mettrop		Better Wetter: linking spatial adaptation to regional transitions
14:50	Rode Michael	Development and trial of an evaluation tool for the identification of the spatial potentials of paludicultures – An approach for the reduction of agricultural greenhouse gas emissions	Franziska Tanneberger		Summer or winter? Ten years of mowing in Rozwarowo Marshes and Peene Valley - results on vegetation and breeding birds	Christoph Buschmann		Perspectives for agriculturally used drained peat soils: Comparison of the socio-economic and ecologic business environment of six European countries
15:10	Sara Helen Knox	Agricultural peatland restoration: effects of land-use change on greenhouse gas fluxes in the Sacramento-San Joaquin Delta, California	Viktar Fenchuk		Will biomass oriented conservation actions only further threaten world's largest refuge of a globally threatened passerine? A case for Zvaniec fen	Johan Kieft		Applying Systems Analysis to evaluate the use of Jelutung (Dyera sp) as an option for the sustainable use of Peatlands in Central Kalimantan
15:30	Anke Günther	Paludiculture and greenhouse gases	Hans Brix		Growth response of paludicrops to fertilisation	Frank W. Croon		A business case for reed as a renewable resource

15:50 *Coffee break and presentation of posters*

Session 1: Greenhouse gas emissions and other climate effects			Session 2: Biodiversity			Session 3: Socio-Economy & life cycle assessment		
16:30	Christian Fritz	Cutting-of or salting-down? Promising management tools to improve the carbon footprint of Paludicultures	Matthias Krebs		Species protection by paludiculture: Sphagnum cultures as surrogate habitats	Sabine Wichmann		Economics of paludiculture: Sphagnum farming, Reed harvesting and Cattail cultivation
16:50	John Couwenberg	GEST: Greenhouse gas emission site types to estimate GHG emissions after rewetting	Edgar Karofeld		Performance of Sphagnum species in experimental extracted peatland restoration	Tobias Dahms		Biomass harvest on wet peatlands – assessment of different harvesting regimes using a labor time classification based model
17:10	Alex Barthelmes	Using the GPD - potential sites for paludiculture	Martha Graf		Protection for Optimal Sphagnum growth	Uta Berghöfer		Applying the concept of Societal relationships with nature: insights for paludiculture and rewetting projects

17:30 *Summary and feedback*

19:00 *Conference Dinner*

28th of September: cont. draft programme of the International Conference

08:00 Registration

09:00 Key note 3 Ab Grootjans Peatland restoration and paludiculture for clean and safe water

Session 1: Quality and quantity of water and nutrients

09:40 Alfons Smolders Azolla farming on rewetted peat soils.

10:00 Brian Sorrell Nutrient preferences and limitations of paludicrops: insights from the photosynthesis-nitrogen relationship

10:20 Christian Fritz Sphagnum farming in a eutrophic world: the importance of optimal nutrient stoichiometry

10:40 Dominik Zak Managing nutrient and carbon release from inundated peatlands

11:00 *Coffee break and presentation of posters*

11:40 Jeroen Geurts Nutrient recycling in rewetted peatlands used for paludiculture

12:00 Kristina Brust The water balance of a Sphagnum farming site in Northwest Germany

12:20 Renske Vroom The influence of nitrogen input on biomass yield and nutrient sequestration in rewetted peatlands

12:40 Sandrine Hugron Sphagnum farming initiatives in Canada: an overview

13:00 *Lunch*

Session 1: Case studies

14:30 Paul Goriup Reed-based renewable energy development in the Danube and Dniester deltas of Ukraine, Moldova and Romania

14:50 Richard Grosshans Sustainable Watersheds to Renewable Energy

15:10 Ülo Kask The review of the results of performed EU projects on reed and meadow grasses in Estonia and Finland

15:30 Vittoria Giannini What we have learnt from five years of paludiculture in a mediterranean peatland (Tuscany, IT)

15:50 *Coffee break and presentation of posters*

16:30 *Discussion/ Round Table / Fish Bowl*

18:00 *Summary of discussion and final word*

20:00 *Networking evening*

Session 2: Biomass: production and utilisation

Susanne Abel DPPP - Potential plants for paludiculture

Martin Krus Typha angustifolia as a basis for the development of a new building material with multiple environmental and practical advantages

Robert Schwemmer Cattail Products for a mass market: Insulation material based on cattail

W. Daniel Svedarsky Integrated Management of Invasive Cattails as Biofuel and as a Wetland Management Strategy in the Northern Great Plains of the United States

Greta Gaudig Let it grow! Sphagnum biomass production on rewetted cut-over bog and bog grassland in Germany

Jan Felix Köbbing From natural peat moss to a commercial growing media constituent

Jeroen Pijlman The potential of the Paludiculture crop Typha in a dairy farming system: nutritional values and biomass yield driven by harvesting date and stand age

Joab J.L. Osumba Macrophyte biomass harvesting and regeneration potential in Lake Victoria Wetlands, Kenya

Session 2: Legal and policy framework: incentives & constraints

Jan Peters Is Europe ready for Paludiculture? – Implications of the EU Regulatory Environment

Christian Schröder Boon or bane - strategie to implement paludiculture
Kristiina Regina Could there be paludiculture on Finnish cultivated peat soils?

Wim Giesen The wavering path to paludiculture in Indonesia

The international conference will be followed by an international Sphagnum Workshop. This will be held nearby Oldenburg/Hankhausen. A transfer from Greifswald to Lower Saxony will be provided.

Third international Sustainable wetland plant management conference

This conference will be held in Fargo, North Dakota, 31st of May to 1st of June.

LINK: <https://www.ag.ndsu.edu/bioepic/3rd-international-sustainable-wetland-plant-management-conference>, Aaron Ostlund, Project Coordinator, Red River Basin Commission, 1120 28th Ave. N., Suite C, Fargo, ND 58102, phone: [701-356-3183](tel:701-356-3183) (office), cell: [320-808-5090](tel:320-808-5090), email: aaron@redriverbasincommission.org

Registration Announcement

**3rd International Sustainable Wetland Plant Management Conference:
Hybrid Cattail Management - Promises and Perils
May 31st & June 1st, 2017
North Dakota State University
Fargo, North Dakota**

Join researchers, natural resource managers and engaged citizens for a day and a half workshop focused on sustainable hybrid cattail management. Presentations and discussions to include management relevant to wildlife and habitat enhancement, water quality improvements, biomass utilization and green infrastructure.
Registration is available at the NDSU BioEPIC Website www.ag.ndsu.edu/bioepic

Following the workshop please join us for a tour of the North Ottawa Impoundment. This is a flood water retention project site in the Bois de Sioux Watershed near the headwaters of the Red River of the North. The project is managed for habitat enhancement and water quality benefits along with the flood damage reduction management. Cattail management is a key component to this multi-benefit management plan.



IMCG bulletin March 2017

The latest bulletin by IMCG recently has been published. Again it provides several information on project related relevant issues and gives an overview on recently published papers on peatland protection: <http://www.imcg.net/>

Mires and Peat

Take a look at the latest volume (Vol. 20) of Mires and Peat: <http://mires-and-peat.net> dealing with “Growing Sphagnum”, and use this online magazine to publish your newest results!

Paludiculture in Germany inspires “Natural England” (UK) (Sabine Wichmann)

From 3rd to 6th of April 2017, Deborah Land and Ruth Gregg from “Natural England” (UK) came over to learn from the German experience in paludiculture. Their main interest was to get to know about dos and don’ts for their own Sphagnum farming trial that is to set up still in April 2017. As part of restoring a previously milled bog in Cumbria, the Sphagnum farming trial shall be established on one of the milling fields. The general interest of Deb and Ruth was much broader, however, so that we arranged a packed program including not only paludiculture on bog sites, but also on fen sites and peatland restoration in general.

We started with meeting in Malchin to visit the district heating plant fired with biomass from rewetted fens in the Peene river valley (photos a and b). On the way back to Greifswald, we went into the restored peatlands along the shore of the lake “Kummerower See” and in the Peene river valley, accompanied by cranes, graylag geese and the bleating calls of the snipe (photo c). Since Ruth has been working on the monitoring of greenhouse gas fluxes, she was keen to see the automatically measuring

facility in Zarnekow (photo d). After a pleasant evening in Greifswald with first introduction to Northeastern beer and food, we met again next day at Greifswald University to exchange experiences on bog restoration and Sphagnum farming before Deb and Ruth had to head to the West again. They visited the Sphagnum farming site on former bog grassland near Rastede (Lower Saxony) where they were shown around by Silke Kumar from the peat company “Moorkultur Ramsloh”, our long-standing project partner for paludiculture on bog sites. We also arranged contact with Jan Köbbing from the peat company Klasmann-Deilmann, which established Sphagnum farming trials on cut-over bog in the last year.

Being back home, Deborah Land wrote „We both learned a great deal and are excited and enthused to start our own Paludiculture journey here in the UK.” – thus it seems to have been a successful and inspiring journey. All of us are looking forward to meeting again at the international conference RRR 2017 in Greifswald/Germany!



(a) Ruth Gregg and Deborah Land from “Natural England” (UK) learning about the district heating plant in Malchin, which is fired with biomass from rewetted fens. (b) shows the automatic feeding system for round bales and the disintegrating unit (photos: W. Wichtmann).



c) Our guests were impressed by the large scale of peatland restoration in the Peene river valley, here outlook from an observation tower overlooking the Polder “Große Rosin” with about 1,000 ha. (photo: Wendelin Wichtmann)



(d) Automatic flux measurement chambers and an eddy covariance system to determine turbulent exchange fluxes of heat, water vapor, CO₂, and CH₄ between a re-wetted peatland and the atmosphere at Zarnekow, NE Germany. These devices are run by the Helmholtz Centre Potsdam, GFZ German Research Centre for Geosciences (photo taken in September 2016, W. Wichtmann)


New publications


The online journal "Mires & Peat" has just opened a Special Volume on "Growing Sphagnum": <http://mires-and-peat.net/pages/volumes.php>. Mires and Peat is a peer-reviewed internet journal, indexed by e.g. Thomson Reuters Web of Science and a truly "free-to-users" publication, i.e. there are no charges to authors or readers. The Special Volume collects papers on all aspects of Sphagnum farming. The editors have agreed to extend the closing date of this volume until end of September 2017, related to the conference week on paludiculture. The first articles went online last week, some more will follow soon.

Wichtmann, S., Prager, A. & Gaudig, G. (2017): Establishing *Sphagnum* cultures on bog grassland, cut-over bogs, and floating mats: procedures, costs and area potential in Germany. *Mires and Peat*, 20: 3, 1-19.

Günther, A., Jurasinski, G., Albrecht, K., Gaudig, G., Krebs, M. & Glatzel, S. (2017): Greenhouse gas balance of an establishing *Sphagnum* culture on a former bog grassland in Germany. *Mires and Peat*, 20: 2, 1-16


Arbeiter, S., Franke, E., Helmecke, A. & Tanneberger, F. (2017) Habitat preference of female Corncrakes *Crex crex*: implications for the conservation of breeding sites in a secretive species. *Bird Study*. Doi 10.1080/00063657.2017.1318107.


International Workshop
Peatland Conservation and Wise Use in the Context of Climate Change
 A Contribution to the Implementation of the Ramsar Convention
International Academy for Nature Conservation Isle of Vilm, 11th – 14th September 2016
Workshop report



12th Meeting of the Conference of the Parties to the Convention on Wetlands (Ramsar, Iran, 1971)
 Peatland Site, Ukraine, 1-4 June 2015
 Resolution 10.2.2
 Peatlands, climate change and wise use implications for the Ramsar Convention

compiled by Alexandra Barthelmes, Franziska Tanneberger & Hans Joosten
 Greifswald Mire Centre
 December 2016
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Briefing Note
30 Good Reasons to Safeguard Peatlands!
 Results from the International Workshop
Peatland Conservation and Wise Use in the Context of Climate Change:
 A Contribution to the Implementation of the Ramsar Convention
 held at the
 International Academy for Nature Conservation, Isle of Vilm (Germany),
 11th – 14th September 2016




Fig. 1: Global distribution of peatlands/organic soils (Greifswald Mire Centre).

Peatlands and climate change – crucial facts

1. Peatlands cover 3% (4,5 million ha) of the global land area, or one third of the global wetland area.
2. Peatlands store as much carbon (550 Gtonnes) as all terrestrial biomass and twice as much as all above-ground forest biomass.
3. Peatlands contribute to climate change mitigation and adaptation through carbon sequestration and storage and by providing important climate-smart livelihood options through sustainable forms of paludiculture.
4. Peatlands also fulfill services, which are important for human life and well-being, including storage and purification of water, biodiversity conservation, and reduction of flood risks.
5. However, as a result of drainage, peatland ecosystem services are jeopardized and peatlands become a major source of net greenhouse gas emissions, produced by both microbial peat oxidation and peat fires.

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Open calls which may be interesting for paludiculture projects

Client II – International partnerships for sustainable innovation, BMBF, 2 step application, first step until 29.9.2017, max. 12 pages. Support of (economy oriented) international partnerships in the area of climate, environment and energy, e.g. watermanagement, climate protection, energy efficiency, adaptation to climate change, land management. Different focal countries for different topics. Own contribution necessary. SME participation necessary.

<https://www.bmbf.de/foerderungen/bekanntmachung.php?B=1123>

Call by ERA-NET Cofund "LEAP-Agri" African-European Research cooperation for sustainable agriculture, aquaculture and food security in Africa Cooperation with e.g. Ägypten, Uganda, Kenia. At least 4 partner countries (2 from Europe, 2 from Africa), draft must be delivered until 15.6.:

<http://www.leap-agri.com/index.php/2014-10-27-15-56-42/pre-proposal-submission>

Upcoming workshops and conferences (provided by G. Gaudig and F. Tannebrger, GMC)

- 17./18.05.2017 Moorschutz in Niedersachsen, NNA
- 18.-21.05.2017 25th International Symposium "Deltas and Wetlands", Tulcea, Danube Delta
- 22.-24.05.2017 DGMT Workshop "Naturschutzfachliche Leitplanken für Tourismus und Umweltbildung an und in Mooren" in Drübeck (Harzrand),
- 29.-31.05.2017 IPS Annual Convention „Responsible Management of Drained Peatlands“ in Aberdeen www.peatlands2017.net
- 12.-14.06.2017 Workshop on Non-Pollen Palynomorphes (NPP) in Liverpool
- 19.-29.06.2017 International Field Symposium "West Siberian Peatlands and Carbon Cycle: Past and Present"
- 27.-29.06.2017 BfN/ENCA/WHO European Conference on "Biodiversity and Health in the Face of Climate Change", Bonn
- 28./29.06.2017 Congress "ecoinnovations from biomass" von 3N in Papenburg, Paludikultur-Session
- 11./12.07.2017 Internationale Konferenz "Conservation and Management of Wetland Habitats", Riga, registration <https://goo.gl/DWi2hv>
- 22.07.-04.08.2017 IMCG Field Symposium "Mires of the Northern Part of European Russia" http://www.imcg.net/media/2016/imcg_bulletin_1610.pdf
- 24.-26.08.2017 Jahrestagung Arbeitsgemeinschaft Grünland und Futterbau (AGGF), Berlin und Paulinenaue, „Nachhaltige Futterproduktion auf Niedermoorgrünland“
- -28.8.-5.9.2017 Pollenmonitoring-Workshop in Torun/Bialowieza
- 02.-07.09.2017 Jahrestagung Deutsche Bodenkundliche Gesellschaft, Göttingen <https://www.dbges.de/wb/pages/jahrestagung-goettingen-2017.php>,
- 14.-16.09.2017 Flora Pomeranica III (Szczecin) <http://florapomeranica.pl>, Registration/abstract deadline 31.05.2017
- 21.-23.09.2017 DGMT Jahrestagung in Allenbach (Hunsrück) (Anja)
- 21.-23.09.2017 IUCN UK Peatland Programme Conference, Edale
- 21.-23.09.2017 2. Auentagung NLP Unteres Odertal "Moore und Böden in Flusslandschaften: Retention und Biotopverbund", Criewen, abstract deadline 31.05
- 12.-14.10.2017 DGMT-Tagung „Erfahrungen mit der Vernässung von Hochmooren in der Eider-Treene-Sorge Niederung / Schleswig-Holstein“