



Fentastic example! A tiny house built with paludiculture material shows triple win from rewetted peatlands - carbon storage, renewable resources, new jobs in a circular bioeconomy

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Peatlands must be wet, that's no news. Wet peatlands can be used in paludiculture, no news either. However, paludiculture is still largely an idea – far from large scale implementation. With a fantastic tiny house built with paludiculture materials the [Greifswald Mire Centre \(GMC\)](#) makes people see what rewetted peatlands can deliver with triple win for climate and people. In September the GMCs team took it on a tour through Northern Germany.

Twelve days on the road with ten hours of speaking time on two cups of coffee daily and an estimated total of 2,000 visitors - of course all contacts corona-compliant – that's the stock taken after the roadshow with the Paludi-Tiny house from 3rd to 15th September 2021. Stopping at market places, climate festivals, conferences and fairs the Paludi-Tiny house reached out to farmers, craftsmen, manufacturers, politicians, to conservationists, climate activists and simply interested people.



Presenting the Paludi-Tiny house, photo by Stephahn Busse



Paludi-Tiny house with visitors at a field-day, photo by Philipp Schroeder

Since tiny houses are trending, the GMC and the company [Moor and more](#) teamed up and translated 'small but beautiful' into 'tiny and fantastic'. A multi-purpose tiny house was built, which can serve as a holiday home, a temporary office or an artists' residence. The tiny format stands for a conscious way of living with reduced space, costs, consumption of energy and other resources – and reduced emissions. With a tiny exhibition on its outside and the building materials visible on and in the inner walls, floor and furniture the Paludi-Tiny house shows the Paludi-Plus: building materials produced by a handful of paludiculture-pioneering manufacturers. Reeds can be found on the roof and walls and in the walls for sound and heat insulation. Cattail is used in boards and as blow-in insulation. There is alder in the wall and floor panels as well in the kitchen furniture. Last but not least, wet meadow grass fibres also serve as insulation but – pressed into boards without any adhesive – it's used for stylish interior furniture as well!



Paludi Tiny-house on tour, Photo by Torsten Galke

The feedback received during the roadshow made it very clear that **The Paludi-Tiny House** is an excellent vehicle to transport the message of #Peatlandsmustbewet and that #PeatlandsMatter for our sustainable futures. Wet peatlands are essential for fighting and adapting to the climate crisis, for clean water, protecting us from flooding and droughts as well as being crucial for rural livelihoods. Depicting the situation of peatlands in Mecklenburg-Vorpommern, where the tiny house was built, as an example was catching the visitors' eyes and ears. In this federal state alone, 13% of the land area is covered by peatlands, which is around 270,000 ha, but they are largely drained and converted for monocultural large-scale industrial agriculture. These areas are hotspots for greenhouse gas emission – they contribute 30% to total greenhouse gas emissions of the federal state. Some 85,000 hectares, though, are principally suitable for growing cattails, which can have a productivity of 20 tonnes of dry matter per hectare per year. A cattail area of around 30 hectares would suffice to supply enough raw material for the continuous production of a manufacturer of building and insulation boards in the short to medium term. Due to the specific properties of cattails, energy consumption and thus CO₂ emissions during processing can be reduced compared to the production of similar building and insulation materials. Not to forget about the multiple benefits of rewetted and cultivated wet areas: a plus for biodiversity, the regulation of micro climate and buffering extreme weather. Building from paludiculture material could easily be scaled up with a clear political framework and sufficient funding. These must now be set on national, EU and international level – for example by the next German government currently in preparing the new coalition agreement.

Dianna Kopansky Global Peatlands Coordinator from UNEP says: *“Paludi tiny-house is an ingenious project that shows how building with paludiculture materials can be replicated on a larger scale. The Paludi tiny-house is perfect for this moment as it reflects people’s desires to live more sustainably, with style and making a personal climate impact that is far from tiny! Paludiculture materials are also suited for larger homes and vacation getaways not only across Germany but across the world”.*

Info box Paludiculture:

Paludiculture is a term to describe the sustainable use of wet and rewetted peatlands derived from Latin *palus* (swamp) and *cultura* (cultivation, agriculture). A high water level on formerly drained areas stops further emissions and prevents further degradation and subsidence of the soil. Reeds, cattails, sedges, alder, peat moss and other plants can be grown here. They can be used for building materials, substrates in horticulture, for combustion or fodder. Their cultivation, utilisation and recycling can create a circular economy with new green and meaningful jobs in rural areas.

The roadshow was financed by [Wissenschaft im Dialog](#) and implemented within the project [MoKli](#).

For more information see:

[Paludi-tiny house - a demonstrator for climate friendly building materials](#) (poster presentation)

[Visit the Paludi-Tiny House](#) (film)

[The Paludi-tiny house on roadshow – a diary](#) (website German only)

[Greifswald Mire Centre](#) (website)

This release is part of the Global Peat Press Project (GP3) campaign, bringing together international partners to highlight the importance of peatlands as vulnerable but valuable ecosystems. It is a coordinated media campaign from the UNEP's Global Peatlands Initiative (GPI) and the North Pennines AONB Partnership to promote the UN Decade on Ecosystem Restoration (2021-2030) and toward the UNFCCC COP 26 through the work of organisations throughout Europe and beyond.

A relay of stories from peatland projects worldwide started with the UK as the host of the upcoming United Nations Climate Change Conference, COP26, taking place in Glasgow in November. The relay has already featured the North Pennines AONB, the Care-Peat project in Belgium, NUI Galway, five EU transnational projects (Carbon Connects, Care-Peat, DESIRE, LIFE Peat Restore, and CANAPE), Bax & Company who straddle the UK, Spain and The Netherlands, The Lancashire Wildlife Trust, The GPI and EUROSITE Peatlands Social Media Campaign, NABU, Moors for the Future Partnership, Metsähallitus with its Hydrology LIFE Project, Natural Resources Wales and the LIFE Welsh Raised Bogs Project, Community Wetlands Forum and Landscape Finance Lab, Geospatial Insight-Terra Motion, Green Restoration Ireland Coop (GRI), a major restoration effort in Belarus recognized by the Ministry of Natural Resources and Environmental Protection of the Republic of Belarus, The Lancashire Wildlife Trust, UNEP's World Conservation Monitoring Centre, Conservatoires d'Espace Natureles (CER), Peatland ACTION Cairngorms National Park, and now the baton has landed in Germany.

Join us - share, learn, inspire, experience and act for peatlands, people and the planet. Follow and share using #PeatlandsMatter and #GenerationRestoration

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NOTES TO EDITOR

The Greifswald Mire Centre (GMC) is the science-policy-practice interface for all peatland related questions – locally and globally with currently more than 70 peatland experts of various disciplines concentrated in one place. It offers science-based solutions for social challenges. The GMC coordinates the "[Global Peatland Database](#)", the largest database of distribution and status of peatlands worldwide. The extensive library „[Peatland and Nature Conservation International Library](#)“ (PeNCIL) is part of the GMC.

Partners in the Greifswald Mire Centre are the [University of Greifswald](#), the [Michael Succow Foundation](#) and the [Institute of Sustainable Development of Landscapes of the Earth](#) (German: Institut für Dauerhaft Umweltgerechte Entwicklung von Naturräumen der Erde, DUENE e.V.). The Greifswald Mire Centre is founding member of the [Global Peatlands Initiative](#).

The Global Peatlands Initiative is an international partnership launched at the UNFCCC COP in Marrakech, Morocco, in late 2016. Led by the United Nations Environment Programme (UNEP), our goal is to protect and conserve peatlands as the world's largest terrestrial organic carbon stock and to prevent it being emitted into the atmosphere.