



FLORIAN MÖLLERS / REWILDING EUROPE

Peat power

From climate change mitigation to biodiversity enhancement, peatland rewilding offers a wide range of benefits.

The rewilding of peatland can mitigate climate change and benefit people and nature in myriad other ways. In 2022, a grant from the US-based Grantham Foundation saw Rewilding Europe begin work to fund landscape-scale peatland rewilding through the sale of nature-based carbon credits, with an

initial focus on the Oder Delta rewilding landscape on the German-Polish border, as well as Swedish Lapland.

We caught up with Peter Torkler, Rewilding Oder Delta team leader (Poland), to discuss peatland restoration on the Polish side of the Oder Delta.

Why is the Oder Delta such a good place for peatland restoration?

The Oder Delta, straddling the border between Poland and Germany, is a unique region, with a rich mosaic of terrestrial, marine and freshwater ecosystems. The landscape was shaped by the withdrawal of glaciers around 10,000 years ago, leaving huge expanses of peatland. So far, the Rewilding Oder Delta team have identified around 20,000 hectares of peatland that could be restored, rewetted or regenerated. Most of these areas are located on the Polish side of the delta, and many are being used for extensive agriculture. The land is often drained and used only because of subsidies from the European Union.

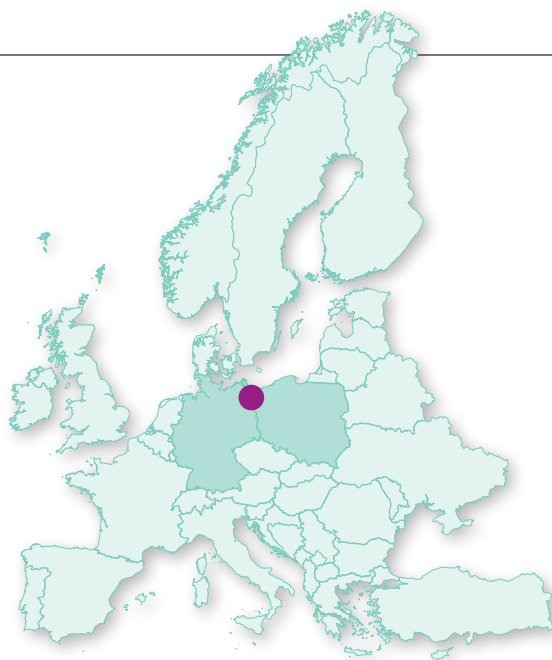
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How will people and nature benefit from such restoration?

Everywhere in the Oder Delta landscape – especially in forested areas – we see an increasing lack of water caused by more irregular rainfall and excessive agricultural demand putting pressure on flora and fauna. Areas of forest that are normally wet have become dry by the spring, forest ponds are drying out, and even small rivers dry out and look more like desert wadis. Healthy peatlands can counteract this by helping to balance landscape hydrology – they are the perfect buffer against extreme weather events, whether there is too much rain in winter or too little in summer.

Peatlands also support populations of many wild animals, providing shelter and the possibility of retreating from human pressure. Moose (Eurasian elk), for example, can be often seen in such landscapes – we see them making a comeback in the Oder Delta, with around 30 individuals currently present.

Last but not least, when peatlands are restored through rewetting, they change from carbon sources to carbon sinks. This means that instead of emitting carbon dioxide (CO₂) into the atmosphere, they start to absorb and lock up atmospheric carbon. Peatlands cover only 3% of the world’s land surface, but contain 500 gigatonnes (5 x 10¹¹ tonnes) of carbon within their peat – twice as much as all the biomass



○ Countries



Germany



Poland

○ Focal landscape

Oder Delta

○ Size of landscape

470,000 ha

○ Work started in

2015

○ Larger landscape

A network of rivers, forests, wetlands, and the Baltic Coast on the border between Germany and Poland.

○ Main habitats

Baltic coast with wetlands, tidal zones, reed marshes, sand dunes, alluvial and coastal forests, peat systems, and wet grasslands.

○ Focal species

White-tailed eagle, European bison, beaver, elk, wolf, Atlantic sturgeon, and grey seal.

○ Team Leaders

Ulrich Stöcker (Germany)
 Peter Torkler (Poland)

of the world’s forests. In Europe, where peatlands of various types cover an estimated 265,000 square kilometres, they lock up about five times more carbon than forests, but there is an overall trend towards drying. This makes rewilding the peatlands of the Oder Delta a very attractive climate solution.

How is peatland in the Oder Delta typically restored?

Most peatland in the Oder Delta is linked to the river system draining into the Oder River, Stettin Lagoon or Baltic Sea (see map). Peatland restoration essentially involves “rewetting”, which means closing ditches that were created to drain the land for agriculture, and thereby retaining water in the landscape.

In Germany the authorities are increasingly aware of the climate-related importance of peatlands. On the German side of the delta, this means 20,000 hectares of peatland have been restored along the Peene River since the 1990s (representing one of the largest peatland complexes in Germany). Many of these are managed by private foundations – such as the 1500-hectare Anklamer Stadtbruch Nature Reserve – which is owned and managed by the NABU Foundation.

On the Polish side, we have huge nature reserves and Natura 2000 sites that are usually state-owned and well protected. But agricultural intensifica-

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5,000

By 2028, the Rewilding Oder Delta team are aiming to have rewilded 5,000 hectares of peatland on the Polish side.



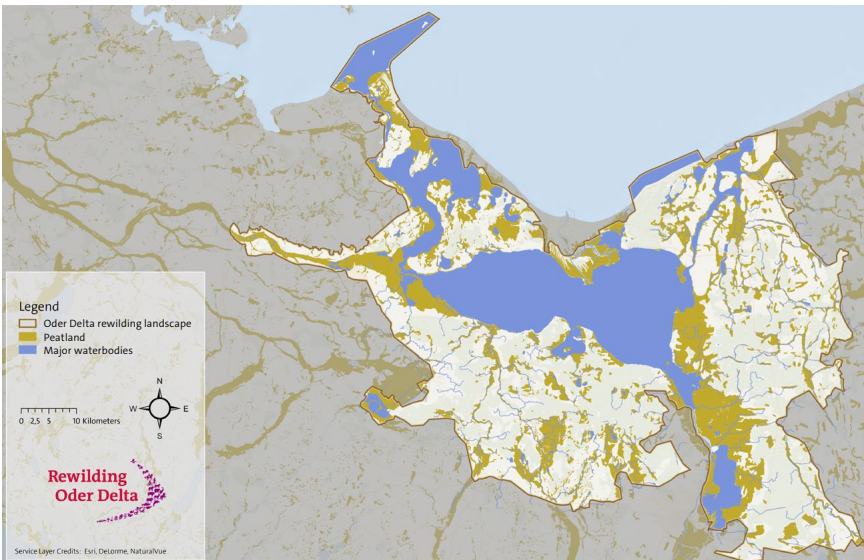
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 “A rewilding-oriented business model can prove attractive for landowners, since carbon credits aim to provide secured funding for at least 30 years.”

tion is putting pressure on remaining wetlands along the lagoon and there are still not many positive examples of where farmers have a stake in keeping peatlands wet. This is, for example, the case in the Rozwarowo Marshes – a stronghold of the globally threatened aquatic warbler – where traditional reed cutting is still a good business.

How can you make peatland rewilding commercially attractive for landowners?

The challenge for nature-based carbon credits is to make them competitive with subsidies offered through the European Union’s Common Agricultural Policy (CAP). As such subsidies are usually paid over a five-year period – and there is a lot of uncertainty as to whether they will remain – we are now seeing more and more farmers looking to secure more stable, long-term funding. This is where a rewilding-oriented business model can prove attractive for landowners, since carbon credits aim to provide secured funding for at least 30 years. It’s good for nature and good for business.

We established a Polish field team in November 2022 focused on the legal aspects of land acquisition and to conduct a search for land purchase opportunities in the area. We are now negotiating with a farmer based in the delta who owns large areas of peatland



▲ Distribution of peatland in the Oder Delta rewilding landscape.
 ▲▲ Peter Torkler examines a fresh beaver feeding site.



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- ▲ Aerial view of rewetted peat bogs and the Peene River in fall colours at sunrise, just outside the city of Anklam, Germany.
- ▶ An aquatic warbler perches on reeds.
- ▶▶ Fen woodland at a former peat extraction site, close to the village of Święta, Poland.



TOMASZ KUBIS / ISTOCKPHOTO



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and have just signed an agreement to calculate the carbon potential of around 500 hectares. In due course this land will be rewetted, representing a major step forward in our peatland work in the Polish part of the delta.

As to the credits, we currently employ a Polish-wide certified system. It is important that sales are verified and carried out through an independent, scientific and rigorously audited system, and are now waiting on external partners to finalise the process. We are hopeful that the first credits can be sold by end of 2023.

What's the upscaling potential of your efforts?

Peatland restoration work in Germany is more advanced and there are very experienced German organisations in this field. On the Polish side, how-

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ever, we can act as a role model for the whole of Poland and are working with the Polish CMOK Centre for Peatland Protection. We also have a long-term relationship with the German Greifswald Mire Centre – a world-renowned, peatland-focused foundation located in the middle of the Oder Delta rewilding landscape – and are in touch with

various peatland restoration initiatives across Europe. Working within our transboundary rewilding landscape we aim to aggregate existing know-how and scale up synergies between Poland and Germany.

Where would you like peatland restoration in the Oder Delta to be five years from now?

We would like to see 5,000 hectares of peatland rewilded through the removal of dykes and closure of artificial ditches. This would see former non-productive farmland become a paradise for a wide range of plant and animal species, with landowners earning money from carbon credits that help to mitigate climate change and enhance biodiversity. The rewilding of this peatland will act as an inspirational role model for the restoration of this important ecosystem.