



DESIRE

Development of sustainable peatland management by restoration and paludiculture for nutrient retention in the Neman river catchment



Wendelin Wichtmann, Jan Peters & Marina Abramchuk

Greifswald University and Michael Succow Foundation, both partners in the Greifswald Mire Centre, Greifswald, Germany.

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„DESIRE“ Project

The project addresses the improvement of peatland management in the Neman catchment by rewetting and paludiculture. The project is led by Greifswald University with support of Succow Foundation (Greifswald) and cooperates with partners and associated organisations from all countries in the catchment area (see list below).

The project comprises a mixed approach of generating new knowledge via experiments and modelling, using pilot sites to demonstrate peatland rewetting and implementation of paludiculture and drafting evidence based policy recommendations.

Target groups: regional and national authorities in the Neman catchment area, NGOs, decision makers in forestry and water management, farmer's associations, and agricultural administrators and consultants.

Water quality in the Neman basin and eventually in the Baltic will benefit by

- reduction of nutrient loads from diffuse sources in the catchment area (mainly arable lands) and
- preventing peatlands to act as nutrient sources and internal-external eutrophication hot spots.

Partners:

University of Greifswald – UG

Michael Succow Foundation – MSF

Warsaw University of Life Sciences – SGGW

Polish Society for the Protection of Birds – OTOP

Vytautas Magnus University Kaunas – UK

Lithuanian Fund for Nature – LFN

State Budget Institution of the Kaliningrad region "Nature Park Vishnynsky."

Białystok University of Technology - BUT

Associated Organisations:

AO 1 – Biebrza National Park, Poland

AO 2 – Belarussian State University

AO 3 – Institute for Nature Management of the National Academy of Science of Belarus

AO 4 – Regional Water Management Authority Polish Waters in Białystok (RZGW), Poland

AO 5 – Regional Directorate for Environmental Protection in Białystok (RDOS), Poland

AO 6 – Mecklenburg-Vorpommern Research Centre for Agriculture and Fisheries, Germany

AO 7 – APB-Birdlife Belarus

AO 8 – Environmental Protection Agency of Lithuania

AO 9 – Žuvintas Biosphere Reserve, Lithuania

Project area

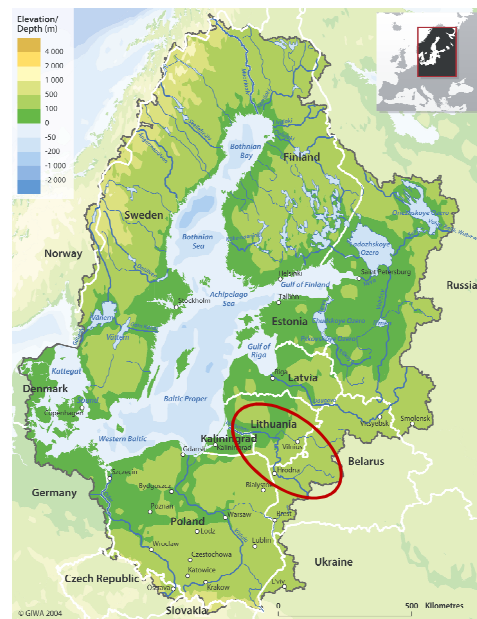


Fig. 1 Map of the catchment of the Baltic Sea. The Neman river basin location is marked red ([https://de.wikipedia.org/wiki/Date:Baltic_drainage_basins_\(catchment_area\).svg](https://de.wikipedia.org/wiki>Date:Baltic_drainage_basins_(catchment_area).svg))

The Neman river catchment area



Fig. 3 Winter aspect of the Neman river near Dukudovo, Grodno oblast, Belarus

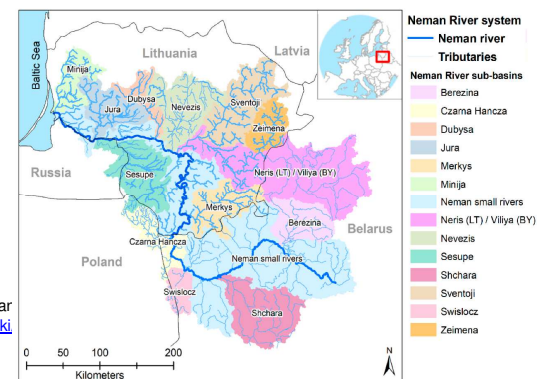


Fig. 4 Map of the Neman River basin, its sub-basins and tributaries in the territories of Belarus, Lithuania, Poland, and Russia (Kaliningrad region) Manton et al. 2021, Land 2021, 10(2), 174; <https://doi.org/10.3390/land10020174>

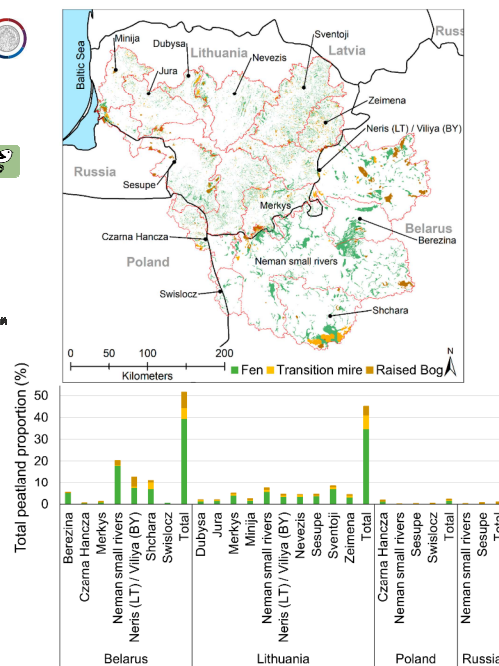


Fig. 2 Map of peatlands and their area proportions within the entire Neman River basin by country, sub-basin, and peatland type (fen, transitional mire, and raised bog) (Manton et al. 2021, Land 2021, 10(2), 174; <https://doi.org/10.3390/land10020174>)

Outputs (finalised and on-going)

<https://www.moorwissen.de/en/paludikultur/projekte/desire/outputs.php>

- ✓ Interactive map of peatlands in the Neman basin on-line
- ✓ Strategy for paludiculture in the Neman basin
- ✓ Peatland chapters for RBMPs (drafts)
- ✓ Draft of agri-environmental schemes for nature-friendly paludiculture
- ✓ Report on economic effectiveness of paludiculture for nutrients retention
- ✓ Peatlands as nutrient sinks - publication and factsheet
- ✓ Report - manual for peatland rewetting
- ✓ Rewetted pilot peatlands
- ✓ Training, excursion and workshops on paludiculture

The project contributes to achieving the objectives of the EU Strategy for the Baltic Sea Region Policy Area Nutri Action 1: Managing nutrients more efficiently – by promoting practices that reduce nutrient losses from drained peatlands that have been used for agriculture, forestry or peat extraction and by nutrient recycling through paludiculture; Action 3: Facilitate cross-sectoral policy-orientated dialogue – by facilitating discussion between different sectors and optimising spatial planning; and Action 5: Cooperation with non-EU Member States – by including Russia and Belarus as partner and associated organisations.