

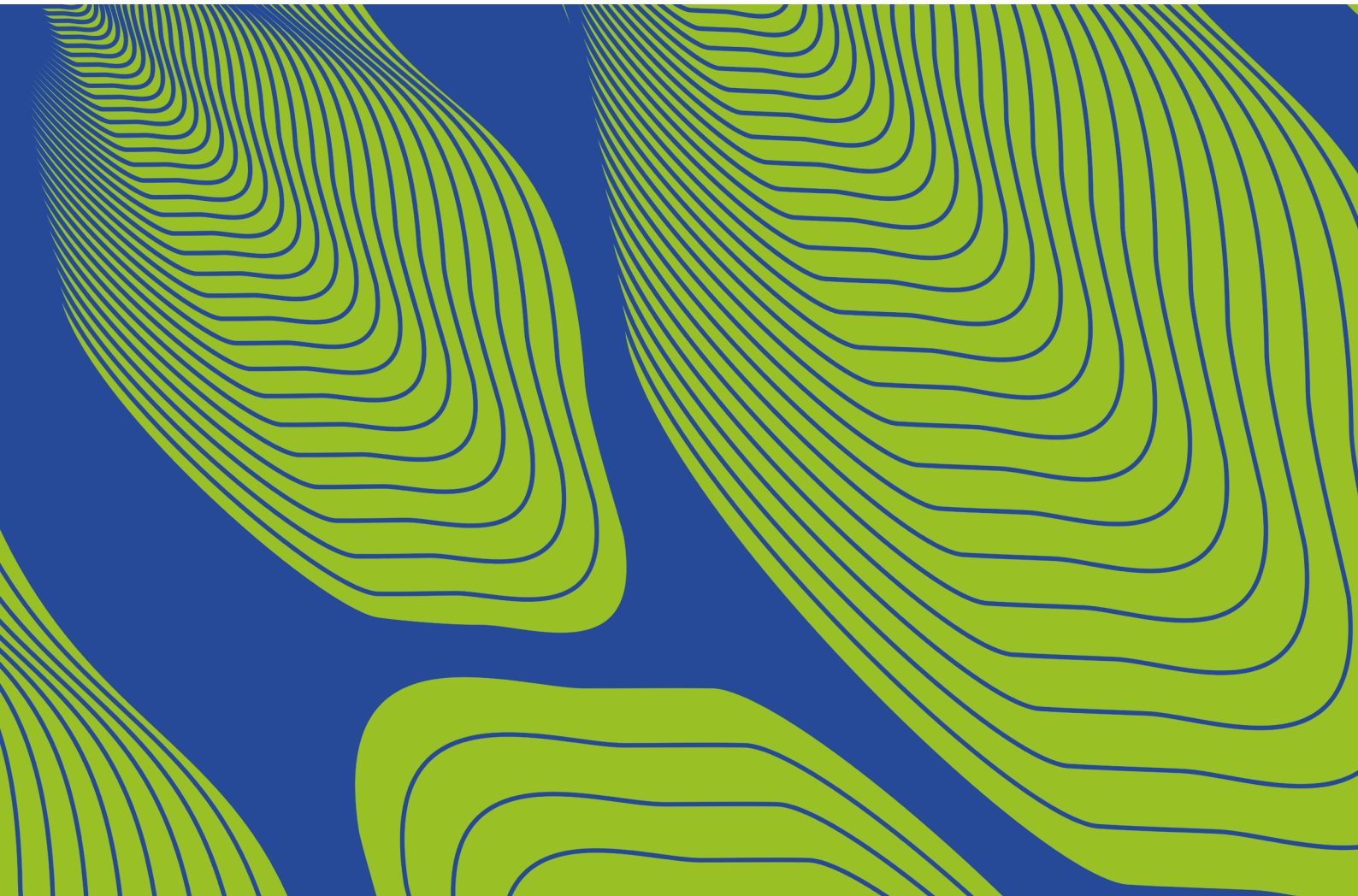


Global Peatland Hotspot Atlas:
The State of the World's Peatlands in Maps
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Peatlands of Europe

Europe's peatlands are mainly found in the north, highlands, and coasts, with diverse mire types from raised bogs to fens. Despite this richness, Europe has lost over 10% of its peatlands, and nearly half of the rest are degraded, making them major GHG emitters.



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Authors

Alexandra Barthelmes (GMC/DUENE e.V.),
Cosima Tegetmeyer (GMC/DUENE e.V.), Hans Joosten (GMC/
University of Greifswald), Patrick Scheel (UNEP).

Production, Coordination and Review

Patrick Scheel (UNEP), Jan Peters (GMC/MSF),
Dianna Kopansky (UNEP).

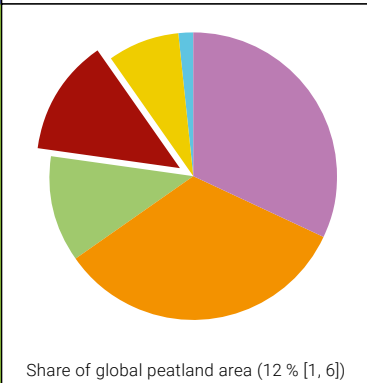
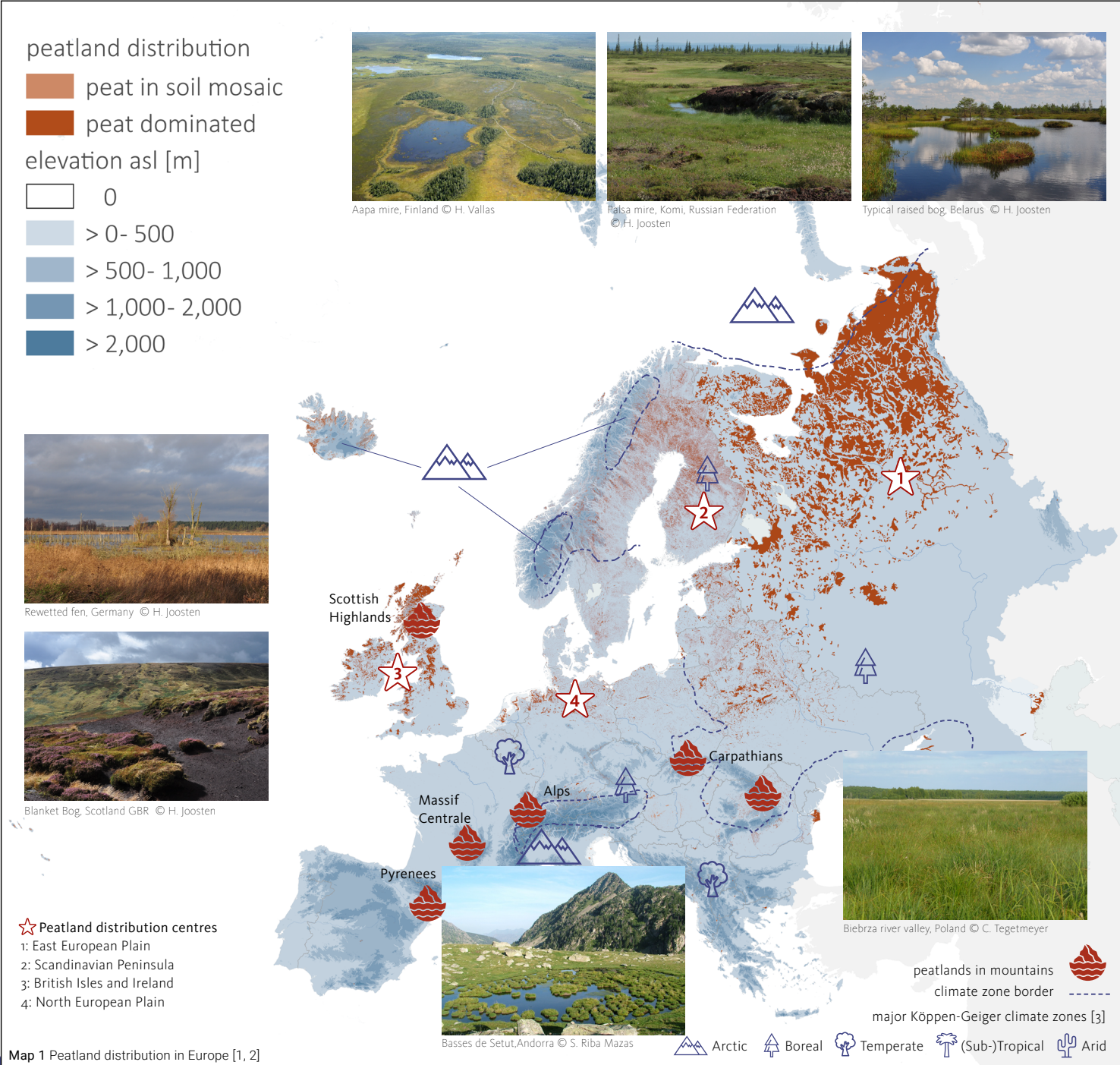
Design and layout

igel+ente, Büro für Gestaltung, Fotografie und
Kommunikation Greifswald, Germany
Anna Knüppel & Michael Schröder (www.igelundente.de)
Nora Prinz (www.noraprinz.de)

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Peatlands of Europe



In Europe, peatlands are unevenly distributed, with a greater concentration in northern regions, highlands, and coastal areas [2]. They are sparsely distributed in steppe and broadleaf forest zones. Among all continents, Europe has experienced the highest proportional losses of actively accumulating peatlands (mires [1]). Nevertheless, it still harbors significant mire diversity. The **Arctic Seepage and Polygonal Mire Region**, covering the northernmost part of Europe, is characterized by the wide occurrence of tundra

seepage and polygonal bogs. The **Palsa Mire Region** encompasses large areas in the Russian Federation, northern Finland, Sweden and Norway. The **Northern Fen Region**, covering the boreal vegetation zones in northern Europe, is characterized by fens and hillside bogs. The **Typical Raised Bog Region** is characterized by typical raised bogs and wooded raised bogs. The **Atlantic Bog Region** along the western European coast is defined by the wide occurrence of Atlantic raised bogs, blanket bogs and fens, and the

Continental Fen and Bog Region is characterized by a mosaic of fens and bogs. The **Nemoral-Submeridional-Fen Region** covers large parts of England, France and Germany. Flat fens are the most characteristic mire type, alongside plane bogs and percolation bogs [4].

Approximately 10 % of the former European peatland area has been entirely lost due to drainage for agriculture, forestry, and peat extraction, while around 46 % of the remaining peatland area in Europe is clas-

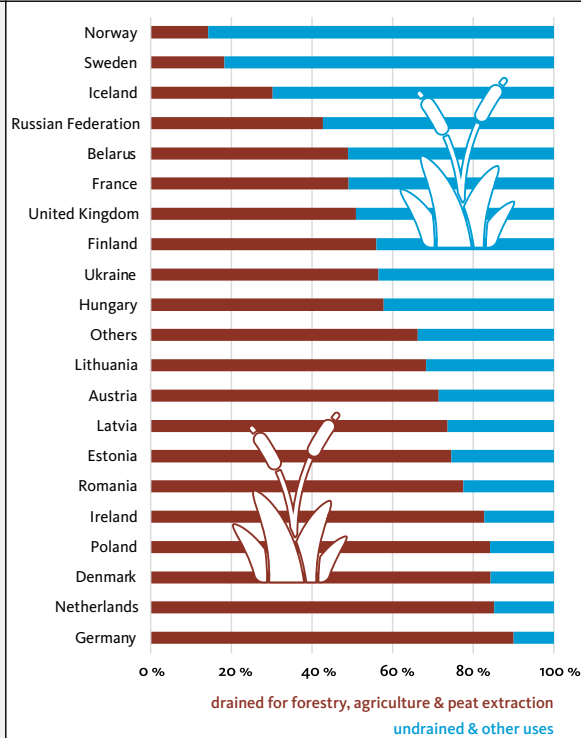
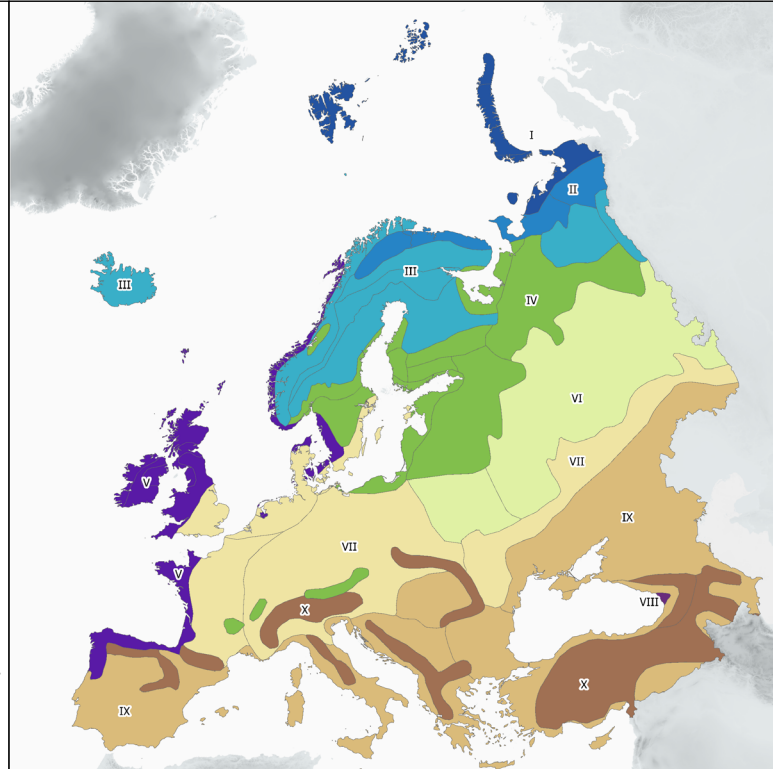


Figure 1 Status of peatlands (%) [1, 6])



Map 2 Europe's peatland regionality map [8]

- **Total peatland area: 59 million ha**
- **Distribution: Easernt European Plain, Scandinavian Peninsula, British Isles, North European Plain**
- **Peatland cover over total regional surface area: 6 %**
- **Share of global peatland area: 12 %**
- **Degraded peatlands: 46 %**
- **Annual GHG emissions from peatlands: 582 Mt CO₂e / yr**
- **Share of global GHG emissions from peatlands: 30 %**
- **Peatlands within protected areas: 20 %**
- **Top 5 countries with largest peatland area:**
 - European Russia (20,800,000 ha)**
 - Finland (8,313,381 ha)**
 - Sweden (6,797,032 ha)**
 - Norway (4,865,000 ha)**
 - Belarus (3,014,298 ha)**
- **Total peatland carbon stock: 43,620 Mt C [6]**
- **Threatened peatland species: Flora: 6 VU, 10 EN, 5 CR; Fauna: 32 VU, 12 EN, 8 CR [9]**
- **Ramsar Wetlands of International Importance with peat: 456 sites (40.5 % of total Ramsar sites in Europe [7])**

sified as degraded; in the EU, this figure rises to 50 % [1]. As a result, Europe is the second-largest emitter of GHG from drained peatlands globally. Additionally, climate change is contributing to peat loss in undrained peatlands through severe droughts and heatwaves, fires, changes in vegetation, and permafrost degradation. The significant and rapid loss of old permafrost driven by climate change has only just begun [5].

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