

Global Peatlands Assessment Regional Assessment for Europe

Coordinating Lead Authors:

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Thank you!



<https://www.unep.org/resources/global-peatlands-assessment-2022>



Global Peatlands Assessment: The State of the World's Peatlands

EVIDENCE FOR ACTION TOWARD THE CONSERVATION, RESTORATION,
AND SUSTAINABLE MANAGEMENT OF PEATLANDS

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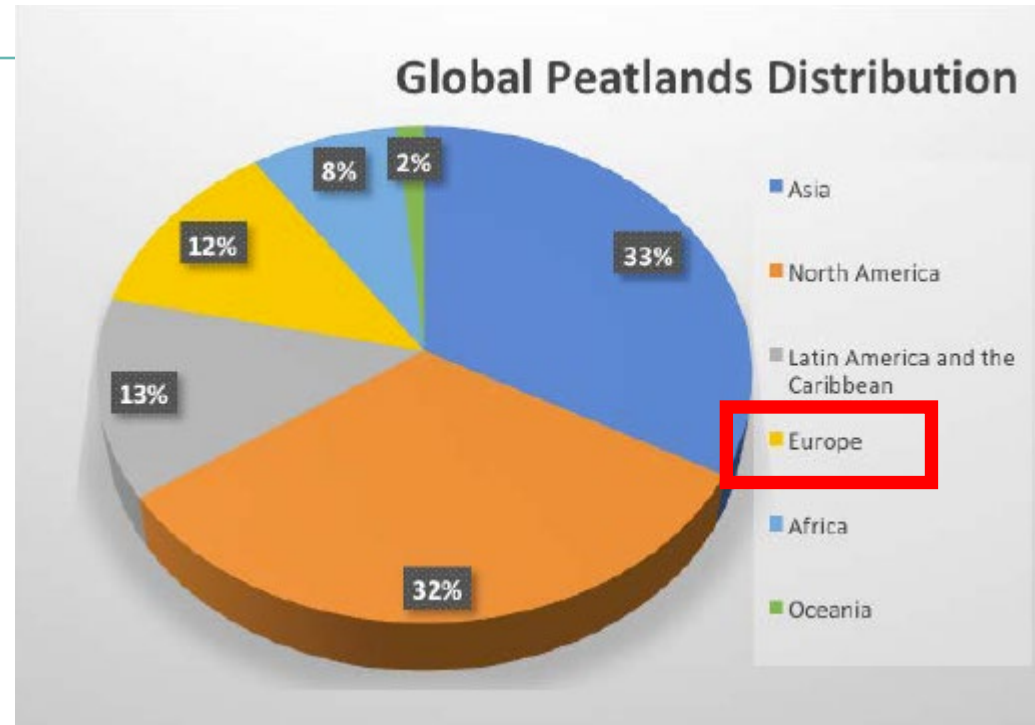
Summary for Policy Makers

Chapter 1. Peatlands: the Case for Assessment and Action

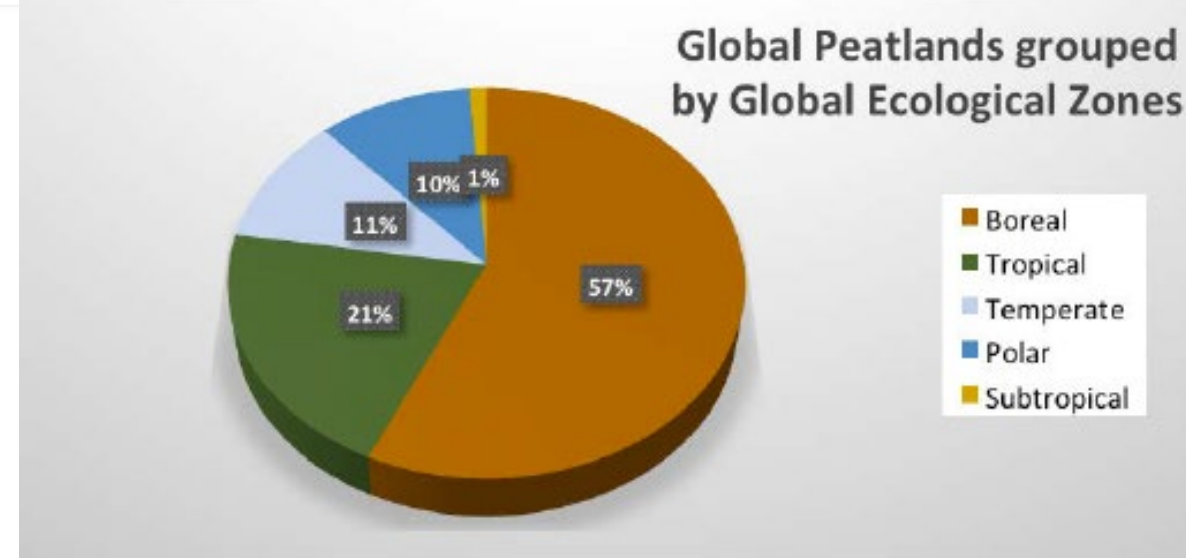
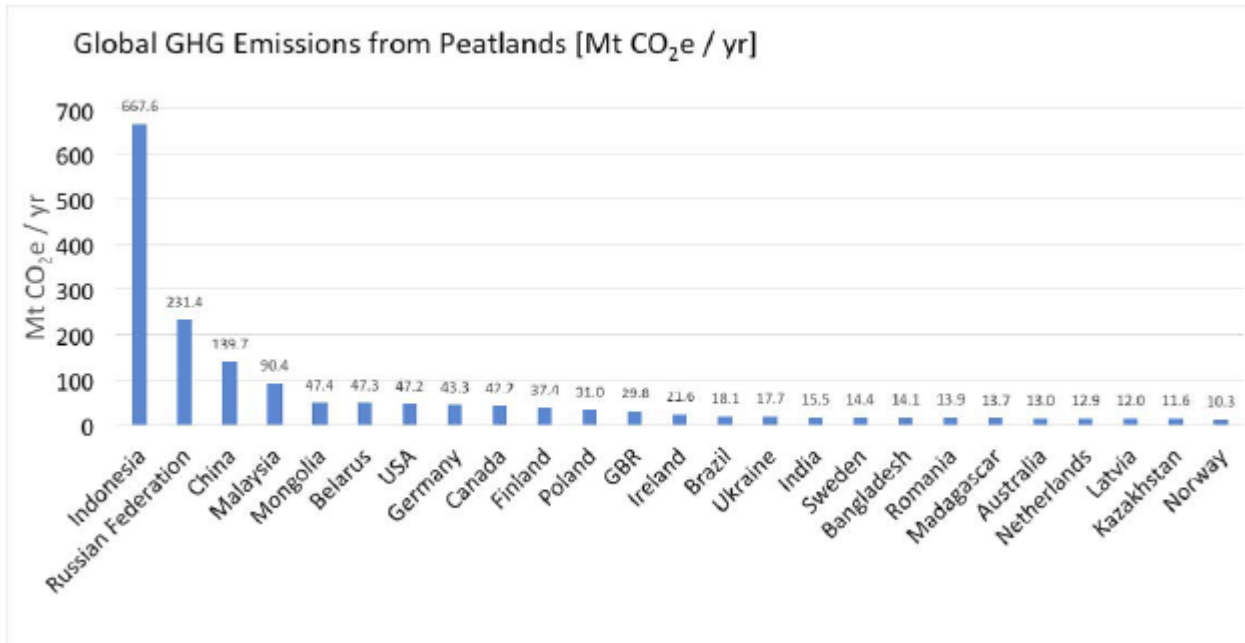
- 1.1. Why Take Action to Protect, Restore and Sustainably Manage Peatlands
- 1.2. International Commitments to Peatland Protection and Restoration
- 1.3. The Global Peatlands Initiative Working Together for Impact, Speed, and Scale
- 1.4. About this Assessment

Chapter 2. Global Peatland Extent and Status

- 2.1. Introduction
- 2.2. Definition of Peat and Peatland
- 2.3. Mapping Methods and Approaches Seeking the Global Extent
- 2.4. The Global Peatland Map 2.0 (GPM2.0)
- 2.5. Global Distribution of Peatlands
- 2.6. Monitoring Peatlands Change
- 2.7. The Global State of Peatlands
 - 2.7.1. Peatlands and Nature Contributions to People
 - 2.7.2. Drivers of Peatland Degradation
 - 2.7.3. Peatland Emissions



- 2.8.
- 2.9.



Contents

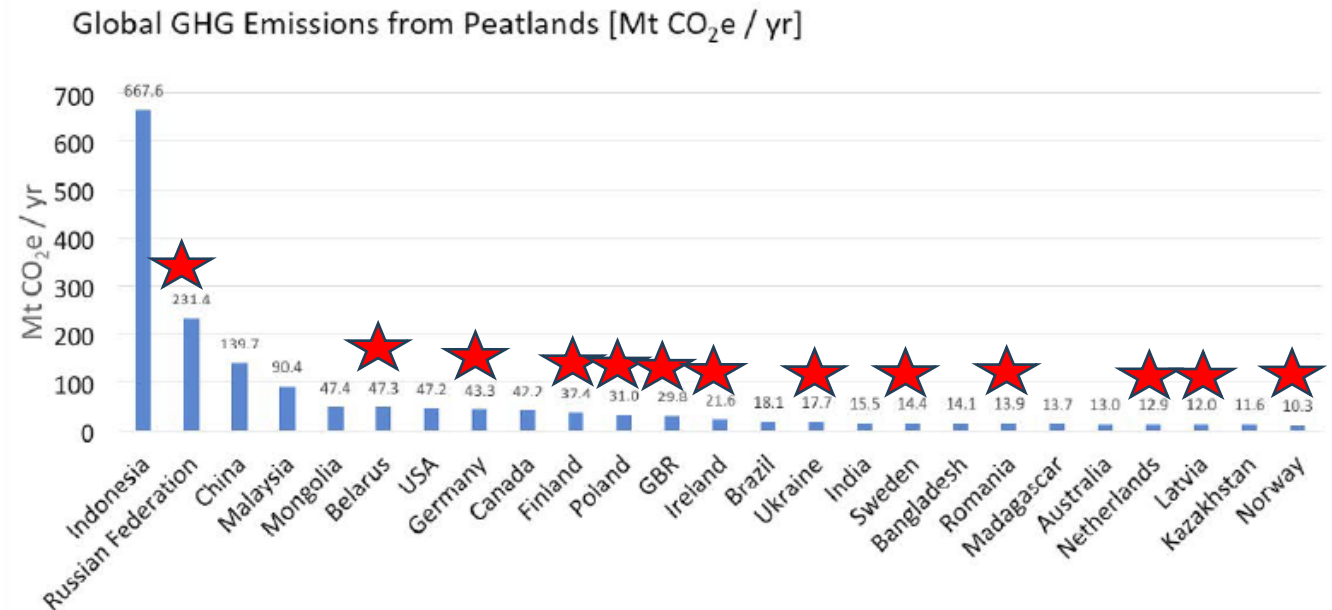
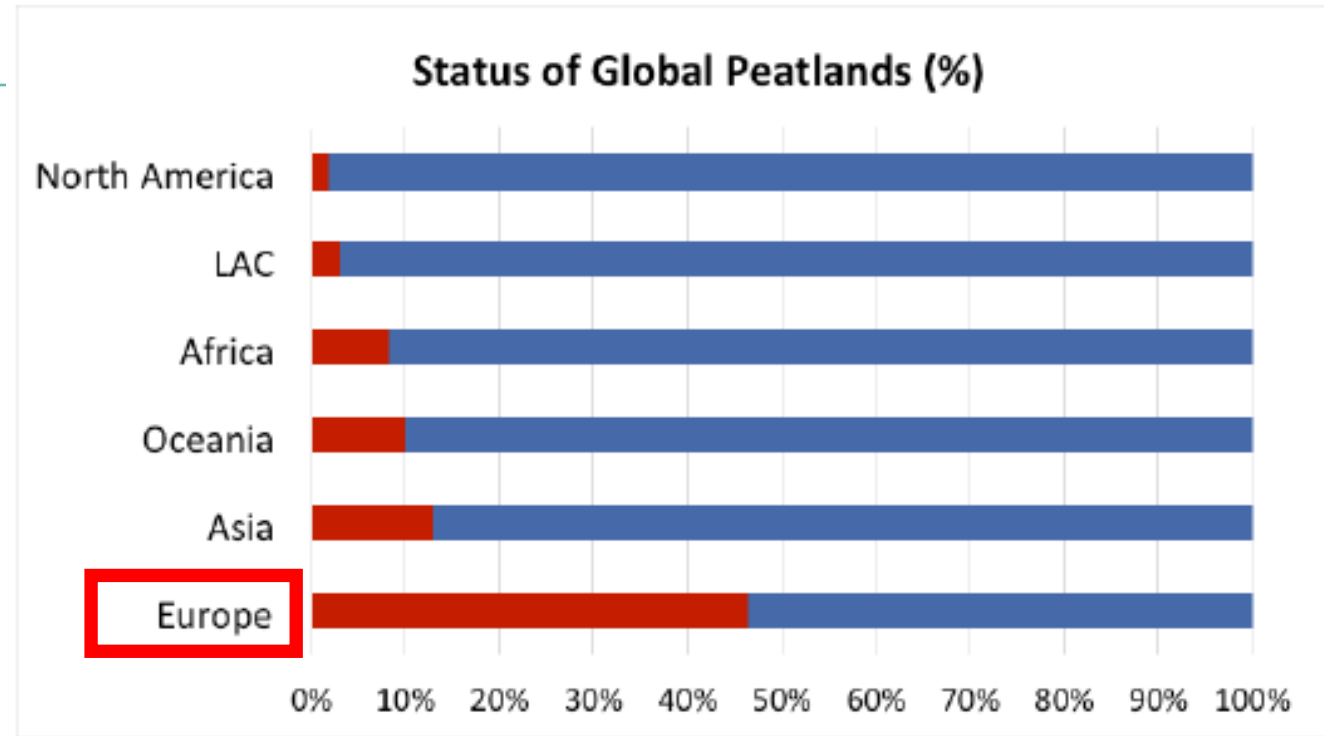
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 - 2.7.1. Peatlands and Nature Contributions to People
 - 2.7.2. Drivers of Peatland Degradation
 - 2.7.3. Peatland Emissions
 - 2.7.4. Effects of Peatland Drainage/Degradation Beyond Climate Damage
 - 2.7.5. Protection State
- 2.8. Global Diversity of Peatlands
- 2.9. Peatland Carbon Stock



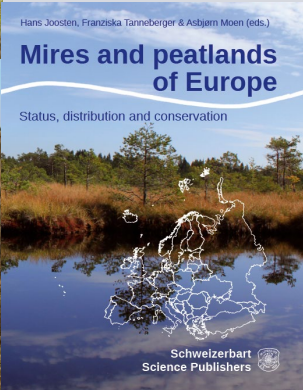
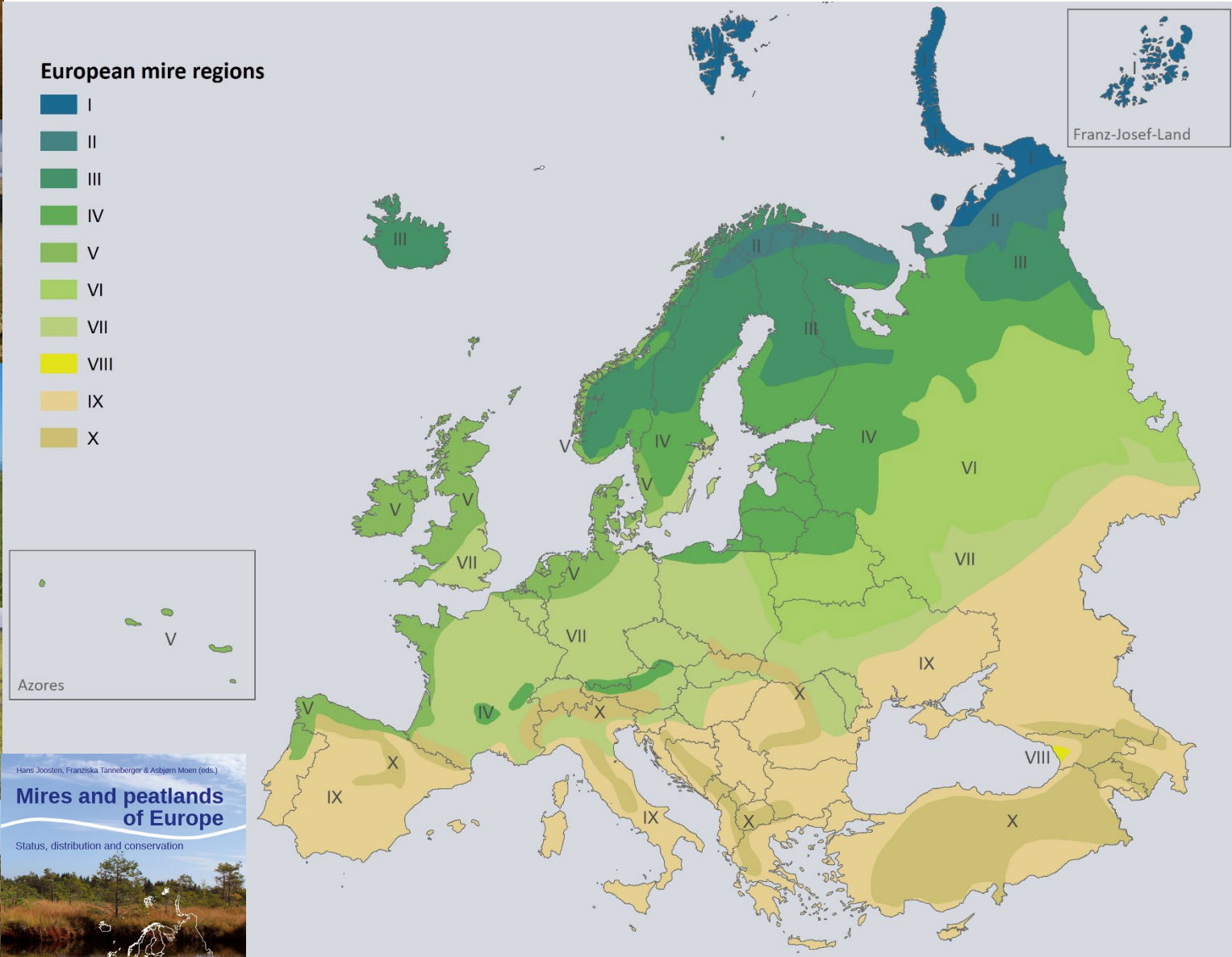
KEY REGIONAL DATA PRODUCED FOR THE GLOBAL PEATLANDS ASSESSMENT 2022¹

Total peatland area (hectares)	58,755,644 ha
Peatland cover over total region surface area (%)	6.0%
Degraded peatlands (%)	46.4%
Annual GHG emissions from peatlands (Megatonnes of carbon dioxide equivalent emissions per year)	582.0 Mt CO ₂ e / yr
Undegraded peatlands (%)	53.6%
Peatlands within protected areas (%)	19.7%
Top 5 Countries with largest peatland area (hectares)	<ol style="list-style-type: none"> 1. European Russia (20,800,000 ha) 2. Finland (8,313,381 ha) 3. Sweden (6,797,032 ha) 4. Norway (4,865,000 ha) 5. Belarus (3,014,298 ha)

ADDITIONAL DATA

Total peatland carbon stock ² (Megatonnes of carbon)	43,620 Mton C
Threatened peatland species ³ (VU = vulnerable; EN = endangered; CR = critically endangered)	Flora: 6 VU, 10 EN, 5 CR Fauna: 32 VU, 12 EN, 8 CR
Ramsar Wetlands of International Importance with peat ⁴	456 sites (40.5% of total Ramsar sites in Europe)





[Joosten et al. 2017](#)

Moen et al. 2017

European mire regions

I Arctic seepage and polygon mire

II Palsa mire

III Northern fen (aapa mires s.l.)

IV Typical raised bog

V Atlantic bog

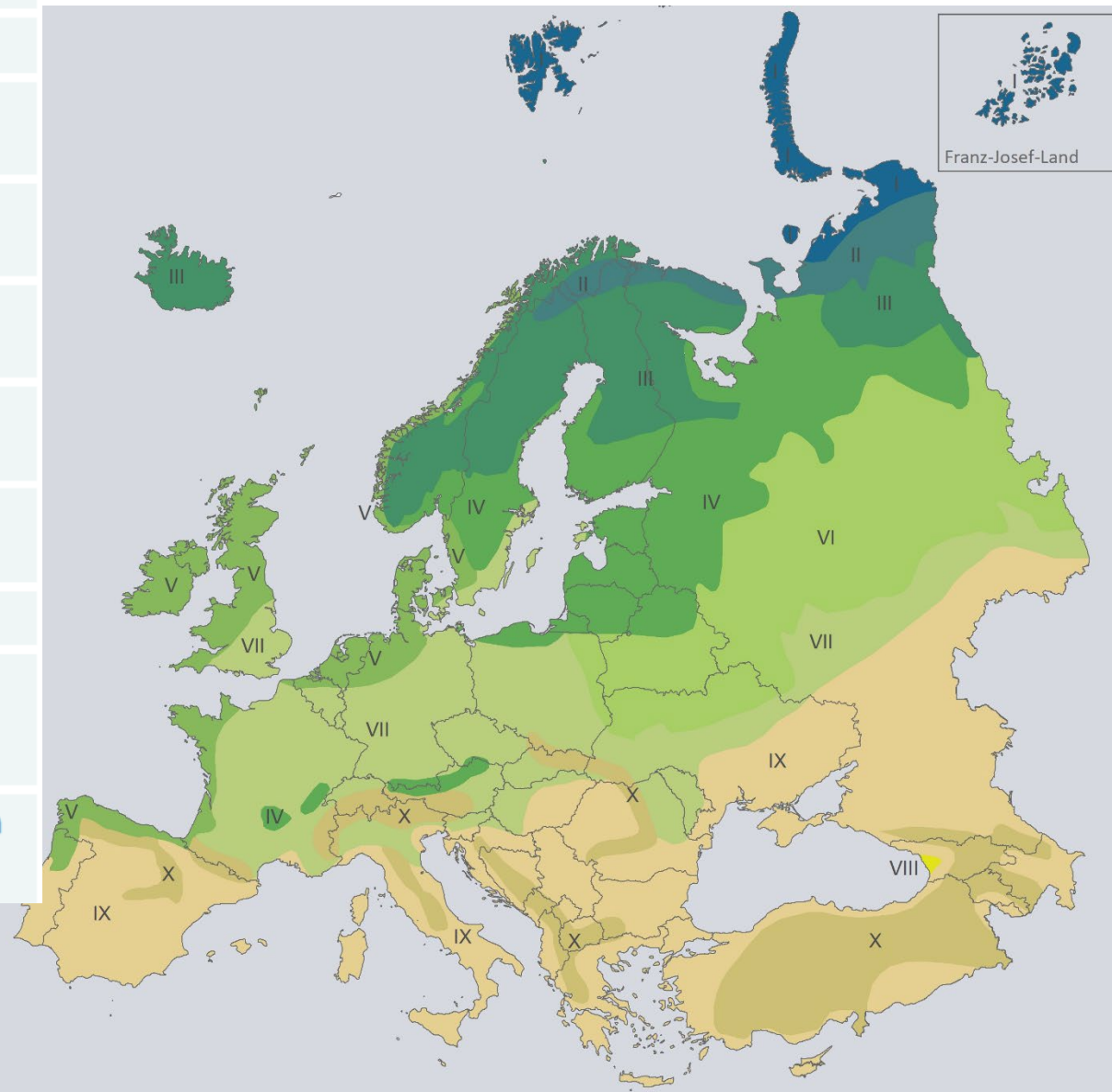
VI Continental fen and bog

VII Nemoral-submeridional fen

VIII Colchis mire

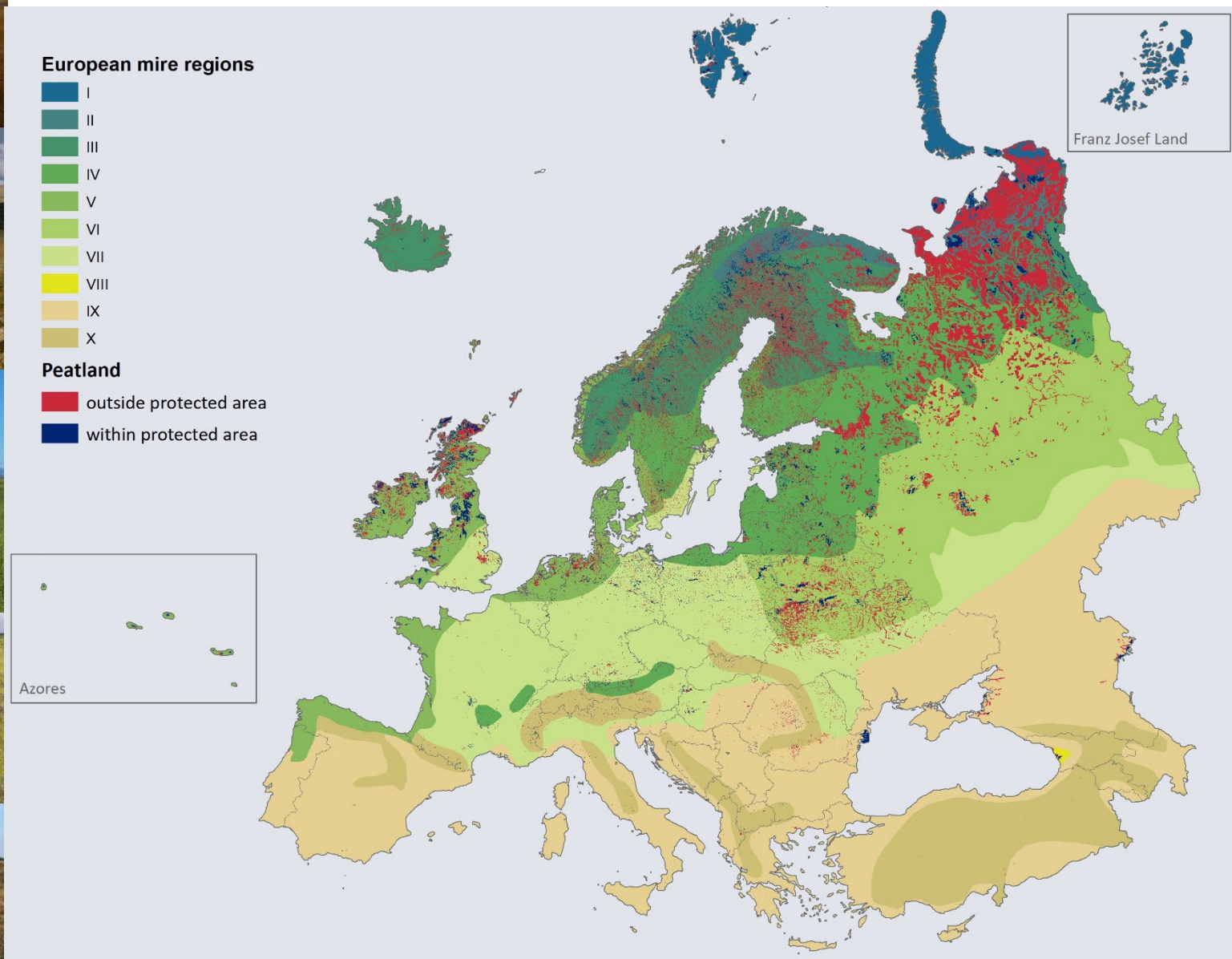
IX Southern European marsh

X Central and southern European mountain compound



Moen et al. 2017





Tanneberger et al. 2021

European mire regions and FAO Ecological Zones

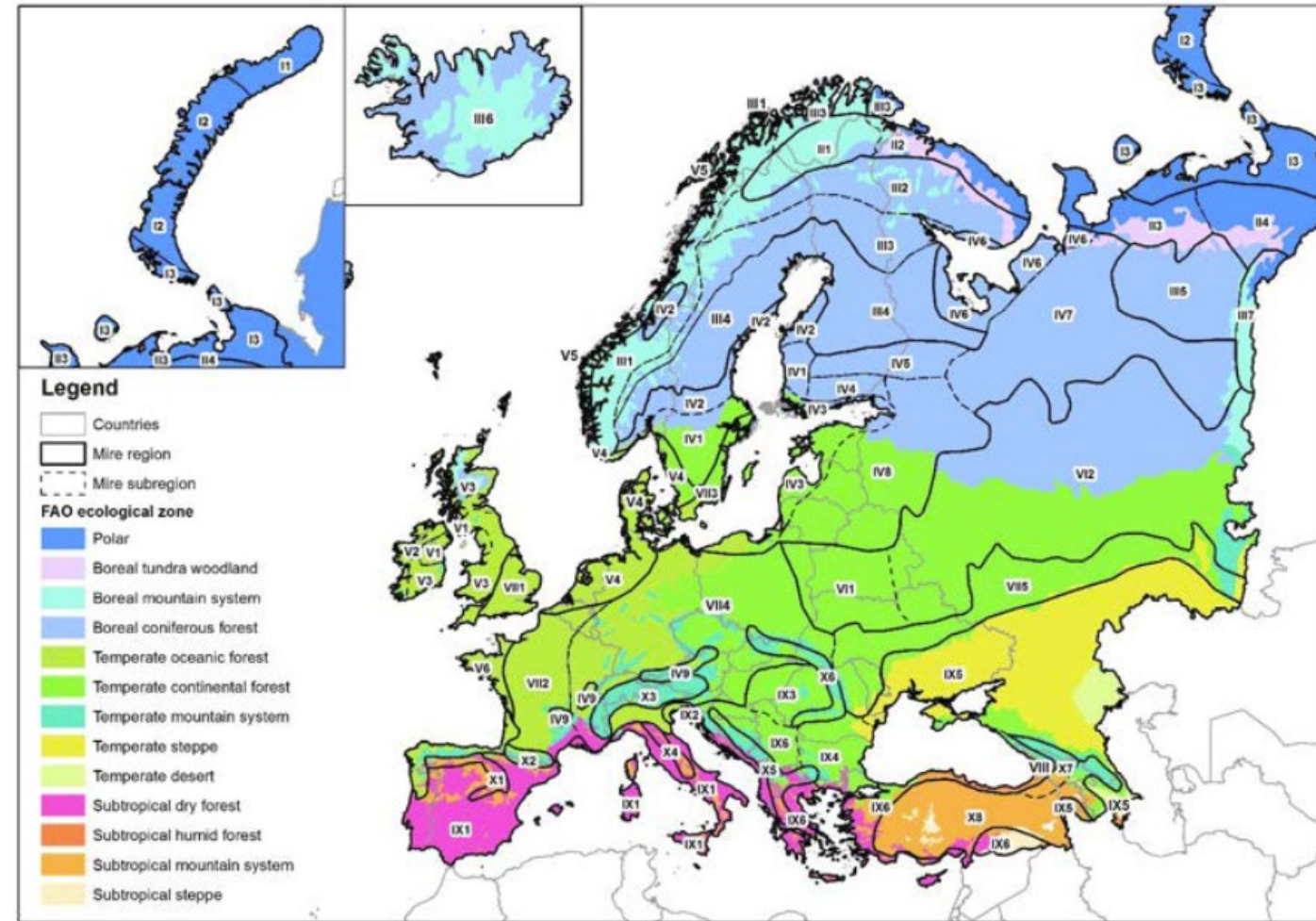
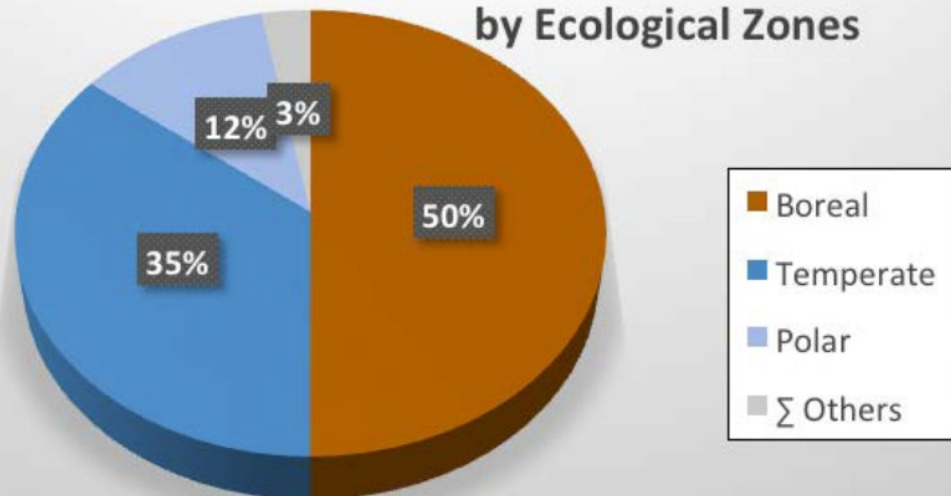


Figure 5.2 FAO ecological zones in relation to European mire regions and subregions according to FAO and Moen et al. 2017, respectively European mire regions and subregions: **I Arctic seepage and polygon mire region** (I1 Northern, I2 Middle, I3 Southern), **II Palsa mire region** (II1 Fennoscandian, II2 North-Kola, II3 Lower Pechora, II4 East-Nenets), **III Northern fen (aapa mires s.l.) region** (III1 Northwestern, III2 Northern, III3 Main, III4 Southern, III5 Northeastern, III6 Northwestern alpine, III7 Ural), **IV Typical raised bog region** (IV1 Fennoscandian plateau bog, IV2 Fennoscandian eccentric bog, IV3 Baltic plateau bog, IV4 Finland/Karelia concentric bog, IV5 Finland/Karelia eccentric bog, IV6 White Sea, IV7 Northeastern, IV8 East-Baltic, IV9 Central European upland), **V Atlantic bog region** (V1 Ireland-Britain raised bog; V2 Western Ireland blanket bog; V3 Ireland-Britain blanket bog; V4 Northwestern lowland; V5 Boreal (Norway); V6 Southern, V7 Azores), **VI Continental fen and bog region** (VI1 Polesia, VI2 East-European), **VII Nemoral-submeridional fen region** (VII1 British lowland, VII2 West-European lowland, VII3 Danish and Baltic Sea lowland, VII4 Central European lowland, VII5 Central Russian), **VIII Colchis mire region**, **IX Southern European marsh region** (IX1 Western, IX2 Po delta, IX3 Pannonian (Hungarian) plains, IX4 Lower Danube, IX5 South-Russian, IX6 Eastern), **X Central and southern European mountain compound** (X1 Cantabrian mountains, X2 Pyrenees mountains, X3 Alps, X4 Western mediterranean mountains, X5 Mountains of the Balkan peninsula, X6 Carpathian mountains, X7 Humid Caucasus mountains, X8 Semi-arid Caucasus and Turkey mountains).

European Peatlands grouped by Ecological Zones

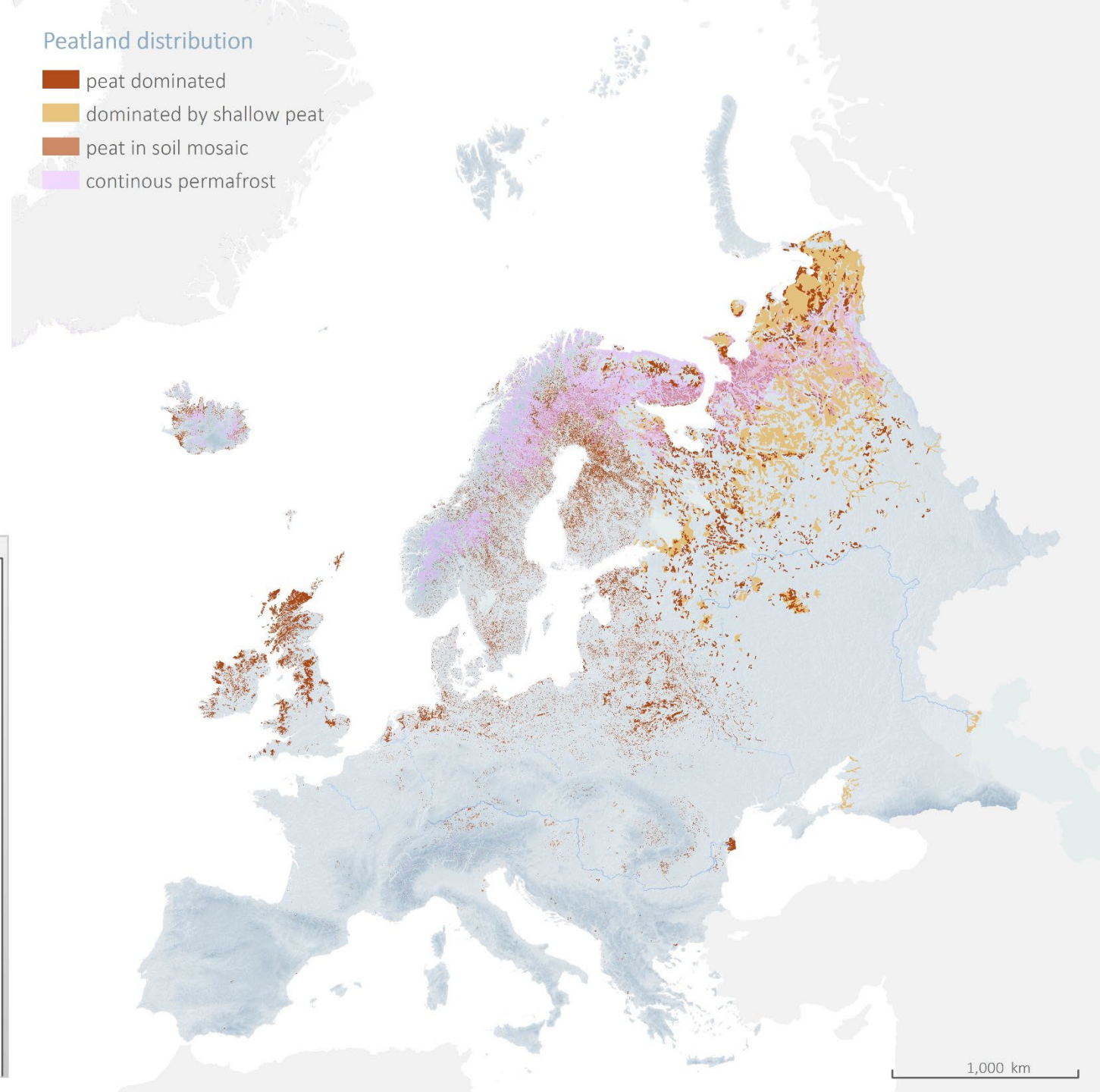


Peatland distribution

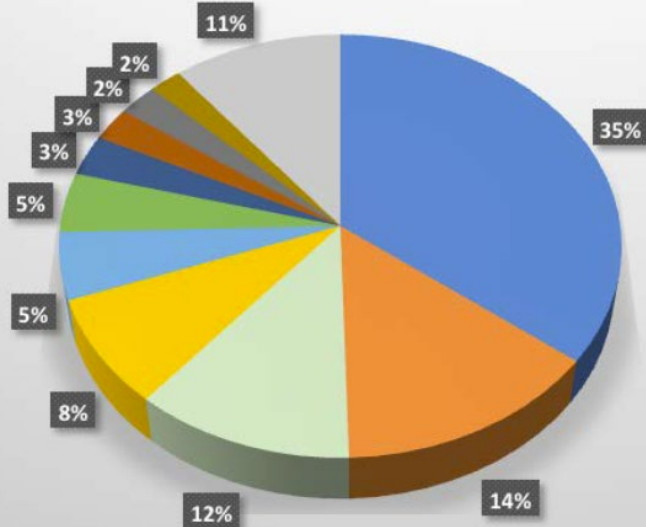
- Largest peatland: „Ocean“ (178,000 ha) in the Republic of Komi
- Smallest peatland: in the highlands and steppe zones (a few m²)
- Deepest peatland: „Philippi“ (Greece) with up to 190 m depth

Peatland distribution

- peat dominated
- dominated by shallow peat
- peat in soil mosaic
- continuous permafrost



Peatlands of Europe by country



- European Russia
- Finland
- Sweden
- Norway
- Belarus
- GBR
- Germany
- Poland
- Ireland
- Ukraine
- Other countries

1,000 km

Biodiversity

- In more than half of Europe's mire regions, less than 17% of the peatland area inside Pas
- European Red List of habitats: 13 open mire habitats (3 endangered, 1 critically endangered)
- IUCN Red List: 9 mire species of vascular plants, 5 bird species

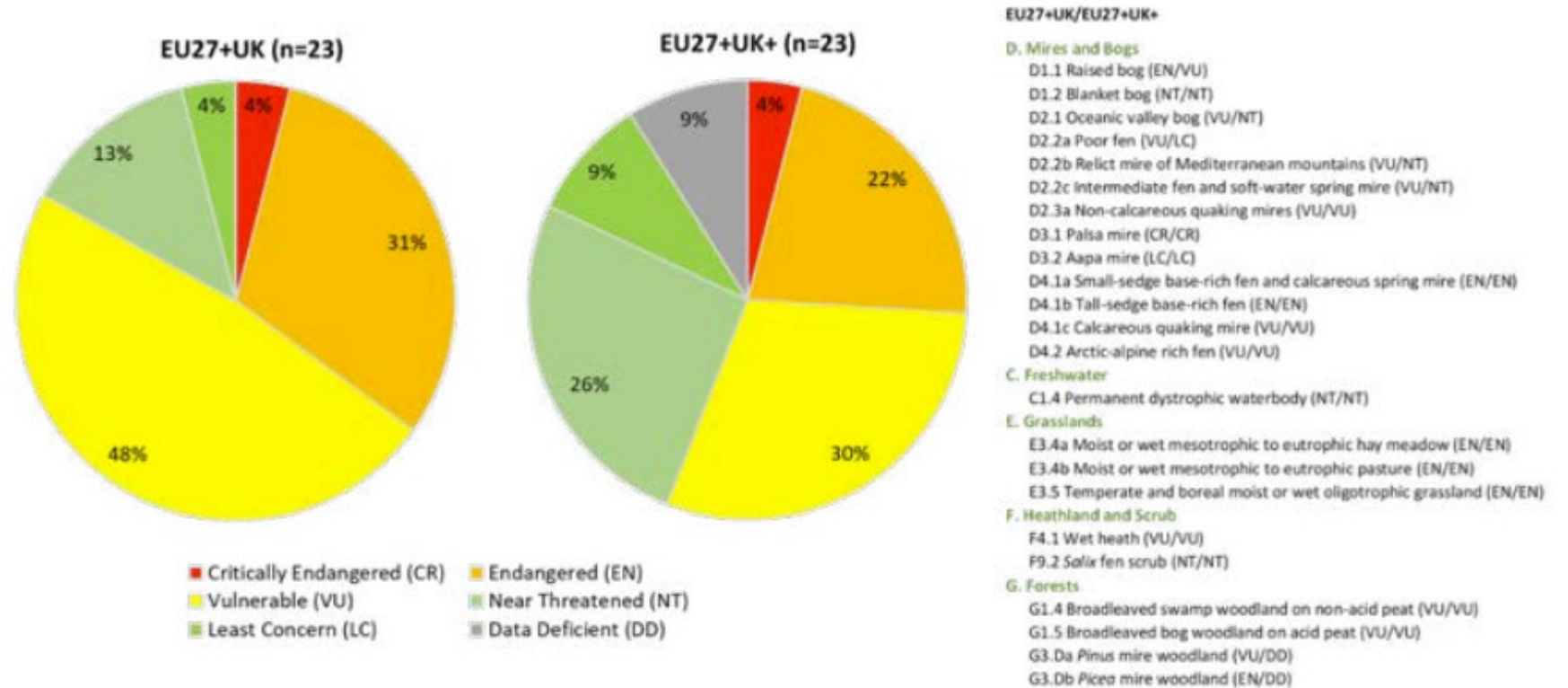


Figure 5.7 European red list of mires and mire-related habitat types and percentage of threatened habitat types at two geographic levels: across the EU27+UK (EU and the United Kingdom) and EU27+UK+ (including Norway, Switzerland, Iceland, and the Balkan countries). n – number of habitats. Source: Modified after Janssen et al. 2016 and Eionet Forum 2016.