

An aerial photograph of a vast peatland landscape. A dark, winding river flows through a dense, green forest. The terrain is flat and covered in low-lying vegetation, typical of peatlands. The text "PEATLANDS and PEATLAND RESTORATION" is overlaid in white, bold, sans-serif font in the center of the image. A solid orange vertical bar is on the right side of the image.

# PEATLANDS and PEATLAND RESTORATION



# Peatlands

- Type of wetland
- The term 'peatland' refers to the peat soil and the wetland habitat growing on its surface
- Valuable ecosystem, critical for preserving biodiversity
- Important for:
  - Provision of safe drinking water
  - Minimising flood risk
  - Addressing climate change



# Peat soil

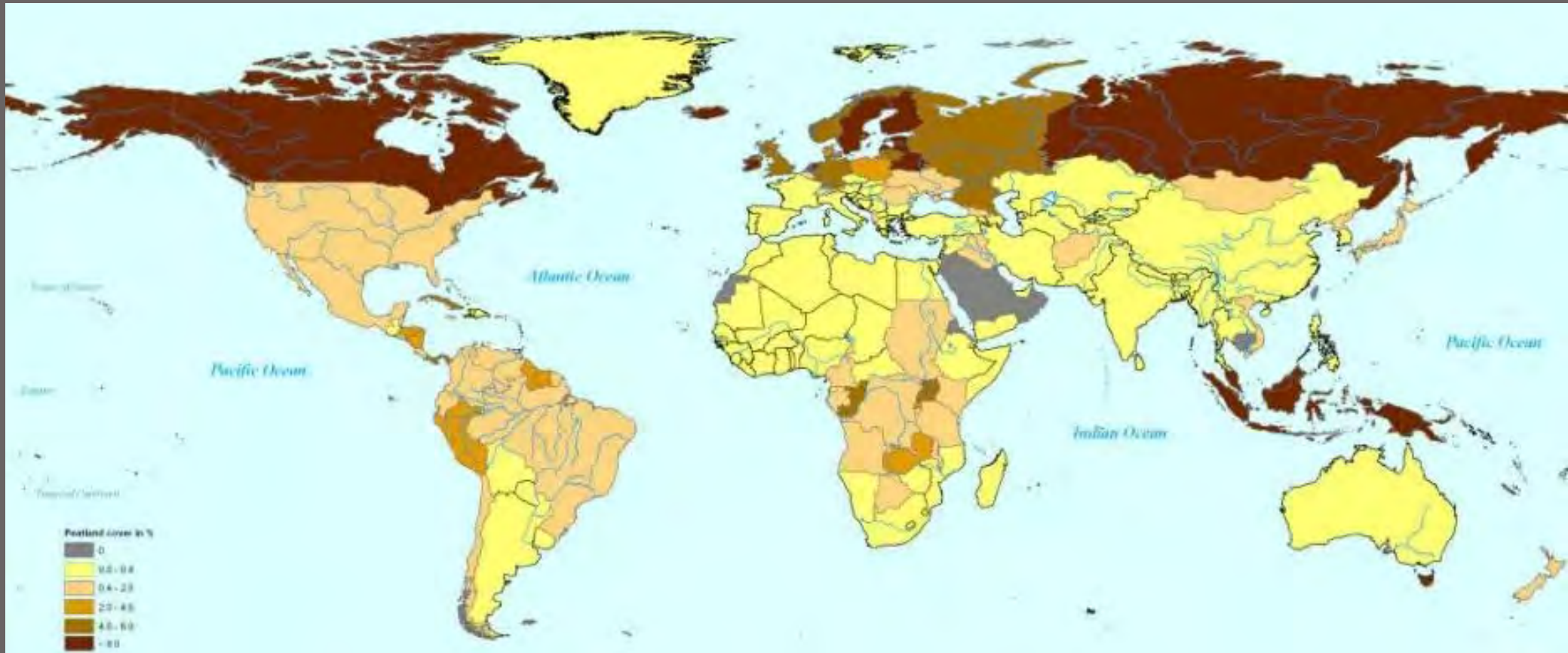
Year-round waterlogged conditions slow the process of plant decomposition to such an extent that dead plants accumulate to form peat.

Over millennia this material builds up and becomes several metres thick.



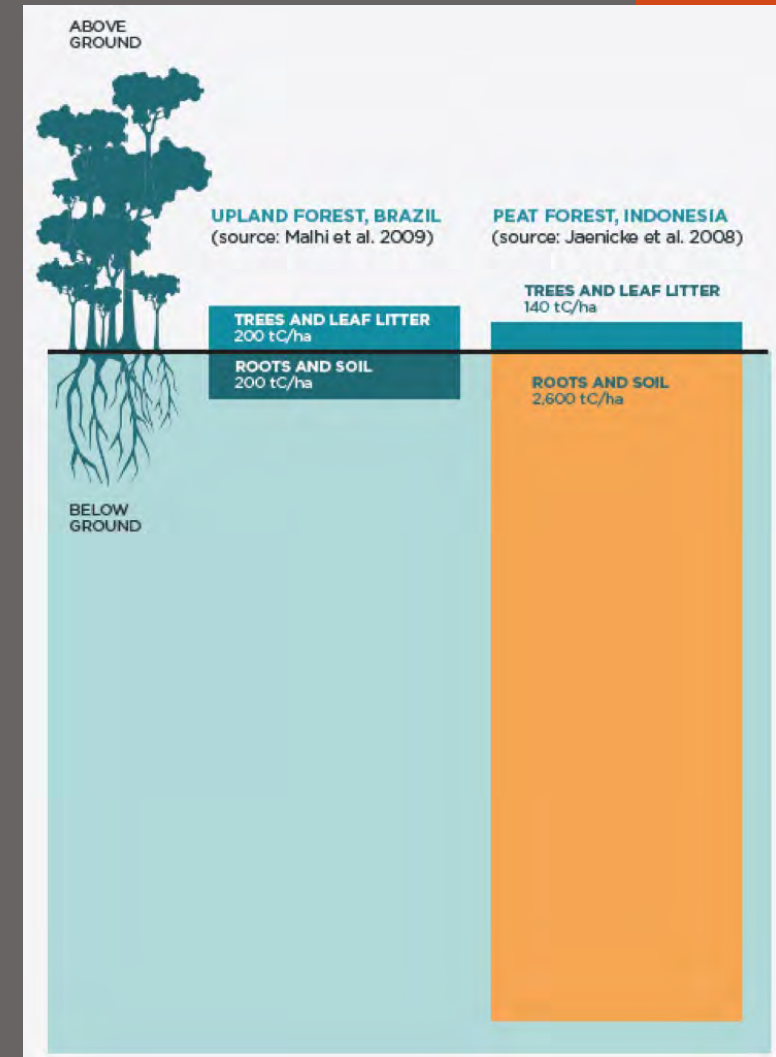


# Where do we find peatlands?



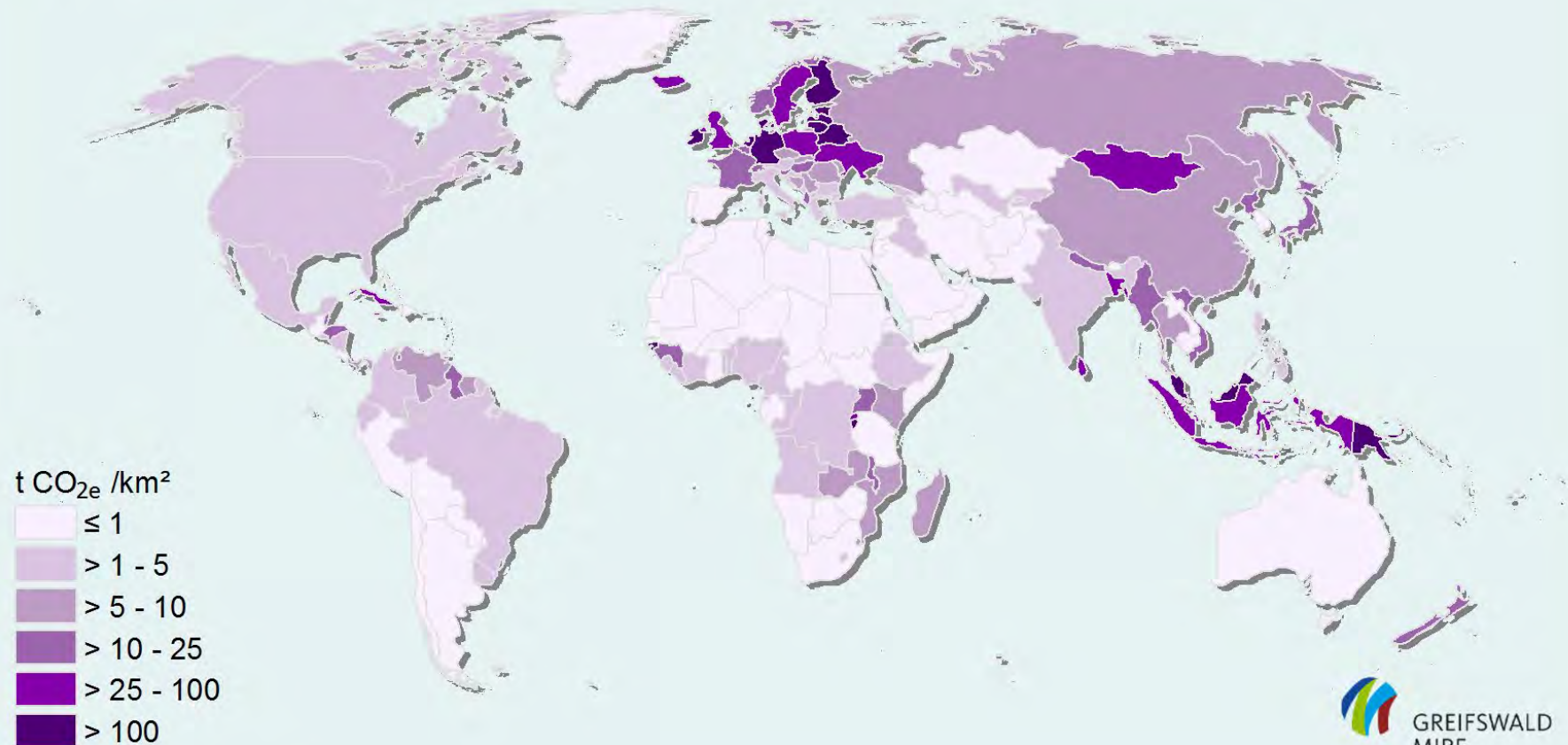
# Peatlands and climate change

- Largest terrestrial carbon store
- >3million km<sup>2</sup> of peatlands sequester 0.37 giga tonnes of CO<sub>2</sub>/year
- Damaged peatlands are a major source of greenhouse gas emissions
- Converted peatland ecosystems release 6% of global anthropogenic CO<sub>2</sub> emissions
- Peatland restoration can significantly reduce emissions



# Global peatland CO<sub>2</sub> emissions

Peatland emissions per unit national land area



source: Global Peatland Database, 2015

# Peatlands in Indonesia



- 36% of the world's tropical peatlands, which store up to 20 times more carbon than non-peat soils
- Home to endangered wildlife species: orang-utans, Sumatran Tigers, leopards and species of fish found nowhere else in the world
- Catastrophic fires of 2015 reinforced the Indonesian government's commitments to:
  - reduce peatland deforestation and fires
  - rewet and restore degraded peatlands





# Peatland degradation in Indonesia

About half of Indonesia's peatlands are degraded, which causes:

- Billions of dollars in economic losses
- High greenhouse gas emissions
- Rapid subsidence of cultivated peatlands
- Increased vulnerability to widespread flooding
- Loss of areas suitable for agricultural production





# Restoration measures

- Protecting peatland areas from degrading activities such as agricultural conversion and drainage
- Restoring the waterlogged conditions required for peat formation to prevent the release of carbon stored in peat soil
- Global networking and exchange



Environmental Management	Law	Communication
<p>In its environmental strategy, Government of Indonesia prioritised:</p> <ul style="list-style-type: none"> <li>• Restoring degraded peatlands</li> <li>• Conserving remaining good peatland</li> <li>• Providing alternative livelihood for communities living inside and surrounding peatland</li> <li>• Developing institutional arrangements to deal with problems in peatland management</li> <li>• Conducting research</li> <li>• Developing better peatland management strategies</li> </ul>	<ul style="list-style-type: none"> <li>• Issuing policy and regulations for better peatland management</li> <li>• Indonesia's Supreme Court has quashed a ministerial regulation obliging forestry companies to relinquish and protect carbon-rich concessions in protected peat areas</li> <li>• The Ministry of Environment and Forestry exercises jurisdiction over Perhutani, the state-owned Forest Enterprise (covering two-thirds of Indonesia's land area)</li> <li>• Zoning for either conservation, protection or production has been legally established</li> <li>• Law enforcement</li> </ul>	<ul style="list-style-type: none"> <li>• Community consultation - global and local</li> <li>• Facilitation of community engagement</li> <li>• Providing information on: <ul style="list-style-type: none"> <li>• Importance of peatland conservation</li> <li>• Measures for sustainable management</li> <li>• Government incentives</li> </ul> </li> <li>• Public Relations for BRG, relevant government departments and private sector partners using range of mass and digital media</li> </ul>



# Acknowledgement: Lisa Lawler

## References:

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- <https://wri-indonesia.org/en/blog/rule-law-peatland-and-environmental-protection>
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