

The environmental effect of degrading intact peatlands

Background:

Damaged peatlands are a major source of greenhouse gas emissions

- When peatlands are being dried out, decomposition processes happen in previous anaerob environments
→ former bound carbon gets relased (Fig 1.a, 1.b)
- Degenerating peatlands releases 6% of global annual anthropogenic CO₂ emissions

Project:

Examined peatland on Reksteren

- Reksteren: island in Western Norway , potential site for new highway
- Carbon content in study area belowground (Fig. 2)
80 kg C / square meter
= 800 tons C / hectare
= 294 kg CO₂ when decomposed

distribution of land area

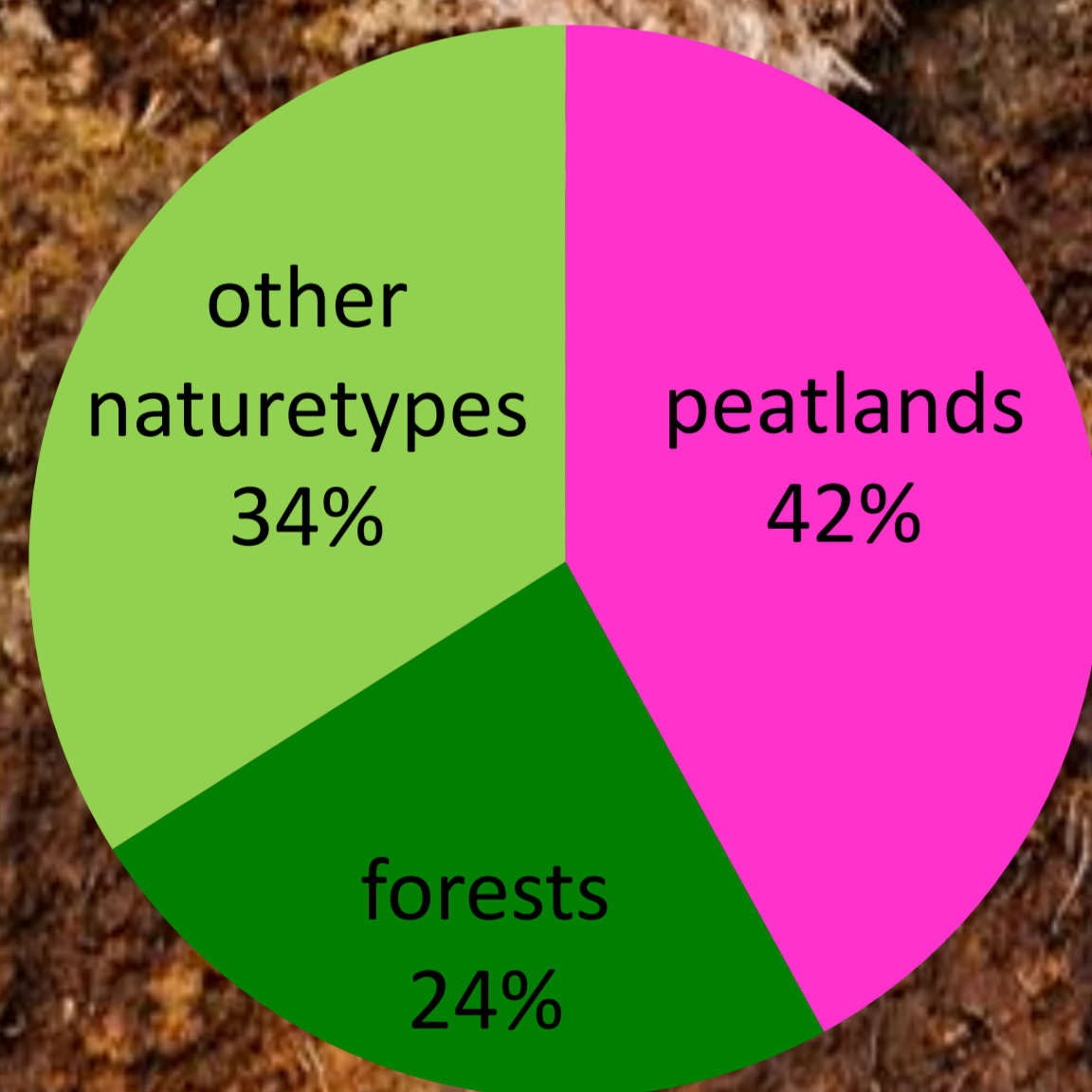


Fig. 1.a

terrestrial carbon storgage

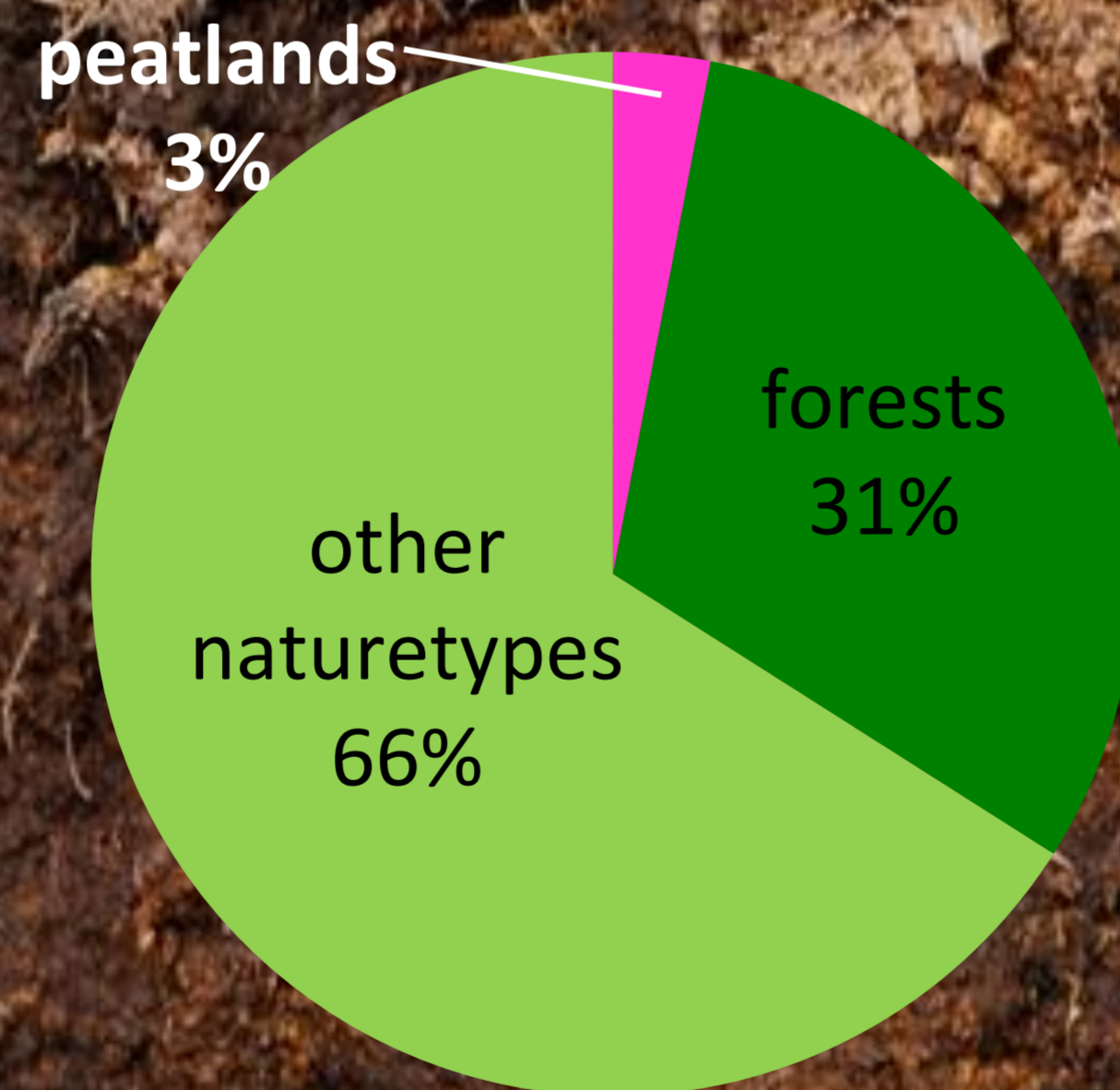


Fig. 1.b

Seen in context

- Tropical rain forest (ag + bg): 284 tons C/ hectare
- Peatland belowground: **800 tons C/ hectare**

Conclusion:

Peatlands function as vast carbon stores and must be protected and renaturated worldwide!



Fig. 2

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