Rewetting strategies to reduce nitrous oxide emissions from European peatlands

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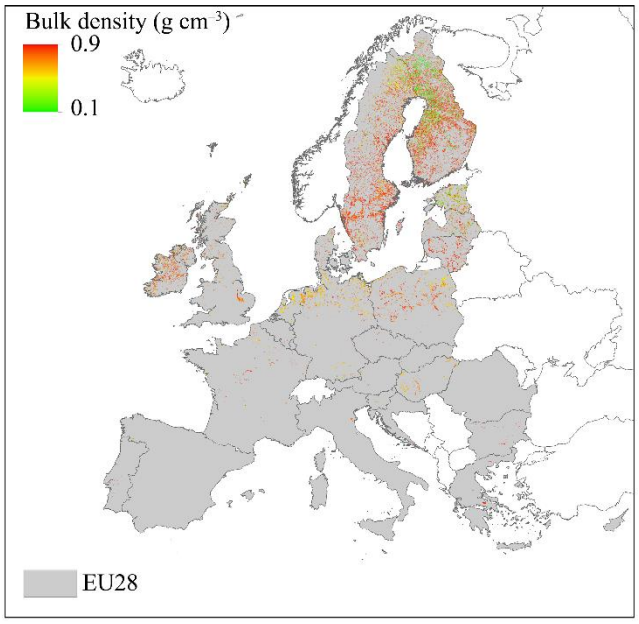
Supplementary Figures



Supplementary Figure 1 Map of topsoil bulk density of European managed peatlands (EU 28).

Supplementary Tables

Supplementary Table 1 Area of managed European peatlands ($\times 10^6$ ha), average N_2O-N emission factors (kg N ha^{-1} $year^{-1}$) by IPCC and overall N_2O-N emissions (Gg N $year^{-1}$) for managed European peatlands (EU-28) as calculated using emission factors from IPCC. Brackets indicate 95% confidence intervals.

Land use	Climate Zones	Area	N_2O-N emission factors	N_2O-N emission
Cropland	Boreal and temperate	2.4	13 (8.2, 18)	31.7 (20.0, 43.9)
Grassland	Boreal	0.8	9.5 (4.6, 14)	7.6 (3.7, 11.2)
	Temperate	2.7	8.2 (4.9, 11)	22.1 (13.2, 29.7)
Forest	Boreal	7.8	0.22 (0.15, 0.28)	1.7 (1.2, 2.2)
	Temperate	2.9	2.8 (–0.57, 6.1)	8.1 (–1.7, 17.7)
Sum	–	16.6	–	71.3 (36.4, 104.7)

Supplementary Table 2 Summary for model variables between soil bulk density (BD, g cm^{-3}) and soil organic matter content (wt%, weight percent); between BD and N_2O-N emissions (kg N ha^{-1} $year^{-1}$) from agricultural and forested peatlands.

Variables	Model	Regression Terms	Estimate	Std. Error	R^2	*p*
BD vs. SOM	Linear	Intercept	0.867	0.01	0.84	<0.001
		coefficient	-0.008	0.0001		
Ln (BD) vs. Ln (N_2O-N) †	Linear	Intercept	4.28	0.31	0.40	<0.001
		coefficient	2.44	0.28		
Ln (BD) vs. Ln (N_2O-N) ‡	Linear	Intercept	2.42	0.36	0.59	<0.001
		coefficient	1.54	0.17		

† The function for agricultural peatlands

‡ The function for forested peatlands