

SUPPLEMENTARY MATERIAL

The use of the GEST method to estimate greenhouse gases uptake or emissions in the absence of data for a raised bog

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Table S1. Estimated greenhouse gas emissions ($\text{CO}_2 \cdot \text{ha}^{-1} \cdot \text{y}^{-1}$) using the GEST method for both scenarios and their potential for reduction

| GEST type | CO_2 | | CH_4 | | CO_2 | | CH_4 | |
|---|---------------|----------|---------------|---------|---------------|---------|---------------|---------|
| | without woods | | | | with woods | | | |
| | base | post | base | post | base | post | base | post |
| Open peatlands | | | | | | | | |
| Moderately moist (forb) meadows | 443.40 | 104.40 | 0.00 | 0.00 | 443.40 | 104.40 | 0.00 | 0.00 |
| Peat moss lawn on former peat-cut off areas | 159.90 | 210.90 | 38.53 | 50.81 | 159.90 | 210.90 | 38.53 | 50.81 |
| Very moist peat moss lawn | -32.80 | -45.10 | 103.29 | 141.95 | -32.80 | -45.10 | 103.29 | 141.95 |
| Very moist bog heath | 25.30 | 1.80 | 64.66 | 12.32 | 25.30 | 1.80 | 64.66 | 12.32 |
| Wet small sedges reeds mostly with moss layer | -12.70 | -8.20 | 24.59 | 15.90 | -12.70 | -8.20 | 24.59 | 15.90 |
| Wet tall sedges reeds | -0.40 | -0.50 | 34.18 | 36.22 | -0.40 | -0.50 | 34.18 | 36.22 |
| Moist bog heath | 4.34 | 4.04 | 0.00 | 0.00 | 4.34 | 4.04 | 0.00 | 0.00 |
| Open water/ditches | N/D | N/D | 63.73 | 79.82 | N/D | N/D | 63.73 | 79.82 |
| Moderately moist bog heath | N/D | - | N/D | - | N/D | - | N/D | - |
| Wet peat moss lawn with pine trees | 54.20 | - | 3.10 | - | 54.20 | - | 3.10 | - |
| Wet peat moss lawn | -0.40 | -17.40 | 0.17 | 8.11 | -0.40 | -17.40 | 0.17 | 8.11 |
| Bare peat (moist) | 3.50 | - | -0.01 | - | 3.50 | - | -0.01 | - |
| Bare peat (wet) | 2.50 | - | 0.14 | - | 2.50 | - | 0.14 | - |
| Wet peat moss Hollows respectively flooded peat moss lawn | -0.80 | -0.80 | 3.01 | 3.01 | -0.80 | -0.80 | 3.01 | 3.01 |
| Wet tall reeds | -0.10 | -0.10 | 0.25 | 0.25 | -0.10 | -0.10 | 0.25 | 0.25 |
| Moist reeds and meadows | - | 26.00 | - | 42.28 | - | 26.00 | - | 42.28 |
| Forested peatlands | | | | | | | | |
| Moderately moist forests and shrubberies | 15578.00 | 12081.00 | 0.00 | 0.00 | 15505.20 | 12008.4 | 0.00 | 0.00 |
| Moist forests and shrubberies | 701.20 | 1199.80 | 1143.51 | 1956.85 | 689.80 | 1190.4 | 1143.51 | 1956.85 |
| Very moist forests and shrubberies | 16.20 | 100.40 | 28.59 | 177.54 | 16.00 | 100.30 | 28.59 | 177.54 |
| Wet forests and shrubberies | 129.70 | -129.70 | 249.83 | 249.83 | -131.00 | -131.00 | 249.83 | 249.83 |
| Moderately dry forests and shrubberies | 384.30 | 370.60 | 0.00 | 0.00 | 382.40 | 369.00 | 0.00 | 0.00 |
| Reduction potential | -3298.80 | | +1017.32 | | -3296.20 | | +1017.32 | |

Source: Herrmann *et al.* (2018), modified.