

TABLES

Table S1: Mean \pm SE CO₂ fluxes measured in vegetated and bare sediments exposed to warming from 25 - 37 °C and maintained at 25 °C. Days indicate the time since the onset of the experiment.

CO ₂ production rate ($\mu\text{mol CO}_2 \text{ m}^{-2} \text{ d}^{-1}$)						
Days	Warming, 25 - 37 °C			Constant temperature, 25 °C		
	Temperature (°C)	Vegetated sediments	Bare sediments	Temperature (°C)	Vegetated sediments	Bare sediments
2	25	747.62 \pm 590.24	73.76 \pm 391.54	25	527.18 \pm 605.17	175.72 \pm 307.19
5	27	1798.24 \pm 1762.62	184.16 \pm 206.54	25	-229.02 \pm 498.39	-331.73 \pm 44.79
8	29	1024.33 \pm 477.27	315.07 \pm 213.32	25	-233.58 \pm 393.44	-250.91 \pm 129.42
11	31	1341.18 \pm 278.32	734.41 \pm 372.15	25	-820.06 \pm 175.14	-382.96 \pm 164.46
14	33	1341.88 \pm 405.25	1426.84 \pm 255.33	25	-871.44 \pm 281.91	-5.91 \pm 114.24
17	35	6058.69 \pm 3141.78	1298.08 \pm 183.1	25	-804.09 \pm 179.12	89.49 \pm 212.86
20	37	10422.18 \pm 2570.12	1718.8 \pm 402.69	25	-941.7 \pm 208.15	-130.98 \pm 214.6

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Table S2: Mean \pm SE CH₄ fluxes measured in vegetated and bare sediments exposed to warming from 25 - 37 °C and maintained at 25 °C. Days indicate the time since the onset of experiment.

CH ₄ production rate ($\mu\text{mol CH}_4 \text{ m}^{-2} \text{ d}^{-1}$)						
Days	Warming, 25 - 37 °C			Constant temperature, 25 °C		
	Temperature (°C)	Vegetated sediments	Bare sediments	Temperature (°C)	Vegetated sediments	Bare sediments
2	25	54.1 \pm 23.21	4.82 \pm 4.14	25	59.67 \pm 15.82	7.95 \pm 4.56
5	27	57.33 \pm 18.78	13.14 \pm 5.92	25	82.2 \pm 16.41	6.4 \pm 2.09
8	29	48.79 \pm 20.37	3.69 \pm 1.51	25	49.01 \pm 8.42	3.52 \pm 1.75
11	31	47.94 \pm 19.85	4.81 \pm 1.72	25	41.21 \pm 8.99	1.84 \pm 0.76
14	33	19.65 \pm 4.96	4.78 \pm 1.69	25	26.69 \pm 3.46	1.57 \pm 0.35
17	35	68.65 \pm 39.48	3.73 \pm 0.93	25	28.43 \pm 4.0	2.76 \pm 1.21
20	37	88.11 \pm 15.19	27.18 \pm 19.62	25	18.45 \pm 7.35	0.73 \pm 0.22

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Table S3: Mean \pm SE CO₂ fluxes measured in vegetated and bare sediments exposed to darkness at 25 °C. Days indicate the time since the onset of experiment.

CO ₂ production rate ($\mu\text{mol CO}_2 \text{ m}^{-2} \text{ d}^{-1}$)			
Days	Temperature (°C)	Vegetated sediments	Bare sediments
2	25	-1120.63 \pm 280.14	-372.77 \pm 93.55
9	25	308.70 \pm 476.30	-638.34 \pm 168.80
12	25	1452.53 \pm 518.04	-319.12 \pm 236.70
15	25	1441.06 \pm 343.63	-153.57 \pm 125.23
18	25	1809.12 \pm 463.59	26.46 \pm 227.48
21	25	1049.19 \pm 427.39	-282.71 \pm 159.16

Table S4: Mean \pm SE CH₄ fluxes measured in vegetated and bare sediments exposed to darkness at 25 °C. Days indicate the time since the onset of experiment.

CH ₄ production rate ($\mu\text{mol CH}_4 \text{ m}^{-2} \text{ d}^{-1}$)			
Days	Temperature (°C)	Vegetated sediments	Bare sediments
2	25	39.11 \pm 12.33	6.64 \pm 2.81
9	25	27.164 \pm 4.38	11.05 \pm 4.84
12	25	22.57 \pm 5.84	8.64 \pm 3.04
15	25	18.13 \pm 5.21	7.25 \pm 1.43
18	25	16.13 \pm 3.41	7.40 \pm 1.21
21	25	7.79 \pm 2.54	4.74 \pm 1.04