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Duration of extraction determines CO_2 and CH_4 emissions from an actively extracted peatland in eastern Quebec, Canada

Laura Clark et al.

Correspondence to: Ian B. Strachan (ian.strachan@queensu.ca)

Table S1. Physical and chemical properties of the studied peatland. Density and porosity are from Lai (2022); all other properties are from Kendall (2020).

Depth	Density	Porosity	C	N	C:N	P	Lignin	Holocellulose
(m)	(kg m^{-3})	--	(mg g^{-1})	(mg g^{-1})	--	(µg g^{-1})	(mg g^{-1})	(mg g^{-1})
0-0.4	110-140	0.82-0.87	519 ±28	12.6 ±1.6	43 ±5	219 ±9	358 ±18	528 ±14
> 0.4	70-80	0.92-0.94	499 ±20	10.5 ±2.1	49 ±10	189 ±12	459 ±75	600 ±66

Kendall, R. A.: Microbial and substrate decomposition factors in Canadian commercially extracted peatlands, M.Sc. Thesis, Department of Geography, McGill University, 102 pp., 2020.

Lai, O. Y.: Peat moisture and thermal regimes for peatlands undergoing active extraction, M.Sc. Thesis, Department of Geography, McGill University, 65 pp., 2022.

Table S2. CO_2 (g C m^{-2} d^{-1}), CH_4 (mg C m^{-2} d^{-1}) fluxes and measurements of soil temperature (T_{soil} °C; average of 0.02, 0.05, 0.10, 0.15, 0.20 m) and volumetric soil moisture (% VSM at 0.10 m) by sector for fields (2 m, 5 m, 15 m transect positions combined) and ditches.

			1987	2007	2010	2013	2016	All sectors
Field	CO_2	Mean	0.6	0.7	0.6	0.7	1.5	0.9
		Std. Dev.	0.7	0.5	0.4	0.4	2.7	1.6
	CH_4	Mean	2.4	5.0	11.7	2.0	21.9	9.2
		Std. Dev.	26.9	22.6	61.3	13.6	195.9	103.0
	T_{soil}	Mean	18.0	18.4	20.0	16.9	19.6	18.7
		Std. Dev.	5.1	4.4	4.6	3.2	5.0	4.7
	VSM	Mean	31.0	35.1	31.7	31.6	33.7	32.8
		Std. Dev.	8.1	6.9	7.6	6.3	7.9	7.6
Ditch	CO_2	Mean	1.4	2.6	1.8	1.7	2.0	2.0
		Std. Dev.	1.2	2.6	1.5	1.1	2.5	2.2
	CH_4	Mean	32.9	113.6	46.7	14.3	128.4	84.2
		Std. Dev.	155.0	421.0	58.4	54.7	398.6	325.4
	T_{soil}	Mean	19.5	18.9	20.7	17.6	20.8	19.6
		Std. Dev.	4.1	4.3	5.3	2.9	4.9	4.5
	VSM	Mean	35.8	28.1	29.6	32.2	36.4	32.4
		Std. Dev.	28.8	27.6	35.1	37.7	28.1	30.4