



*Supplement of*

## **Water-table-driven greenhouse gas emission estimates guide peatland restoration at national scale**

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Tables S1 and S2

## **Introduction**

The tables S1 and S2 present the Danish data synthesis for CO<sub>2</sub> and CH<sub>4</sub> fluxes that we utilized to derive response functions for greenhouse gas emissions in relation to water table depth at mean annual conditions.

**Table S1: Overview of measurement sites included in the Danish data synthesis for CO<sub>2</sub> fluxes. MAT: mean annual temperature, MAP: mean annual precipitation, GWT: groundwater table, where negative values indicate a water table below terrain.**

Site	Coordinates	Soil Type	Main crop	Starting Monitoring	Ending Monitoring	MAT (Celsius)	MAP (mm)	Mean GWT-cm	Soil Depth-cm	Organic C-%	C:N ratio	pH	Mean Annual CO <sub>2</sub> emission-NECB (Mg C ha <sup>-1</sup> yr <sup>-1</sup> )	Reference
Skjern-W	55°56'N, 8°26'E	Organic soil with different agricultural management	Arable crop- Barley	2008/08	2009/09	9.3	913	-48	0-30	20.3	17	5	15.3	Elsgaard, L., et al., Net ecosystem exchange of CO <sub>2</sub> and carbon balance for eight temperate organic soils under agricultural management. <i>Agriculture, Ecosystems &amp; Environment</i> , 2012. 162: 52-67.
Skjern-W	55°56'N, 8°26'E	Organic soil with different agricultural management	Permanent grassland	2008/08	2009/09	9.6	913	-42	0-30	15.7	18.2	4.9	6.9	Elsgaard, L., et al., Net ecosystem exchange of CO <sub>2</sub> and carbon balance for eight temperate organic soils under agricultural management. <i>Agriculture, Ecosystems &amp; Environment</i> , 2012. 162: 52-67.
St. Vildmose-N	57°13'N, 09°49'E	Organic soil with different agricultural management	Arable crop- Potato	2008/08	2009/09	8.7	702	-70	0-30	47.3	30.2	4.5	7	Elsgaard, L., et al., Net ecosystem exchange of CO <sub>2</sub> and carbon balance for eight temperate organic soils under agricultural management. <i>Agriculture, Ecosystems &amp; Environment</i> , 2012. 162: 52-67.
St. Vildmose-N	57°13'N, 09°49'E	Organic soil with different agricultural management	Permanent grassland	2008/08	2009/09	8.6	702	-61	0-30	42.7	27.7	5.1	10.4	Elsgaard, L., et al., Net ecosystem exchange of CO <sub>2</sub> and carbon balance for eight temperate organic soils under agricultural management. <i>Agriculture, Ecosystems &amp; Environment</i> , 2012. 162: 52-67.
St. Vildmose-N	57°13'N, 09°49'E	Organic soil with different agricultural management	Rotational grass	2008/08	2009/09	9.1	702	-70	0-30	45.3	27.9	4.9	11.5	Elsgaard, L., et al., Net ecosystem exchange of CO <sub>2</sub> and carbon balance for eight temperate organic soils under agricultural management. <i>Agriculture, Ecosystems &amp; Environment</i> , 2012. 162: 52-67.

Mørke-E	56°23'N, 10°24'E	Organic soil with different agricultural management	Arable crop- Barley/Grass	2008/08	2009/09	9.2	579	-111	0-30	32.7	29.3	4.9	7.2	Elsgaard, L., et al., Net ecosystem exchange of CO <sub>2</sub> and carbon balance for eight temperate organic soils under agricultural management. Agriculture, Ecosystems & Environment, 2012. 162: 52-67.
Mørke-E	56°23'N, 10°24'E	Organic soil with different agricultural management	Permanent grassland	2008/08	2009/09	9	579	-40	0-30	29.7	25.1	4.7	7.9	Elsgaard, L., et al., Net ecosystem exchange of CO <sub>2</sub> and carbon balance for eight temperate organic soils under agricultural management. Agriculture, Ecosystems & Environment, 2012. 162: 52-67.
Mørke-E	56°23'N, 10°24'E	Organic soil with different agricultural management	Rotational grass	2008/08	2009/09	9.2	579	-43	0-30	30	25.6	5.8	16.7	Elsgaard, L., et al., Net ecosystem exchange of CO <sub>2</sub> and carbon balance for eight temperate organic soils under agricultural management. Agriculture, Ecosystems & Environment, 2012. 162: 52-67.
Nørre Å	56°44'N, 9°68'E	Fen peatland	Reed canary grass	2012/05	2012/05	14.2	294	0	0-20	37.8	11.6		-3.6	Karki, S., et al., Carbon balance of rewetted and drained peat soils used for biomass production: a mesocosm study. GCB Bioenergy, 2016. 8(5): 969-980.
Nørre Å	56°44'N, 9°68'E	Fen peatland	Reed canary grass	2012/05	2012/05	14.2	294	-10	0-20	37.8	11.6		0.1	Karki, S., et al., Carbon balance of rewetted and drained peat soils used for biomass production: a mesocosm study. GCB Bioenergy, 2016. 8(5): 969-980.
Nørre Å	56°44'N, 9°68'E	Fen peatland	Reed canary grass	2012/05	2012/05	14.2	294	-20	0-20	37.8	11.6		4.3	Karki, S., et al., Carbon balance of rewetted and drained peat soils used for biomass production: a mesocosm study. GCB Bioenergy, 2016. 8(5): 969-980.

Nørre Å	56°44'N, 9°68'E	Fen peatland	Reed canary grass	2012/05	2012/05	14.2	294	-30	0-20	37.8	11.6		3.5	Karki, S., et al., Carbon balance of rewetted and drained peat soils used for biomass production: a mesocosm study. GCB Bioenergy, 2016. 8(5): 969-980.
Nørre Å	56°44'N, 9°68'E	Fen peatland	Reed canary grass	2012/05	2012/05	14.2	294	-40	0-20	37.8	11.6		10	Karki, S., et al., Carbon balance of rewetted and drained peat soils used for biomass production: a mesocosm study. GCB Bioenergy, 2016. 8(5): 969-980.
Odense River Basin	55°13'N, 10°17'E	Rewetted riparian wetland	creeping bentgrass	2015/03	2016/03	8.8	808	0	0-25	30		5.9-6.9	2.2	Kandel, T.P., et al., Complete annual CO <sub>2</sub> , CH <sub>4</sub> , and N <sub>2</sub> O balance of a temperate riparian wetland 12 years after rewetting. Ecological Engineering, 2019. 127: 527-535.
Nørre Å	56°27'N, 9°40'E	Fen peatland	Reed canary grass- Fertilized paludiculture	2015/03	2017/02	7.9	650	-1	0-20	36.3	12.1	6.1-7.1	0.6	Karki, S., et al., Annual CO <sub>2</sub> fluxes from a cultivated fen with perennial grasses during two initial years of rewetting. Mires & Peat, 2019. 25.
Nørre Å	56°27'N, 9°40'E	Fen peatland	Reed canary grass- Fertilized paludiculture	2015/03	2017/02	7.9	650	-9	0-20	36.3	12.1	6.1-7.1	2.4	Karki, S., et al., Annual CO <sub>2</sub> fluxes from a cultivated fen with perennial grasses during two initial years of rewetting. Mires & Peat, 2019. 25.
Nørre Å	56°44'N, 9°68'E	Fen peat	Reed canary grass	2013/05	2013/09	14.2	294	0	0-20	37.8	11.8		-3.6	Karki, S., et al., Carbon balance of rewetted and drained peat soils used for biomass production: a mesocosm study. Gcb Bioenergy, 2016. 8(5): 969-980.

Nørre Å	56°44'N, 9°68'E	Fen peat	Reed canary grass	2013/05	2013/09	14.2	294	-10	0-20	37.8	11.8		0.1	Karki, S., et al., Carbon balance of rewetted and drained peat soils used for biomass production: a mesocosm study. <i>Gcb Bioenergy</i> , 2016. 8(5): 969-980.
Nørre Å	56°44'N, 9°68'E	Fen peat	Reed canary grass	2013/05	2013/09	14.2	294	-20	0-20	37.8	11.8		4.3	Karki, S., et al., Carbon balance of rewetted and drained peat soils used for biomass production: a mesocosm study. <i>Gcb Bioenergy</i> , 2016. 8(5): 969-980.
Nørre Å	56°44'N, 9°68'E	Fen peat	Reed canary grass	2013/05	2013/09	14.2	294	-30	0-20	37.8	11.8		3.5	Karki, S., et al., Carbon balance of rewetted and drained peat soils used for biomass production: a mesocosm study. <i>Gcb Bioenergy</i> , 2016. 8(5): 969-980.
Nørre Å	56°44'N, 9°68'E	Fen peat	Reed canary grass	2013/05	2013/09	14.2	294	-40	0-20	37.8	11.8		10	Karki, S., et al., Carbon balance of rewetted and drained peat soils used for biomass production: a mesocosm study. <i>Gcb Bioenergy</i> , 2016. 8(5): 969-980.
Western Jutland	55°56'N, 8°26'E	Fen peat	Permanent grassland	2008/08	2009/10	9.5	913	-37	0-30	27	18	4.3	9.41	Görres, C.-M., L. Kutzbach, and L. Elsgaard, Comparative modeling of annual CO2 flux of temperate peat soils under permanent grassland management. <i>Agriculture, Ecosystems &amp; Environment</i> , 2014. 186: 64-76.
Western Jutland	55°56'N, 8°26'E	Fen peat	Permanent grassland	2008/08	2009/10	9.5	913	-37	0-30	30		4.3	11.59	Görres, C.-M., L. Kutzbach, and L. Elsgaard, Comparative modeling of annual CO2 flux of temperate peat soils under permanent grassland management. <i>Agriculture, Ecosystems &amp; Environment</i> , 2014. 186: 64-76.

Western Jutland	55°56'N, 8°26'E	Fen peat	Permanent grassland	2008/08	2009/10	9.5	913	-37	0-30	40		4.1	8.32	Görres, C.-M., L. Kutzbach, and L. Elsgaard, Comparative modeling of annual CO <sub>2</sub> flux of temperate peat soils under permanent grassland management. <i>Agriculture, Ecosystems &amp; Environment</i> , 2014. 186: 64-76.
Northern Jutland	57°13'N, 09°49'E	Fen peat	Permanent grassland	2008/08	2009/10	8.8	702	-71	0-30	82	28	4.5	11.86	Görres, C.-M., L. Kutzbach, and L. Elsgaard, Comparative modeling of annual CO <sub>2</sub> flux of temperate peat soils under permanent grassland management. <i>Agriculture, Ecosystems &amp; Environment</i> , 2014. 186: 64-76.
Northern Jutland	57°13'N, 09°49'E	Fen peat	Permanent grassland	2008/08	2009/10	8.8	702	-61	0-30	81		4.5	12.14	Görres, C.-M., L. Kutzbach, and L. Elsgaard, Comparative modeling of annual CO <sub>2</sub> flux of temperate peat soils under permanent grassland management. <i>Agriculture, Ecosystems &amp; Environment</i> , 2014. 186: 64-76.
Northern Jutland	57°13'N, 09°49'E	Fen peat	Permanent grassland	2008/08	2009/10	8.8	702	-51	0-30	85		4.4	6.82	Görres, C.-M., L. Kutzbach, and L. Elsgaard, Comparative modeling of annual CO <sub>2</sub> flux of temperate peat soils under permanent grassland management. <i>Agriculture, Ecosystems &amp; Environment</i> , 2014. 186: 64-76.
Eastern Jutland	56°23'N, 10°24'E	Bog peat	Permanent grassland	2008/08	2009/10	9.1	579	-73	0-30	91	25	3.2	4.50	Görres, C.-M., L. Kutzbach, and L. Elsgaard, Comparative modeling of annual CO <sub>2</sub> flux of temperate peat soils under permanent grassland management. <i>Agriculture, Ecosystems &amp; Environment</i> , 2014. 186: 64-76.
Eastern Jutland	56°23'N, 10°24'E	Bog peat	Permanent grassland	2008/08	2009/10	9.1	579	-20	0-30	47		5.2	11.59	Görres, C.-M., L. Kutzbach, and L. Elsgaard, Comparative modeling of annual CO <sub>2</sub> flux of temperate peat soils under permanent grassland management. <i>Agriculture, Ecosystems &amp; Environment</i> , 2014. 186: 64-76.

Eastern Jutland	56°23'N, 10°24'E	Bog peat	Permanent grassland	2008/08	2009/10	9.1	579	-28	0-30	26		5	14.73	Görres, C.-M., L. Kutzbach, and L. Elsgaard, Comparative modeling of annual CO <sub>2</sub> flux of temperate peat soils under permanent grassland management. <i>Agriculture, Ecosystems &amp; Environment</i> , 2014. 186: 64-76.
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**Table S2: Overview of the measurement sites included in the Danish data synthesis for CH<sub>4</sub> fluxes. MAT: mean annual temperature, MAP: mean annual precipitation, GWT: groundwater table, where negative values indicate a water table below terrain.**

Site	Coordinates	Soil Type	Main crop	Starting Monitoring	Ending Monitoring	MAT (Celsius)	MAP (mm)	Mean WTD-cm	Soil Depth-cm	Organic C-%	C:N ratio	pH	Annual fluxes CH <sub>4</sub> (g CH <sub>4</sub> m <sup>-2</sup> yr <sup>-1</sup> )	Reference
Skjern-W	55°56'N, 8°26'E	Arable crop	Barley	2008/08	2009/09	9.3	913	-48	0-30	20.3	17	5	-0.02	Petersen, S.O., et al., Annual emissions of CH <sub>4</sub> and N <sub>2</sub> O, and ecosystem respiration, from eight organic soils in Western Denmark managed by agriculture. Biogeosciences, 2012. 9(1): 403-422.
Skjern-W	55°56'N, 8°26'E	Permanent grassland	Grass	2008/08	2009/09	9.6	913	-42	0-30	15.7	18.2	4.9	-0.16	Petersen, S.O., et al., Annual emissions of CH <sub>4</sub> and N <sub>2</sub> O, and ecosystem respiration, from eight organic soils in Western Denmark managed by agriculture. Biogeosciences, 2012. 9(1): 403-422.
St. Vildmose-N	57°14'N, 09°51'E	Arable crop	Potato	2008/08	2009/09	8.7	702	-70	0-30	47.3	30.2	4.5	0.03	Petersen, S.O., et al., Annual emissions of CH <sub>4</sub> and N <sub>2</sub> O, and ecosystem respiration, from eight organic soils in Western Denmark managed by agriculture. Biogeosciences, 2012. 9(1): 403-422.
St. Vildmose-N	57°14'N, 09°50'E	Permanent grassland	Grass	2008/08	2009/09	8.6	702	-61	0-30	42.7	27.7	5.1	2.8	Petersen, S.O., et al., Annual emissions of CH <sub>4</sub> and N <sub>2</sub> O, and ecosystem respiration, from eight organic soils in Western Denmark managed by agriculture. Biogeosciences, 2012. 9(1): 403-422.
St. Vildmose-N	57°14'N, 09°51'E	Rotational grass	Grass	2008/08	2009/09	9.1	702	-70	0-30	45.3	27.9	4.9	-0.03	Petersen, S.O., et al., Annual emissions of CH <sub>4</sub> and N <sub>2</sub> O, and ecosystem respiration, from eight organic soils in Western Denmark managed by agriculture. Biogeosciences, 2012. 9(1): 403-422.

Mørke-E	56°23'N, 10°24'E	Arable crop	Barley/Grass	2008/08	2009/09	9.2	579	-111	0-30	32.7	29.3	4.9	0.38	Petersen, S.O., et al., Annual emissions of CH4 and N2O, and ecosystem respiration, from eight organic soils in Western Denmark managed by agriculture. <i>Biogeosciences</i> , 2012. 9(1): 403-422.
Mørke-E	56°23'N, 10°24'E	Permanent grassland	Grass	2008/08	2009/09	9	579	-40	0-30	29.7	25.1	4.7	4.7	Petersen, S.O., et al., Annual emissions of CH4 and N2O, and ecosystem respiration, from eight organic soils in Western Denmark managed by agriculture. <i>Biogeosciences</i> , 2012. 9(1): 403-422.
Mørke-E	56°23'N, 10°24'E	Rotational grass	Barley/Grass	2008/08	2009/09	9.2	579	-43	0-30	30	25.6	5.8	0.03	Petersen, S.O., et al., Annual emissions of CH4 and N2O, and ecosystem respiration, from eight organic soils in Western Denmark managed by agriculture. <i>Biogeosciences</i> , 2012. 9(1): 403-422.
Karup-P1	56°25'N, 9°0'E	riparian wetlands		2010/06	2011/06	7.6	740	2.2	0-30	21	20.4	6.6	0.13	Audet, J., et al., Methane emissions in Danish riparian wetlands: ecosystem comparison and pursuit of vegetation indexes as predictive tools. <i>Ecological indicators</i> , 2013. 34: 548-559.
Karup-P2	56°25'N, 9°0'E	riparian wetlands		2010/06	2011/06	7.6	740	2.5	0-30	14	20.4	6.7	51.07	Audet, J., et al., Methane emissions in Danish riparian wetlands: ecosystem comparison and pursuit of vegetation indexes as predictive tools. <i>Ecological indicators</i> , 2013. 34: 548-559.
Karup-P3	56°25'N, 9°0'E	riparian wetlands		2010/06	2011/06	7.6	740	-4.8	0-30	13	18.8	6.8	26.40	Audet, J., et al., Methane emissions in Danish riparian wetlands: ecosystem comparison and pursuit of vegetation indexes as predictive tools. <i>Ecological indicators</i> , 2013. 34: 548-559.

Haderup-P1	56°24'N, 9°0'E	riparian wetlands		2010/06	2011/06	7.6	831	-0.6	0-30	44	21.4	6.3	51.07	Audet, J., et al., Methane emissions in Danish riparian wetlands: ecosystem comparison and pursuit of vegetation indexes as predictive tools. Ecological indicators, 2013. 34: 548-559.
Haderup-P2	56°24'N, 9°0'E	riparian wetlands		2010/06	2011/06	7.6	831	-3.3	0-30	14	20.7	6.3	18.40	Audet, J., et al., Methane emissions in Danish riparian wetlands: ecosystem comparison and pursuit of vegetation indexes as predictive tools. Ecological indicators, 2013. 34: 548-559.
Haderup-P3	56°24'N, 9°0'E	riparian wetlands		2010/06	2011/06	7.6	831	-12	0-30	24	21.5	7	1.73	Audet, J., et al., Methane emissions in Danish riparian wetlands: ecosystem comparison and pursuit of vegetation indexes as predictive tools. Ecological indicators, 2013. 34: 548-559.
Simsted-P1	56°41'N, 9°29'E	riparian wetlands		2010/06	2011/06	7.6	688	0.2	0-30	10	15.7	6.3	17.73	Audet, J., et al., Methane emissions in Danish riparian wetlands: ecosystem comparison and pursuit of vegetation indexes as predictive tools. Ecological indicators, 2013. 34: 548-559.
Simsted-P2	56°41'N, 9°29'E	riparian wetlands		2010/06	2011/06	7.6	688	-12.6	0-30	45	22.8	6.5	16.27	Audet, J., et al., Methane emissions in Danish riparian wetlands: ecosystem comparison and pursuit of vegetation indexes as predictive tools. Ecological indicators, 2013. 34: 548-559.
Simsted-P3	56°41'N, 9°29'E	riparian wetlands		2010/06	2011/06	7.6	688	-18.9	0-30	24	16.5	5.8	8.13	Audet, J., et al., Methane emissions in Danish riparian wetlands: ecosystem comparison and pursuit of vegetation indexes as predictive tools. Ecological indicators, 2013. 34: 548-559.

Villestrup-P1	56°44'N, 9°57'E	riparian wetlands		2010/06	2011/06	7.5	764	-5.4	0-30	24	18.7	5.5	34.13	Audet, J., et al., Methane emissions in Danish riparian wetlands: ecosystem comparison and pursuit of vegetation indexes as predictive tools. Ecological indicators, 2013. 34: 548-559.
Villestrup-P2	56°44'N, 9°57'E	riparian wetlands		2010/06	2011/06	7.5	764	-57.1	0-30	2	15.3	4.7	0.13	Audet, J., et al., Methane emissions in Danish riparian wetlands: ecosystem comparison and pursuit of vegetation indexes as predictive tools. Ecological indicators, 2013. 34: 548-559.
Villestrup-P3	56°44'N, 9°57'E	riparian wetlands		2010/06	2011/06	7.5	764	-39.2	0-30	4	15.8	4.8	-0.27	Audet, J., et al., Methane emissions in Danish riparian wetlands: ecosystem comparison and pursuit of vegetation indexes as predictive tools. Ecological indicators, 2013. 34: 548-559.
Store Vildmose	57°13'48"N, 9°50'24"E	Undrained natural Bog		2014/06	2015/06	7.9	740	-5	0-25	41	32	3.4	17.2	Kandel, T.P., P.E. Lærke, and L. Elsgaard, Annual emissions of CO <sub>2</sub> , CH <sub>4</sub> and N <sub>2</sub> O from a temperate peat bog: Comparison of an undrained and four drained sites under permanent grass and arable crop rotations with cereals and potato. Agricultural and Forest Meteorology, 2018. 256: 470-481.
Store Vildmose	57°13'48"N, 9°50'24"E	Drained peat bog	permanent grassland	2014/06	2015/06	7.9	740	-60	0-25	39	21	4.3	-0.15	Kandel, T.P., P.E. Lærke, and L. Elsgaard, Annual emissions of CO <sub>2</sub> , CH <sub>4</sub> and N <sub>2</sub> O from a temperate peat bog: Comparison of an undrained and four drained sites under permanent grass and arable crop rotations with cereals and potato. Agricultural and Forest Meteorology, 2018. 256: 470-481.
Store Vildmose	57°13'48"N, 9°50'24"E	Drained peat bog	Oat-Potato	2014/06	2015/06	7.9	740	-60	0-25	34	25	4	0.15	Kandel, T.P., P.E. Lærke, and L. Elsgaard, Annual emissions of CO <sub>2</sub> , CH <sub>4</sub> and N <sub>2</sub> O from a temperate peat bog: Comparison of an undrained and four drained sites under permanent grass and arable crop rotations with cereals and potato. Agricultural and Forest Meteorology, 2018. 256: 470-481.

Store Vildmose	57°13'48"N, 9°50'24"E	Drained peat bog	Oat-Spring barley	2014/06	2015/06	7.9	740	-60	0-25	32	24	4.8	-0.14	Kandel, T.P., P.E. Lærke, and L. Elsgaard, Annual emissions of CO <sub>2</sub> , CH <sub>4</sub> and N <sub>2</sub> O from a temperate peat bog: Comparison of an undrained and four drained sites under permanent grass and arable crop rotations with cereals and potato. Agricultural and Forest Meteorology, 2018. 256: 470-481.
Store Vildmose	57°13'48"N, 9°50'24"E	Drained peat bog	Potato-Spring barley	2014/06	2015/06	7.9	740	-60	0-25	33	24	4	-0.06	Kandel, T.P., P.E. Lærke, and L. Elsgaard, Annual emissions of CO <sub>2</sub> , CH <sub>4</sub> and N <sub>2</sub> O from a temperate peat bog: Comparison of an undrained and four drained sites under permanent grass and arable crop rotations with cereals and potato. Agricultural and Forest Meteorology, 2018. 256: 470-481.
Nørre Å	56°27'N, 9°40'E	Fen peat	Reed canary grass-Fertilized paludiculture	2015/03	2017/03	8.6	755	-1	0-20	36	12	5.7-6.3	99 [82-116]	Kandel, T.P., et al., Methane fluxes from a rewetted agricultural fen during two initial years of paludiculture. Science of The Total Environment, 2020. 713: 136670.
Nørre Å	56°27'N, 9°40'E	Fen peat	Reed canary grass-Fertilized paludiculture	2015/03	2017/03	8.6	755	-3	0-20	36	12	5.7-6.3	52 [35-69]	Kandel, T.P., et al., Methane fluxes from a rewetted agricultural fen during two initial years of paludiculture. Science of The Total Environment, 2020. 713: 136670.
Nørre Å	56°27'N, 9°40'E	Fen peat	Reed canary grass-Fertilized paludiculture	2015/03	2017/03	8.6	755	-9	0-20	36	12	5.7-6.3	6[3-9]	Kandel, T.P., et al., Methane fluxes from a rewetted agricultural fen during two initial years of paludiculture. Science of The Total Environment, 2020. 713: 136670.
Odense River Basin	55°13'N, 10°17'E	Rewetted riparian wetland	creeping bentgrass	2015/03	2016/03	8.8	808	0	0-25	30		5.9-6.9	53	Kandel, T.P., et al., Complete annual CO <sub>2</sub> , CH <sub>4</sub> , and N <sub>2</sub> O balance of a temperate riparian wetland 12 years after rewetting. Ecological Engineering, 2019. 127: 527-535.

Nørre Å	56°44'N, 9°68'E	Fen peat	Spring barley	2010/09	2011/09	7.3	750	-40	0-30	36	12	6.1-7.1	0.01	Karki, S., et al., Full GHG balance of a drained fen peatland cropped to spring barley and reed canary grass using comparative assessment of CO <sub>2</sub> fluxes. Environmental monitoring and assessment, 2015. 187(3): 1-13.
Nørre Å	56°44'N, 9°68'E	Fen peat	Reed canary grass	2010/09	2011/09	7.3	750	-40	0-30	36	12	6.1-7.1	0.09	Karki, S., et al., Full GHG balance of a drained fen peatland cropped to spring barley and reed canary grass using comparative assessment of CO <sub>2</sub> fluxes. Environmental monitoring and assessment, 2015. 187(3): 1-13.
Nørre Å	56°44'N, 9°68'E	Fen peat	Reed canary grass	2012/07	2013/07	6.9	667	0	0-20	37.8	11.8		4.1	Karki, S., L. Elsgaard, and P.E. Lærke, Effect of reed canary grass cultivation on greenhouse gas emission from peat soil at controlled rewetting. Biogeosciences, 2015. 12(2): 595-606.
Nørre Å	56°44'N, 9°68'E	Fen peat	Reed canary grass	2013/05	2013/09	14.2	294	0	0-20	37.8	11.8		11.8	Karki, S., et al., Carbon balance of rewetted and drained peat soils used for biomass production: a mesocosm study. Gcb Bioenergy, 2016. 8(5): 969-980.
Nørre Å	56°44'N, 9°68'E	Fen peat	Reed canary grass	2013/05	2013/09	14.2	294	-10	0-20	37.8	11.8		6.2	Karki, S., et al., Carbon balance of rewetted and drained peat soils used for biomass production: a mesocosm study. Gcb Bioenergy, 2016. 8(5): 969-980.
Nørre Å	56°44'N, 9°68'E	Fen peat	Reed canary grass	2013/05	2013/09	14.2	294	-20	0-20	37.8	11.8		1.8	Karki, S., et al., Carbon balance of rewetted and drained peat soils used for biomass production: a mesocosm study. Gcb Bioenergy, 2016. 8(5): 969-980.

Nørre Å	56°44'N, 9°68'E	Fen peat	Reed canary grass	2013/05	2013/09	14.2	294	-30	0-20	37.8	11.8	0.6	Karki, S., et al., Carbon balance of rewetted and drained peat soils used for biomass production: a mesocosm study. <i>Gcb Bioenergy</i> , 2016. 8(5): 969-980.
Nørre Å	56°44'N, 9°68'E	Fen peat	Reed canary grass	2013/05	2013/09	14.2	294	-40	0-20	37.8	11.8	0	Karki, S., et al., Carbon balance of rewetted and drained peat soils used for biomass production: a mesocosm study. <i>Gcb Bioenergy</i> , 2016. 8(5): 969-980.
Oddebæk riparian wetland	55°55'N, 9°17'E	riparian wetland		2010/05	2011/12			9	0-30	7	17.4	42.7	Audet, J., et al., Greenhouse gas emissions from a Danish riparian wetland before and after restoration. <i>Ecological Engineering</i> , 2013. 57: 170-182.
Oddebæk riparian wetland	55°55'N, 9°17'E	riparian wetland		2010/05	2011/12			-41	0-30	33.4	24.1	-0.08	Audet, J., et al., Greenhouse gas emissions from a Danish riparian wetland before and after restoration. <i>Ecological Engineering</i> , 2013. 57: 170-182.
Oddebæk riparian wetland	55°55'N, 9°17'E	riparian wetland		2010/05	2011/12			-36	0-30	27	10	-0.16	Audet, J., et al., Greenhouse gas emissions from a Danish riparian wetland before and after restoration. <i>Ecological Engineering</i> , 2013. 57: 170-182.