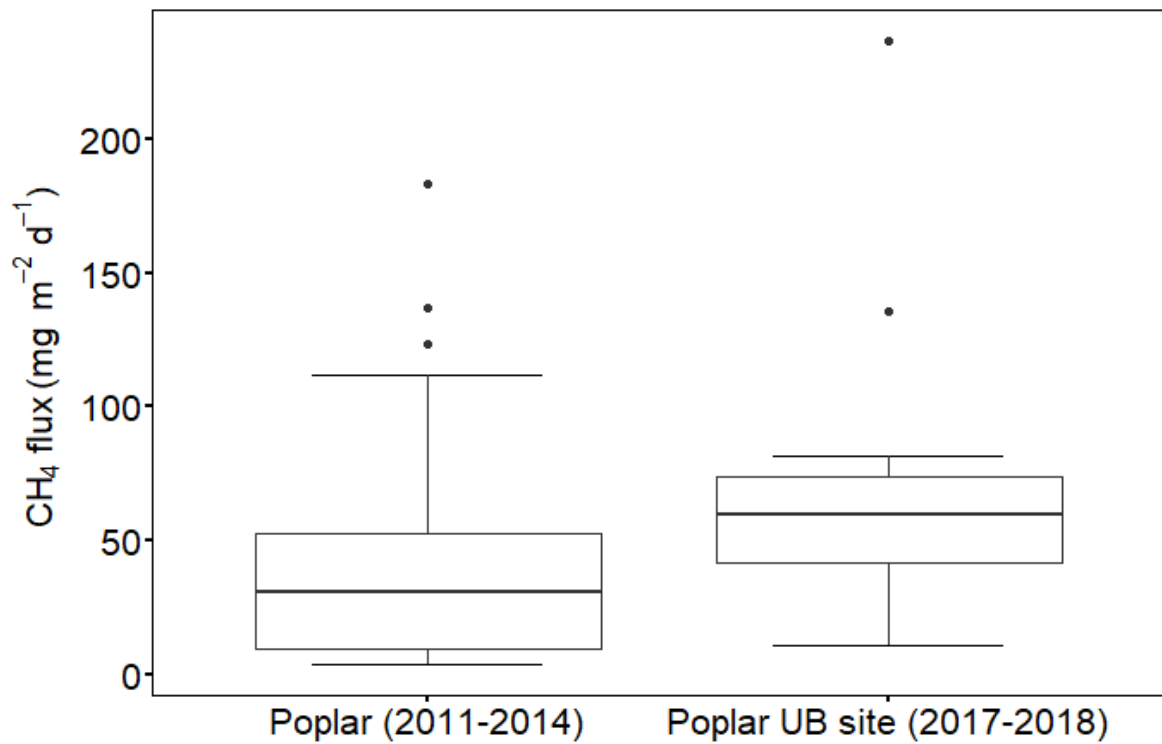
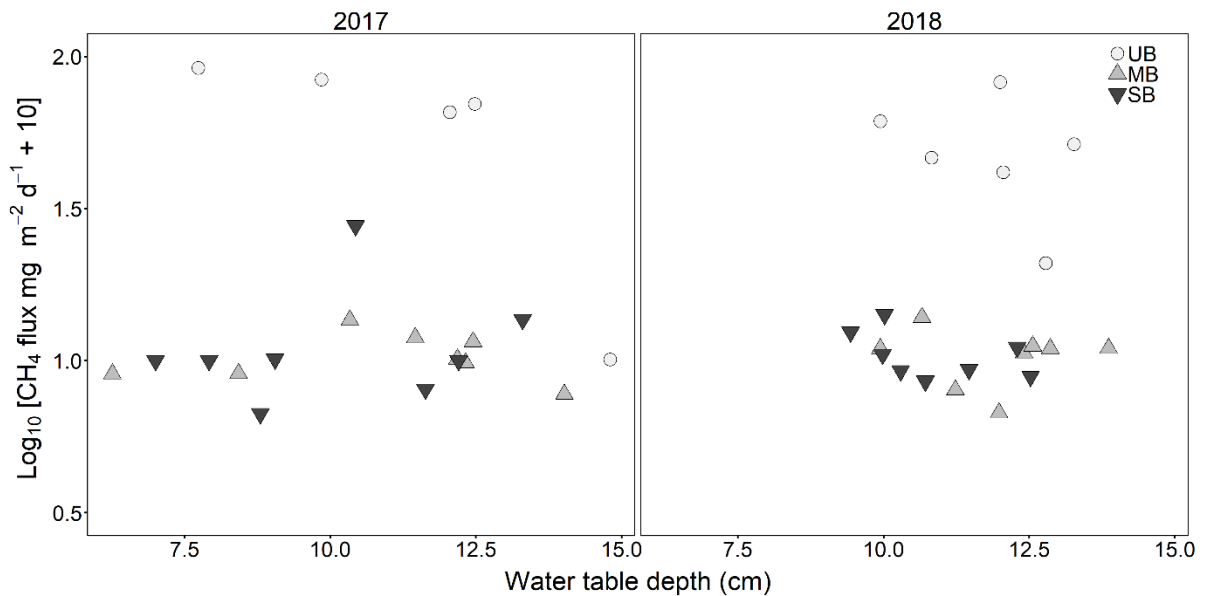
1 **Supplementary information**

3 **Figure S1. Comparison of CH₄ flux between a study conducted at Poplar Fen (2011-2014; Murray**
4 ***et al.*, 2017) and this study (UB site only)**

5

6 **Figure S2. Seasonal mean CH₄ flux (log transformed) at each collar across the burn severity**
7 **gradient plotted against seasonal mean ST at 30 cm depth. UB is unburned, MB is moderately**
8 **burned and SB is severely burned. Note that CH4 values were log transformed + 10 therefore a**
9 **value of 1 represents the measured value zero.**

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Table S1. Mean (standard deviation) gravimetric water content (%) and organic matter content by LOI (%) for each microform type across the burn severity gradient

Burn severity	Microform	Gravimetric water content (%)	Organic matter content (%)
UB	Hollow	84.8 (10.3)	89.3 (3.3)
	Hummock	83.5 (12.1)	89.0 (2.3)
MB	Hollow	77.5 (3.9)	82.2 (1.9)
	Hummock	83.2 (8.0)	90.9 (2.7)
SB	Hollow	88.4 (2.5)	87.7 (2.8)
	Hummock	89.6 (2.4)	92.2 (2.9)

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