Supplementary Materials: Integrated Mosquito Management in Experimental Constructed Wetlands: Efficacy of Small-Stature Macrophytes and Fluctuating Hydroperiod

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Table S1. ANOVA results of the effect of hydroperiod treatment on vegetation density and height.

Source	MS	*F*	df	*P*
November *B. maritimus* density				
Hydroperiod	135.20	1.32	1,4	>0.25
Cells (Hydroperiod)	102.38	5.19	4,12	<0.025
Bands (Cells)	19.71	1.28	12,162	>0.25
Error	15.34			
July *B. maritimus* density				
Hydroperiod	1.42	0.03	1,4	>0.5
Cells (Hydroperiod)	48.57	0.93	4,12	>0.4
Bands (Cells)	52.36	5.77	12,162	<0.001
Error	9.08			
July *E. crus-galli* density				
Hydroperiod	1075.56	1.82	1,4	<0.25
Cells (Hydroperiod)	590.22	1.50	4,12	>0.1
Bands (Cells)	394.32	9.86	12,162	<0.001
Error	39.98			
November *B. maritimus* height				
Hydroperiod	270.06	0.11	1,4	<0.5
Cells (Hydroperiod)	2395.31	0.83	4,12	>0.5
Bands (Cells)	2863.78	5.85	12,222	<0.001
Error	489.16			
July *B. maritimus* height				
Hydroperiod	2843.70	0.39	1,4	<0.5
Cells (Hydroperiod)	7353.68	1.75	4,6	<0.25
Bands (Cells)	4202.68	5.63	6,186	<0.001
Error	746.66			
July *E. crus-galli* height				
Hydroperiod	69744.0	3.67	1,4	>0.1
Cells (Hydroperiod)	19016.7	1.77	4,9	>0.1
Bands (Cells)	10718.5	2.76	9,395	<0.005
Error	3889.3			

Table S2. ANOVA and repeated-measures ANOVA results of the effect of hydroperiod treatment on water quality constituents.

Date	Constituent	Source	MS	Wilk's λ ‡	*F* *	*P*
November (Before manipulation)	NH4-N	Treatment	0.003		0.29	0.63
	NOx †	Treatment	1.124		0.44	0.55
	TN	Treatment	0.004		0.002	0.96
	TP	Treatment	0.007		0.04	0.84
	COD	Treatment	1252.8		24.64	0.008
December–February (During manipulation)	NH4-N	Treatment	0.497		5.35	0.10
		Date	1.20		7.66	0.07
		Date*treatment	0.212		1.35	0.33
	NOx	Treatment	0.318		0.29	0.63
		Date	16.04		9.29	0.06
		Date*treatment	1.83		1.06	0.38
	TN	Treatment	7.79		5.06	0.11
		Date	48.24		25.27	0.02
		Date*treatment	3.03		1.59	0.30
	TP	Treatment	4.60		5.24	0.11
		Date	13.31		34.69	0.01
		Date*treatment	4.54		11.83	0.04
	COD	Treatment	3975.6		4.67	0.12
		Date	3168.3		0.62	0.49
		Date*treatment	0.04		<0.001	0.99
April–May (After manipulation: spring)	NH4-N	Treatment	0.013		5.09	0.09
		Date	0.05		22.23	0.01
		Date*treatment	0.002		1.27	0.32
	NOx	Treatment	0.193		1.37	0.31
		Date	40.83		305.6	<0.0001
		Date*treatment	0.03		0.25	0.64
	TN	Treatment	0.095		0.44	0.54
		Date	37.2		163.6	0.0002
		Date*treatment	0.029		0.13	0.74
	TP	Treatment	1.48		6.11	0.07
		Date	5.31		17.44	0.01
		Date*treatment	2.29		7.52	0.05
	COD	Treatment	706.9		0.58	0.49
		Date	202.5		3.25	0.15
		Date*treatment	25.5		0.41	0.56
June–August (After manipulation: summer)	NH4-N	Treatment	0.0002		0.02	0.89
		Date		0.222	5.26	0.10
		Date*treatment		0.562	1.17	0.42
	NOx	Treatment	0.020		0.002	0.96
		Date		0.36	2.68	0.21
		Date*treatment		0.862	0.24	0.91
	TN	Treatment	0.144		0.02	0.90
		Date		0.242	4.71	0.12
		Date*treatment		0.948	0.083	0.92
	TP	Treatment	0.049		0.66	0.46
		Date		0.068	20.64	0.014
		Date*treatment		0.928	0.12	0.89
	COD	Treatment	41.10		0.79	0.42
		Date		0.063	22.32	0.016
		Date*treatment		0.075	0.51	0.64

† NO_x = [NO_2-N + NO_3-N]; ‡ df = 2,3; * df = 1,4.

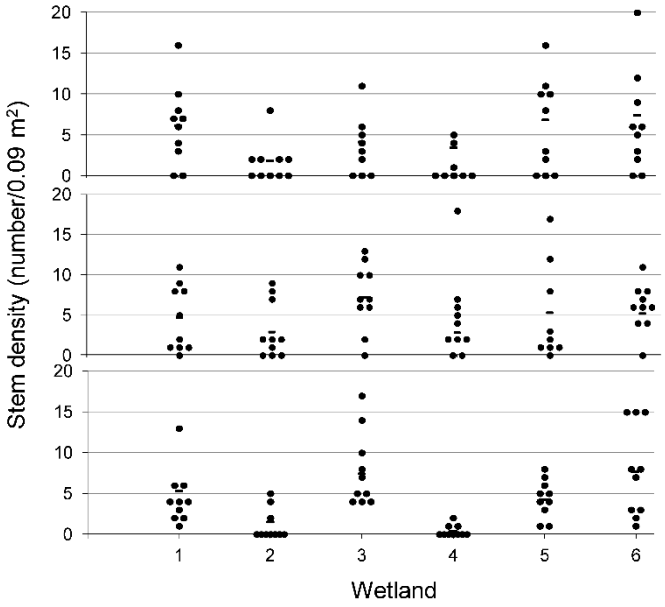

Figure S1. Abundance of *Bolboschoenus maritimus* in thirty 0.09 m² quadrats in three bands (top panel = inflow band, middle panel = center band and lower panel = outflow band) of vegetation in each test cell in November 2012.

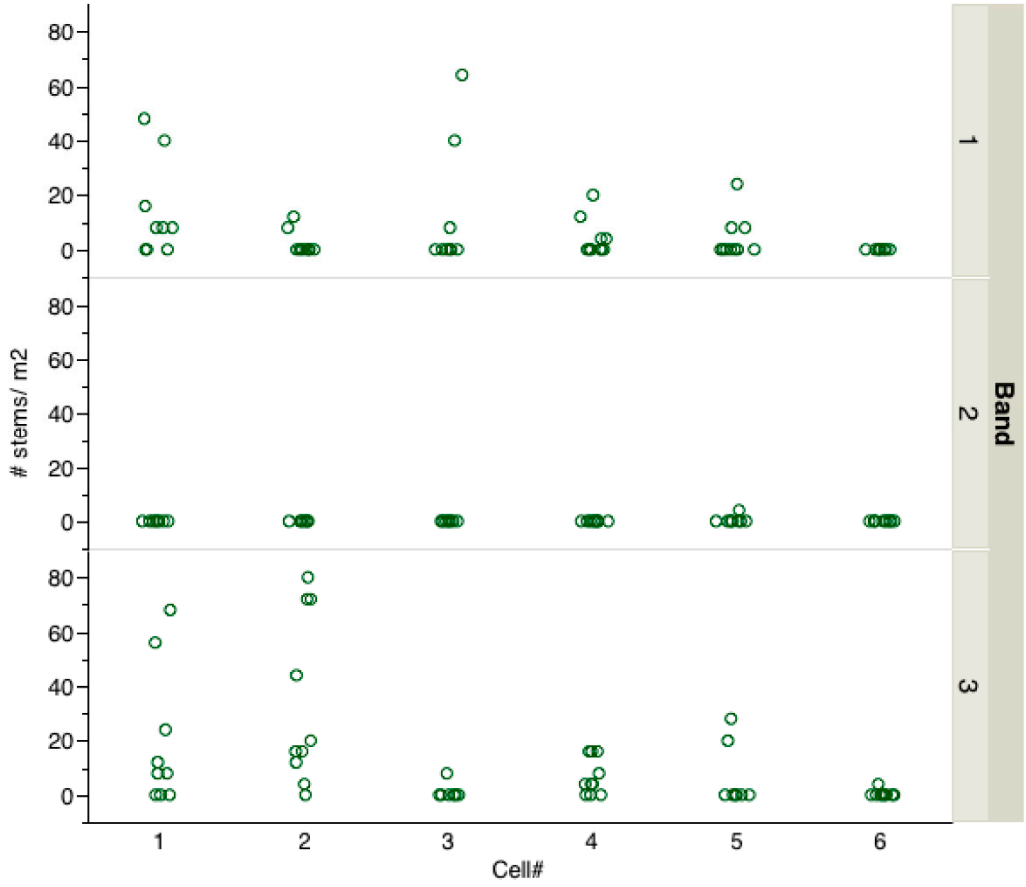

Figure S2. Abundance of *Bolboschoenus maritimus* in thirty 0.09 m² quadrats in three bands (top panel = inflow band, middle panel = center band and lower panel = outflow band) of vegetation in each test cell in July 2013.

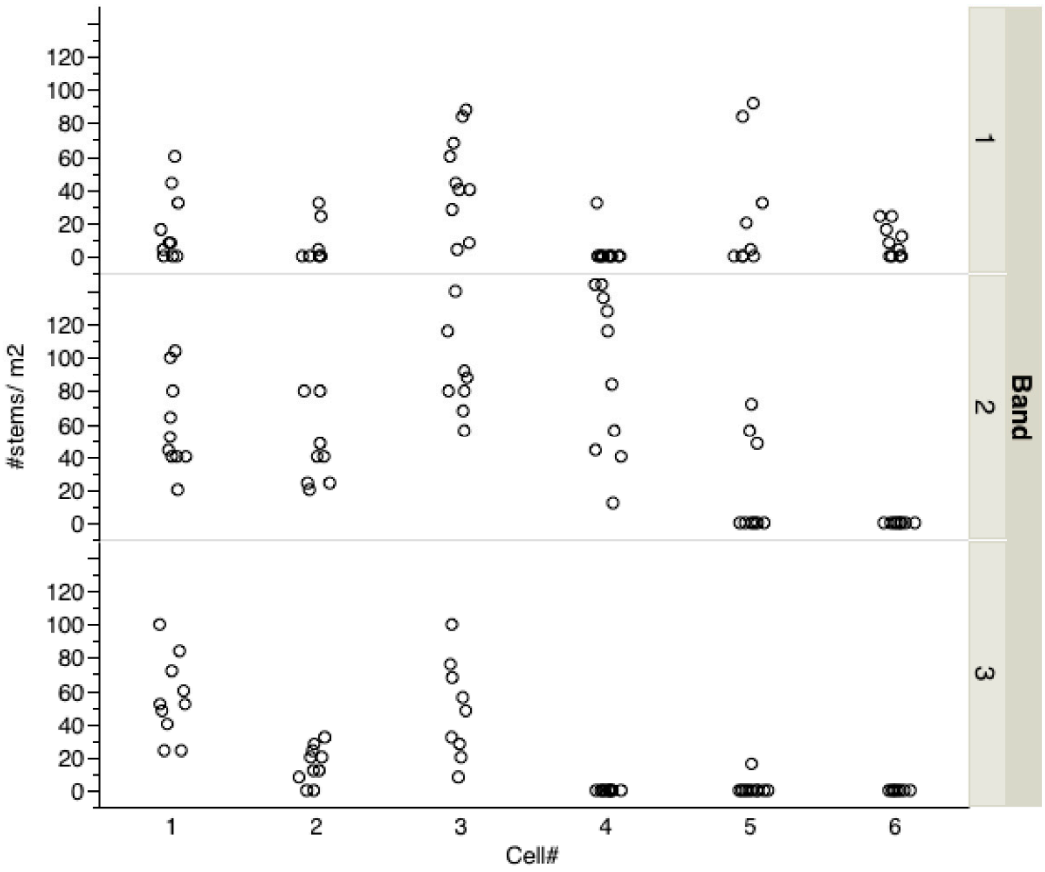

Figure S3. Abundance of invasive vegetation (primarily *Echinocloa crus-galli*) in thirty 0.09 m^2 quadrats in three bands (top panel = inflow band, middle panel = center band and lower panel = outflow band) of vegetation in each test cell in July 2013.