

Supplementary material

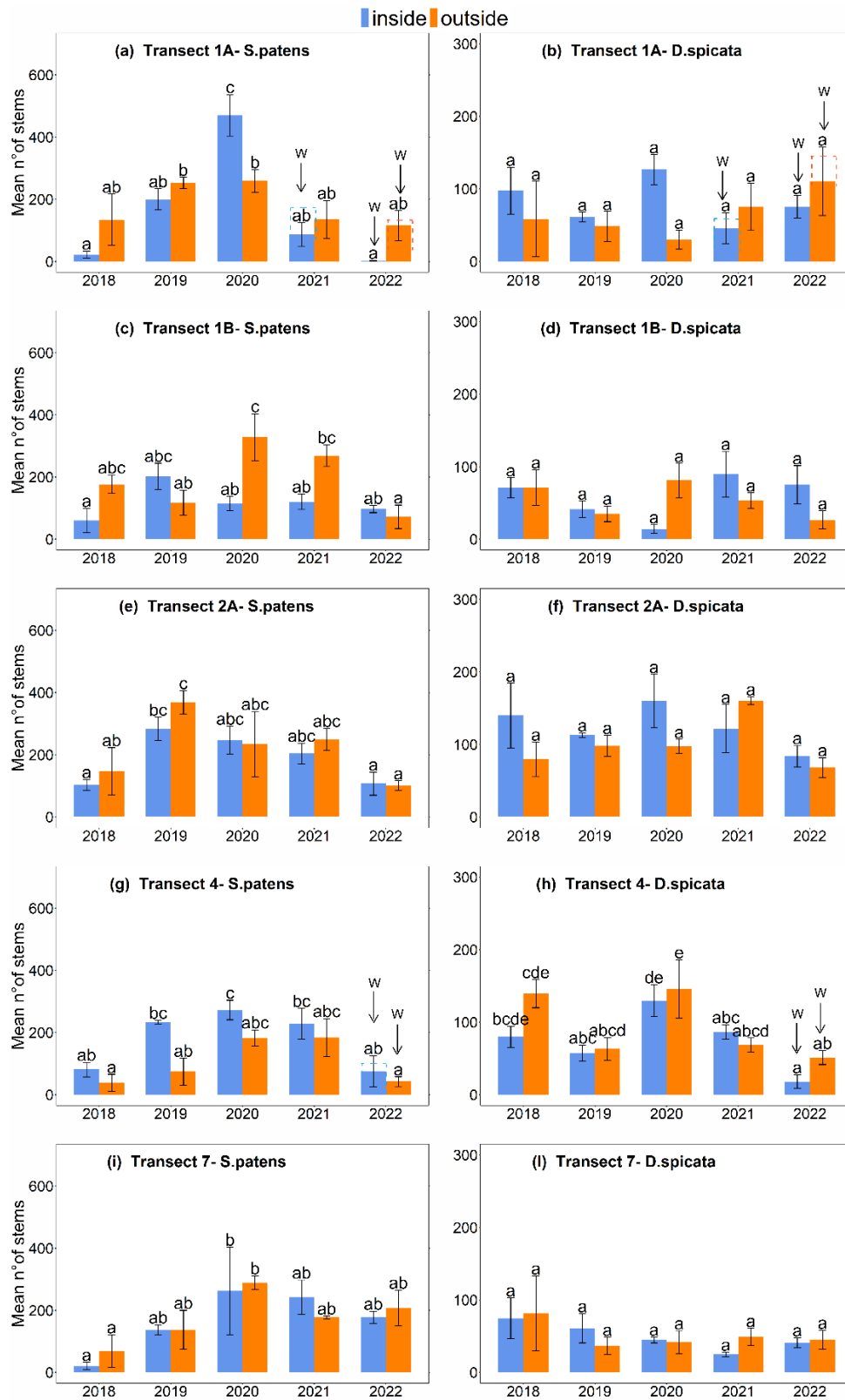


Figure S1a: Number of stems of *Spartina patens* and *Distichlis spicata* inside and outside the sediment patches over the years. Letters over the bars identify post-hoc Tukey test results. W identifies wrack presence and dotted lines correspond to the values without plots affected by wrack.

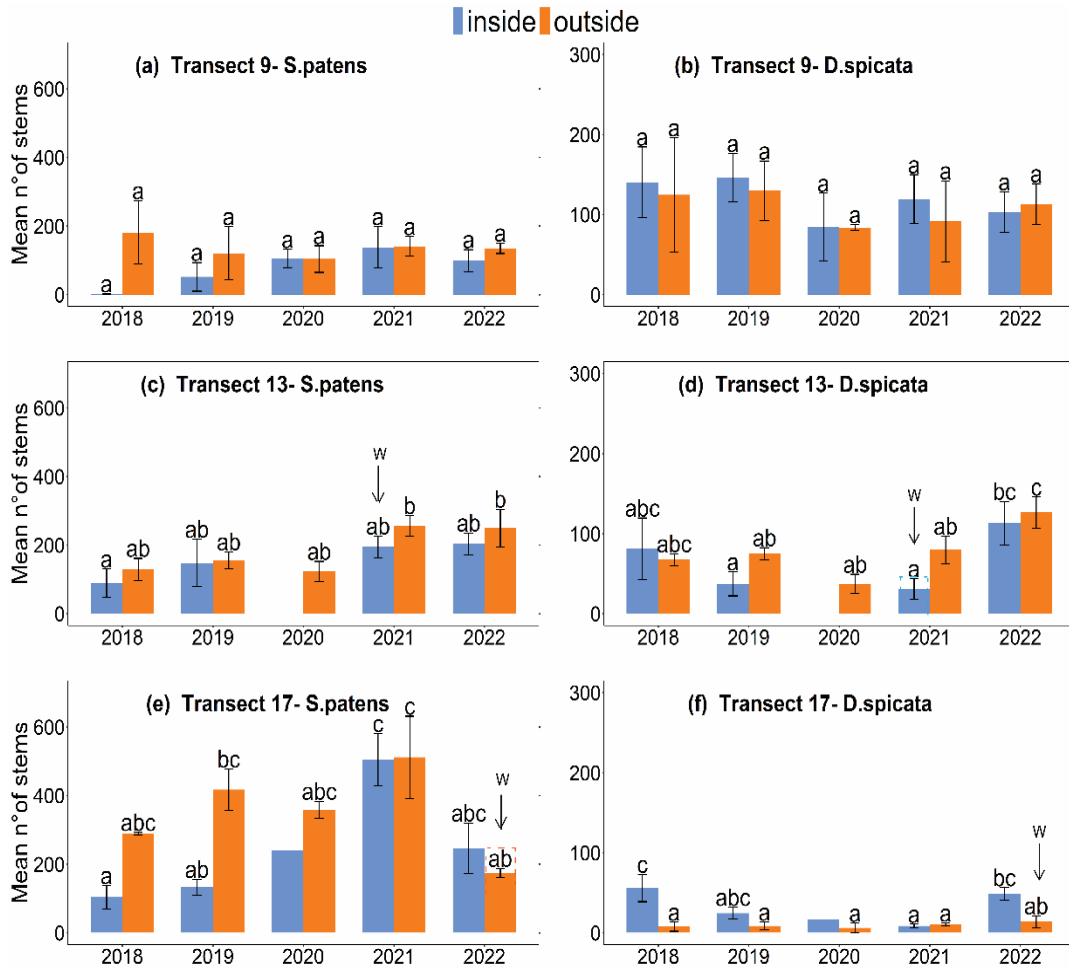


Figure S1b: Number of stems of *Spartina patens* and *Distichlis spicata* inside and outside the sediment patches over the years. Letters over the bars identify post-hoc Tukey test results. W identifies wrack presence and dotted lines correspond to the values without plots affected by wrack.

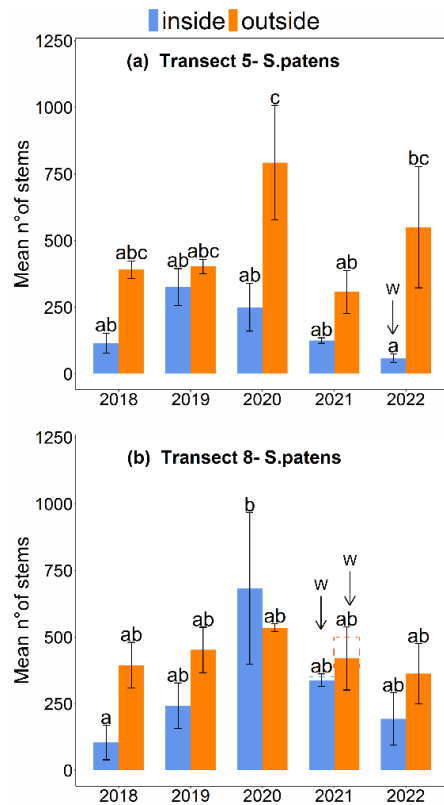


Figure S2: Number of stems of *Spartina patens* inside and outside the patches 5 and 8. Letters over the bars identify post-hoc Tukey test results. W identifies wrack presence and dotted lines correspond to the values without plots affected by wrack.

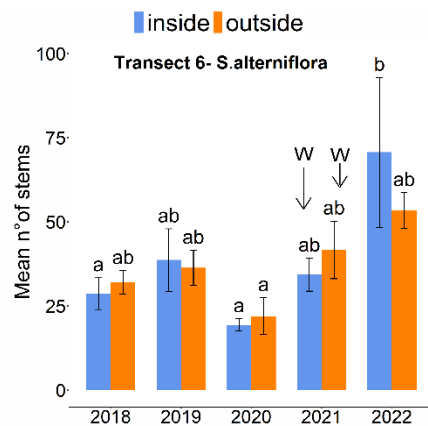


Figure S3: Number of stems of *Spartina alterniflora* inside and outside the patch in transect 10 over the years. Letters over the bars identify post-hoc Tukey test results. W identifies wrack presence and dotted lines correspond to the values without plots affected by wrack.

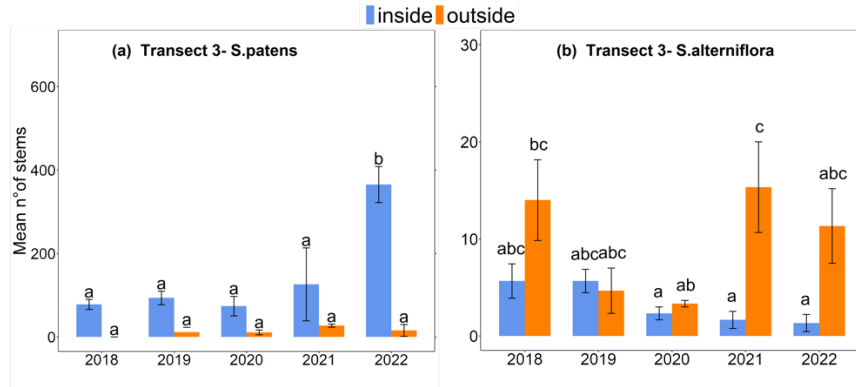


Figure S4: Number of stems of *Spartina patens* and *Spartina alterniflora* inside and outside the patch in transect 3. Letters over the bars identify post-hoc Tukey test results. W identifies wrack presence and dotted lines correspond to the values without plots affected by wrack.

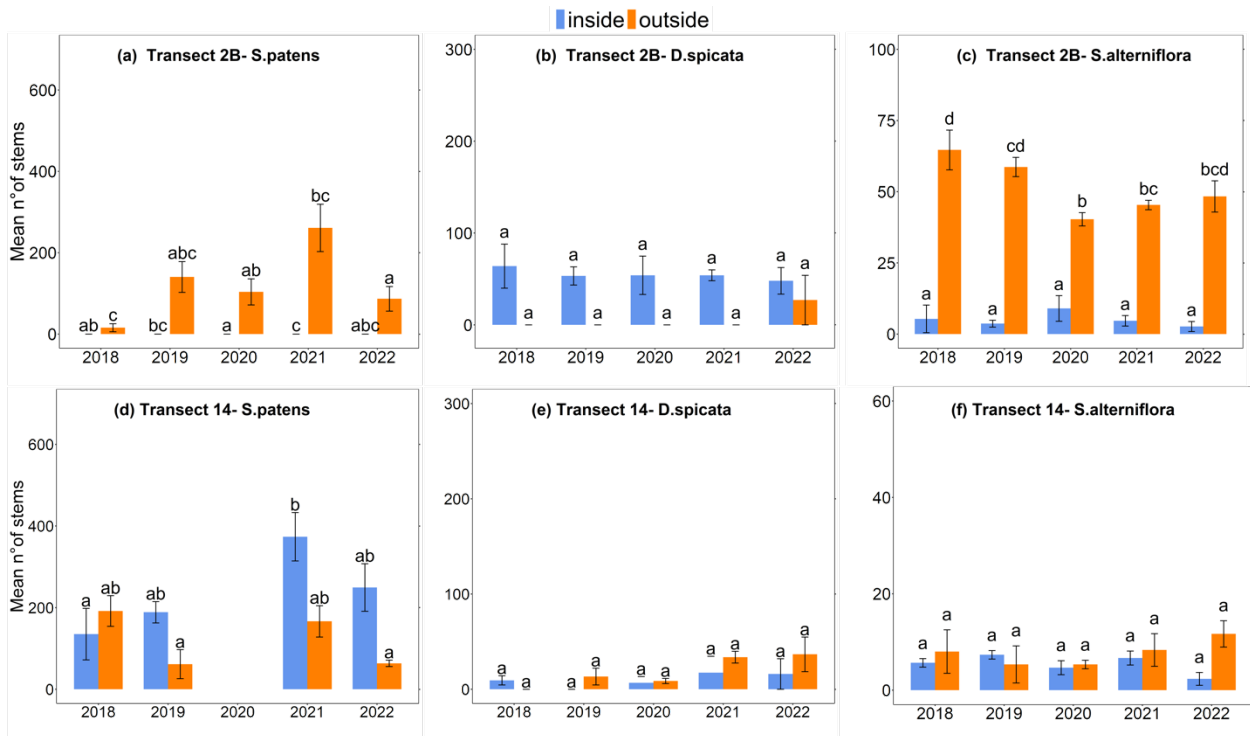


Figure S5: Number of stems of *Spartina patens*, *Distichlis spicata* and *Spartina alterniflora* inside and outside the sediment patch of transect 2B and 14. Letters over the bars identify post-hoc Tukey test results. W identifies wrack presence and dotted lines correspond to the values without plots affected by wrack.

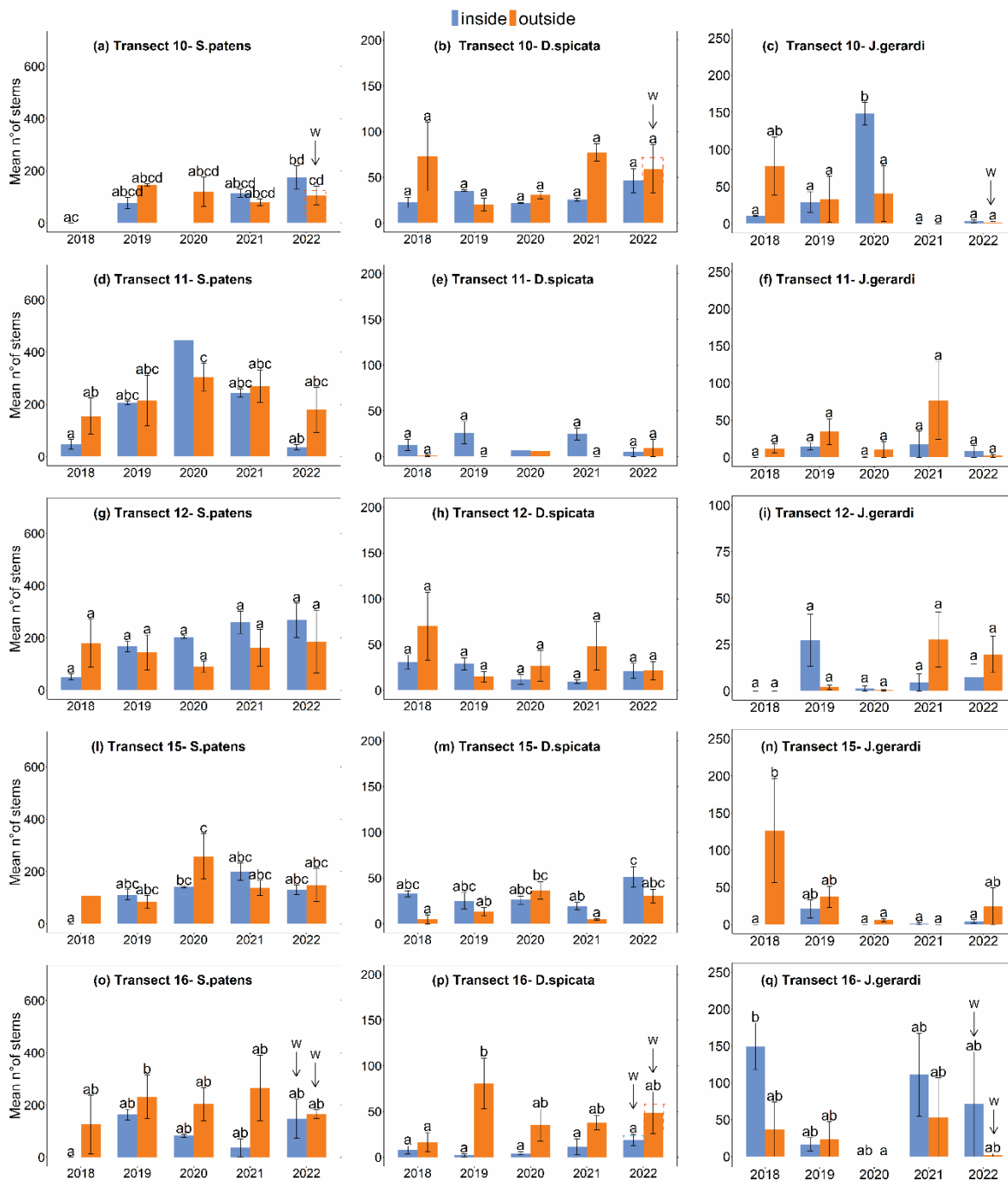


Figure S6: Number of stems of *Spartina patens*, *Distichlis spicata* and *Juncus gerardi* inside and outside the sediment patch of transect 10, 11, 12, 15 and 16. Letters over the bars identify post-hoc Tukey test results. W identifies wrack presence and dotted lines correspond to the values without plots affected by wrack.

Table S1: Summary results of two-way ANOVA model for number of stems of *Spartina patens* outside and inside over years for each patch: stems~position+year+position:year. Position and year are main effects and position:year represents the interaction. Bold text is used to identify significant difference in the levels of each effect.

Transect	Test	Position	Year	Position: Year
1A	<i>F</i> value	0.61 ($F_{crit}=2.97$)	15.10 ($F_{crit}=2.25$)	4.18 ($F_{crit}=2.25$)
	<i>p</i> value	0.44 ($\alpha_{crit}=0.1$)	7.70*10⁻² ($\alpha_{crit}=0.1$)	1.30*10⁻² ($\alpha_{crit}=0.1$)
1B	<i>F</i> value	8.79 ($F_{crit}=2.97$)	3.97 ($F_{crit}=2.25$)	4.97 ($F_{crit}=2.25$)
	<i>p</i> value	7.60*10⁻³ ($\alpha_{crit}=0.1$)	1.60*10⁻² ($\alpha_{crit}=0.1$)	6.00*10⁻³ ($\alpha_{crit}=0.1$)
2A	<i>F</i> value	0.91 ($F_{crit}=2.97$)	6.32 ($F_{crit}=2.25$)	0.31 ($F_{crit}=2.25$)
	<i>p</i> value	0.35 ($\alpha_{crit}=0.1$)	2.00*10⁻³ ($\alpha_{crit}=0.1$)	0.87 ($\alpha_{crit}=0.1$)
2B	<i>F</i> value	-	7.13 ($F_{crit}=2.18$)	-
	<i>p</i> value	-	5.60*10⁻⁴ ($\alpha_{crit}=0.1$)	-
3	<i>F</i> value	41.61 ($F_{crit}=2.97$)	7.41 ($F_{crit}=2.25$)	6.67 ($F_{crit}=2.25$)
	<i>p</i> value	2.73*10⁻⁶ ($\alpha_{crit}=0.1$)	7.80*10⁻⁴ ($\alpha_{crit}=0.1$)	1.30*10⁻³ ($\alpha_{crit}=0.1$)
4	<i>F</i> value	9.80 ($F_{crit}=2.97$)	9.02 ($F_{crit}=2.25$)	0.99 ($F_{crit}=2.25$)
	<i>p</i> value	5.30*10⁻³ ($\alpha_{crit}=0.1$)	2.50*10⁻⁴ ($\alpha_{crit}=0.1$)	0.44 ($\alpha_{crit}=0.1$)
5	<i>F</i> value	25.48 ($F_{crit}=2.98$)	3.21 ($F_{crit}=2.27$)	2.10 ($F_{crit}=2.27$)
	<i>p</i> value	7.15*10⁻⁵ ($\alpha_{crit}=0.1$)	4.00*10⁻² ($\alpha_{crit}=0.1$)	0.12 ($\alpha_{crit}=0.1$)
7	<i>F</i> value	4.80*10 ⁻² ($F_{crit}=2.97$)	4.36 ($F_{crit}=2.25$)	0.29 ($F_{crit}=2.25$)
	<i>p</i> value	0.83 ($\alpha_{crit}=0.1$)	1.00*10⁻² ($\alpha_{crit}=0.1$)	0.88 ($\alpha_{crit}=0.1$)
8	<i>F</i> value	2.52 ($F_{crit}=2.97$)	2.79 ($F_{crit}=2.25$)	0.97 ($F_{crit}=2.25$)
	<i>p</i> value	0.13 ($\alpha_{crit}=0.1$)	5.00*10⁻² ($\alpha_{crit}=0.1$)	0.44 ($\alpha_{crit}=0.1$)
9	<i>F</i> value	3.37 ($F_{crit}=2.97$)	0.38 ($F_{crit}=2.25$)	1.13 ($F_{crit}=2.25$)
	<i>p</i> value	8.00*10⁻² ($\alpha_{crit}=0.1$)	0.82 ($\alpha_{crit}=0.1$)	0.37 ($\alpha_{crit}=0.1$)
10	<i>F</i> value	0.53 ($F_{crit}=3.10$)	3.45 ($F_{crit}=2.39$)	1.97 ($F_{crit}=2.39$)
	<i>p</i> value	0.48 ($\alpha_{crit}=0.1$)	4.00*10⁻² ($\alpha_{crit}=0.1$)	0.18 ($\alpha_{crit}=0.1$)
11	<i>F</i> value	1.69 ($F_{crit}=3.05$)	4.28 ($F_{crit}=2.33$)	1.06 ($F_{crit}=2.33$)
	<i>p</i> value	0.21 ($\alpha_{crit}=0.1$)	1.50*10⁻² ($\alpha_{crit}=0.1$)	0.41 ($\alpha_{crit}=0.1$)
12	<i>F</i> value	0.87 ($F_{crit}=2.97$)	1.09 ($F_{crit}=2.25$)	1.25 ($F_{crit}=2.25$)
	<i>p</i> value	0.36 ($\alpha_{crit}=0.1$)	0.39 ($\alpha_{crit}=0.1$)	0.32 ($\alpha_{crit}=0.1$)
13	<i>F</i> value	0.75 ($F_{crit}=3.01$)	3.69 ($F_{crit}=2.29$)	0.15 ($F_{crit}=2.29$)
	<i>p</i> value	0.40 ($\alpha_{crit}=0.1$)	2.30*10⁻² ($\alpha_{crit}=0.1$)	0.93 ($\alpha_{crit}=0.1$)
14	<i>F</i> value	8.84 ($F_{crit}=3.10$)	4.90 ($F_{crit}=2.39$)	2.65 ($F_{crit}=2.39$)
	<i>p</i> value	1.00*10⁻² ($\alpha_{crit}=0.1$)	1.00*10⁻² ($\alpha_{crit}=0.1$)	7.80*10⁻² ($\alpha_{crit}=0.1$)

15	<i>F value</i>	1.88 ($F_{crit}= 3.01$)	4.16 ($F_{crit}= 2.29$)	1.69 ($F_{crit}= 2.29$)
	<i>p value</i>	0.19 ($\alpha_{crit}= 0.1$)	1.50*10⁻² ($\alpha_{crit}= 0.1$)	0.20 ($\alpha_{crit}= 0.1$)
16	<i>F value</i>	6.69 ($F_{crit}= 2.97$)	1.03 ($F_{crit}= 2.25$)	0.66 ($F_{crit}= 2.25$)
	<i>p value</i>	1.80*10⁻² ($\alpha_{crit}= 0.1$)	0.42 ($\alpha_{crit}= 0.1$)	0.63 ($\alpha_{crit}= 0.1$)
17	<i>F value</i>	5.78 ($F_{crit}= 3.05$)	8.85 ($F_{crit}= 2.33$)	2.52 ($F_{crit}= 2.33$)
	<i>p value</i>	2.90*10⁻² ($\alpha_{crit}= 0.1$)	5.70*10⁻⁴ ($\alpha_{crit}= 0.1$)	8.20*10⁻² ($\alpha_{crit}= 0.1$)

Table S2: Summary results of two-way ANOVA model for number of stems of *Distichlis spicata* outside and inside over years for each patch: stems~position+year+position:year. Position and year are main effects and position:year represents the interaction. Bold text is used to identify significant difference in the levels of each effect.

Transect	Test	Position	Year	Position: Year
1A	<i>F value</i>	0.79 ($F_{crit}= 2.97$)	0.53 ($F_{crit}= 2.25$)	1.67 ($F_{crit}= 2.25$)
	<i>p value</i>	0.39 ($\alpha_{crit}= 0.1$)	0.71 ($\alpha_{crit}= 0.1$)	0.20 ($\alpha_{crit}= 0.1$)
1B	<i>F value</i>	0.15 ($F_{crit}= 2.97$)	1.21 ($F_{crit}= 2.25$)	2.78 ($F_{crit}= 2.25$)
	<i>p value</i>	0.70 ($\alpha_{crit}= 0.1$)	0.34 ($\alpha_{crit}= 0.1$)	5.00*10⁻² ($\alpha_{crit}= 0.1$)
2A	<i>F value</i>	2.24 ($F_{crit}= 2.97$)	2.13 ($F_{crit}= 2.25$)	1.47 ($F_{crit}= 2.25$)
	<i>p value</i>	0.15 ($\alpha_{crit}= 0.1$)	0.11 ($\alpha_{crit}= 0.1$)	0.25 ($\alpha_{crit}= 0.1$)
2B	<i>F value</i>	-	0.10 ($F_{crit}= 2.18$)	-
	<i>p value</i>	-	0.98 ($\alpha_{crit}= 0.1$)	-
3	<i>F value</i>	21.24 ($F_{crit}= 2.97$)	15.43 ($F_{crit}= 2.25$)	16.04 ($F_{crit}= 2.25$)
	<i>p value</i>	1.70*10⁻⁴ ($\alpha_{crit}= 0.1$)	6.58*10⁻⁶ ($\alpha_{crit}= 0.1$)	4.95*10⁻⁶ ($\alpha_{crit}= 0.1$)
4	<i>F value</i>	2.69 ($F_{crit}= 2.97$)	9.50 ($F_{crit}= 2.25$)	1.23 ($F_{crit}= 2.25$)
	<i>p value</i>	0.12 ($\alpha_{crit}= 0.1$)	1.80*10⁻⁴ ($\alpha_{crit}= 0.1$)	0.33 ($\alpha_{crit}= 0.1$)
7	<i>F value</i>	1.30*10 ⁻² ($F_{crit}= 2.97$)	1.13 ($F_{crit}= 2.25$)	0.33 ($F_{crit}= 2.25$)
	<i>p value</i>	0.91 ($\alpha_{crit}= 0.1$)	0.37 ($\alpha_{crit}= 0.1$)	0.85 ($\alpha_{crit}= 0.1$)
9	<i>F value</i>	0.16 ($F_{crit}= 2.97$)	0.60 ($F_{crit}= 2.25$)	6.80*10 ⁻² ($F_{crit}= 2.25$)
	<i>p value</i>	0.69 ($\alpha_{crit}= 0.1$)	0.67 ($\alpha_{crit}= 0.1$)	0.99 ($\alpha_{crit}= 0.1$)
10	<i>F value</i>	4.73 ($F_{crit}= 2.97$)	1.38 ($F_{crit}= 2.25$)	1.66 ($F_{crit}= 2.25$)
	<i>p value</i>	4.20*10⁻² ($\alpha_{crit}= 0.1$)	0.28 ($\alpha_{crit}= 0.1$)	0.20 ($\alpha_{crit}= 0.1$)
11	<i>F value</i>	10.11 ($F_{crit}= 3.07$)	0.35 ($F_{crit}= 2.36$)	1.70 ($F_{crit}= 2.36$)
	<i>p value</i>	6.20*10⁻³ ($\alpha_{crit}= 0.1$)	0.84 ($\alpha_{crit}= 0.1$)	0.20 ($\alpha_{crit}= 0.1$)
12	<i>F value</i>	2.36 ($F_{crit}= 2.97$)	1.23 ($F_{crit}= 2.25$)	1.04 ($F_{crit}= 2.25$)
	<i>p value</i>	0.14 ($\alpha_{crit}= 0.1$)	0.33 ($\alpha_{crit}= 0.1$)	0.41 ($\alpha_{crit}= 0.1$)
13	<i>F value</i>	0.76 ($F_{crit}= 3.00$)	4.71 ($F_{crit}= 2.89$)	0.96 ($F_{crit}= 2.89$)

	<i>p value</i>	0.40 ($\alpha_{crit}= 0.1$)	8.90*10⁻³ ($\alpha_{crit}= 0.1$)	0.43 ($\alpha_{crit}= 0.1$)
14	<i>F value</i>	1.72 ($F_{crit}= 2.97$)	2.16 ($F_{crit}= 2.25$)	0.69 ($F_{crit}= 2.25$)
	<i>p value</i>	0.21 ($\alpha_{crit}= 0.1$)	0.11 ($\alpha_{crit}= 0.1$)	0.61 ($\alpha_{crit}= 0.1$)
15	<i>F value</i>	9.86 ($F_{crit}= 2.97$)	6.03 ($F_{crit}= 2.25$)	2.37 ($F_{crit}= 2.25$)
	<i>p value</i>	5.50*10⁻³ ($\alpha_{crit}= 0.1$)	2.40*10⁻³ ($\alpha_{crit}= 0.1$)	9.00*10⁻² ($\alpha_{crit}= 0.1$)
16	<i>F value</i>	15.97 ($F_{crit}= 2.97$)	1.37 ($F_{crit}= 2.25$)	1.78 ($F_{crit}= 2.25$)
	<i>p value</i>	7.10*10⁻⁴ ($\alpha_{crit}= 0.1$)	0.28 ($\alpha_{crit}= 0.1$)	0.17 ($\alpha_{crit}= 0.1$)
17	<i>F value</i>	19.59 ($F_{crit}= 2.97$)	3.14 ($F_{crit}= 2.25$)	2.97 ($F_{crit}= 2.25$)
	<i>p value</i>	3.70*10⁻⁴ ($\alpha_{crit}= 0.1$)	4.20*10⁻² ($\alpha_{crit}= 0.1$)	5.00*10⁻² ($\alpha_{crit}= 0.1$)

Table S3: Summary results of two-way ANOVA model for number of stems of *Spartina alterniflora* outside and inside over years for each patch: stems~position+year+position:year. Position and year are main effects and position:year represents the interaction. Bold text is used to identify significant difference in the levels of each effect.

Transect	Test	Position	Year	Position: Year
2B	<i>F value</i>	2.83 ($F_{crit}= 2.97$)	358.03 ($F_{crit}= 2.25$)	4.17 ($F_{crit}= 2.25$)
	<i>p value</i>	5.00*10⁻² ($\alpha_{crit}= 0.1$)	3.10*10⁻¹⁴ ($\alpha_{crit}= 0.1$)	1.00*10⁻² ($\alpha_{crit}= 0.1$)
3	<i>F value</i>	15.52 ($F_{crit}= 2.97$)	2.30 ($F_{crit}= 2.25$)	2.90 ($F_{crit}= 2.25$)
	<i>p value</i>	8.20*10⁻⁴ ($\alpha_{crit}= 0.1$)	9.00*10⁻² ($\alpha_{crit}= 0.1$)	5.00*10⁻² ($\alpha_{crit}= 0.1$)
6	<i>F value</i>	0.05 ($F_{crit}= 2.97$)	5.83 ($F_{crit}= 2.25$)	0.58 ($F_{crit}= 2.25$)
	<i>p value</i>	0.83 ($\alpha_{crit}= 0.1$)	2.80*10⁻³ ($\alpha_{crit}= 0.1$)	0.68 ($\alpha_{crit}= 0.1$)
14	<i>F value</i>	0.29 ($F_{crit}= 2.97$)	2.31 ($F_{crit}= 2.25$)	1.42 ($F_{crit}= 2.25$)
	<i>p value</i>	0.88 ($\alpha_{crit}= 0.1$)	0.44 ($\alpha_{crit}= 0.1$)	0.26 ($\alpha_{crit}= 0.1$)

Table S4: Summary results of two-way ANOVA model for number of stems of *Juncus gerardi* outside and inside over years for each patch: stems~position+year+position:year. Position and year are main effects and position:year represents the interaction. Bold text is used to identify significant difference in the levels of each effect.

Transect	Test	Position	Year	Position: Year
10	<i>F value</i>	6.80 ($F_{crit}= 2.97$)	0.33 ($F_{crit}= 2.25$)	4.59 ($F_{crit}= 2.25$)
	<i>p value</i>	1.30*10⁻³ ($\alpha_{crit}= 0.1$)	0.57 ($\alpha_{crit}= 0.1$)	8.60*10⁻³ ($\alpha_{crit}= 0.1$)
11	<i>F value</i>	1.79 ($F_{crit}= 2.99$)	2.57 ($F_{crit}= 2.27$)	0.74 ($F_{crit}= 2.27$)
	<i>p value</i>	0.17 ($\alpha_{crit}= 0.1$)	0.13 ($\alpha_{crit}= 0.1$)	0.58 ($\alpha_{crit}= 0.1$)
12	<i>F value</i>	2.12 ($F_{crit}= 2.97$)	0.14 ($F_{crit}= 2.25$)	2.75 ($F_{crit}= 2.25$)
	<i>p value</i>	0.12 ($\alpha_{crit}= 0.1$)	0.72($\alpha_{crit}= 0.1$)	5.70*10⁻² ($\alpha_{crit}= 0.1$)

15	<i>F value</i>	2.22 ($F_{\text{crit}} = 2.97$)	4.75 ($F_{\text{crit}} = 2.25$)	2.34 ($F_{\text{crit}} = 2.25$)
	<i>p value</i>	0.10 ($\alpha_{\text{crit}} = 0.1$)	4.10*10⁻² ($\alpha_{\text{crit}} = 0.1$)	9.00*10⁻² ($\alpha_{\text{crit}} = 0.1$)
16	<i>F value</i>	2.27 ($F_{\text{crit}} = 2.97$)	3.82 ($F_{\text{crit}} = 2.25$)	0.89 ($F_{\text{crit}} = 2.25$)
	<i>p value</i>	0.10 ($\alpha_{\text{crit}} = 0.1$)	6.50*10⁻² ($\alpha_{\text{crit}} = 0.1$)	0.49 ($\alpha_{\text{crit}} = 0.1$)

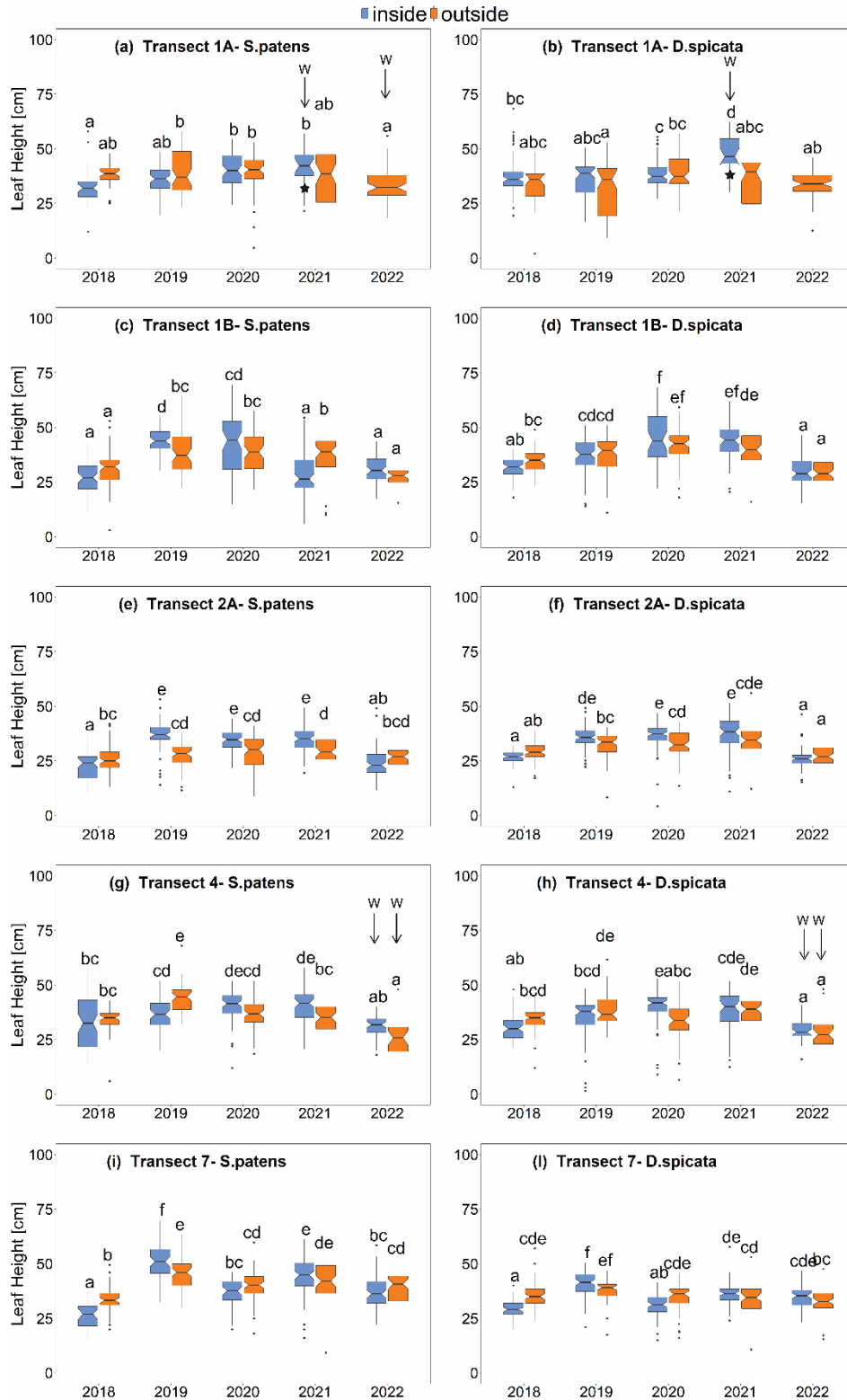


Figure S7a: Stem height of *Spartina patens* and *Distichlis spicata* inside and outside each sediment patch. Letters over the bars identify post-hoc Tukey test results.

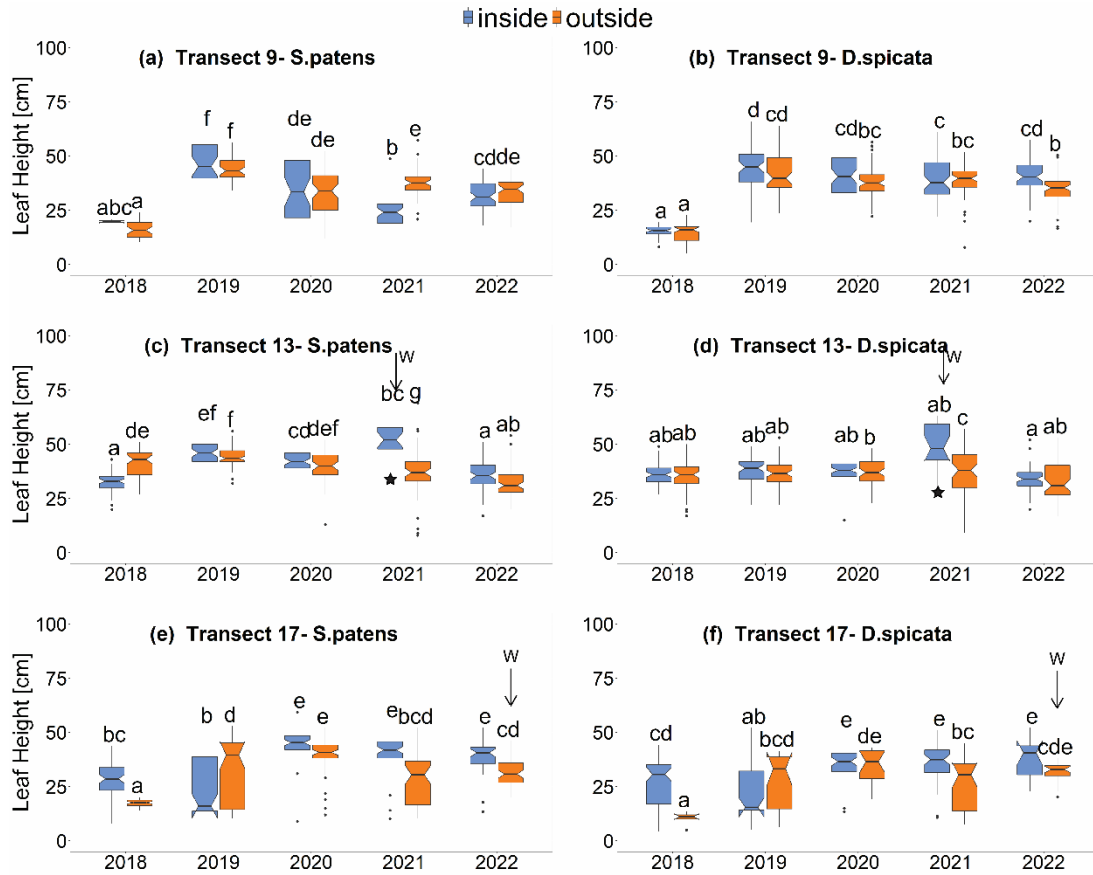


Figure S7b: Stem height of *Spartina patens* and *Distichlis spicata* inside and outside each sediment patch. Letters over the bars identify post-hoc Tukey test results.

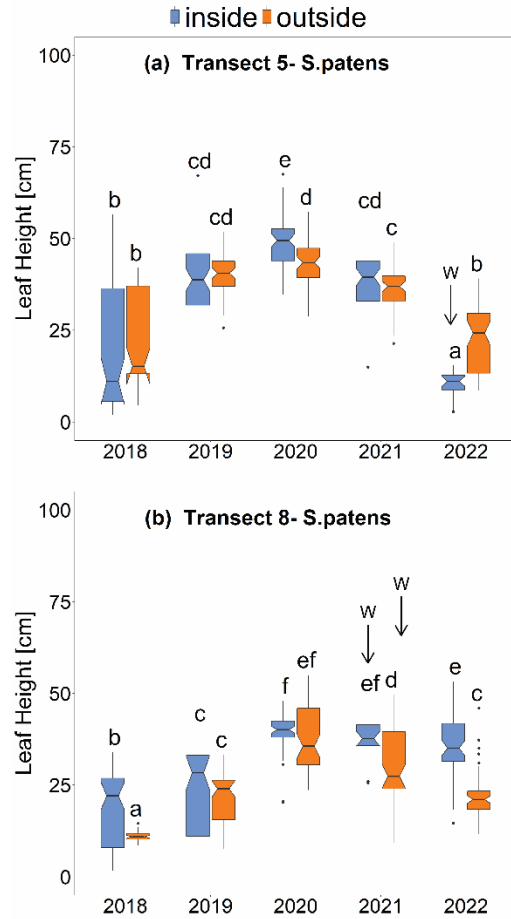


Figure S8: Stem height of *Spartina patens* inside and outside each sediment patch. Letters over the bars identify post-hoc Tukey test results. *W* identifies wrack presence and dotted lines correspond to the values without plots affected by wrack.

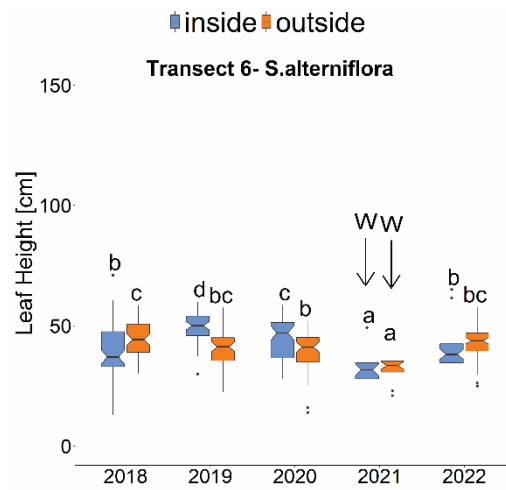


Figure S9: Stem height of *Spartina alterniflora* inside and outside sediment patch 6. Letters over the bars identify post-hoc Tukey test results. *W* identifies wrack presence and dotted lines correspond to the values without plots affected by wrack.

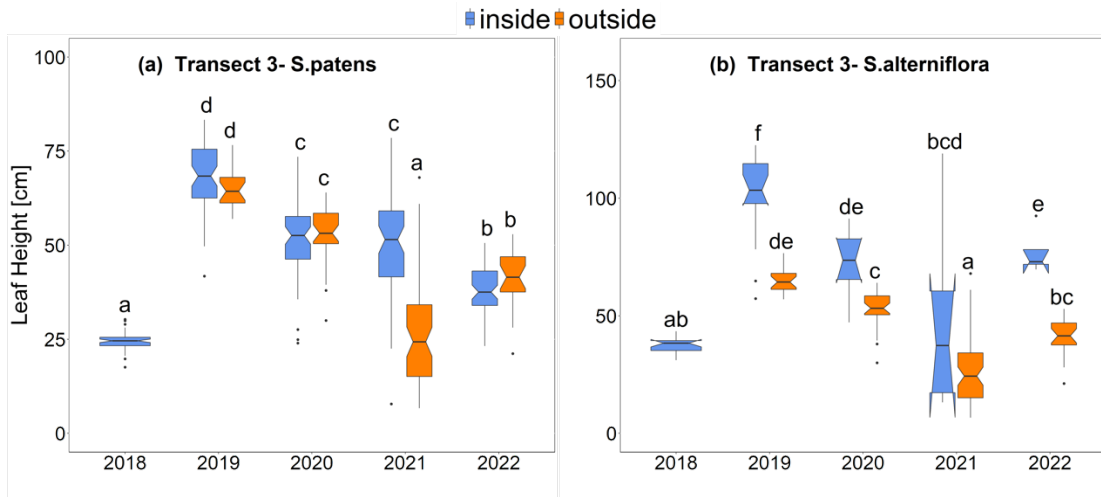


Figure S10: Stem height of *Spartina patens* and *Spartina alterniflora* inside and outside sediment patch 3. Letters over the bars identify post-hoc Tukey test results. *W* identifies wrack presence and dotted lines correspond to the values without plots affected by wrack.

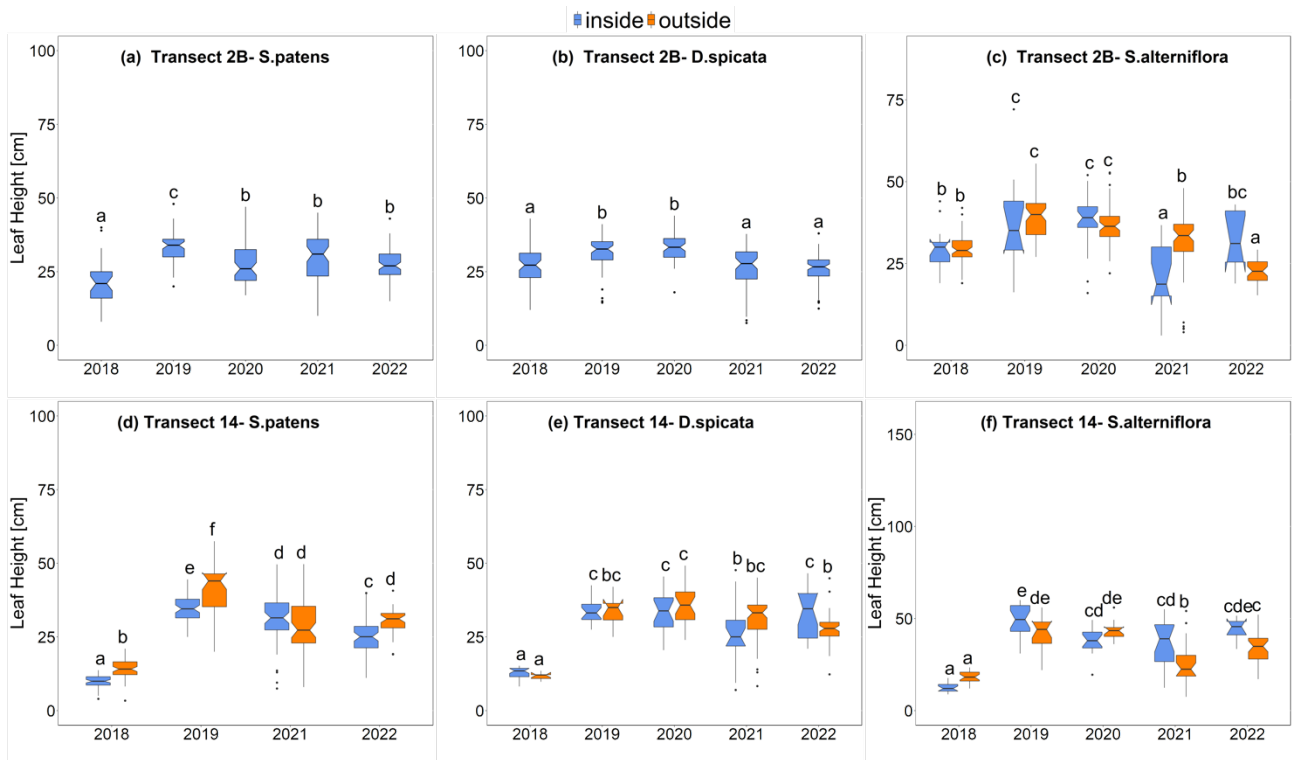


Figure S11: Stem heights of *Spartina patens*, *Distichlis spicata* and *Spartina alterniflora* inside and outside the sediment patch of transect 2B and 14. Letters over the bars identify post-hoc Tukey test

results. *W* identifies wrack presence and dotted lines correspond to the values without plots affected by wrack.

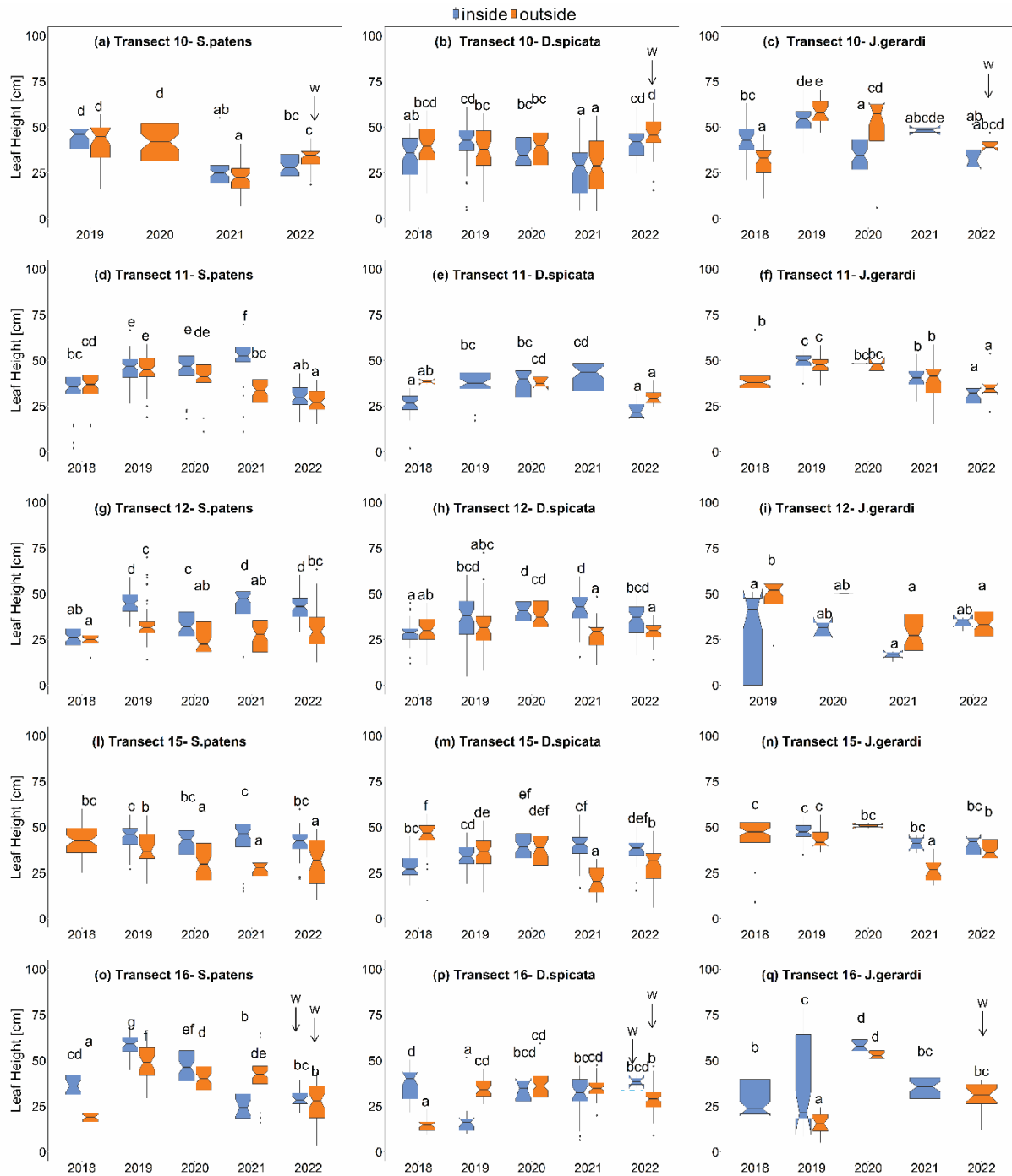


Figure S12: Number of stems of *Spartina patens*, *Distichlis spicata* and *Juncus gerardi* inside and outside the sediment patch of transect 10,11,12,15 and 16. Letters over the bars identify post-hoc Tukey test results. *W* identifies wrack presence and dotted lines correspond to the values without plots affected by wrack.

Table S5: Summary results of two-way ANOVA model for stem heights of *Spartina patens* outside and inside over years for each patch: stems~position+year+position:year. Position and year are main effects and position:year represents the interaction. Bold text is used to identify significant difference in the levels of each effect.

Transect	Test	Position	Year	Position: Year
1A	<i>F</i> value	2.03 ($F_{crit}=2.72$)	6.36 ($F_{crit}=1.96$)	5.76 ($F_{crit}=1.96$)
	<i>p</i> value	0.16 ($\alpha_{crit}=0.1$)	5.55*10⁻⁵ ($\alpha_{crit}=0.1$)	7.20*10⁻⁴ ($\alpha_{crit}=0.1$)
1B	<i>F</i> value	8.10*10 ⁻² ($F_{crit}=2.72$)	44.93 ($F_{crit}=1.96$)	11.97 ($F_{crit}=1.96$)
	<i>p</i> value	0.78 ($\alpha_{crit}=0.1$)	<2.20*10⁻¹⁶ ($\alpha_{crit}=0.1$)	2.45*10⁻⁹ ($\alpha_{crit}=0.1$)
2A	<i>F</i> value	29.05 ($F_{crit}=2.72$)	48.12 ($F_{crit}=1.96$)	23.41 ($F_{crit}=1.96$)
	<i>p</i> value	<2.20*10⁻¹⁶ ($\alpha_{crit}=0.1$)	1.02*10⁻⁷ ($\alpha_{crit}=0.1$)	<2.20*10⁻¹⁶ ($\alpha_{crit}=0.1$)
2B	<i>F</i> value	-	18.02 ($F_{crit}=1.96$)	-
	<i>p</i> value	-	3.25*10⁻¹³ ($\alpha_{crit}=0.1$)	-
3	<i>F</i> value	40.96 ($F_{crit}=2.72$)	182.55 ($F_{crit}=1.96$)	27.17 ($F_{crit}=1.96$)
	<i>p</i> value	4.10*10⁻¹⁰ ($\alpha_{crit}=0.1$)	<2.20*10⁻¹⁶ ($\alpha_{crit}=0.1$)	4.22*10⁻¹⁶ ($\alpha_{crit}=0.1$)
4	<i>F</i> value	1.13 ($F_{crit}=2.72$)	27.41 ($F_{crit}=1.96$)	10.82 ($F_{crit}=1.96$)
	<i>p</i> value	0.29 ($\alpha_{crit}=0.1$)	<2.20*10⁻¹⁶ ($\alpha_{crit}=0.1$)	1.98*10⁻⁸ ($\alpha_{crit}=0.1$)
5	<i>F</i> value	0.27 ($F_{crit}=2.72$)	163.94 ($F_{crit}=1.96$)	9.53 ($F_{crit}=1.96$)
	<i>p</i> value	0.61 ($\alpha_{crit}=0.1$)	<2.20*10⁻¹⁶ ($\alpha_{crit}=0.1$)	1.88*10⁻⁷ ($\alpha_{crit}=0.1$)
7	<i>F</i> value	2.40*10 ⁻² ($F_{crit}=2.72$)	73.25 ($F_{crit}=1.96$)	11.12 ($F_{crit}=1.96$)
	<i>p</i> value	0.88 ($\alpha_{crit}=0.1$)	<2.20*10⁻¹⁶ ($\alpha_{crit}=0.1$)	1.14*10⁻⁸ ($\alpha_{crit}=0.1$)
8	<i>F</i> value	70.72 ($F_{crit}=2.72$)	136.70 ($F_{crit}=1.96$)	8.53 ($F_{crit}=1.96$)
	<i>p</i> value	3.68*10⁻¹⁶ ($\alpha_{crit}=0.1$)	<2.20*10⁻¹⁶ ($\alpha_{crit}=0.1$)	1.20*10⁻⁶ ($\alpha_{crit}=0.1$)
9	<i>F</i> value	15.16 ($F_{crit}=2.72$)	84.69 ($F_{crit}=1.96$)	15.81 ($F_{crit}=1.96$)
	<i>p</i> value	1.10*10⁻⁴ ($\alpha_{crit}=0.1$)	<2.20*10⁻¹⁶ ($\alpha_{crit}=0.1$)	4.18*10⁻¹² ($\alpha_{crit}=0.1$)
10	<i>F</i> value	8.60*10 ⁻² ($F_{crit}=2.72$)	80.34 ($F_{crit}=1.96$)	2.77 ($F_{crit}=1.96$)
	<i>p</i> value	0.77 ($\alpha_{crit}=0.1$)	<2.20*10⁻¹⁶ ($\alpha_{crit}=0.1$)	6.00*10⁻² ($\alpha_{crit}=0.1$)
11	<i>F</i> value	42.16 ($F_{crit}=2.72$)	62.74 ($F_{crit}=1.96$)	26.61 ($F_{crit}=1.96$)
	<i>p</i> value	1.86*10⁻¹⁰ ($\alpha_{crit}=0.1$)	<2.20*10⁻¹⁶ ($\alpha_{crit}=0.1$)	<2.20*10⁻¹⁶ ($\alpha_{crit}=0.1$)
12	<i>F</i> value	169.14 ($F_{crit}=2.72$)	41.10 ($F_{crit}=1.96$)	12.26 ($F_{crit}=1.96$)
	<i>p</i> value	<2.20*10⁻¹⁶ ($\alpha_{crit}=0.1$)	<2.20*10⁻¹⁶ ($\alpha_{crit}=0.1$)	1.46*10⁻⁹ ($\alpha_{crit}=0.1$)
13	<i>F</i> value	4.67 ($F_{crit}=2.72$)	39.14 ($F_{crit}=1.96$)	33.52 ($F_{crit}=1.96$)
	<i>p</i> value	3.00*10⁻² ($\alpha_{crit}=0.1$)	<2.20*10⁻¹⁶ ($\alpha_{crit}=0.1$)	<2.20*10⁻¹⁶ ($\alpha_{crit}=0.1$)
14	<i>F</i> value	31.79 ($F_{crit}=2.72$)	342.24 ($F_{crit}=1.96$)	13.36 ($F_{crit}=1.96$)
	<i>p</i> value	3.12*10⁻⁸ ($\alpha_{crit}=0.1$)	<2.20*10⁻¹⁶ ($\alpha_{crit}=0.1$)	2.38*10⁻⁸ ($\alpha_{crit}=0.1$)

15	<i>F value</i>	101.04 ($F_{crit}= 2.72$)	8.63 ($F_{crit}= 1.96$)	3.60 ($F_{crit}= 1.96$)
	<i>p value</i>	<2.20*10⁻¹⁶ ($\alpha_{crit}= 0.1$)	1.06*10⁻⁶ ($\alpha_{crit}= 0.1$)	1.40*10⁻² ($\alpha_{crit}= 0.1$)
16	<i>F value</i>	18.51 ($F_{crit}= 2.72$)	113.15 ($F_{crit}= 1.96$)	24.12 ($F_{crit}= 1.96$)
	<i>p value</i>	2.55*10⁻⁵ ($\alpha_{crit}= 0.1$)	<2.20*10⁻¹⁶ ($\alpha_{crit}= 0.1$)	<2.20*10⁻¹⁶ ($\alpha_{crit}= 0.1$)
17	<i>F value</i>	43.74 ($F_{crit}= 2.72$)	59.35 ($F_{crit}= 1.96$)	20.21 ($F_{crit}= 1.96$)
	<i>p value</i>	8.90*10⁻¹¹ ($\alpha_{crit}= 0.1$)	<2.20*10⁻¹⁶ ($\alpha_{crit}= 0.1$)	1.50*10⁻¹⁵ ($\alpha_{crit}= 0.1$)

Table S6: Summary results of two-way ANOVA model for stem heights of *Distichlis spicata* outside and inside over years for each patch: stems~position+year+position:year. Position and year are main effects and position:year represents the interaction. Bold text is used to identify significant difference in the levels of each effect.

Transect	Test	Position	Year	Position: Year
1A	<i>F value</i>	21.18 ($F_{crit}= 2.97$)	5.66 ($F_{crit}= 2.25$)	6.83 ($F_{crit}= 2.25$)
	<i>p value</i>	5.39*10⁻⁶ ($\alpha_{crit}= 0.1$)	1.90*10⁻⁴ ($\alpha_{crit}= 0.1$)	1.60*10⁻⁴ ($\alpha_{crit}= 0.1$)
1B	<i>F value</i>	1.34 ($F_{crit}= 2.97$)	64.11 ($F_{crit}= 2.25$)	3.47 ($F_{crit}= 2.25$)
	<i>p value</i>	0.25 ($\alpha_{crit}= 0.1$)	<2.20*10⁻¹⁶ ($\alpha_{crit}= 0.1$)	8.20*10⁻³ ($\alpha_{crit}= 0.1$)
2A	<i>F value</i>	4.26 ($F_{crit}= 2.97$)	57.03 ($F_{crit}= 2.25$)	5.96 ($F_{crit}= 2.25$)
	<i>p value</i>	3.90*10⁻² ($\alpha_{crit}= 0.1$)	<2.20*10⁻¹⁶ ($\alpha_{crit}= 0.1$)	1.10*10⁻⁴ ($\alpha_{crit}= 0.1$)
2B	<i>F value</i>	-	18.94 ($F_{crit}= 2.18$)	-
	<i>p value</i>	-	5.69*10⁻¹⁴ ($\alpha_{crit}= 0.1$)	-
4	<i>F value</i>	0.10 ($F_{crit}= 2.97$)	18.69 ($F_{crit}= 2.25$)	6.77 ($F_{crit}= 2.25$)
	<i>p value</i>	0.75 ($\alpha_{crit}= 0.1$)	2.15*10⁻¹⁴ ($\alpha_{crit}= 0.1$)	2.53*10⁻⁵ ($\alpha_{crit}= 0.1$)
7	<i>F value</i>	2.02 ($F_{crit}= 2.97$)	25.14 ($F_{crit}= 2.25$)	13.82 ($F_{crit}= 2.25$)
	<i>p value</i>	0.16 ($\alpha_{crit}= 0.1$)	<2.20*10⁻¹⁶ ($\alpha_{crit}= 0.1$)	9.17*10⁻¹¹ ($\alpha_{crit}= 0.1$)
9	<i>F value</i>	15.49 ($F_{crit}= 2.97$)	231.11 ($F_{crit}= 2.25$)	1.82 ($F_{crit}= 2.25$)
	<i>p value</i>	9.29*10⁻⁵ ($\alpha_{crit}= 0.1$)	<2.20*10⁻¹⁶ ($\alpha_{crit}= 0.1$)	0.12 ($\alpha_{crit}= 0.1$)
10	<i>F value</i>	2.95 ($F_{crit}= 2.97$)	22.92 ($F_{crit}= 2.25$)	3.09 ($F_{crit}= 2.25$)
	<i>p value</i>	8.60*10⁻² ($\alpha_{crit}= 0.1$)	<2.20*10⁻¹⁶ ($\alpha_{crit}= 0.1$)	1.60*10⁻² ($\alpha_{crit}= 0.1$)
11	<i>F value</i>	6.26 ($F_{crit}= 3.07$)	25.16 ($F_{crit}= 2.36$)	1.67 ($F_{crit}= 2.36$)
	<i>p value</i>	1.00*10⁻² ($\alpha_{crit}= 0.1$)	<2.20*10⁻¹⁶ ($\alpha_{crit}= 0.1$)	0.19 ($\alpha_{crit}= 0.1$)
12	<i>F value</i>	16.52 ($F_{crit}= 2.97$)	11.23 ($F_{crit}= 2.25$)	6.83 ($F_{crit}= 2.25$)
	<i>p value</i>	5.78*10⁻⁵ ($\alpha_{crit}= 0.1$)	1.19*10⁻⁸ ($\alpha_{crit}= 0.1$)	2.49*10⁻⁵ ($\alpha_{crit}= 0.1$)
13	<i>F value</i>	10.38 ($F_{crit}= 3.00$)	8.99 ($F_{crit}= 2.89$)	8.33 ($F_{crit}= 2.89$)
	<i>p value</i>	1.00*10⁻³ ($\alpha_{crit}= 0.1$)	4.92*10⁻⁷ ($\alpha_{crit}= 0.1$)	1.58*10⁻⁶ ($\alpha_{crit}= 0.1$)
14	<i>F value</i>	1.60*10 ⁻² ($F_{crit}= 2.97$)	66.13 ($F_{crit}= 2.25$)	4.71 ($F_{crit}= 2.25$)

	<i>p value</i>	0.90 ($\alpha_{crit}= 0.1$)	<2.20*10⁻¹⁶ ($\alpha_{crit}= 0.1$)	1.10*10⁻³ ($\alpha_{crit}= 0.1$)
15	<i>F value</i>	10.64 ($F_{crit}= 2.97$)	7.34 ($F_{crit}= 2.25$)	32.46 ($F_{crit}= 2.25$)
	<i>p value</i>	1.20*10⁻³ ($\alpha_{crit}= 0.1$)	1.01*10⁻⁵ ($\alpha_{crit}= 0.1$)	<2.20*10⁻¹⁶ ($\alpha_{crit}= 0.1$)
16	<i>F value</i>	7.76 ($F_{crit}= 2.97$)	15.54 ($F_{crit}= 2.25$)	51.65 ($F_{crit}= 2.25$)
	<i>p value</i>	6.00*10⁻³ ($\alpha_{crit}= 0.1$)	1.32*10⁻¹¹ ($\alpha_{crit}= 0.1$)	<2.20*10⁻¹⁶ ($\alpha_{crit}= 0.1$)
17	<i>F value</i>	12.42 ($F_{crit}= 2.97$)	17.87 ($F_{crit}= 2.25$)	9.30 ($F_{crit}= 2.25$)
	<i>p value</i>	4.80*10⁻⁴ ($\alpha_{crit}= 0.1$)	2.54*10⁻¹³ ($\alpha_{crit}= 0.1$)	3.87*10⁻⁷ ($\alpha_{crit}= 0.1$)

Table S7: Summary results of two-way ANOVA model for stem heights of *Spartina alterniflora* outside and inside over years for each patch: stems~position+year+position:year. Position and year are main effects and position:year represents the interaction. Bold text is used to identify significant difference in the levels of each effect.

Transect	Test	Position	Year	Position: Year
2B	<i>F value</i>	0.10 ($F_{crit}= 2.97$)	39.07 ($F_{crit}= 2.25$)	7.35 ($F_{crit}= 2.25$)
	<i>p value</i>	0.75 ($\alpha_{crit}= 0.1$)	<2.20*10⁻¹⁶ ($\alpha_{crit}= 0.1$)	1.09*10⁻⁵ ($\alpha_{crit}= 0.1$)
3	<i>F value</i>	98.76 ($F_{crit}= 2.97$)	84.67 ($F_{crit}= 2.25$)	2.41 ($F_{crit}= 2.25$)
	<i>p value</i>	<2.20*10⁻¹⁶ ($\alpha_{crit}= 0.1$)	<2.20*10⁻¹⁶ ($\alpha_{crit}= 0.1$)	7.00*10⁻² ($\alpha_{crit}= 0.1$)
6	<i>F value</i>	2.31 ($F_{crit}= 2.97$)	18.74 ($F_{crit}= 2.25$)	15.19 ($F_{crit}= 2.25$)
	<i>p value</i>	0.13 ($\alpha_{crit}= 0.1$)	2.34*10⁻¹⁴ ($\alpha_{crit}= 0.1$)	1.01*10⁻¹¹ ($\alpha_{crit}= 0.1$)
14	<i>F value</i>	5.83 ($F_{crit}= 2.97$)	71.48 ($F_{crit}= 2.25$)	8.35 ($F_{crit}= 2.25$)
	<i>p value</i>	2.00*10⁻² ($\alpha_{crit}= 0.1$)	<2.20*10⁻¹⁶ ($\alpha_{crit}= 0.1$)	3.25*10⁻⁶ ($\alpha_{crit}= 0.1$)

Table S8: Summary results of two-way ANOVA model for stem heights of *Juncus gerardi* outside and inside over years for each patch: stems~position+year+position:year. Position and year are main effects and position:year represents the interaction. Bold text is used to identify significant difference in the levels of each effect.

Transect	Test	Position	Year	Position: Year
10	<i>F value</i>	3.86 ($F_{crit}= 2.97$)	36.43 ($F_{crit}= 2.25$)	18.35 ($F_{crit}= 2.25$)
	<i>p value</i>	5.00*10⁻² ($\alpha_{crit}= 0.1$)	<2.20*10⁻¹⁶ ($\alpha_{crit}= 0.1$)	1.01*10⁻¹⁰ ($\alpha_{crit}= 0.1$)
11	<i>F value</i>	1.20 ($F_{crit}= 2.99$)	35.41 ($F_{crit}= 2.27$)	1.50 ($F_{crit}= 2.27$)
	<i>p value</i>	0.27 ($\alpha_{crit}= 0.1$)	<2.20*10⁻¹⁶ ($\alpha_{crit}= 0.1$)	0.22 ($\alpha_{crit}= 0.1$)
12	<i>F value</i>	40.70 ($F_{crit}= 2.97$)	2.06 ($F_{crit}= 2.25$)	2.36 ($F_{crit}= 2.25$)
	<i>p value</i>	1.50*10⁻⁹ ($\alpha_{crit}= 0.1$)	0.11 ($\alpha_{crit}= 0.1$)	7.00*10⁻² ($\alpha_{crit}= 0.1$)
15	<i>F value</i>	14.88 ($F_{crit}= 2.97$)	34.06 ($F_{crit}= 2.25$)	3.13 ($F_{crit}= 2.25$)
	<i>p value</i>	1.60*10⁻⁴ ($\alpha_{crit}= 0.1$)	<2.20*10⁻¹⁶ ($\alpha_{crit}= 0.1$)	4.60*10⁻² ($\alpha_{crit}= 0.1$)

16	<i>F value</i>	34.21 ($F_{\text{crit}} = 2.97$)	28.27 ($F_{\text{crit}} = 2.25$)	10.76 ($F_{\text{crit}} = 2.25$)
	<i>p value</i>	$1.93 \cdot 10^{-8}$ ($\alpha_{\text{crit}} = 0.1$)	$< 2.20 \cdot 10^{-16}$ ($\alpha_{\text{crit}} = 0.1$)	$1.20 \cdot 10^{-3}$ ($\alpha_{\text{crit}} = 0.1$)