

CEHL: Summary of 2018 Eelgrass Density Data around Mt. Desert Island

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2018 Site Visitation

Site Name	# of Days of data collected	# quadrats counted	Date(s) of collection
Wonderland	1	20	7/12/2018
Ship Harbor	1	20	8/14/2018
Bar East	1	26	8/17/2018
Bar Tide Pool	1	23	9/13/2018
Stave Island	1	40	7/16/2018
Hadley Point East	1	10	9/14/2018
Berry Cove	1	N/A*	7/19/2018
Hadley Point West	1	0	8/21/2018
Bar West	1	0	8/17/2018

Table 1. 2018 study site visitation. * No eelgrass bed data collected at Berry Cove due to time constraint (N/A). No eelgrass bed data collected at Hadley Point West and Bar West due to lack of eelgrass presence (0).

Shoot Averages at Community Lab Study Sites

Between 2017 and 2018 eelgrass shoot density increased at Bar Tide Pool, Stave Island, and Wonderland and decreased at Bar East, Hadley Point East, and Ship Harbor (see Figure 1 and Table 2). There is a statistically significant difference in eelgrass density across sites with a *P*-value of 0.000822 based on a two-factor ANOVA test (Figure 3).

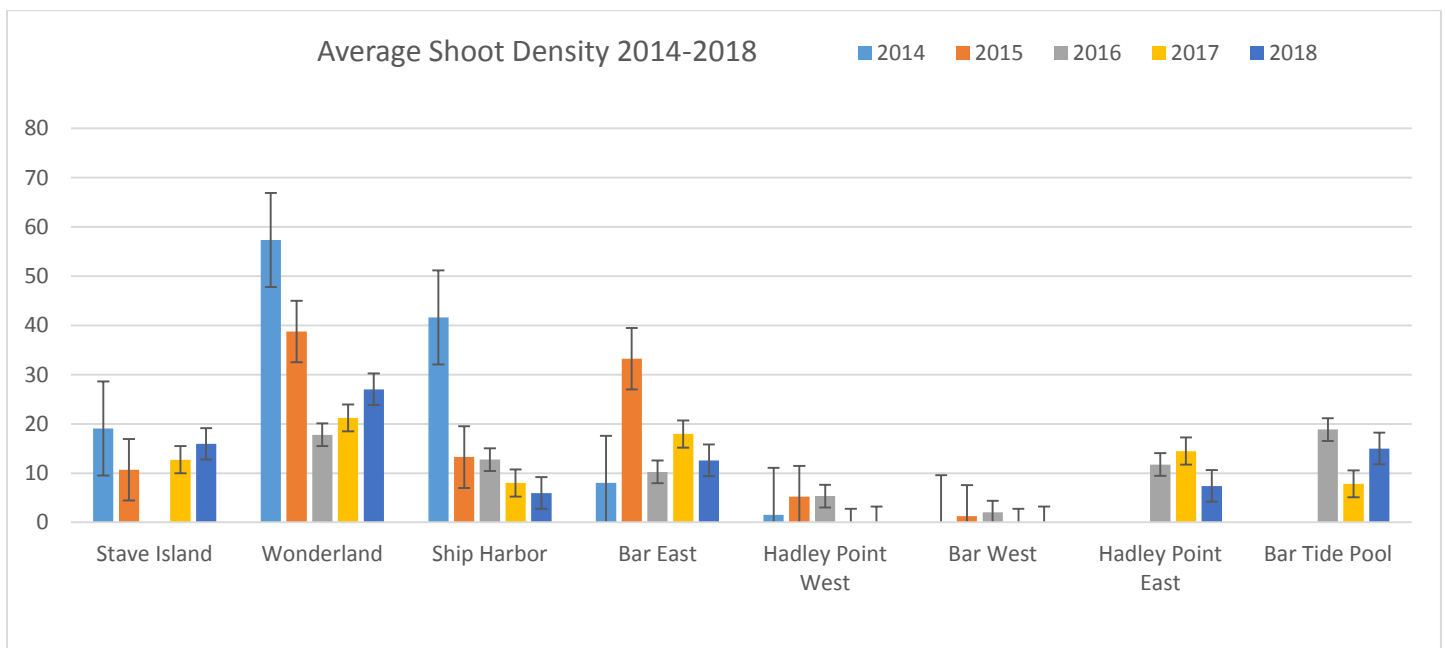


Figure 1. Average eelgrass shoot density between 2014-2018 across all study sites.

Average Shoot Density by Site between 2014-2018

Site	2014	2015	2016	2017	2018
Bar East	8	33.22	10.25	17.93	12.6
Bar Tide Pool	N/A	N/A	18.86	7.83	15
Bar West	0	1.29	2.06	0	0
Hadley Point East	N/A	N/A	11.74	14.48	7.4
Hadley Point West	1.5	5.22	5.33	0	0
Ship Harbor	41.6	13.25	12.74	8	5.95
Stave Island	19.09	10.69	N/A	12.73	15.95
Wonderland	57.3	38.75	17.78	21.2	27
Average of All Sites	21.25	17.07	11.25	10.27	10.49

Table 2. Average eelgrass shoot density by site by year.

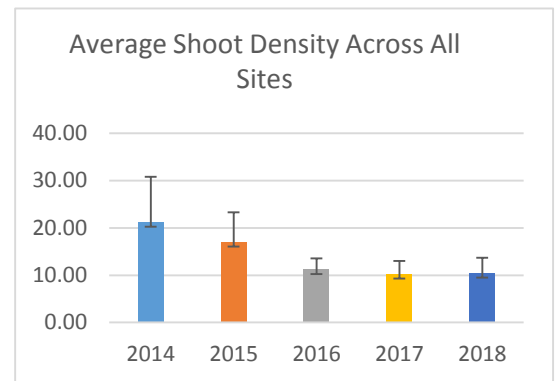


Figure 2. Average eelgrass shoot density averaged across all sites by year.

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Rows	3306.162	4	826.5405	8.256597	0.000822	3.006917
Columns	705.6539	4	176.4135	1.762255	0.185838	3.006917
Error	1601.707	16	100.1067			
Total	5613.523	24				

Figure 3. Two-way ANOVA of eelgrass density by site (1-5) and year (2014-2018)