



Supplement of

Biological response of eelgrass epifauna, Taylor's Sea hare (*Phyllaplysia* taylori) and eelgrass isopod (*Idotea resecata*), to elevated ocean alkalinity

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Figure S1. Sea hare LC₅₀ plot indicating at which day for each pH treatment 50% mortality occurred. 50% mortality threshold indicated by the dotted line. Three lines per treatment indicates three rounds of experiments.



Figure S2. Isopod LC₅₀ plot indicating at which day for each pH treatment 50% mortality occurred. 50% mortality threshold indicated by the dotted line. Three lines per treatment indicates three rounds of experiments.



Figure S3. Mortality of sea hares separated by experimental round. Yellow circles (pH 7.8), blue squares (pH 8.3), orange triangles (pH 8.8), purple diamonds (pH 9.3).



Figure S4. Mortality of isopods separated by experimental round. Yellow circles (pH 7.8), blue squares (pH 8.3), orange triangles (pH 8.8), purple diamonds (pH 9.3).

			Temp	Salinity	Alkalinity
Date	Time (UTC)	Sample #	(°C)	(PSU)	(µmol kg ⁻¹)
10/3/2023	17:20	1	16.9	32.3	2177
10/16/2023	17:58	2	19.6	32.4	2250
10/30/2023	16:22	3	19.7	32.2	2146
11/3/2023	16:30	4	20.6	32.4	2289
11/6/2023	17:21	5	18.0	31.8	2142
11/13/2023	20:12	6	15.3	31.4	2147
11/20/2023	18:10	7	16.7	31.7	2145
12/4/2023	17:10	8	17.5	31.8	2118
12/8/2023	18:12	9	19.1	31.9	2262
12/11/2023	17:10	10	15.4	31.3	2002

Table S1. Samples collected from our facility's seawater intake measured directly for total alkalinity. These alkalinity values were used to correct pH_{NBS} values measured throughout the experiment to allow more robust calculations of the carbonate system.