

The following supplement accompanies the article

Temporal soundscape patterns and processes in an estuarine reserve

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Table S1: Pearson's correlation coefficients between SPLs in the lower band (150–1500Hz) at each site.

	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6	Site 7	Site 8	all sites
Site 1	1.00	0.46	0.56	0.56	0.52	0.52	0.41	0.64	0.69
Site 2		1.00	0.69	0.54	0.61	0.67	0.53	0.60	0.79
Site 3			1.00	0.58	0.57	0.67	0.51	0.66	0.80
Site 4				1.00	0.65	0.65	0.51	0.63	0.77
Site 5					1.00	0.75	0.62	0.64	0.83
Site 6						1.00	0.66	0.61	0.87
Site 7							1.00	0.46	0.73
Site 8								1.00	0.79
all sites									1.00

Table S2: Pearson's correlation coefficients between SPLs in the higher band (7-43kHz) at each site. Correlation coefficients marked with an asterisk (*) are not significant at $p < 0.05$.

	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6	Site 7	Site 8	all sites
Site 1	1.00	0.37	0.44	0.59	0.59	0.63	0.04*	0.63	0.68
Site 2		1.00	0.38	0.36	0.40	0.45	0.04*	0.37	0.45
Site 3			1.00	0.53	0.46	0.52	0.09	0.50	0.52
Site 4				1.00	0.70	0.75	0.09	0.76	0.79
Site 5					1.00	0.74	0.10	0.75	0.90
Site 6						1.00	0.08	0.79	0.84
Site 7							1.00	0.08	0.23
Site 8								1.00	0.90
all sites									1.00

Table S3: Correlation coefficient (r) between SPL in the low frequency band (150–1500 Hz) and the tidal water level. The standard error uncertainty is estimated using a bootstrap resampling.

	Deployment I June	Deployment II July	Deployment III August
Site 1	0.42 ± 0.02	0.33 ± 0.03	0.46 ± 0.03
Site 2	0.62 ± 0.02	0.44 ± 0.02	0.53 ± 0.02
Site 3	0.73 ± 0.01	0.68 ± 0.01	0.51 ± 0.02
Site 4	0.59 ± 0.02	0.64 ± 0.01	0.65 ± 0.02
Site 5	0.67 ± 0.02	0.73 ± 0.02	0.72 ± 0.01
Site 6	0.74 ± 0.01	0.69 ± 0.01	--
Site 7	0.56 ± 0.02	--	0.55 ± 0.02
Site 8	0.57 ± 0.01	0.64 ± 0.02	--
All Sites (median)	0.78 ± 0.01	0.77 ± 0.01	0.76 ± 0.01

Table S4: Correlation coefficient (r) between SPL in the high frequency band (7-43 kHz) and the tidal water level. The standard error uncertainty is estimated using a bootstrap resampling.

	Deployment I June	Deployment II July	Deployment III August
Site 1	0.21 ± 0.02	0.23 ± 0.03	0.22 ± 0.02
Site 2	0.23 ± 0.02	0.14 ± 0.02	0.12 ± 0.03
Site 3	0.20 ± 0.01	0.18 ± 0.02	0.11 ± 0.02
Site 4	0.24 ± 0.03	0.08 ± 0.03	0.05 ± 0.02
Site 5	0.18 ± 0.03	0.11 ± 0.03	0.07 ± 0.02
Site 6	0.13 ± 0.03	0.14 ± 0.02	--
Site 7	-0.20 ± 0.02	--	-0.10 ± 0.02
Site 8	0.05 ± 0.02	0.03 ± 0.02	--
All Sites (median)	0.07 ± 0.03	0.07 ± 0.02	0.09 ± 0.02

Table S5: Correlation between the high frequency band and shrimp snap counts for all sites during each deployment. Correlation coefficient reported is the bootstrap mean plus or minus the standard deviation of the bootstrap means.

	Deployment I	Deployment II	Deployment III
Site 1	0.71 ± 0.02	0.77 ± 0.01	0.76 ± 0.01
Site 2	0.71 ± 0.02	0.79 ± 0.01	0.80 ± 0.01
Site 3	0.72 ± 0.01	0.71 ± 0.01	0.72 ± 0.01
Site 4	0.76 ± 0.01	0.73 ± 0.01	0.77 ± 0.01
Site 5	0.77 ± 0.01	0.80 ± 0.01	0.86 ± 0.01
Site 6	0.74 ± 0.02	0.72 ± 0.02	--
Site 7	0.12 ± 0.02	--	0.40 ± 0.03
Site 8	0.85 ± 0.01	0.87 ± 0.01	--
All sites	0.67 ± 0.01	0.77 ± 0.01	0.76 ± 0.01