

**Table S1.** Mean faunal abundance  $\pm$  standard error (SE), and mean percentage contributions to the total faunal assemblage in the wood (n=11), kelp (n = 11) and control (n = 11) samples. Mean abundance and SE are rounded to the nearest integer and percentage contributions are rounded to two decimal places.

Taxa	Wood		Kelp		Control	
	Abundance (ind. substrate <sup>-1</sup> )	Contrib. (%)	Abundance (ind. substrate <sup>-1</sup> )	Contrib. (%)	Abundance (ind. substrate <sup>-1</sup> )	Contrib. (%)
<b>Polychaeta</b>						
<i>Capitella</i> sp.	4 $\pm$ 1	0.79	129 $\pm$ 24	21.65	0	0.42
<i>Flabelligera affinis</i>	0	0.02	0	0.00	0	0.00
<i>Glycera alba</i>	0	0.02	0	0.00	0	0.00
<i>Neogyptis rosea</i>	2 $\pm$ 0	0.32	5 $\pm$ 1	0.79	3 $\pm$ 1	14.23
Hesionidae Sp. A	0	0.00	7 $\pm$ 2	1.13	0	0.00
<i>Lumbrineris</i> sp.	0	0.03	0	0.03	0	0.42
Nephtyidae	1 $\pm$ 0	0.13	0	0.02	0	1.26
<i>Nereimyra woodsholea</i>	1 $\pm$ 0	0.15	1 $\pm$ 0	0.23	0	0.42
<i>Ophelina modesta</i>	1 $\pm$ 0	0.12	0	0.05	2 $\pm$ 1	8.37
<i>Ophryotrocha</i> sp.	7 $\pm$ 2	1.28	205 $\pm$ 37	34.35	0	0.84
<i>Ophryotrocha craigsmithi</i>	0	0.00	3 $\pm$ 1	0.56	0	0.00
<i>Paraprionospio alata</i>	11 $\pm$ 2	2.11	17 $\pm$ 3	2.87	0	1.26
Polynoidae sp. A	0	0.02	0	0.02	0	0.00
Polynoidae sp. B	0	0.00	0	0.00	0	0.42
<i>Prionospio multibranchiata</i>	11 $\pm$ 3	2.11	4 $\pm$ 1	0.72	0	2.09
<i>Sphaerosyllis</i> sp.	0	0.02	0	0.00	0	0.00
<i>Sosane wahrbergi</i>	3 $\pm$ 1	0.54	0	0.05	1 $\pm$ 1	5.86
<i>Terebellides</i> sp.	0	0.03	0	0.02	0	1.26
<b>Crustacea</b>						
Amphipoda Sp. A	0	0.00	0	0.00	2 $\pm$ 1	10.04
Amphipoda Sp. B	0	0.02	0	0.00	0	0.42
Amphipoda Sp. C	1 $\pm$ 0	0.12	2 $\pm$ 1	0.34	0	1.26
<i>Atlantopandalus propinquus</i>	10 $\pm$ 2	1.76	11 $\pm$ 1	1.89	2 $\pm$ 0	9.21
<i>Caridion gordonii</i>	6 $\pm$ 1	1.02	4 $\pm$ 0	0.66	3 $\pm$ 1	15.48
<i>Cirolana</i> sp.	0	0.03	0	0.00	0	0.00
Gnathiidae	0	0.00	0	0.00	0	0.42
<i>Lebbeus polaris</i>	4 $\pm$ 1	0.65	7 $\pm$ 1	1.24	3 $\pm$ 1	14.23
<i>Munida intermedia</i>	0	0.00	0	0.02	0	1.67
<i>Nebalia</i> larvae	0	0.00	1 $\pm$ 1	0.17	0	0.00
<i>Nebalia strausi</i>	20 $\pm$ 5	3.78	191 $\pm$ 25	32.05	0	0.42
<i>Pandalus montagui</i>	0	0.07	0	0.05	0	0.00
Shrimp larvae	2 $\pm$ 2	0.39	0	0.00	0	0.00
<b>Mollusca</b>						
<i>Aequipecten opercularis</i> spat	2 $\pm$ 1	0.45	2 $\pm$ 1	0.37	1 $\pm$ 0	3.35
Mytilidae spat	0	0.00	1 $\pm$ 0	0.09	0	0.00
Veneridae spat	12 $\pm$ 3	2.17	4 $\pm$ 1	0.66	1 $\pm$ 1	5.44
<i>Xylophaga dorsalis</i>	443 $\pm$ 75	81.71	0	0.00	0	0.00
<b>Other taxa</b>						
Nematoda	1 $\pm$ 0	0.12	0	0.02	0	1.26
Enteropneusta	0	0.3	0	0.00	0	0.00