The following supplement accompanies the article

Spatial patterns of invertebrate settlement in giant kelp forests

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Supplement. Abundance data and full ANOVA results for all 8 analyzed taxa

Table S1. Mean (± SE) abundances of recently settled invertebrate taxa per 14 day at 7 m depth at the outer edge, interior, and inner edge of kelp forests in 2009 and 2010, with subphyla listed in decreasing order of abundance. The lowest level of taxonomic identification is shown in **bold**, with hierarchical position indicated by indentation from the left margin. P: Phylum; SubP: Subphylum; C: Class; SC: Subclass; O: Order; SO: Suborder; IO: Infraorder; F: Family; G: Genus

Taxon P SP C SC O SO IO F G	2009			2010		
	Outer edge	Interior	Inner edge	Outer edge	Interior	Inner edge
Mollusca						
Gastropoda						
Orthogastropoda						
***Crepidula* spp.**	0.43 (0.09)	1.12 (0.22)	1.29 (0.23)	0.20 (0.04)	0.73 (0.16)	1.25 (0.19)
Orthogastropoda[a]	29.62 (3.13)	45.13 (6.60)	14.95 (3.68)	66.75 (12.13)	76.04 (9.45)	36.75 (8.05)
Opisthobranchia[a]	2.21 (0.39)	2.18 (0.54)	0.81 (0.12)	1.45 (0.64)	0.77 (0.10)	1.28 (0.36)
Bivalvia						
Pectinidae	9.95 (1.96)	15.71 (2.20)	8.27 (1.40)	1.17 (0.21)	1.36 (0.24)	1.79 (0.36)
Other Bivalvia[a]	0.81 (0.14)	1.29 (0.17)	2.81 (1.28)	1.79 (0.05)	2.67 (0.98)	2.26 (0.64)
Annelida						
Polychaeta						
Non-sessile Polychaeta[a]	17.23 (1.31)	20.72 (2.79)	14.31 (1.75)	31.54 (6.84)	22.25 (6.17)	16.57 (2.69)
Crustacea						
Malacostraca						
Decapoda						
Caridea	0.17 (0.04)	0.82 (.24)	2.92 (1.19)	0.56 (0.13)	2.67 (0.76)	2.37 (0.41)
Brachyura	0.21 (0.06)	0.16 (0.07)	0.01 (0.01)	1.25 (0.45)	0.91 (0.12)	0.93 (0.14)

[a]Informal groupings based on morphology were used to aid in sorting (Carlton 2007)

Table S2. Results of 4-factor mixed model nested ANOVA on mean settlement per 14 d of individual taxa at 7 m depth over 2 yr. **Bold** values indicate significance ($\alpha \leq 0.05$).

Taxon	Source	SS	df	MS	*F*	P
Orthogastropoda	**Year**	8072.12	1	8072.12	98.85	**<0.01**
	Region	168.50	1	168.50	2.08	0.39
	Location	7438.27	2	3719.13	20.85	**0.05**
	Transect(Region)	1008.87	4	252.22	3.09	0.15
	Region × Year	81.20	1	81.20	0.19	0.67
	Location × Year	356.83	2	178.42	0.42	0.67
	Year × Transect(Region)	326.65	4	81.66	0.19	0.94
	Location × Region	1998.68	2	999.34	3.39	0.23
	Year × Loc. × Region	589.78	2	294.89	0.69	0.52
	Residual	6865.43	16	429.09		
Crepidula spp.[a]	Year	0.13	1	0.13	2.93	0.11
	Region	0.21	1	0.21	2.66	0.35
	Location	1.78	2	0.89	28.74	**0.03**
	Transect(Region)	0.11	4	0.03	0.84	0.57
	Region × Year	0.08	1	0.08	1.75	0.20
	Location × Year	0.06	2	0.03	0.69	0.52
	Year × Transect(Region)	0.13	4	0.03	0.73	0.59
	Location × Region	0.05	2	0.03	0.51	0.66
	Year × Loc. × Region	0.10	2	0.05	1.14	0.35
	Residual	0.72	16	0.05		
Opisthobranchia	Year	2.84	1	2.84	1.55	0.28
	Region	<0.01	1	<0.01	<0.01	1.00
	Location	3.71	2	1.86	0.68	0.60
	Transect(Region)	1.37	4	0.34	0.19	0.93
	Region × Year	4.84	1	4.84	7.08	**0.02**
	Location × Year	5.46	2	2.73	3.99	**0.04**
	Year × Transect(Region)	7.33	4	1.83	2.68	0.07
	Location × Region	1.45	2	0.73	0.34	0.75
	Year × Loc. × Region	4.32	2	2.16	3.16	0.07
	Residual	10.94	16	0.68		
Non-sessile Polychaeta[a]	Year	0.27	1	0.27	2.62	0.18
	Region	0.90	1	0.90	50.09	0.09
	Location	0.83	2	0.42	2.19	0.31
	Transect(Region)	0.57	4	0.14	1.37	0.38
	Region × Year	0.02	1	0.02	0.15	0.71
	Location × Year	0.38	2	0.19	1.57	0.24
	Year × Transect(Region)	0.42	4	0.10	0.86	0.51
	Location × Region	1.39	2	0.70	2.16	0.32
	Year × Loc. × Region	0.65	2	0.32	2.67	0.10
	Residual	1.93	16	0.12		

Pectindae [a]	**Year**	22.15	1	22.15	263.70	**<0.01**
	Region	0.23	1	0.23	1.49	0.44
	Location	0.50	2	0.25	0.60	0.62
	Transect(Region)	0.32	4	0.08	0.96	0.52
	Region × Year	0.15	1	0.15	1.26	0.28
	Location × Year	0.84	2	0.42	3.49	0.06
	Year × Transect(Region)	0.34	4	0.08	0.70	0.61
	Location × Region	0.07	2	0.04	1.39	0.42
	Year × Loc. × Region	0.05	2	0.03	0.21	0.82
	Residual	1.92	16	0.12		
Other Bivalvia [a]	Year	0.39	1	0.39	1.00	0.37
	Region	1.11	1	1.11	1.58	0.43
	Location	0.73	2	0.36	2.05	0.33
	Transect(Region)	0.36	4	0.09	0.23	0.91
	Region × Year	0.70	1	0.70	5.91	**0.03**
	Location × Year	0.36	2	0.18	1.49	0.25
	Year × Transect(Region)	1.56	4	0.39	3.27	**0.04**
	Location × Region	0.46	2	0.23	1.74	0.37
	Year × Loc. × Region	0.27	2	0.13	1.12	0.35
	Residual	1.90	16	0.12		
Brachyura [a]	**Year**	2.80	1	2.80	46.70	**<0.01**
	Region	0.00	1	0.00	0.19	0.74
	Location	0.11	2	0.05	3.81	0.21
	Transect(Region)	0.20	4	0.05	0.82	0.57
	Region × Year	0.01	1	0.01	0.18	0.68
	Location × Year	0.03	2	0.01	0.36	0.70
	Year × Transect(Region)	0.24	4	0.06	1.57	0.23
	Location × Region	0.20	2	0.10	5.27	0.16
	Year × Loc. × Region	0.04	2	0.02	0.49	0.62
	Residual	0.61	16	0.04		
Caridea [a]	**Year**	0.93	1	0.93	10.68	**0.03**
	Region	<0.01	1	<0.01	<0.01	1.00
	Location	4.72	2	2.36	8.52	0.11
	Transect(Region)	0.87	4	0.22	2.51	0.20
	Region × Year	0.26	1	0.26	1.87	0.19
	Location × Year	0.55	2	0.28	2.00	0.17
	Year × Transect(Region)	0.35	4	0.09	0.63	0.65
	Location × Region	1.01	2	0.51	3.19	0.24
	Year × Loc. × Region	0.32	2	0.16	1.15	0.34
	Residual	2.21	16	0.14		

[a]Log transformation used to meet assumptions of the model

Table S3. Results of 4-factor mixed model nested ANOVA on mean settlement per 14 d of individual taxa at 7 m depth and 2 m off the seafloor in 2010. **Bold** values indicate significance ($\alpha \leq 0.05$).

Taxon	Source	SS	df	MS	*F*	P
Orthogastropoda[a]	Region	0.08	1	0.08	3.22	0.09
	Location	0.87	2	0.44	17.92	**<0.01**
	Depth	0.92	1	0.92	38.05	**<0.01**
	Location × Region	0.74	2	0.37	15.21	**<0.01**
	Region × Depth	0.00	1	0.00	0.18	0.68
	Location × Depth	0.01	2	0.00	0.10	0.91
	Location × Region × Depth	0.05	2	0.03	1.08	0.36
	Transect(Region)	0.08	4	0.02	0.85	0.51
	Transect(Region)×Depth	0.05	4	0.01	0.53	0.71
	Residual	0.39	16	0.02		
Crepidula spp.[a]	Region	0.04	1	0.04	3.76	0.07
	Location	0.23	2	0.11	11.97	**<0.01**
	Depth	0.01	1	0.01	1.13	0.30
	Location × Region	0.03	2	0.01	1.29	0.30
	Region × Depth	0.00	1	0.00	0.02	0.89
	Location × Depth	0.10	2	0.05	5.25	**0.02**
	Location × Region × Depth	0.02	2	0.01	1.08	0.37
	Transect(Region)	0.03	4	0.01	0.71	0.59
	Transect(Region)×Depth	0.04	4	0.01	0.98	0.45
	Residual	0.15	16	0.01		
Opisthobranchia	Region	0.03	1	0.03	0.18	0.68
	Location	1.47	2	0.74	4.08	**0.04**
	Depth	2.72	1	2.72	15.08	**<0.01**
	Location × Region	3.06	2	1.53	8.49	**<0.03**
	Region × Depth	1.49	1	1.49	8.29	**0.01**
	Location × Depth	0.54	2	0.27	1.51	0.25
	Location × Region × Depth	0.61	2	0.30	1.69	0.22
	Transect(Region)	0.93	4	0.23	1.29	0.32
	Transect(Region)×Depth	1.08	4	0.27	1.49	0.25
	Residual	2.88	16	0.18		
Non-sessile Polychaeta[a]	Region	0.01	1	0.01	0.29	0.60
	Location	0.01	2	0.00	0.07	0.94
	Depth	3.43	1	3.43	82.44	**<0.01**
	Location × Region	0.75	2	0.37	8.97	**<0.01**
	Region × Depth	0.23	1	0.23	5.57	**0.03**
	Location × Depth	0.15	2	0.08	1.85	0.19
	Location × Region × Depth	0.08	2	0.04	0.97	0.40
	Transect(Region)	0.06	4	0.02	0.35	0.84
	Transect(Region)×Depth	0.11	4	0.03	0.65	0.63
	Residual	0.67	16	0.04		

Pectindae[a]	Region	0.23	1	0.23	0.44	0.52
	Location	0.64	2	0.32	0.62	0.55
	Depth	7.04	1	7.04	13.60	**<0.01**
	Location × Region	1.68	2	0.84	1.62	0.23
	Region × Depth	0.20	1	0.20	0.39	0.54
	Location × Depth	1.18	2	0.59	1.14	0.34
	Location × Region × Depth	0.28	2	0.14	0.27	0.77
	Transect(Region)	2.67	4	0.67	1.29	0.32
	Transect(Region)×Depth	1.10	4	0.27	0.53	0.72
	Residual	8.28	16	0.52		
Other Bivalvia[a]	**Region**	0.07	1	0.07	4.63	**0.05**
	Location	0.03	2	0.02	1.17	0.34
	Depth	1.02	1	1.02	69.59	**<0.01**
	Location × Region	0.04	2	0.02	1.28	0.31
	Region × Depth	0.09	1	0.09	6.04	**0.03**
	Location × Depth	0.05	2	0.03	1.73	0.21
	Location × Region × Depth	0.07	2	0.03	2.35	0.13
	Transect(Region)	0.08	4	0.02	1.38	0.28
	Transect(Region)×Depth	0.16	4	0.04	2.82	0.06
	Residual	0.23	16	0.02		
Brachyura[a]	Region	0.01	1	0.01	0.37	0.55
	Location	0.00	2	0.00	0.05	0.95
	Depth	0.12	1	0.12	8.99	**0.01**
	Location × Region	0.00	2	0.00	0.00	1.00
	Region × Depth	0.01	1	0.01	0.35	0.56
	Location × Depth	0.05	2	0.03	2.00	0.17
	Location × Region × Depth	0.02	2	0.01	0.88	0.43
	Transect(Region)	0.05	4	0.01	1.05	0.41
	Transect(Region)×Depth	0.06	4	0.02	1.13	0.38
	Residual	0.21	16	0.01		
Caridea[a]	Region	0.12	1	0.12	3.73	0.07
	Location	0.65	2	0.33	10.25	**<0.01**
	Depth	0.06	1	0.06	1.93	0.18
	Location × Region	0.09	2	0.04	1.39	0.28
	Region × Depth	0.04	1	0.04	1.31	0.27
	Location × Depth	0.17	2	0.08	2.62	0.10
	Location × Region × Depth	0.06	2	0.03	1.01	0.39
	Transect(Region)	0.09	4	0.02	0.69	0.61
	Transect(Region)×Depth	0.09	4	0.02	0.68	0.61
	Residual	0.51	16	0.03		

[a]Log transformation used to meet assumptions of the model