The following supplement accompanies the article

Ocean warming and acidification prevent compensatory response in a predator to reduced prey quality

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Supporting information

Prey Responses

Statistical analysis results for two-way ANOVA, with pCO_2 (3 levels: 400 ppm, 750 ppm and 1000 ppm) and temperature (2 levels: 14 ºC and 18 ºC) as fixed factors, employed to test for possible differences among all measurements for growth, calcification and survival, with Tukey HSD *post-hoc* tests used to test pair-wise differences ($\alpha \leq 0.05$).

Table S1. Two-way ANOVA, with pCO_2 (3 levels: 400 ppm, 750 ppm and 1000 ppm) and temperature (2 levels: 14 ºC and 18 ºC) as fixed factors, to test for differences in *S. balanoides* RCD growth rate. Tukey HSD *post-hoc* tests (*p*-values) are displayed in a matrix, and mirrored to aid interpretation. Symbols (*) indicate significance level of *p*-value, '.' $p < 0.10$, '*' $p < 0.05$, '**' $p < 0.01$, and '***' $p < 0.001$.

	df	Sum Sq	Mean Sq	*F*-value	Pr (>F)	
pCO_2	2	107.71	53.86	12.55	<0.001	***
Temperature	1	9.30	9.30	2.17	0.154	
pCO_2 : Temperature	2	11.07	5.53	1.29	0.294	
Residuals	24	102.95	4.29			

	400ppm	**750ppm**	**1000ppm**
400ppm	-	0.175	<0.001 ***
750ppm	0.175	-	0.013 *
1000ppm	<0.001 ***	0.013 *	-

	14 °C	**18 °C**
14 °C	-	0.154
18 °C	0.154	-

	400ppm, 14 °C	**750ppm, 14 °C**	**1000ppm, 14 °C**	**400ppm, 18 °C**	**750ppm, 18 °C**	**1000ppm, 18 °C**
400ppm, 14 °C	-	0.961	0.004 **	0.929	0.101	0.010 *
750ppm, 14 °C	0.961	-	0.030 *	1.000	0.407	0.061 .
1000ppm, 14 °C	0.004 **	0.030 *	-	0.040 *	0.729	0.999
400ppm, 18 °C	0.929	1.000	0.040 *	-	0.483	0.080 .
750ppm, 18 °C	0.101	0.407	0.729	0.483	-	0.891
1000ppm, 18 °C	0.010 *	0.061 .	0.999	0.080 .	0.891	-

Table S2. Two-way ANOVA, with pCO_2 (3 levels: 400 ppm, 750 ppm and 1000 ppm) and temperature (2 levels: 14 ºC and 18 ºC) as fixed factors, to test for differences in *S. balanoides* somatic growth rate. Tukey HSD *post-hoc* tests (*p*-values) are displayed in a matrix, and mirrored to aid interpretation. Symbols (*) indicate significance level of *p*-value, '.' $p < 0.10$, '*' $p < 0.05$, '**' $p < 0.01$, and '***' $p < 0.001$.

	df	Sum Sq	Mean Sq	*F*-value	Pr (>F)	
pCO_2	2	1338.4	669.20	10.01	<0.001	***
Temperature	1	924.9	924.90	13.83	0.001	**
pCO_2 : Temperature	2	315.3	157.65	2.36	0.116	
Residuals	24	1604.7	66.86			

	400ppm	**750ppm**	**1000ppm**
400ppm	-	0.069	0.000 ***
750ppm	0.069	-	0.104
1000ppm	0.000 ***	0.104	-

	14 °C	**18 °C**
14 °C	-	0.001 **
18 °C	0.001 **	-

	400ppm, 14 °C	**750ppm, 14 °C**	**1000ppm, 14 °C**	**400ppm, 18 °C**	**750ppm, 18 °C**	**1000ppm, 18 °C**
400ppm, 14 °C	-	0.383	0.001 **	0.029 *	0.001 **	0.000 ***
750ppm, 14 °C	0.383	-	0.124	0.750	0.114	0.054
1000ppm, 14 °C	0.001 **	0.124	-	0.789	1.000	0.998
400ppm, 18 °C	0.029 *	0.750	0.789	-	0.765	0.544
750ppm, 18 °C	0.001 **	0.114	1.000	0.765	-	0.999
1000ppm, 18 °C	0.000 ***	0.054	0.998	0.544	0.999	-

Table S3. Two-way ANOVA, with pCO_2 (3 levels: 400 ppm, 750 ppm and 1000 ppm) and temperature (2 levels: 14 ºC and 18 ºC) as fixed factors, to test for differences in *S. balanoides* net calcification rate (standardized by starting length). Tukey HSD *post-hoc* tests (*p*-values) are displayed in a matrix, and mirrored to aid interpretation. Symbols (*) indicate significance level of *p*-value, '.' $p < 0.10$, '*' $p < 0.05$, '**' $p < 0.01$, and '***' $p < 0.001$.

	df	Sum Sq	Mean Sq	*F*-value	Pr (>F)
pCO_2	2	0.000354	0.000177	3.36	0.052
Temperature	1	0.000001	0.000001	0.02	0.903
pCO_2 : Temperature	2	0.000052	0.000026	0.49	0.618
Residuals	24	0.001266	0.000053		

	400ppm	**750ppm**	**1000ppm**
400ppm	-	0.751	0.048 *
750ppm	0.751	-	0.193
1000ppm	0.048 *	0.193	-

	14 °C	**18 °C**
14 °C	-	0.446
18 °C	0.446	-

	400ppm, 14 °C	**750ppm, 14 °C**	**1000ppm, 14 °C**	**400ppm, 18 °C**	**750ppm, 18 °C**	**1000ppm, 18 °C**
400ppm, 14 °C	-	1.000	0.291	1.000	0.931	0.660
750ppm, 14 °C	1.000	-	0.389	1.000	0.973	0.772
1000ppm, 14 °C	0.291	0.389	-	0.346	0.824	0.986
400ppm, 18 °C	1.000	1.000	0.346	-	0.959	0.727
750ppm, 18 °C	0.931	0.973	0.824	0.959	-	0.992
1000ppm, 18 °C	0.660	0.772	0.986	0.727	0.992	-

Table S4. Two-way ANOVA, with pCO_2 (3 levels: 400 ppm, 750 ppm and 1000 ppm) and temperature (2 levels: 14 ºC and 18 ºC) as fixed factors, to test for differences in *S. balanoides* survival rate. Tukey HSD *post-hoc* tests (*p*-values) are displayed in a matrix, and mirrored to aid interpretation. Symbols (*) indicate significance level of *p*-value, '.' $p < 0.10$, '*' $p < 0.05$, '**' $p < 0.01$, and '***' $p < 0.001$.

	df	Sum Sq	Mean Sq	*F*-value	Pr (>F)	
pCO_2	2	1028.7	514.35	9.88	<0.001	***
Temperature	1	2774.8	2774.80	53.28	<0.001	***
pCO_2 : Temperature	2	143.5	71.75	1.38	0.271	
Residuals	24	1249.9	52.08			

	400ppm	**750ppm**	**1000ppm**
400ppm	-	0.567	0.001 **
750ppm	0.567	-	0.010 *
1000ppm	0.001 **	0.010 *	-

	14 °C	**18 °C**
14 °C	-	<0.001 ***
18 °C	<0.001 ***	-

	400ppm, 14 °C	**750ppm, 14 °C**	**1000ppm, 14 °C**	**400ppm, 18 °C**	**750ppm, 18 °C**	**1000ppm, 18 °C**
400ppm, 14 °C	-	0.457	0.008 **	<0.001 ***	<0.001 ***	<0.001 ***
750ppm, 14 °C	0.457	-	0.356	0.013 *	0.032 *	<0.001 ***
1000ppm, 14 °C	0.008 **	0.356	-	0.569	0.799	0.010 *
400ppm, 18 °C	<0.001 ***	0.013 *	0.569	-	0.999	0.298
750ppm, 18 °C	<0.001 ***	0.032 *	0.799	0.999	-	0.152
1000ppm, 18 °C	<0.001 ***	<0.001 ***	0.010 *	0.298	0.152	-

Barnacle length-weight relationships

Akaike information criterion (AIC) was used to compare linear and non-linear ($a*RCD^b$) regressions. In most cases, non-linear regressions were deemed more appropriate for both RCD to dry weight and RCD to shell weight (AIC values are provided below).

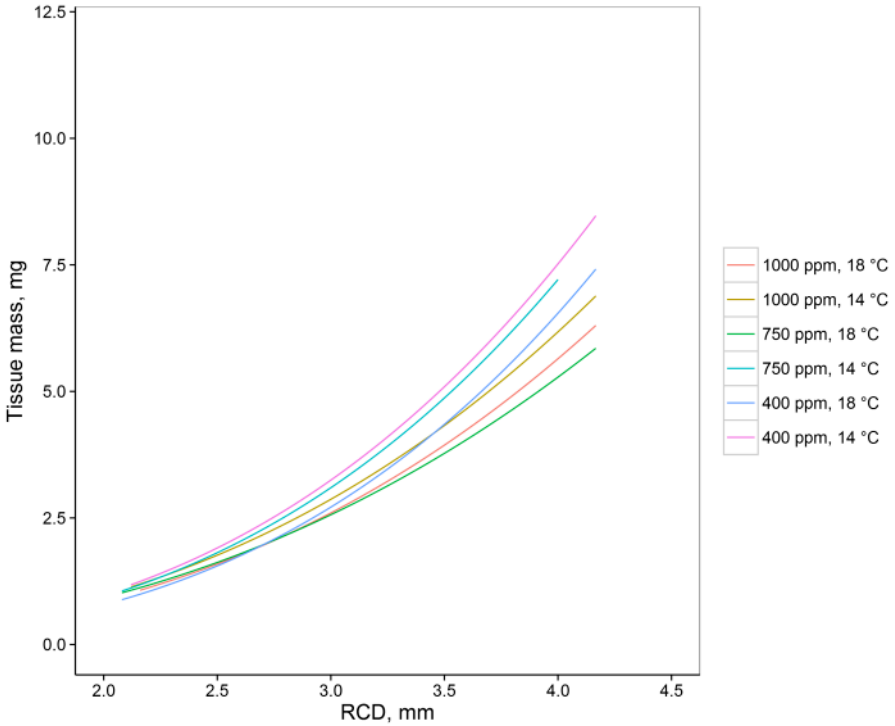

Figure S1. Allometric relationship between tissue mass (mg) and rostro-carinal diameter (RCD, mm) in response to ocean acidification (400, 750 and 1000ppm) and temperature (14 and 18 °C).

Table S5. Akaike information criterion (AIC) values for the linear (A × RCD + B) and allometric ($A \times RCD^B$) models to describe the relationship between the tissue mass and rostro-carinal diameter (RCD) of *S. balanoides*. AIC is a measure of the relative quality of a statistical model for a given set of data, with numbers closer to zero deemed a more appropriate model.

AIC	Linear (A × RCD + B)	Allometric ($A \times RCD^B$)
400ppm, 14 °C	342.49	334.61
750ppm, 14 °C	325.67	316.36
1000ppm, 14 °C	268.97	267.33
400ppm, 18 °C	300.11	284.54
750ppm, 18 °C	229.14	235.97
1000ppm, 18 °C	237.46	229.84

Table S6. Summary of two-way ANCOVA of (log) tissue mass in response to ocean acidification and warming, with (log) length as a covariate. Symbols (*) indicate significance level of *p*-value, '.' $p < 0.10$, '*' $p < 0.05$, '**' $p < 0.01$, and '***' $p < 0.001$.

	Estimate	Std. Error	t value	Pr(>|t|)	
(Intercept)	-0.740	0.047	-15.716	< 0.001	***
Length	2.819	0.057	49.078	< 0.001	***
pCO_2	-0.037	0.018	-2.038	0.042	*
Temperature	-0.087	0.025	-3.525	< 0.001	***
pCO_2:Temperature	0.012	0.011	1.053	0.293	

Table S7. Matrix of *p*-values from the pairwise tests (Tukey HSD) of the ANCOVA of (log) tissue mass in response to ocean acidification and warming, with (log) length as a covariate. Results are mirrored to aid interpretation. Symbols (*) indicate significance level of *p*-value, '*' $p < 0.05$, '**' $p < 0.01$, and '***' $p < 0.001$.

	400ppm, 14 °C	**750ppm, 14 °C**	**1000ppm, 14 °C**	**400ppm, 18 °C**	**750ppm, 18 °C**	**1000ppm, 18 °C**
400ppm, 14 °C	-	0.945	0.026 *	0.003 **	<0.001 ***	<0.001 ***
750ppm, 14 °C	0.945	-	0.25	0.062 .	<0.001 ***	<0.001 ***
1000ppm, 14 °C	0.026 *	0.25	-	0.991	0.003 **	0.245
400ppm, 18 °C	0.003 **	0.062 .	0.991	-	0.025 *	0.607
750ppm, 18 °C	<0.001 ***	<0.001 ***	0.003 **	0.025 *	-	0.659
1000ppm, 18 °C	<0.001 ***	<0.001 ***	0.245	0.607	0.659	-

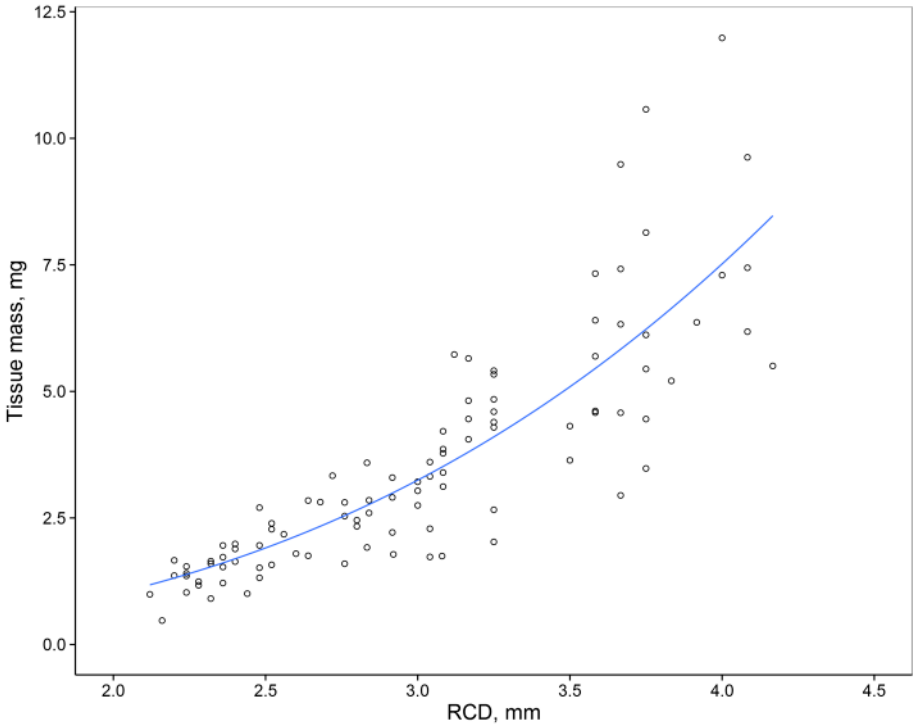

Figure S2. Allometric equation between rostro-carinal diameter (RCD) and tissue mass (mg) at 400 ppm and 14 °C. Tissue mass (mg) = 0.1117 * RCD (mm) ^ 3.0622, n = 100.

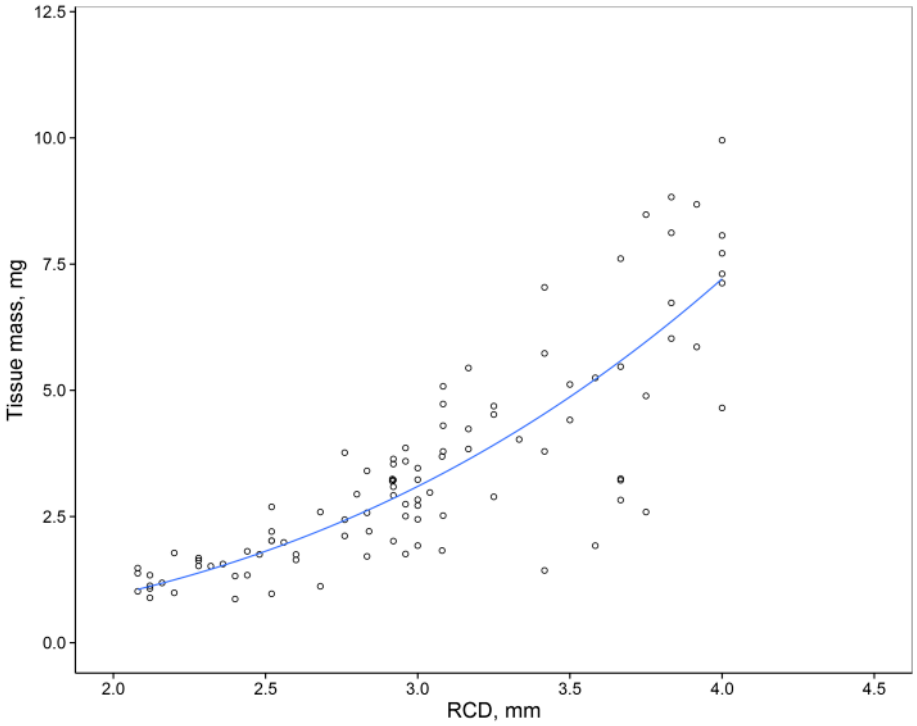

Figure S3. - Allometric equation between rostro-carinal diameter (RCD) and tissue mass (mg) at 750 ppm and 14 °C. Tissue mass (mg) = 0.1230 * RCD (mm) ^ 2.9363, n = 100.

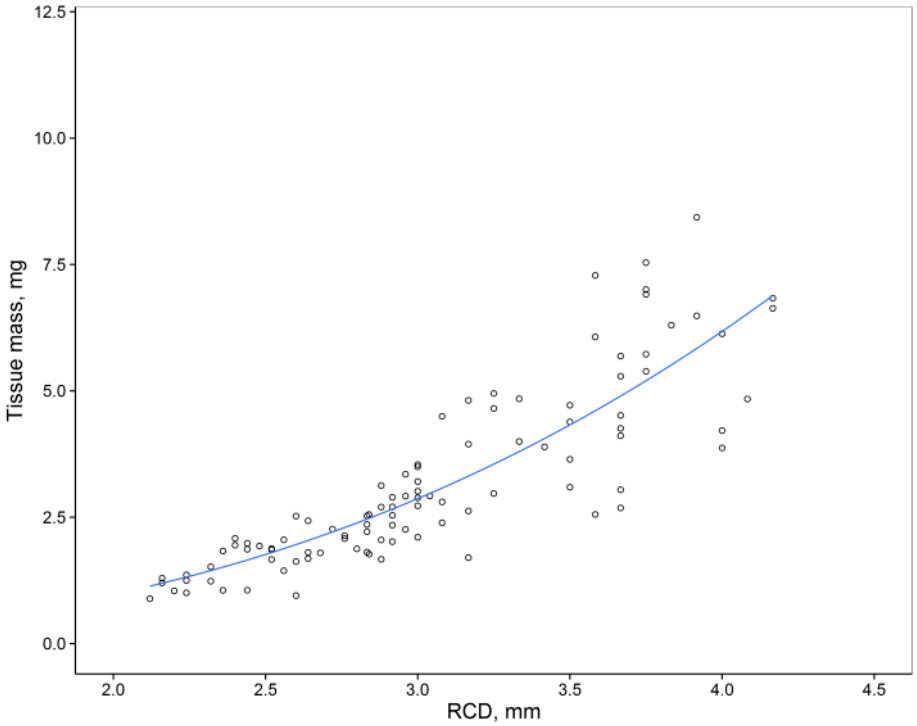

Figure S4. Allometric equation between rostro-carinal diameter (RCD) and tissue mass (mg) at 1000 ppm and 14 °C. Tissue mass (mg) = 0.1534 * RCD (mm) ^ 2.6654, n = 100.

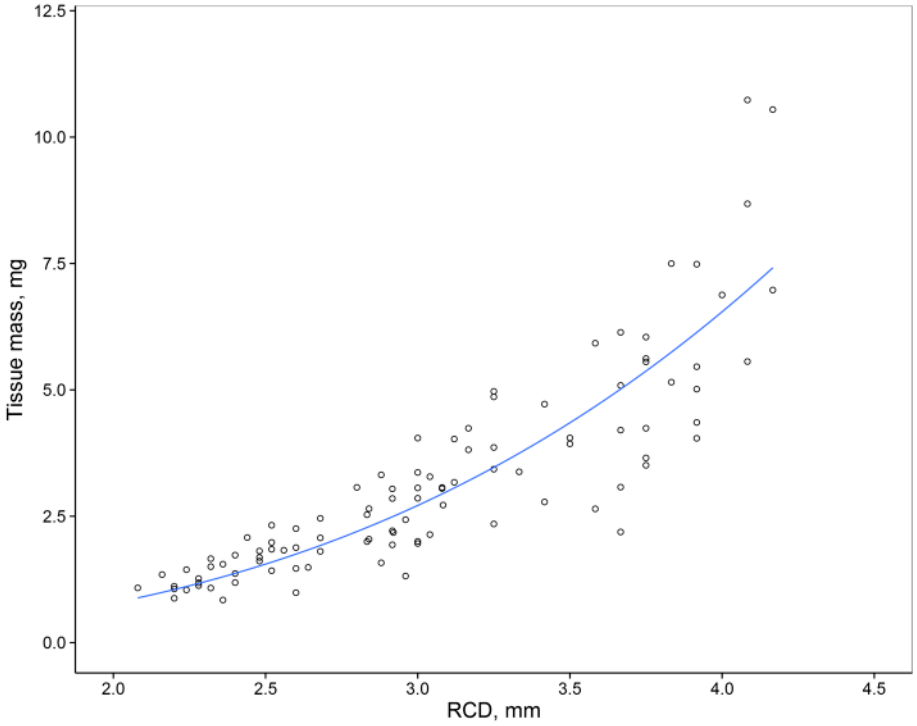

Figure S5. Allometric equation between rostro-carinal diameter (RCD) and tissue mass (mg) at 400 ppm and 18 °C. Tissue mass (mg) = 0.0941 * RCD (mm) ^ 3.0601, n = 100.

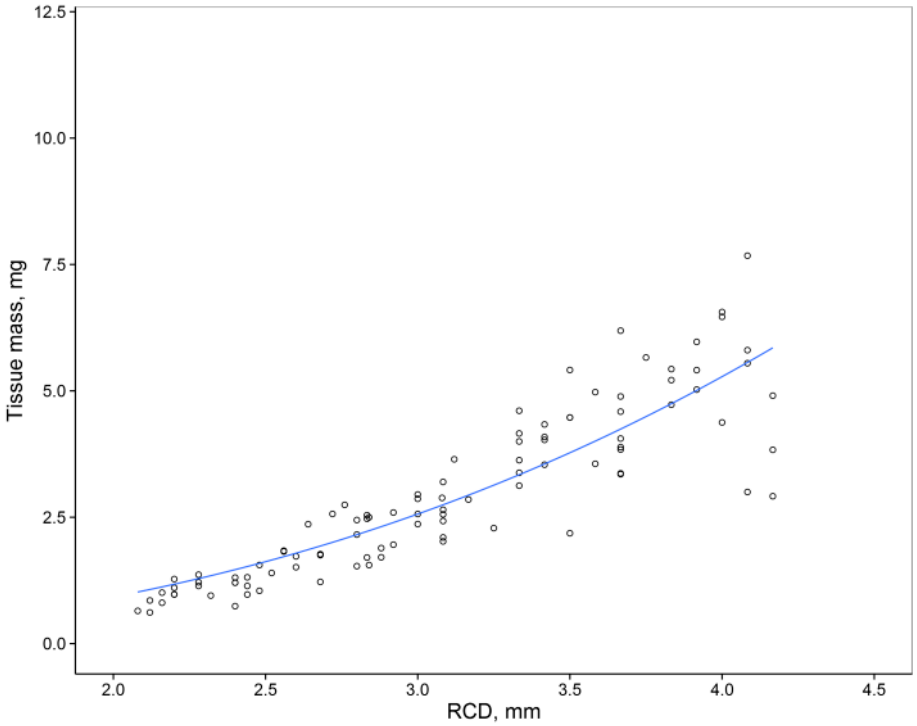

Figure S6. Allometric equation between rostro-carinal diameter (RCD) and tissue mass (mg) at 750 ppm and 18 °C. Tissue mass (mg) = 0.1622 * RCD (mm) ^ 2.5126, n = 100.

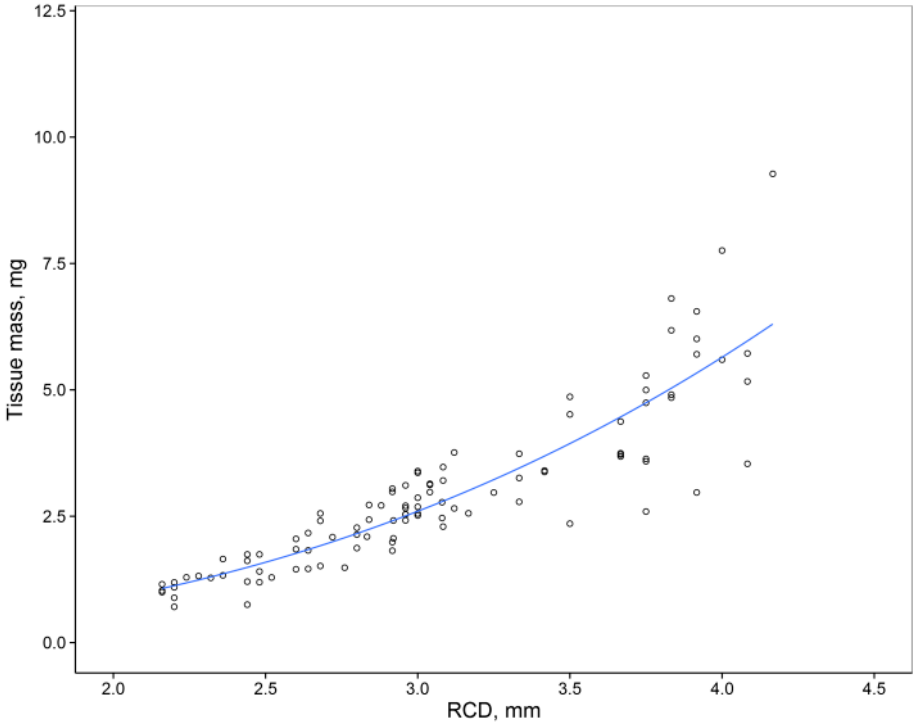

Figure S7. Allometric equation between rostro-carinal diameter (RCD) and tissue mass (mg) at 1000 ppm and 18 °C. Tissue mass (mg) = 0.1344 * RCD (mm) ^ 2.6963, n = 100.

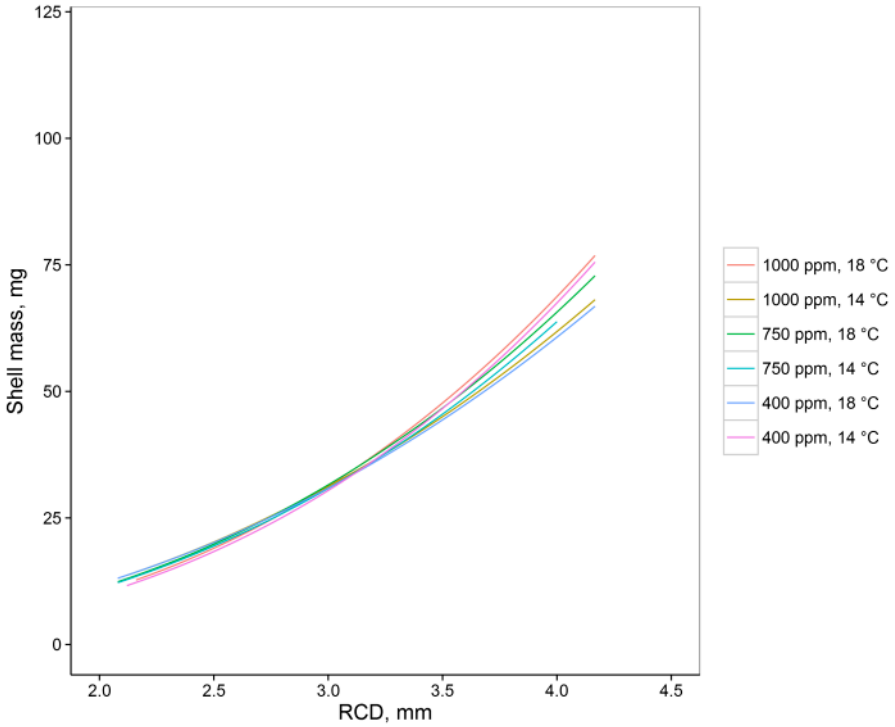

Figure S8. Allometric relationship between shell mass (mg) and rostro-carinal diameter (RCD, mm) in response to ocean acidification (400, 750 and 1000ppm) and temperature (14 and 18 °C).

Table S8. Akaike information criterion (AIC) values for the linear (A × RCD + B) and allometric (A × RCD^B) models to describe the relationship between the shell mass and rostro-carinal diameter (RCD) of *S. balanoides*. AIC is a measure of the relative quality of a statistical model for a given set of data, with numbers closer to zero deemed a more appropriate model.

AIC	**Linear (A × RCD + B)**	**Allometric (A × RCD^B)**
400ppm, 14 °C	843.19	839.07
750ppm, 14 °C	838.88	838.84
1000ppm, 14 °C	808.75	809.34
400ppm, 18 °C	798.00	798.55
750ppm, 18 °C	745.24	740.68
1000ppm, 18 °C	740.97	728.73

Table S9. Summary of two-way ANCOVA of (log) shell mass in response to ocean acidification and warming, with (log) length as a covariate. Symbols (*) indicate significance level of *p*-value, '*' $p < 0.05$, '**' $p < 0.01$, and '***' $p < 0.001$.

	Estimate	Std. Error	t value	Pr(>|t|)	
(Intercept)	0.358	0.055	6.518	< 0.001	***
Length	0.355	0.010	35.378	< 0.001	***
pCO_2	0.001	0.021	0.033	0.974	
Temperature	0.005	0.029	0.183	0.855	
pCO_2:Temperature	0.007	0.013	0.491	0.624	

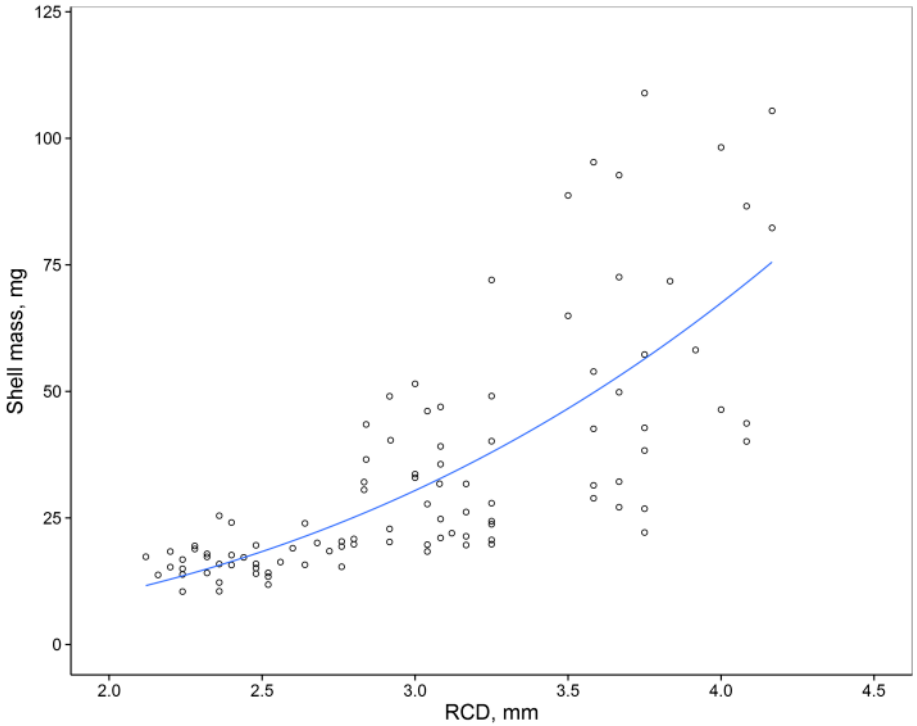

Figure S9. Allometric equation between rostro-carinal diameter (RCD) and shell mass (mg) at 400 ppm and 14 °C. Shell mass (mg) = 1.4529 * RCD (mm) ^ 2.7687, n = 100.

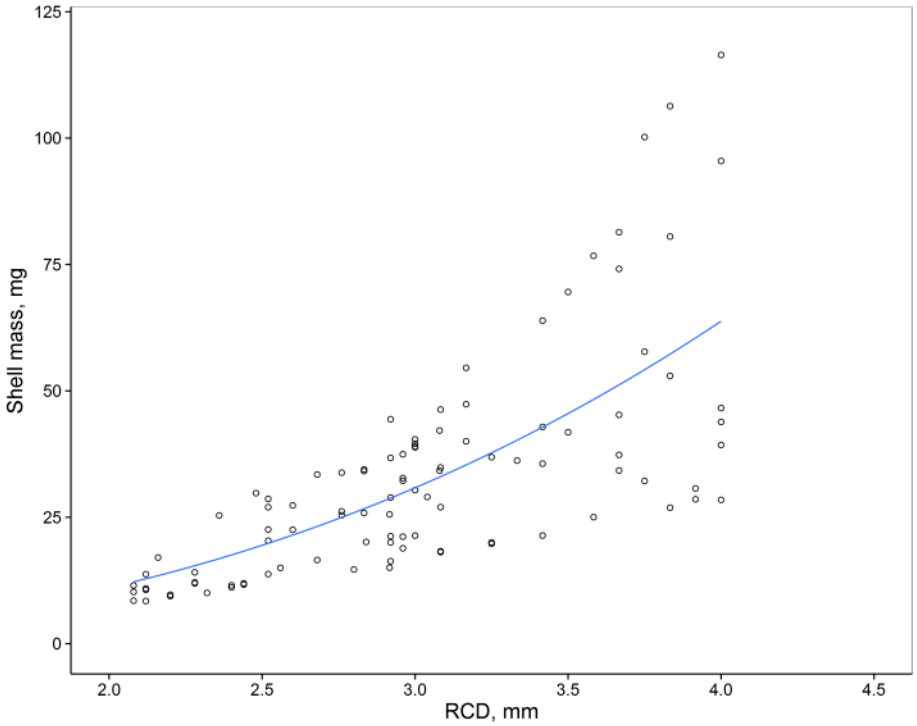

Figure S10. Allometric equation between rostro-carinal diameter (RCD) and shell mass (mg) at 750 ppm and 14 °C. Shell mass (mg) = 1.9210 * RCD (mm) ^ 2.5266, n = 100.

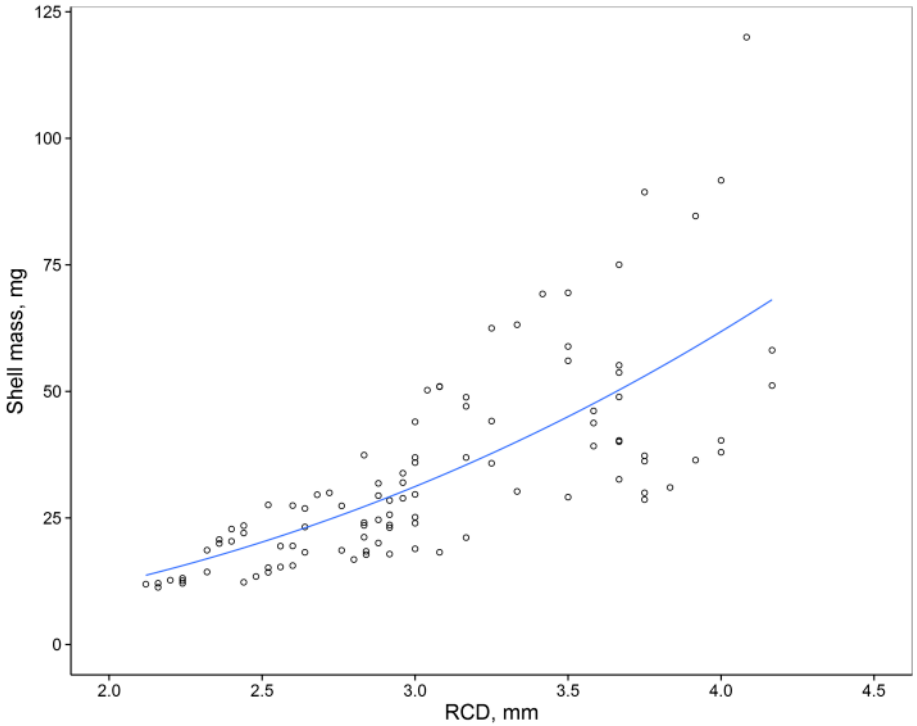

Figure S11. Allometric equation between rostro-carinal diameter (RCD) and shell mass (mg) at 1000 ppm and 14 °C. Shell mass (mg) = 2.2939 * RCD (mm) ^ 2.3761, n = 100.

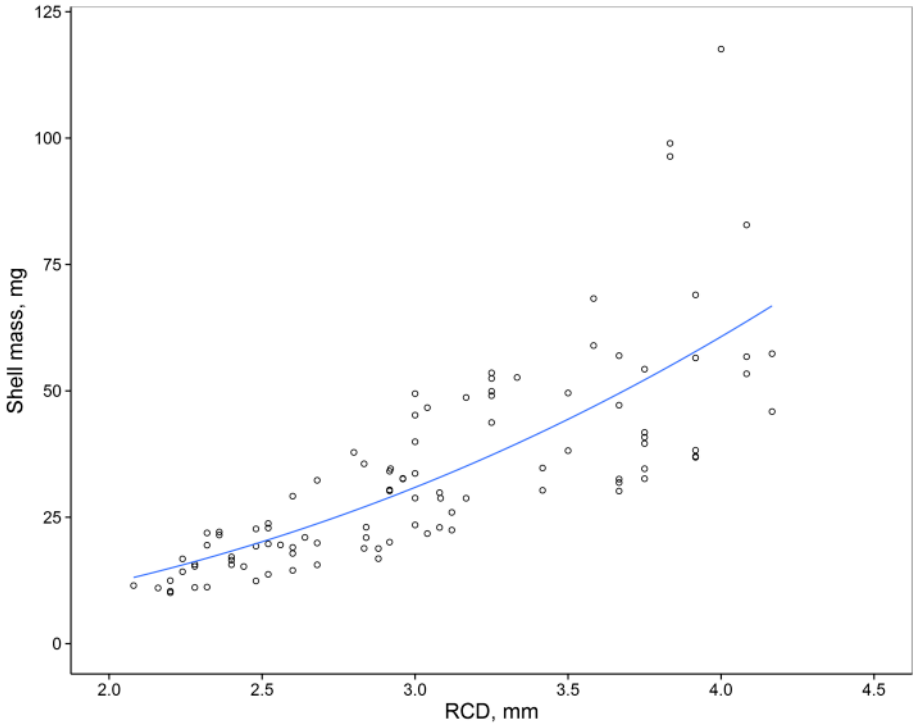

Figure S12. Allometric equation between rostro-carinal diameter (RCD) and shell mass (mg) at 400 ppm and 18 °C. T Shell mass (mg) = 2.3467 * RCD (mm) ^ 2.3467, n = 100.

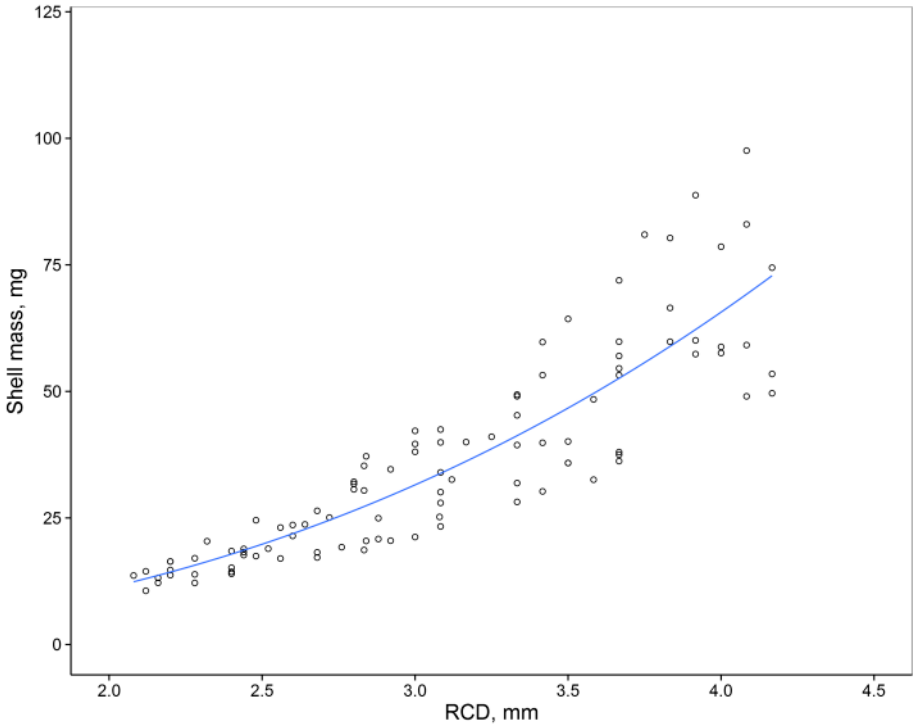

Figure S13. Allometric equation between rostro-carinal diameter (RCD) and shell mass (mg) at 750 ppm and 18 °C. Shell mass (mg) = 1.9167 * RCD (mm) ^ 2.5491, n = 100.

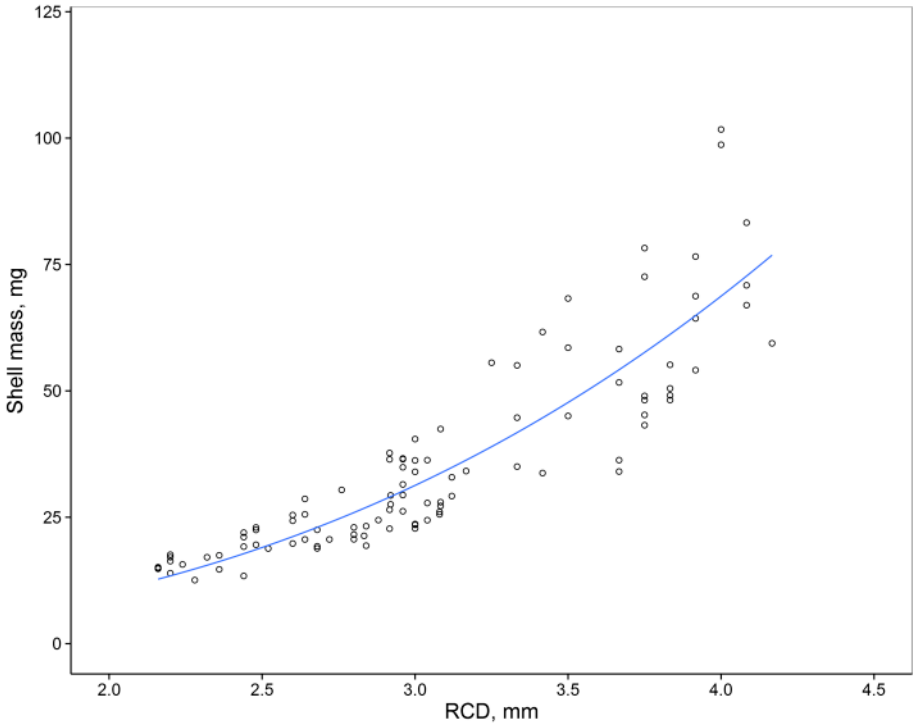

Figure S14. Allometric equation between rostro-carinal diameter (RCD) and shell mass (mg) at 1000 ppm and 18 °C. Shell mass (mg) = 1.5532 * RCD (mm) ^ 2.7338, n = 100.

Predator Responses

Statistical analysis results for two-way ANOVA, with pCO_2 (3 levels: 400 ppm, 750 ppm and 1000 ppm) and temperature (2 levels: 14 ºC and 18 ºC) as fixed factors, employed to test for possible differences among all measurements of the predator (growth, calcification, standard metabolic rate, feeding rate and ingestion efficiency), with Tukey HSD *post-hoc* tests used to test pair-wise differences ($\alpha \leq 0.05$).

Table S10. Two-way ANOVA, with pCO_2 (3 levels: 400 ppm, 750 ppm and 1000 ppm) and temperature (2 levels: 14 ºC and 18 ºC) as fixed factors, to test for differences in *N. lapillus* somatic growth rate. Tukey HSD *post-hoc* tests (*p*-values) are displayed in a matrix, and mirrored to aid interpretation. Symbols (*) indicate significance level of *p*-value, '.' $p < 0.10$, '*' $p < 0.05$, '**' $p < 0.01$, and '***' $p < 0.001$.

	df	Sum Sq	Mean Sq	*F*-value	Pr (>F)	
pCO_2	2	13.61	6.81	36.24	<0.001	***
Temperature	1	7.00	7.00	37.26	<0.001	***
pCO_2 : Temperature	2	2.81	1.40	7.47	0.003	**
Residuals	24	4.51	0.19			

	400ppm	**750ppm**	**1000ppm**
400ppm	-	0.307	<0.001 ***
750ppm	0.307	-	<0.001 ***
1000ppm	<0.001 ***	<0.001 ***	-

	14 °C	**18 °C**
14 °C	-	<0.001 ***
18 °C	<0.001 ***	-

	400ppm, 14 °C	**750ppm, 14 °C**	**1000ppm, 14 °C**	**400ppm, 18 °C**	**750ppm, 18 °C**	**1000ppm, 18 °C**
400ppm, 14 °C	-	0.999	0.031 *	0.015 *	0.868	<0.001 ***
750ppm, 14 °C	0.999	-	0.049 *	0.036 *	0.974	<0.001 ***
1000ppm, 14 °C	0.031 *	0.049 *	-	1.000	0.279	<0.001 ***
400ppm, 18 °C	0.015 *	0.036 *	1.000	-	0.162	<0.001 ***
750ppm, 18 °C	0.868	0.974	0.279	0.162	-	<0.001 ***
1000ppm, 18 °C	<0.001 ***	<0.001 ***	<0.001 ***	<0.001 ***	<0.001 ***	-

Table S11. Two-way ANOVA, with pCO_2 (3 levels: 400 ppm, 750 ppm and 1000 ppm) and temperature (2 levels: 14 ºC and 18 ºC) as fixed factors, to test for differences in *N. lapillus* shell length extension rate. Tukey HSD *post-hoc* tests (*p*-values) are displayed in a matrix, and mirrored to aid interpretation. Symbols (*) indicate significance level of *p*-value, '.' $p < 0.10$, '*' $p < 0.05$, '**' $p < 0.01$, and '***' $p < 0.001$.

	df	Sum Sq	Mean Sq	*F*-value	Pr (>F)
pCO_2	2	0.032	0.016	3.16	0.061
Temperature	1	0.013	0.013	2.54	0.124
pCO_2 : Temperature	2	0.001	0.001	0.11	0.895
Residuals	24	0.122	0.005		

	400ppm	**750ppm**	**1000ppm**
400ppm	-	0.340	0.049 *
750ppm	0.340	-	0.542
1000ppm	0.049 *	0.542	-

	14 °C	**18 °C**
14 °C	-	0.124
18 °C	0.124	-

	400ppm, 14 °C	**750ppm, 14 °C**	**1000ppm, 14 °C**	**400ppm, 18 °C**	**750ppm, 18 °C**	**1000ppm, 18 °C**
400ppm, 14 °C	-	0.756	0.406	0.991	1.000	0.907
750ppm, 14 °C	0.756	-	0.991	0.407	0.805	0.999
1000ppm, 14 °C	0.406	0.991	-	0.157	0.459	0.938
400ppm, 18 °C	0.991	0.407	0.157	-	0.998	0.603
750ppm, 18 °C	1.000	0.805	0.459	0.998	-	0.936
1000ppm, 18 °C	0.907	0.999	0.938	0.603	0.936	-

Table S12. Two-way ANOVA, with pCO_2 (3 levels: 400 ppm, 750 ppm and 1000 ppm) and temperature (2 levels: 14 ºC and 18 ºC) as fixed factors, to test for differences in *N. lapillus* calcification rate. Tukey HSD *post-hoc* tests (*p*-values) are displayed in a matrix, and mirrored to aid interpretation. Symbols (*) indicate significance level of *p*-value, '.' $p < 0.10$, '*' $p < 0.05$, '**' $p < 0.01$, and '***' $p < 0.001$.

	df	Sum Sq	Mean Sq	*F*-value	Pr (>F)	
pCO_2	2	0.936	0.470	18.582	<0.001	***
Temperature	1	0.010	0.010	0.381	0.543	
pCO_2 : Temperature	2	0.013	0.066	0.263	0.771	
Residuals	24	0.604	0.025			

	400ppm	**750ppm**	**1000ppm**
400ppm	-	0.559	<0.001 ***
750ppm	0.559	-	<0.001 ***
1000ppm	<0.001 ***	<0.001 ***	-

	14 °C	**18 °C**
14 °C	-	0.543
18 °C	0.543	-

	400ppm, 14 °C	**750ppm, 14 °C**	**1000ppm, 14 °C**	**400ppm, 18 °C**	**750ppm, 18 °C**	**1000ppm, 18 °C**
400ppm, 14 °C	-	0.816	0.043 *	0.967	0.906	0.119
750ppm, 14 °C	0.816	-	0.002 **	0.997	1.000	0.008 **
1000ppm, 14 °C	0.043 *	0.002 **	-	0.007 **	0.004 **	0.996
400ppm, 18 °C	0.967	0.997	0.007 **	-	1.000	0.022 *
750ppm, 18 °C	0.906	1.000	0.004 **	1.000	-	0.013 *
1000ppm, 18 °C	0.119	0.008 **	0.996	0.022 *	0.013 *	-

Table S13. Two-way ANOVA, with pCO_2 (3 levels: 400 ppm, 750 ppm and 1000 ppm) and temperature (2 levels: 14 ºC and 18 ºC) as fixed factors, to test for differences in *N. lapillus* oxygen uptake rate. Tukey HSD *post-hoc* tests (*p*-values) are displayed in a matrix, and mirrored to aid interpretation. Symbols (*) indicate significance level of *p*-value, '.' $p < 0.10$, '*' $p < 0.05$, '**' $p < 0.01$, and '***' $p < 0.001$.

	df	Sum Sq	Mean Sq	*F*-value	Pr (>F)	
pCO_2	2	21.63	10.82	8.44	0.002	**
Temperature	1	158.96	158.96	124.03	<0.001	***
pCO_2 : Temperature	2	1.84	0.92	0.72	0.498	
Residuals	24	30.76	1.28			

	400ppm	**750ppm**	**1000ppm**
400ppm	-	0.998	0.005 **
750ppm	0.998	-	0.004 **
1000ppm	0.005 **	0.004 **	-

	14 °C	**18 °C**
14 °C	-	<0.001 ***
18 °C	<0.001 ***	-

	400ppm, 14 °C	**750ppm, 14 °C**	**1000ppm, 14 °C**	**400ppm, 18 °C**	**750ppm, 18 °C**	**1000ppm, 18 °C**
400ppm, 14 °C	-	0.950	0.264	<0.001 ***	<0.001 ***	<0.001 ***
750ppm, 14 °C	0.950	-	0.050 *	<0.001 ***	<0.001 ***	<0.001 ***
1000ppm, 14 °C	0.264	0.050 *	-	0.022 *	0.003 **	<0.001 ***
400ppm, 18 °C	<0.001 ***	<0.001 ***	0.022 *	-	0.967	0.098 .
750ppm, 18 °C	<0.001 ***	<0.001 ***	0.003 **	0.967	-	0.384
1000ppm, 18 °C	<0.001 ***	<0.001 ***	<0.001 ***	0.098 .	0.384	-

Table S14. Two-way ANOVA, with pCO_2 (3 levels: 400 ppm, 750 ppm and 1000 ppm) and temperature (2 levels: 14 ºC and 18 ºC) as fixed factors, to test for differences in *N. lapillus* feeding rate (# barnacles). Tukey HSD *post-hoc* tests (*p*-values) are displayed in a matrix, and mirrored to aid interpretation. Symbols (*) indicate significance level of *p*-value, '.' $p < 0.10$, '*' $p < 0.05$, '**' $p < 0.01$, and '***' $p < 0.001$.

	df	Sum Sq	Mean Sq	*F*-value	Pr (>F)	
pCO_2	2	7.14	3.57	3.56	0.044	*
Temperature	1	2.41	2.41	2.41	0.134	
pCO_2 : Temperature	2	5.33	2.66	2.66	0.091	
Residuals	24	24.06	1.00			

	400ppm	**750ppm**	**1000ppm**
400ppm	-	0.981	0.090
750ppm	0.981	-	0.061
1000ppm	0.090	0.061	-

	14 °C	**18 °C**
14 °C	-	0.134
18 °C	0.134	-

	400ppm, 14 °C	**750ppm, 14 °C**	**1000ppm, 14 °C**	**400ppm, 18 °C**	**750ppm, 18 °C**	**1000ppm, 18 °C**
400ppm, 14 °C	-	0.998	1.000	1.000	1.000	0.095
750ppm, 14 °C	0.998	-	0.998	1.000	1.000	0.040 *
1000ppm, 14 °C	1.000	0.998	-	0.999	1.000	0.101
400ppm, 18 °C	1.000	1.000	0.999	-	1.000	0.050 *
750ppm, 18 °C	1.000	1.000	1.000	1.000	-	0.068
1000ppm, 18 °C	0.095	0.040 *	0.101	0.050 *	0.068	-

Table S15. Two-way ANOVA, with pCO_2 (3 levels: 400 ppm, 750 ppm and 1000 ppm) and temperature (2 levels: 14 ºC and 18 ºC) as fixed factors, to test for differences in *N. lapillus* feeding rate (J). Tukey HSD *post-hoc* tests (*p*-values) are displayed in a matrix, and mirrored to aid interpretation. Symbols (*) indicate significance level of *p*-value, '.' $p < 0.10$, '*' $p < 0.05$, '**' $p < 0.01$, and '***' $p < 0.001$.

	df	Sum Sq	Mean Sq	*F*-value	Pr (>F)	
pCO_2	2	11022	5511	3.753	0.038	*
Temperature	1	13059	13059	8.894	0.006	**
pCO_2 : Temperature	2	4129	2065	1.406	0.265	
Residuals	24	35239	1468			

	400ppm	**750ppm**	**1000ppm**
400ppm	-	0.987	0.05 *
750ppm	0.987	-	0.076 .
1000ppm	0.05 *	0.076 .	-

	14 °C	**18 °C**
14 °C	-	0.006 **
18 °C	0.006 **	-

	400ppm, 14 °C	**750ppm, 14 °C**	**1000ppm, 14 °C**	**400ppm, 18 °C**	**750ppm, 18 °C**	**1000ppm, 18 °C**
400ppm, 14 °C	-	1.000	0.991	0.971	0.848	0.015 *
750ppm, 14 °C	1.000	-	0.969	0.929	0.751	0.009 **
1000ppm, 14 °C	0.991	0.969	-	1.000	0.991	0.055 .
400ppm, 18 °C	0.971	0.929	1.000	-	0.998	0.079 .
750ppm, 18 °C	0.848	0.751	0.991	0.998	-	0.174
1000ppm, 18 °C	0.015 *	0.009 **	0.055 .	0.079 .	0.174	-

Table S16. Two-way ANOVA, with pCO_2 (3 levels: 400 ppm, 750 ppm and 1000 ppm) and temperature (2 levels: 14 ºC and 18 ºC) as fixed factors, to test for differences in *N. lapillus* ingestion efficiency. Tukey HSD *post-hoc* tests (*p*-values) are displayed in a matrix, and mirrored to aid interpretation. Symbols (*) indicate significance level of *p*-value, '.' $p < 0.10$, '*' $p < 0.05$, '**' $p < 0.01$, and '***' $p < 0.001$.

	df	Sum Sq	Mean Sq	*F*-value	Pr (>F)	
pCO_2	2	0.93	0.47	6.29	0.006	**
Temperature	1	2.89	2.89	39.01	<0.001	***
pCO_2 : Temperature	2	0.06	0.03	0.377	0.690	
Residuals	24	1.78	0.07			

	400ppm	**750ppm**	**1000ppm**
400ppm	-	0.982	0.017 *
750ppm	0.982	-	0.011 *
1000ppm	0.017 *	0.011 *	-

	14 °C	**18 °C**
14 °C	-	0.000 ***
18 °C	0.000 ***	-

	400ppm, 14 °C	**750ppm, 14 °C**	**1000ppm, 14 °C**	**400ppm, 18 °C**	**750ppm, 18 °C**	**1000ppm, 18 °C**
400ppm, 14 °C	-	0.980	0.592	0.074	0.029 *	0.000 ***
750ppm, 14 °C	0.980	-	0.225	0.016 *	0.006 **	0.000 ***
1000ppm, 14 °C	0.592	0.225	-	0.792	0.530	0.008 **
400ppm, 18 °C	0.074	0.016 *	0.792	-	0.998	0.139
750ppm, 18 °C	0.029 *	0.006 **	0.530	0.998	-	0.299
1000ppm, 18 °C	0.000 ***	0.000 ***	0.008 **	0.139	0.299	-