

Supplementary

Ocean Acidification Does Not Affect Fish Ectoparasite Survival

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Received: 23 January 2020; Accepted: 14 February 2020; Published: date

Table S1. Seawater physicochemical parameters in all experimental setups.

Date	System	Temp. (°C)	pH	Sal.	TA ($\mu\text{mol/kgSW}$)	TCO ₂ ($\mu\text{mol/kgSW}$)	pCO ₂ (μatm)	HCO ₃ ($\mu\text{mol/kgSW}$)	ΩAr
06.03.2019	A	27.79	7.76	35.0	2318.8	2139.9	848.2	1978.1	2.24
06.03.2019	B	27.82	8.07	35.0	2318.8	1969.7	359.9	1713.4	3.97
06.03.2019	C	25.18	8.08	35.0	2318.8	1988.4	352.8	1744.5	3.71
06.03.2019	D	27.72	8.08	35.0	2318.8	1964.2	349.7	1704.6	4.03
06.03.2019	E	27.68	7.70	35.0	2318.8	2167.1	992.6	2017.4	1.98
06.03.2019	F	27.80	7.75	35.0	2318.8	2144.4	870.9	1984.6	2.20
07.03.2019	A	27.36	7.76	35.0	2298.2	2123.2	840.3	1964.4	2.19
07.03.2019	B	27.46	8.09	35.0	2298.2	1941.9	336.8	1682.5	4.02
07.03.2019	C	27.16	8.09	35.0	2298.2	1944.8	337.2	1687.2	3.99
07.03.2019	D	27.16	8.09	35.0	2298.2	1944.8	337.2	1687.2	3.99
07.03.2019	E	27.17	7.71	35.0	2298.2	2146.2	957.9	1997.8	1.97
07.03.2019	F	27.37	7.74	35.0	2298.2	2132.0	885.8	1977.3	2.10
08.03.2019	A	27.64	7.75	35.0	2236.7	2067.4	839.2	1914.0	2.11
08.03.2019	B	27.71	8.09	35.0	2236.7	1884.8	327.0	1631.1	3.94
08.03.2019	C	27.49	8.09	35.0	2236.7	1886.9	327.3	1634.6	3.91
08.03.2019	D	27.56	8.09	35.0	2236.7	1886.2	327.2	1633.5	3.92
08.03.2019	E	27.50	7.75	35.0	2236.7	2068.3	839.1	1915.4	2.10
08.03.2019	F	27.63	7.78	35.0	2236.7	2054.1	775.1	1894.5	2.23
09.03.2019	A	27.65	7.70	35.0	2298.2	2147.6	983.6	1999.4	1.96
09.03.2019	B	27.75	8.13	35.0	2298.2	1912.5	299.0	1634.9	4.34
09.03.2019	C	27.54	8.13	35.0	2298.2	1914.6	299.3	1638.4	4.31
09.03.2019	D	27.56	8.12	35.0	2298.2	1921.1	308.3	1648.9	4.24
09.03.2019	E	27.51	7.76	35.0	2298.2	2122.2	840.4	1962.9	2.20
09.03.2019	F	27.67	7.75	35.0	2298.2	2125.7	862.9	1967.9	2.17
10.03.2019	A	28.16	7.68	35.0	2298.2	2153.1	1036.6	2006.7	1.92
10.03.2019	B	28.25	8.10	35.0	2298.2	1927.6	326.0	1659.1	4.19
10.03.2019	C	28.11	8.10	35.0	2298.2	1929.0	326.2	1661.4	4.17
10.03.2019	D	28.19	8.10	35.0	2298.2	1928.2	326.1	1660.1	4.18
10.03.2019	E	28.10	7.68	35.0	2298.2	2153.4	1036.6	2007.3	1.92
10.03.2019	F	28.15	7.68	35.0	2298.2	2153.1	1036.6	2006.8	1.92

Table S2. Summary output for Cox mixed effects model of gnathiid survival among CO₂ treatments, gnathiid stage and headwidth.

	coef	exp(coef)	se(coef)	z	p
High CO ₂	-2.607	0.073	1.655	-1.58	0.120
Stage 2	-5.334	0.048	2.463	-2.17	0.030
Stage 3	-14.023	<0.001	5.992	-2.34	0.019
Headwidth	-0.033	0.967	0.006	-6.00	<0.001
High CO ₂ × Stage 2	2.366	10.618	3.649	0.65	0.520
High CO ₂ × Stage 3	3.627	37.599	7.873	0.46	0.650
High CO ₂ × Headwidth	0.016	1.016	0.009	1.70	0.090
Stage 2 × Headwidth	0.025	1.025	0.011	2.12	0.034
Stage 3 × Headwidth	0.054	1.055	0.023	2.38	0.017
High CO ₂ × Stage 2 × Headwidth	-0.014	0.986	0.018	-0.77	0.440
High CO ₂ × Stage 3 × Headwidth	-0.018	0.982	0.030	-0.58	0.560

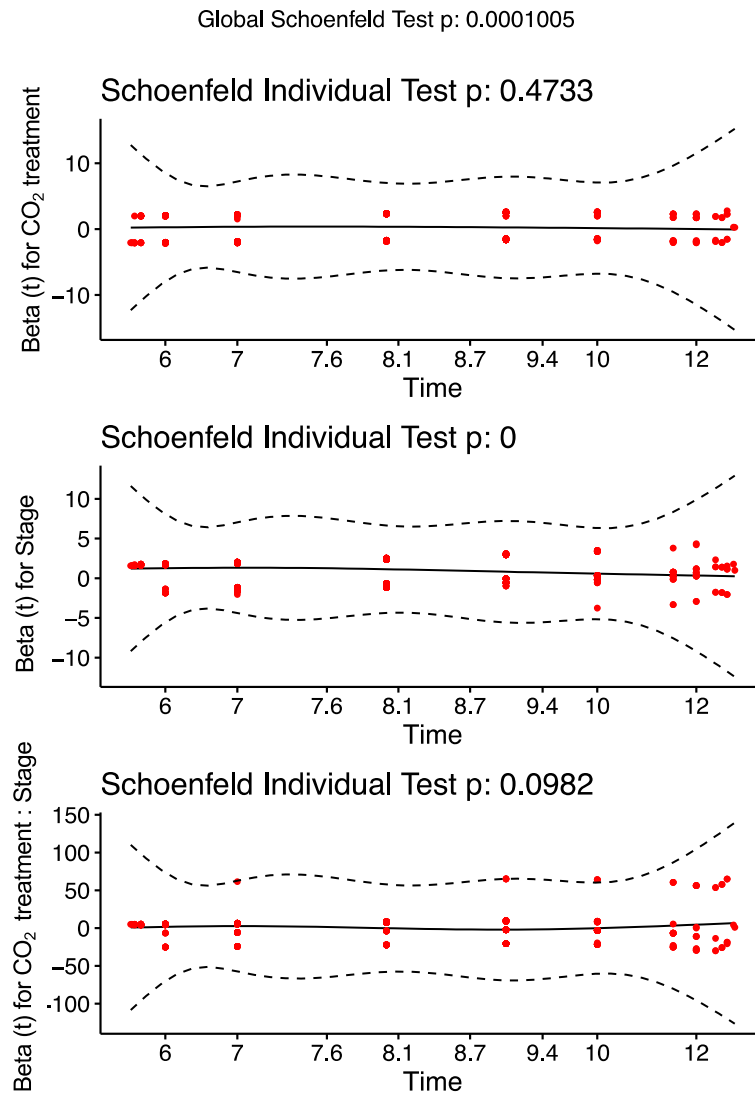


Figure S1. Smoothed spline plots of Schoenfeld residuals of the Cox mixed effects model relative to time (without headwidth)

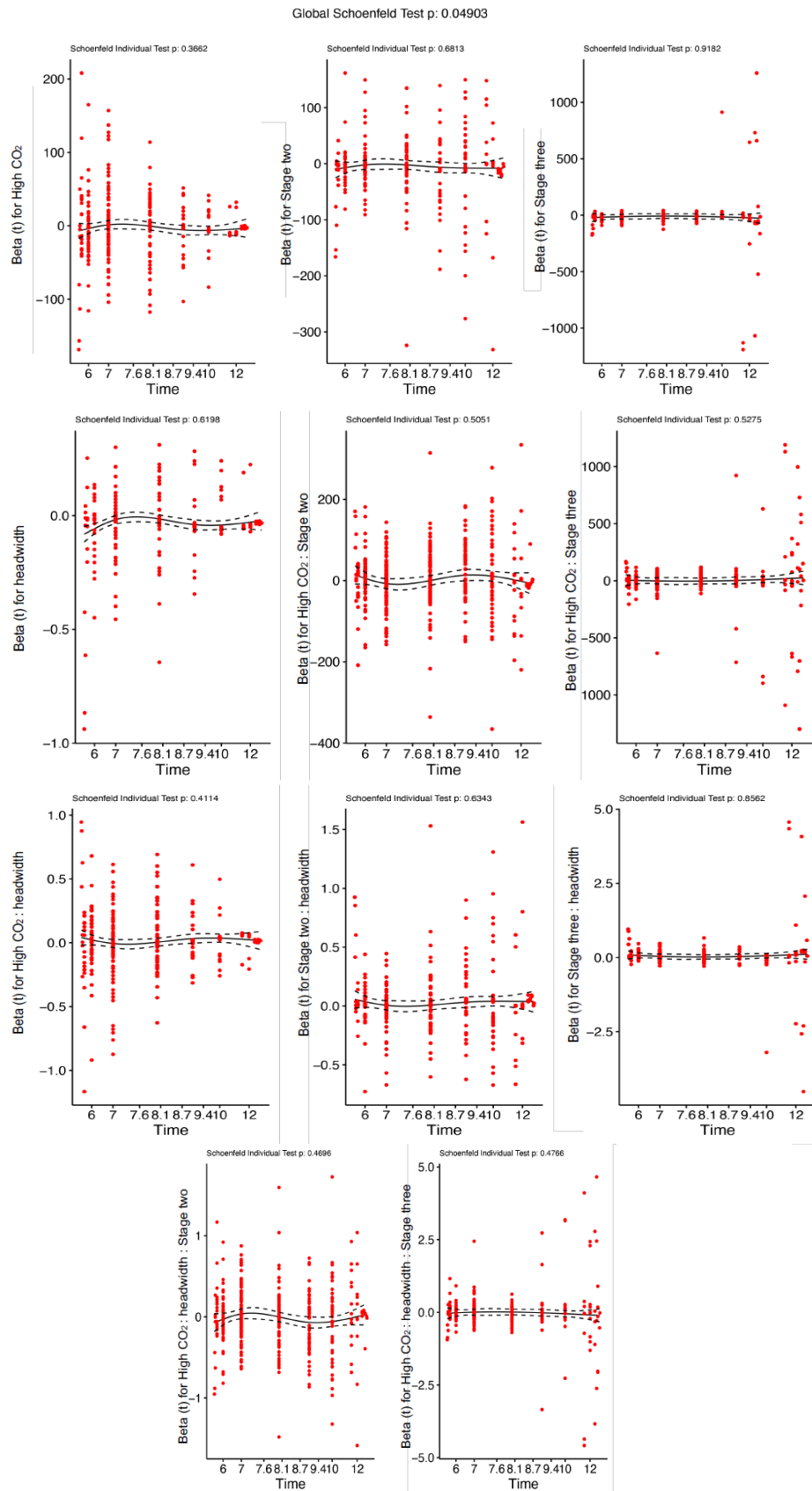


Figure S2. Smoothed spline plots of Schoenfeld residuals of the Final Cox mixed effects model relative to time (with headwidth).