The following supplement accompanies the article

Foraging behavior minimizes heat exposure in a complex thermal landscape

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Supplementary materials

Fig. S1. Overview of experimental plots in the rocky intertidal zone. Artificial islands aligned at +0.95 m tidal elevation above mean lower low water (MLLW), on south-facing beach on San Juan Island, WA. View is looking west and offshore. East and west faces of each cinder block have a temperature logger (t) and transplanted snail bait (b). Snails roam freely on each island, deterred from leaving by the wire mesh cage

Fig. S2. Overhead view from south of one plot. Cinder block is aligned north–south on island so that long surfaces face east and west. Mesh cage is to deter movement of snails out of plot

Fig. S3. Side view from east of one plot. Cobble spacers (c) provide shaded crack refuge (r) approximately 25 mm in height beneath cinder block

Fig. S4. *Nucella ostrina* foraging on barnacle bait, *Balanus glandula*, transplanted on *Mytilus trossulus* shell, in an experimental plot

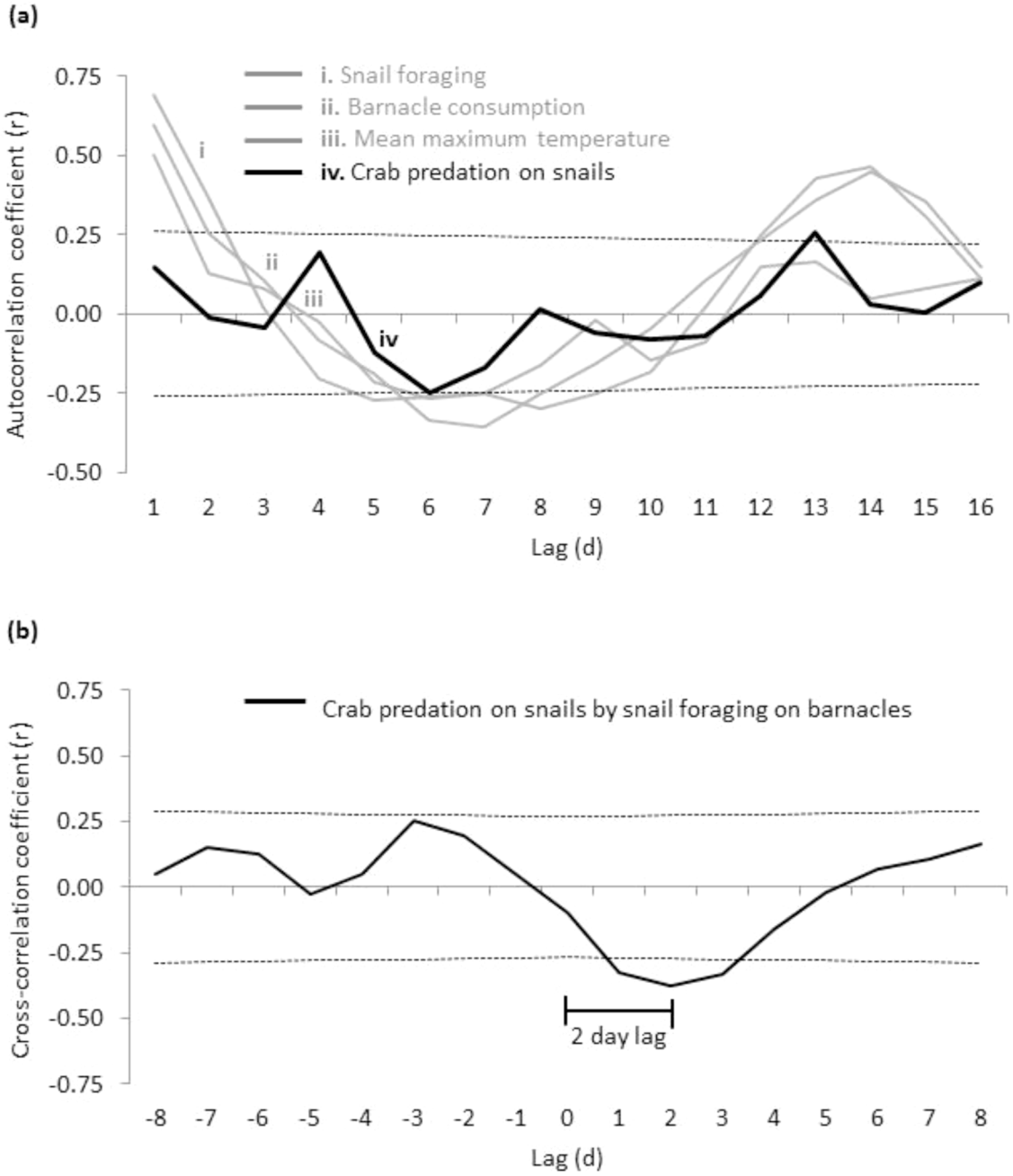

Fig. S5. Time series analyses of crab predation on snails. Correlation coefficient (r) versus lag number (d). Thin dotted lines mark 95% confidence interval for all correlations. (a) Autocorrelation coefficient of newly empty snail shells (crab predation) found per day (iv) superimposed over Fig. 4, autocorrelation of (i) proportion of *Nucella ostrina* foraging, (ii) *Balanus glandula* consumed per snail, and (iii) mean daily maximum temperature. Significant negative correlation of deaths seen at 6 d and positive correlation at 13 d. Note that crab predation trends towards matching the pattern of other tidally correlated metrics. (b) Cross-correlation coefficients of number of newly dead snails by proportion of *N. ostrina* foraging, showing that snail deaths and snail foraging are not occurring at the same time, but offset from one another by an average 2 d lag

Table S1. Summary of substrate temperature and snail foraging by tidal cycle. Temperature: Mean daily maximum temperature for eastern and western faces during spring, neap, and transition phases. The p-value is from a paired *t*-test of west versus east. Foraging: Mean proportion of all snails in experiment that foraged during given tidal phase and mean proportion of foraging snails present on the western or eastern face. Different superscript letters indicate that groups are significantly different at $\alpha = 0.05$ level (1-way ANOVA, Tukey's HSD). Note high levels of foraging occurring during neap and spring-to-neap transitions, and almost no foraging during other tidal phases. The p-value is from a paired *t*-test of west versus east. There is no net difference in maximum daily temperature or mean proportion foraging between the block faces. Unlike the mechanistic predictor of relative minutes of low tide in the morning versus the afternoon, categorical tidal phase is not an adequate predictor of foraging location; however, tidal phase does predict surface of maximum temperature. Despite lack of significant preference, note trend towards increased foraging on western face when temperature difference is maximized ($\Delta T = 8.4$°C). For all, N = 4 lunar tidal cycles; df = 3

	Temperature (°C)				Foraging			
	Mean daily max (SEM)				Mean proportion of total (SEM)	Mean proportion of foragers (SEM)		
	west	east	ΔT	p	whole plot	west	east	p
All phases	25.1 (1.67)	26.4 (0.75)	1.3	0.255	1.00	0.58 (0.04)	0.42 (0.04)	0.506
Spring	32.6 (2.01)	30.8 (1.54)	1.8	0.224	0.06 (0.05)[a]	0.58 (0.06)	0.42 (0.06)	0.330
Spring-to-neap	30.4 (3.64)	25.6 (2.26)	4.8	0.041	0.42 (0.21)[b]	0.49 (0.07)	0.51 (0.07)	0.478
Neap	14.6 (0.96)	18.2 (1.28)	3.7	0.004	0.43 (0.09)[b]	0.53 (0.06)	0.47 (0.06)	0.366
Neap-to-spring	22.8 (1.46)	31.1 (1.00)	8.3	0.009	0.09 (0.04)[a]	0.72 (0.14)	0.28 (0.14)	0.171