

Table S6. Models of the effect of herbivores (mT ha^{-1}) and chlorophyll-*a* (mg m^{-3}) on the percent cover of benthic taxonomic groups. All predictor are random variables and models were estimated using ordinary least squares. However, if residuals exhibited spatial autocorrelation, relationships were estimated using spatial simultaneous autoregressive linear models (indicated by *).

Dependent	Predictors			AIC _c	ΔAIC_c	w _i
Coral	Herbivores	Chla	Interaction	-30.05	1.43	0.12
	Herbivores	Chla		-31.48	0	0.25
	Herbivores*			-31.04	0.44	0.20
		Chla*		-28.38	3.10	0.05
	Herbivores		Interaction	-30.63	0.85	0.16
		Chla	Interaction	-31.01	0.47	0.20
CCA	Herbivores	Chla	Interaction*	-31.02	2.98	0.07
	Herbivores	Chla*		-33.11	0.88	0.19
	Herbivores*			-34.00	0	0.29
		Chla*		-29.35	4.65	0.03
	Herbivores		Interaction*	-33.88	0.12	0.28
		Chla	Interaction*	-32.56	1.44	0.14
Turf	Herbivores	Chla	Interaction*	-23.03	2.61	0.07
	Herbivores	Chla		-25.04	0.60	0.19
	Herbivores*			-25.50	0.14	0.24
		Chla		-22.24	3.40	0.05
	Herbivores		Interaction*	-25.64	0	0.26
		Chla	Interaction	-25.10	0.54	0.19
Macroalgae	Herbivores	Chla	Interaction	-110.93	0	0.98
	Herbivores	Chla		-100.63	10.30	<0.01
	Herbivores*			-89.91	21.02	<0.01
		Chla		-101.79	9.14	0.01
	Herbivores		Interaction	-91.40	19.42	<0.01
		Chla	Interaction	-101.51	9.42	<0.01