

**Table S17.1.** Coefficient and Standard Errors for Richness and Abundance when parameterized using the class metrics for the aggregated data across zones. \* p < 0.01, \*\* p < 0.001. No corrections for multiple tests were included. Model reported is a result of forwards and backwards AIC selection.

Variable	50m				100m				200m			
	Richness		Abundance		Richness		Abundance		Richness		Abundance	
	Estimate	Std.error	Estimate	Std.error	Estimate	Std.error	Estimate	Std.error	Estimate	Std.error	Estimate	Std.error
<b>Intercept</b>	14.25**	0.56	49.82**	13.10	13.55**	2.52	13.57**	2.00	16.21**	0.96	11.68**	2.17
<b>Woody</b>			-0.56	0.29			0.16	0.08			0.33*	0.11
<b>Water</b>							-0.34	0.29				
<b>Non-Woody</b>			-0.24	0.14	0.00	0.04	0.15**	0.04			0.18*	0.51
<b>Built</b>	-0.08**	0.01	-0.36*	0.13	-0.09*	0.03			-0.11**	0.02		
<b>Woody:Non-Woody</b>			0.01	0.00								
<b>Woody:Water</b>							0.04	0.02				
<b>Water:Built</b>												
<b>Non-Woody:Built</b>					0.00	0.00						

**Table S17.2.** Coefficient and Standard Errors for Richness and Abundance when parameterized using the landscape metrics for the aggregated data across zones. \* p < 0.01, \*\* p < 0.001. No corrections for multiple tests were included. Model reported is a result of forwards and backwards AIC selection.

Variable	50m				100m				200m			
	Richness		Abundance		Richness		Abundance		Richness		Abundance	
	Estimate	Std.error	Estimate	Std.error	Estimate	Std.error	Estimate	Std.error	Estimate	Std.error	Estimate	Std.error
Intercept	58.56**	15.43	75.08**	19.44	-21.57	20.24	59.26	26.30	49.75*	16.85	404.18*	111.27
Water			0.32	0.24	0.12	0.26	0.23	0.17			1.41*	0.89
Woody	-0.63*	0.22	-0.16	0.10	0.30	0.21	0.62	0.31			2.23	0.77
Non-Woody	-0.16	0.08			0.32	0.20	0.20*	0.06	0.09*	0.03	-7.46*	2.22
Built	-0.22*	0.07	-0.03	0.05	0.27	0.20						
CONTAG	-0.56	0.33							-1.10*	0.36	-1.72*	0.54
CONNECT			0.11	0.06	0.07	0.04	-0.65	0.43	-0.44	0.23	0.67	0.51
PLADJ	-0.36	0.16					-0.44	0.28			-5.87*	1.70
SHDI	-8.99	4.28	-2.22	6.84	3.63	2.03	-24.83	8.95			-15.37	6.42
Woody:PLADJ			-0.62	0.24								
Woody:Water					0.01	0.01						
Woody:Non-Woody	0.01*	0.00					-0.01	0.01				
Non-Woody:Built	0.00	0.00										
CONNECT:SHDI							1.23	0.59				
Water:CONNECT											0.23	0.10
Woody:SHDI	0.21	0.16										
Water:Woody			-0.02	0.01								
CONTAG:PLADJ	0.01	0.00							0.01*	0.00		
Woody:CONTAG											-0.05	0.02
Built:SHDI			-0.36	0.13								
Non-Woody:PLADJ											0.12*	0.03
Non-Woody:CONTAG											-0.03	0.01
Water:SHDI											-1.39	0.81