

Table S9. Model estimates of persistence-area relationships (realized-PAR and potential-PAR) and species-area relationships (Diversity-SAR) using accumulated scaling of suitable habitat. Separate models were fit for each scale.

Data type	Scale level	Estimated proportion	95% CI
Diversity (SAR)	plot	0.56	0.5, 0.6
Potential with neighbors	plot	0.17	0.14, 0.2
Potential without neighbors	plot	0.32	0.26, 0.4
Realized with neighbors	plot	0.10	0.07, 0.1
Realized without neighbors	plot	0.18	0.14, 0.2
Diversity (SAR)	grid	0.95	0.87, 1
Potential with neighbors	grid	0.83	0.71, 0.9
Potential without neighbors	grid	0.91	0.82, 1
Realized with neighbors	grid	0.70	0.56, 0.8
Realized without neighbors	grid	0.78	0.65, 0.9
Diversity (SAR)	site	1.00	1, 1
Potential with neighbors	site	1.00	1, 1
Potential without neighbors	site	1.00	1, 1
Realized with neighbors	site	0.92	0.72, 1
Realized without neighbors	site	1.00	1, 1