Supplementary Information

Table S1. Correlations between explanatory variables. Results for Pearson's correlations between explanatory variables: urbanization rate (UR) and percent impervious surface (IS) taken at 100 and 500 m scales. Pearson's r values are reported in lower triangle, and corresponding P values in upper triangle. Significant correlations are bolded.

	UR (500)	IS (500)	UR (100)	IS (100)
UR (500)	1.00	0.48	0.21	0.55
IS (500)	0.13	1.00	0.43	**< 0.001**
UR (100)	0.23	-0.15	1.00	0.82
IS (100)	0.11	**0.87**	-0.04	1.00

Table S2. Ladybird beetle sensitivity to percent impervious surface at various spatial scales. Akaike Information Criterion (AIC) for generalized linear models predicting ladybird beetle abundance (AB) and richness (RI) as a function of percent impervious surface (IS) at various spatial scales (meters) assuming Poisson errors. Model with lowest AIC indicated with * was considered the best spatial scale for the regions CA and MI.

Predicted	Region	Scale	AIC
AB	MI	0	84.24
		10	85.44
		100	83.96
		500*	79.74
		1000	82.55
		2000	85.57
		3000	85.28
	CA	0	288.47
		10	252.33
		100*	213.31
		500	234.21
		1000	249.68
		2000	262.77
		3000	275.03
RI	MI	0	44.63
		10	44.14
		100	43.46
		500*	43.29
		1000	43.84
		2000	45.39
		3000	46.30
	CA	0	79.93

10	78.52
100*	78.40
500	79.26
1000	80.22
2000	80.84
3000	81.49

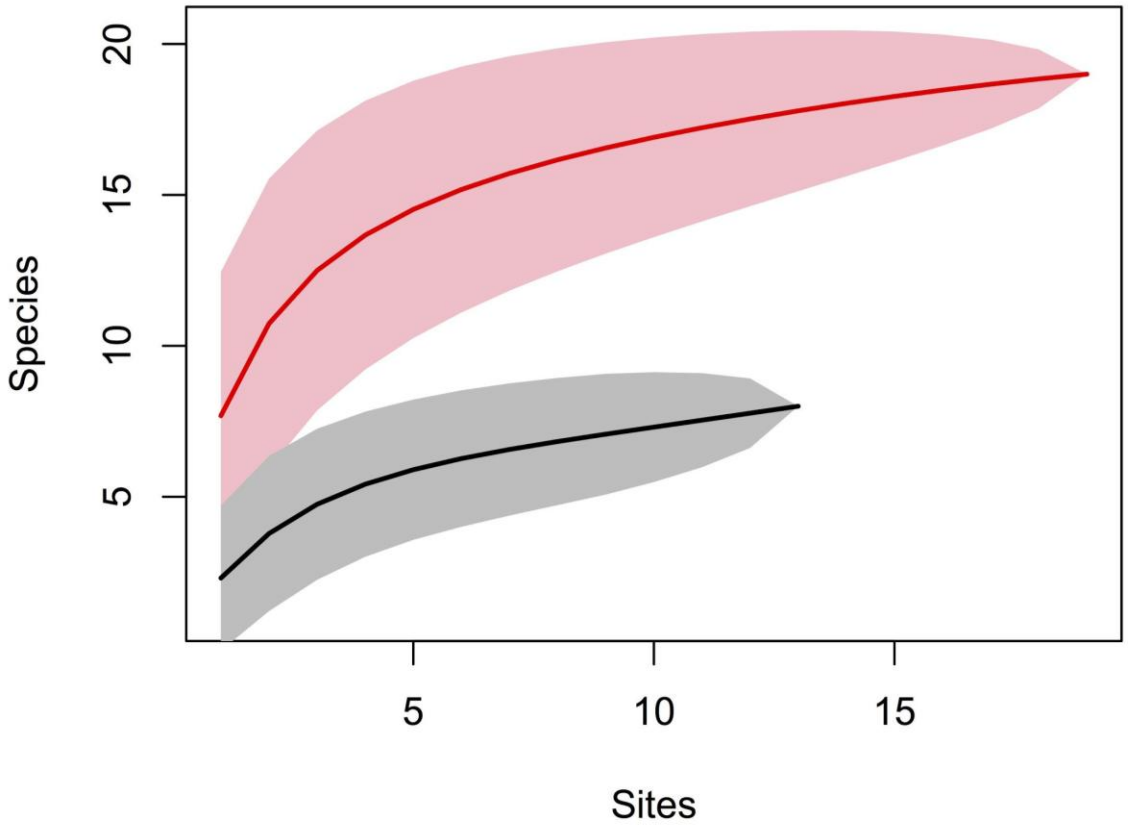

Figure S1. Species accumulation curves. Rarefied number of species in each sampled site in California (Red) and Michigan (Black). Shaded area represents standard deviation.

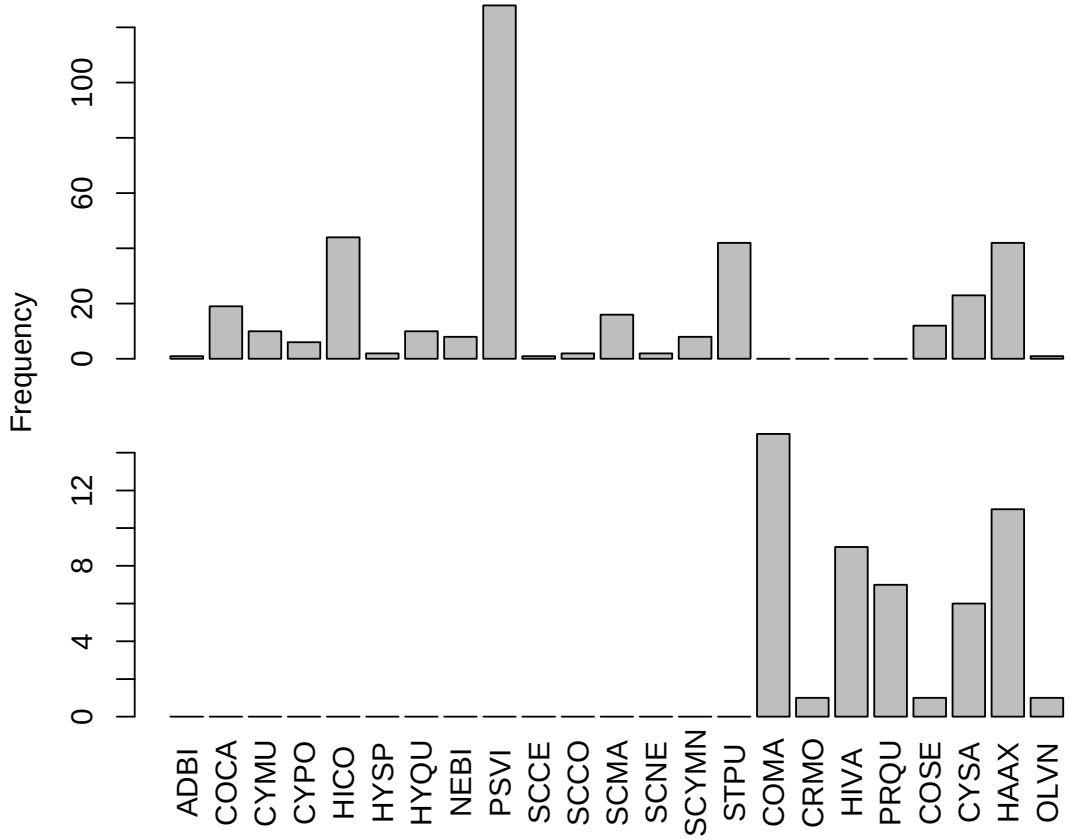

Figure S2. Histograms of ladybird species sampled in CA (top panel) and MI (bottom). Frequency is the total number of individuals observed in the samples. Species codes: *Adalia bipunctata* = ADBI; *Coccinella californ*ia = COCA; *Cycloneda polita* = CYPO; *Hippodamia convergens* = HICO; *Hyperaspis quadrioculata* = HYQU; *Nephus binaevatus* =NEBI; *Psyllobora vigintimaculata* = PSVI; *Scymus cervicalis* = SCCE; *Scymnus coniferarum* = SCCO; Scymnus marginicollis = SCMA; *Scymnus nebulosus* = SCNE; *Stethorus punctum* = STPU; *Coleomegilla maculata* = COMA; *Cryptolaemus montrouzieri* = CRMO; *Hippodamia variegata* = HIVA; *Propylea quatuordecimpunctata* = PRQU; *Coccinella septempunctata* = COSE; *Cycloneda sanguinea* = CYSA; *Harmonia axyridis* = HAAX; *Olla v-nigrum* = OLVN.