Are we accurately estimating the potential role of pollution in the decline of species at risk in Canada?

Supplementary Material 3: ANOVA and Tukey's post-hoc test for differences between taxonomic groups in geographic overlap with sources of pollution ($scope_{GEO}$), all categories and each category separately.

Table S3a. Analysis of Variance Table for effect of taxonomic group on percent geographic overlap with pollution sources (all categories pooled)

	degrees of freedom	sum of squares	mean square	F value	p(>F)
taxonomic group	9	5.059	0.56207	4.6872	5.625e-06
residuals	478	57.320	0.11992		

Table S3b. Results of Tukey's post-hoc pairwise comparison of means, with Bonferroni correction, for differences between taxonomic groups in the percent geographic overlap with pollution sources (all categories pooled). Pairs with significant differences ($Pr(>|t|)<0.05$) are bold.

comparison	**Estimate**	**Std. Error**	**t value**	**Pr(>|t|)**
arthropods vs. amphibians	0.091934	0.096665	0.951	1
birds vs. amphibians	-0.0288	0.085882	-0.335	1
freshwater fishes vs. amphibians	0.168848	0.089056	1.896	1
lichens vs. amphibians	-0.23301	0.117067	-1.99	1
mammals vs. amphibians	-0.17682	0.096665	-1.829	1
molluscs vs. amphibians	0.224831	0.103473	2.173	1
mosses vs. amphibians	0.112096	0.122207	0.917	1
reptiles vs. amphibians	0.068235	0.094611	0.721	1
vascular plants vs. amphibians	0.066478	0.079718	0.834	1
birds vs. arthropods	-0.12074	0.072796	-1.659	1
freshwater fishes vs. arthropods	0.076914	0.076514	1.005	1
lichens vs. arthropods	-0.32495	0.107834	-3.013	0.122423
mammals vs. arthropods	-0.26875	0.08525	-3.153	0.077421
molluscs vs. arthropods	0.132897	0.092899	1.431	1
mosses vs. arthropods	0.020161	0.113393	0.178	1
reptiles vs. arthropods	-0.0237	0.082914	-0.286	1
vascular plants vs. arthropods	-0.025456	0.06541	-0.389	1
freshwater fishes vs. birds	0.197653	0.062339	3.171	0.072849
lichens vs. birds	-0.20421	0.098285	-2.078	1

comparison	Estimate	Std. Error	t value	Pr(>|t|)
mammals vs. birds	-0.14801	0.072796	-2.033	1
molluscs vs. birds	0.253635	0.081621	3.107	0.089967
mosses vs. birds	0.1409	0.104354	1.35	1
reptiles vs. birds	0.09704	0.070046	1.385	1
vascular plants vs. birds	0.095282	0.048065	1.982	1
lichens vs. freshwater fishes	***-0.40186***	***0.101069***	***-3.976***	***0.00364***
mammals vs. freshwater fishes	***-0.34567***	***0.076514***	***-4.518***	***0.000355***
molluscs vs. freshwater fishes	0.055982	0.084954	0.659	1
mosses vs. freshwater fishes	-0.05675	0.106981	-0.53	1
reptiles vs. freshwater fishes	-0.10061	0.073903	-1.361	1
vascular plants vs. freshwater fishes	-0.10237	0.053529	-1.912	1
mammals vs. lichens	0.056195	0.107834	0.521	1
molluscs vs. lichens	***0.457844***	***0.113977***	***4.017***	***0.00308***
mosses vs. lichens	0.345108	0.13122	2.63	0.396619
reptiles vs. lichens	0.301248	0.105997	2.842	0.210336
vascular plants vs. lichens	0.299491	0.092947	3.222	0.061156
molluscs vs. mammals	***0.401649***	***0.092899***	***4.323***	***0.000842***
mosses vs. mammals	0.288914	0.113393	2.548	0.501731
reptiles vs. mammals	0.245053	0.082914	2.956	0.147409
vascular plants vs. mammals	***0.243296***	***0.06541***	***3.72***	***0.010047***
mosses vs. molluscs	-0.11274	0.119251	-0.945	1
reptiles vs. molluscs	-0.1566	0.09076	-1.725	1
vascular plants vs. molluscs	-0.15835	0.075108	-2.108	1
reptiles vs. mosses	-0.04386	0.111648	-0.393	1
vascular plants vs. mosses	-0.04562	0.099343	-0.459	1
vascular plants vs. reptiles	-0.00176	0.062335	-0.028	1

Figure S3a: Proportion of occupied cells that contain one or more sources of pollution category 9.1 – *Household Sewage and Urban Waste Water*, by taxonomic group

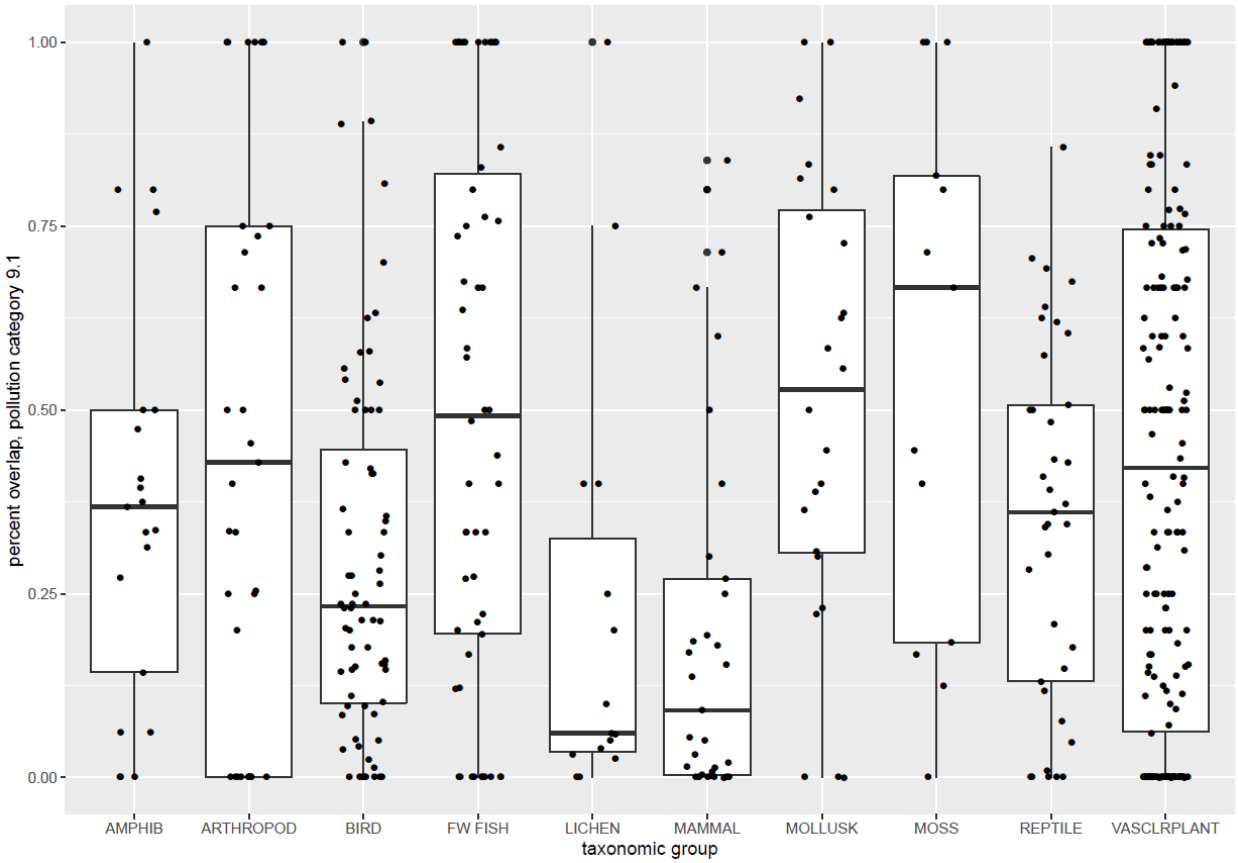

Table S3c. Analysis of Variance Table for effect of taxonomic group on percent geographic overlap with pollution sources, category 9.1 only

	degrees of freedom	sum of squares	mean square	F value	p(>F)
taxonomic group	9	4.311	0.47901	4.416	1.44e-05
residuals	478	51.849	0.10847		

Table S3d. Results of Tukey's post-hoc pairwise comparison of means, with Bonferroni correction, for differences between taxonomic groups in the percent geographic overlap with pollution sources – category 9.1 only. Pairs with significant differences (Pr(>|t|)<0.05) are bold.

comparison	Estimate	Std. Error	t value	Pr(>|t|)
arthropods vs. amphibians	0.08391	0.09194	0.913	1
birds vs. amphibians	-0.08021	0.08168	-0.982	1
freshwater fishes vs. amphibians	0.12594	0.0847	1.487	1
lichens vs. amphibians	-0.15209	0.11134	-1.366	1
mammals vs. amphibians	-0.17501	0.09194	-1.904	1
molluscs vs. amphibians	0.14085	0.09841	1.431	1
mosses vs. amphibians	0.18659	0.11623	1.605	1
reptiles vs. amphibians	-0.02764	0.08998	-0.307	1
vascular plants vs. amphibians	0.06392	0.07582	0.843	1
birds vs. arthropods	-0.16412	0.06924	-2.37	0.81721
freshwater fishes vs. arthropods	0.04203	0.07277	0.578	1
lichens vs. arthropods	-0.23599	0.10256	-2.301	0.98184
mammals vs. arthropods	-0.25892	0.08108	-3.193	0.06745
molluscs vs. arthropods	0.05694	0.08836	0.644	1
mosses vs. arthropods	0.10268	0.10785	0.952	1
reptiles vs. arthropods	-0.11155	0.07886	-1.415	1
vascular plants vs. arthropods	-0.01999	0.06221	-0.321	1
freshwater fishes vs. birds	***0.20615***	***0.05929***	***3.477***	***0.0249***
lichens vs. birds	-0.07187	0.09348	-0.769	1
mammals vs. birds	-0.0948	0.06924	-1.369	1
molluscs vs. birds	0.22106	0.07763	2.848	0.2067
mosses vs. birds	0.2668	0.09925	2.688	0.33458
reptiles vs. birds	0.05257	0.06662	0.789	1
vascular plants vs. birds	0.14413	0.04571	3.153	0.0773
lichens vs. freshwater fishes	-0.27802	0.09613	-2.892	0.17996
mammals vs. freshwater fishes	***-0.30095***	***0.07277***	***-4.136***	***0.00188***
molluscs vs. freshwater fishes	0.01491	0.0808	0.185	1
mosses vs. freshwater fishes	0.06065	0.10175	0.596	1
reptiles vs. freshwater fishes	-0.15358	0.07029	-2.185	1
vascular plants vs. freshwater fishes	-0.06202	0.05091	-1.218	1
mammals vs. lichens	-0.02293	0.10256	-0.224	1
molluscs vs. lichens	0.29293	0.1084	2.702	0.32091
mosses vs. lichens	0.33867	0.1248	2.714	0.31024
reptiles vs. lichens	0.12445	0.10081	1.234	1
vascular plants vs. lichens	0.216	0.0884	2.443	0.67081
molluscs vs. mammals	***0.31586***	***0.08836***	***3.575***	***0.01737***
mosses vs. mammals	***0.3616***	***0.10785***	***3.353***	***0.03885***
reptiles vs. mammals	0.14737	0.07886	1.869	1

comparison	Estimate	Std. Error	t value	Pr(>|t|)
vascular plants vs. mammals	***0.23893***	***0.06221***	***3.841***	***0.00627***
mosses vs. molluscs	0.04574	0.11342	0.403	1
reptiles vs. molluscs	-0.16849	0.08632	-1.952	1
vascular plants vs. molluscs	-0.07693	0.07143	-1.077	1
reptiles vs. mosses	-0.21423	0.10619	-2.017	1
vascular plants vs. mosses	-0.12267	0.09448	-1.298	1
vascular plants vs. reptiles	0.09156	0.05929	1.544	1

Figure S3b: Proportion of occupied cells that contain one or more sources of pollution category 9.2 –*Industrial and Military Effluents,* by taxonomic group

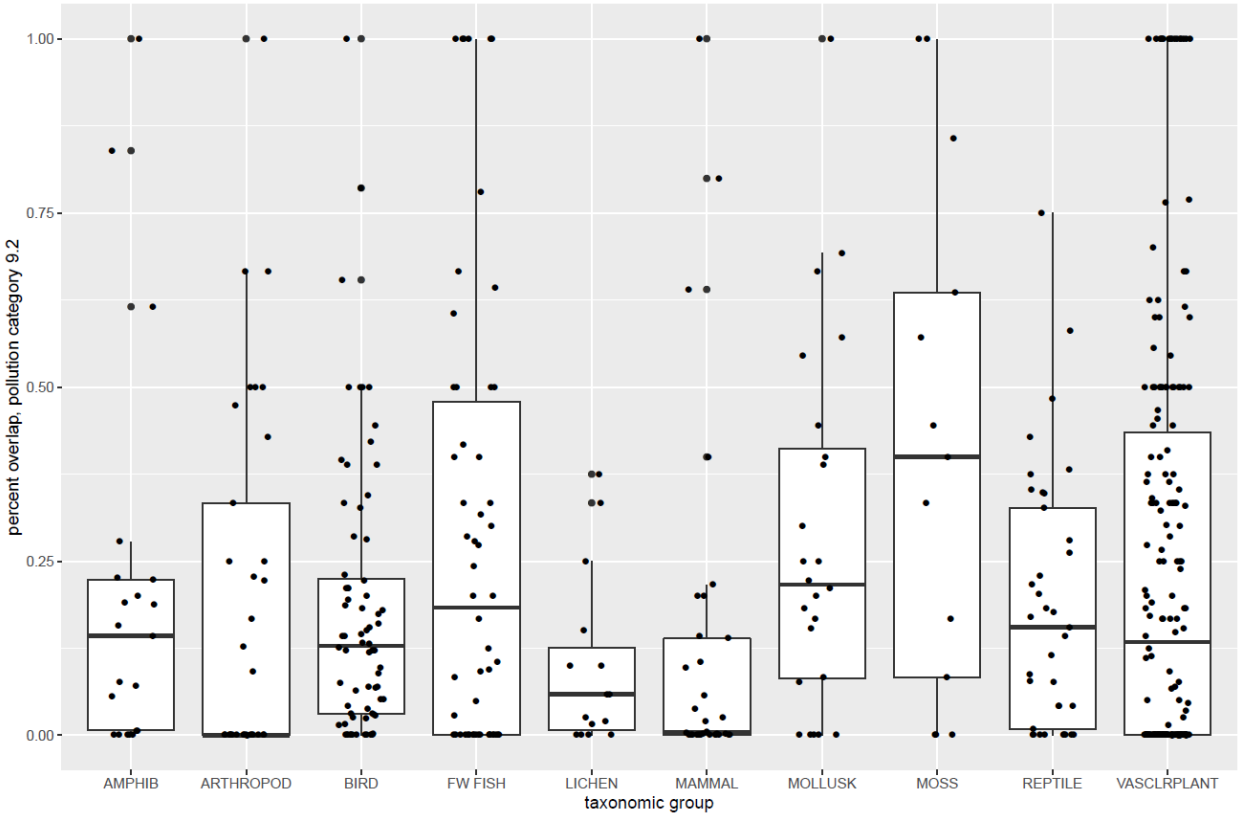

Table S3f. Analysis of Variance Table for effect of taxonomic group on percent geographic overlap with pollution sources, category 9.2 only

	degrees of freedom	sum of squares	mean square	F value	p(>F)
taxonomic group	9	4.311	0.47901	4.416	1.44e-05
residuals	478	51.849	0.10847		

Table S3g. Results of Tukey's post-hoc pairwise comparison of means, with Bonferroni correction, for differences between taxonomic groups in the percent geographic overlap with pollution sources – category 9.2 only. Pairs with significant differences (Pr(>|t|)<0.05) are bold.

comparison	Estimate	Std. Error	t value	Pr(>|t|)
arthropods vs. amphibians	-0.00975	0.07745	-0.126	1
birds vs. amphibians	-0.02409	0.068811	-0.35	1
freshwater fishes vs. amphibians	0.081729	0.071354	1.145	1
lichens vs. amphibians	-0.10463	0.093797	-1.116	1
mammals vs. amphibians	-0.07971	0.07745	-1.029	1
molluscs vs. amphibians	0.079755	0.082905	0.962	1
mosses vs. amphibians	0.218749	0.097915	2.234	1
reptiles vs. amphibians	-0.01778	0.075804	-0.234	1
vascular plants vs. amphibians	0.046946	0.063872	0.735	1
birds vs. arthropods	-0.01434	0.058326	-0.246	1
freshwater fishes vs. arthropods	0.09148	0.061305	1.492	1
lichens vs. arthropods	-0.09488	0.086399	-1.098	1
mammals vs. arthropods	-0.06996	0.068304	-1.024	1
molluscs vs. arthropods	0.089507	0.074433	1.203	1
mosses vs. arthropods	0.228501	0.090853	2.515	0.5503
reptiles vs. arthropods	-0.00802	0.066433	-0.121	1
vascular plants vs. arthropods	0.056697	0.052408	1.082	1
freshwater fishes vs. birds	0.105822	0.049947	2.119	1
lichens vs. birds	-0.08054	0.078748	-1.023	1
mammals vs. birds	-0.05562	0.058326	-0.954	1
molluscs vs. birds	0.103848	0.065397	1.588	1
mosses vs. birds	0.242843	0.083611	2.904	0.1732
reptiles vs. birds	0.006318	0.056123	0.113	1
vascular plants vs. birds	0.071039	0.03851	1.845	1
lichens vs. freshwater fishes	-0.18636	0.080979	-2.301	0.981
mammals vs. freshwater fishes	-0.16144	0.061305	-2.633	0.3928
molluscs vs. freshwater fishes	-0.00197	0.068067	-0.029	1
mosses vs. freshwater fishes	0.137021	0.085716	1.599	1
reptiles vs. freshwater fishes	-0.0995	0.059213	-1.68	1
vascular plants vs. freshwater fishes	-0.03478	0.042889	-0.811	1
mammals vs. lichens	0.024922	0.086399	0.288	1
molluscs vs. lichens	0.184388	0.091321	2.019	1
mosses vs. lichens	0.323383	0.105136	3.076	0.0999
reptiles vs. lichens	0.086858	0.084927	1.023	1
vascular plants vs. lichens	0.151579	0.074471	2.035	1
molluscs vs. mammals	0.159466	0.074433	2.142	1
mosses vs. mammals	***0.298461***	***0.090853***	***3.285***	***0.0492***
reptiles vs. mammals	0.061936	0.066433	0.932	1

comparison	Estimate	Std. Error	t value	Pr(>|t|)
vascular plants vs. mammals	0.126657	0.052408	2.417	0.7215
mosses vs. molluscs	0.138994	0.095547	1.455	1
reptiles vs. molluscs	-0.09753	0.072719	-1.341	1
vascular plants vs. molluscs	-0.03281	0.060178	-0.545	1
reptiles vs. mosses	-0.23653	0.089455	-2.644	0.3807
vascular plants vs. mosses	-0.1718	0.079596	-2.158	1
vascular plants vs. reptiles	0.064722	0.049944	1.296	1

Figure S3c: Proportion of occupied cells that contain one or more sources of pollution category 9.3 – *Agricultural and Forestry Effluents*, by taxonomic group

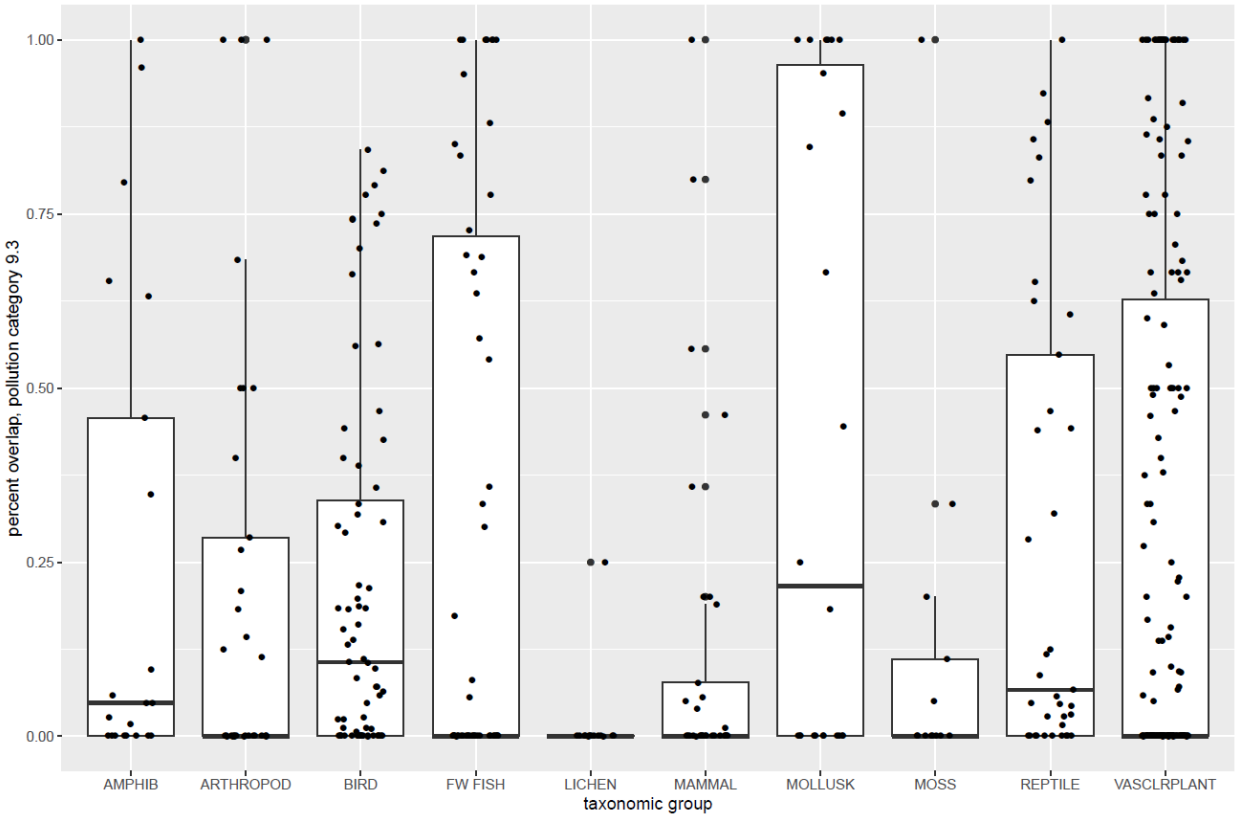

Table S3h. Analysis of Variance Table for effect of taxonomic group on percent geographic overlap with pollution sources, category 9.3 only

	degrees of freedom	sum of squares	mean square	F value	p(>F)
taxonomic group	9	3.186	0.35400	2.8768	0.002561
residuals	478	58.820	0.12305		

Table S3i. Results of Tukey's post-hoc pairwise comparison of means, with Bonferroni correction, for differences between taxonomic groups in the percent geographic overlap with pollution sources – category 9.3 only. Pairs with significant differences (Pr(>|t|)<0.05) are bold.

comparison	Estimate	Std. Error	t value	Pr(>|t|)
arthropods vs. amphibians	-0.03528	0.097922	-0.36	1
birds vs. amphibians	-0.02814	0.086999	-0.323	1
freshwater fishes vs. amphibians	0.090806	0.090214	1.007	1
lichens vs. amphibians	-0.22798	0.118589	-1.922	1
mammals vs. amphibians	-0.12346	0.097922	-1.261	1
molluscs vs. amphibians	0.181865	0.104819	1.735	1
mosses vs. amphibians	-0.1143	0.123796	-0.923	1
reptiles vs. amphibians	0.035621	0.095841	0.372	1
vascular plants vs. amphibians	0.05051	0.080755	0.625	1
birds vs. arthropods	0.007141	0.073743	0.097	1
freshwater fishes vs. arthropods	0.126083	0.077509	1.627	1
lichens vs. arthropods	-0.1927	0.109236	-1.764	1
mammals vs. arthropods	-0.08818	0.086359	-1.021	1
molluscs vs. arthropods	0.217143	0.094107	2.307	0.9656
mosses vs. arthropods	-0.07902	0.114868	-0.688	1
reptiles vs. arthropods	0.070898	0.083992	0.844	1
vascular plants vs. arthropods	0.085788	0.066261	1.295	1
freshwater fishes vs. birds	0.118943	0.06315	1.884	1
lichens vs. birds	-0.19984	0.099563	-2.007	1
mammals vs. birds	-0.09533	0.073743	-1.293	1
molluscs vs. birds	0.210003	0.082682	2.54	0.5132
mosses vs. birds	-0.08616	0.105711	-0.815	1
reptiles vs. birds	0.063758	0.070957	0.899	1
vascular plants vs. birds	0.078647	0.04869	1.615	1
lichens vs. freshwater fishes	-0.31878	0.102384	-3.114	0.0882
mammals vs. freshwater fishes	-0.21427	0.077509	-2.764	0.2665
molluscs vs. freshwater fishes	0.09106	0.086058	1.058	1
mosses vs. freshwater fishes	-0.20511	0.108372	-1.893	1
reptiles vs. freshwater fishes	-0.05519	0.074864	-0.737	1
vascular plants vs. freshwater fishes	-0.0403	0.054225	-0.743	1
mammals vs. lichens	0.104514	0.109236	0.957	1
molluscs vs. lichens	***0.409842***	***0.115459***	***3.55***	***0.0191***
mosses vs. lichens	0.113675	0.132926	0.855	1
reptiles vs. lichens	0.263597	0.107375	2.455	0.6501
vascular plants vs. lichens	0.278487	0.094155	2.958	0.1464
molluscs vs. mammals	0.305328	0.094107	3.244	0.0567
mosses vs. mammals	0.009161	0.114868	0.08	1
reptiles vs. mammals	0.159083	0.083992	1.894	1

comparison	Estimate	Std. Error	t value	Pr(>|t|)
vascular plants vs. mammals	0.173972	0.066261	2.626	0.4017
mosses vs. molluscs	-0.29617	0.120801	-2.452	0.6559
reptiles vs. molluscs	-0.14625	0.09194	-1.591	1
vascular plants vs. molluscs	-0.13136	0.076084	-1.726	1
reptiles vs. mosses	0.149922	0.113099	1.326	1
vascular plants vs. mosses	0.164811	0.100634	1.638	1
vascular plants vs. reptiles	0.01489	0.063146	0.236	1

Figure S3d: Proportion of occupied cells that contain one or more sources of pollution category 9.4 –*Garbage and Solid Waste*, by taxonomic group

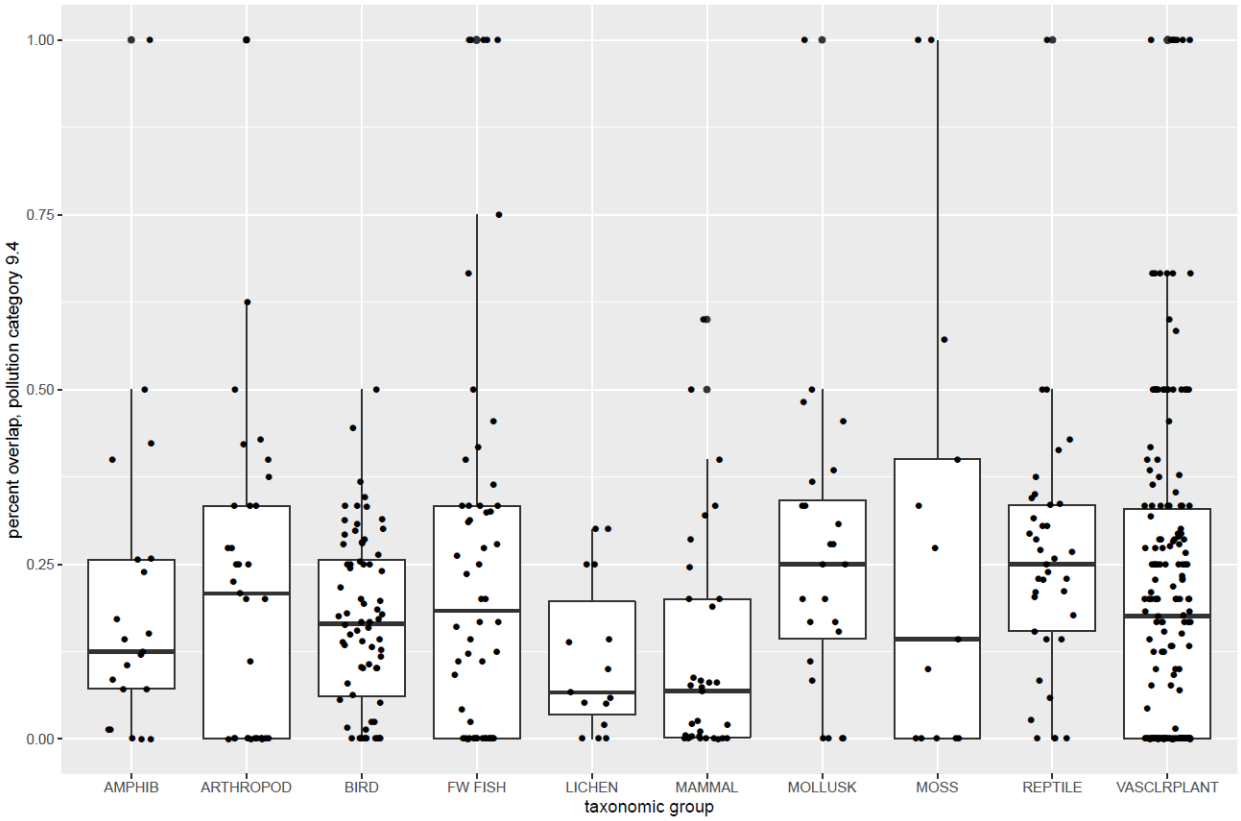

Table S3j. Analysis of Variance Table for effect of taxonomic group on percent geographic overlap with pollution sources, category 9.4 only

	degrees of freedom	sum of squares	mean square	F value	p(>F)
taxonomic group	9	0.9302	0.103351	2.0306	0.03442
residuals	478	24.3288	0.050897		

Table S3k. Results of Tukey's post-hoc pairwise comparison of means, with Bonferroni correction, for differences between taxonomic groups in the percent geographic overlap with pollution sources – category 9.4 only. Pairs with significant differences (Pr(>|t|)<0.05) are bold.

comparison	Estimate	Std. Error	t value	Pr(>|t|)
arthropods vs. amphibians	0.014466	0.062976	0.23	1
birds vs. amphibians	-0.03026	0.055952	-0.541	1
freshwater fishes vs. amphibians	0.06409	0.058019	1.105	1
lichens vs. amphibians	-0.08214	0.076268	-1.077	1
mammals vs. amphibians	-0.07873	0.062976	-1.25	1
molluscs vs. amphibians	0.065176	0.067412	0.967	1
mosses vs. amphibians	0.096524	0.079617	1.212	1
reptiles vs. amphibians	0.058441	0.061638	0.948	1
vascular plants vs. amphibians	0.018181	0.051936	0.35	1
birds vs. arthropods	-0.04473	0.047426	-0.943	1
freshwater fishes vs. arthropods	0.049624	0.049849	0.996	1
lichens vs. arthropods	-0.09661	0.070253	-1.375	1
mammals vs. arthropods	-0.09319	0.05554	-1.678	1
molluscs vs. arthropods	0.050711	0.060523	0.838	1
mosses vs. arthropods	0.082058	0.073875	1.111	1
reptiles vs. arthropods	0.043975	0.054018	0.814	1
vascular plants vs. arthropods	0.003716	0.042614	0.087	1
freshwater fishes vs. birds	0.09435	0.040613	2.323	0.927
lichens vs. birds	-0.05188	0.064032	-0.81	1
mammals vs. birds	-0.04847	0.047426	-1.022	1
molluscs vs. birds	0.095436	0.053175	1.795	1
mosses vs. birds	0.126784	0.067986	1.865	1
reptiles vs. birds	0.088701	0.045634	1.944	1
vascular plants vs. birds	0.048441	0.031314	1.547	1
lichens vs. freshwater fishes	-0.14623	0.065846	-2.221	1
mammals vs. freshwater fishes	-0.14282	0.049849	-2.865	0.196
molluscs vs. freshwater fishes	0.001086	0.055347	0.02	1
mosses vs. freshwater fishes	0.032434	0.069697	0.465	1
reptiles vs. freshwater fishes	-0.00565	0.048147	-0.117	1
vascular plants vs. freshwater fishes	-0.04591	0.034874	-1.316	1
mammals vs. lichens	0.003417	0.070253	0.049	1
molluscs vs. lichens	0.147319	0.074255	1.984	1
mosses vs. lichens	0.178667	0.085489	2.09	1
reptiles vs. lichens	0.140584	0.069056	2.036	1
vascular plants vs. lichens	0.100324	0.060554	1.657	1
molluscs vs. mammals	0.143902	0.060523	2.378	0.802
mosses vs. mammals	0.17525	0.073875	2.372	0.813
reptiles vs. mammals	0.137167	0.054018	2.539	0.514

comparison	Estimate	Std. Error	t value	Pr(>|t|)
vascular plants vs. mammals	0.096907	0.042614	2.274	1
mosses vs. molluscs	0.031348	0.077691	0.403	1
reptiles vs. molluscs	-0.00674	0.05913	-0.114	1
vascular plants vs. molluscs	-0.047	0.048932	-0.96	1
reptiles vs. mosses	-0.03808	0.072738	-0.524	1
vascular plants vs. mosses	-0.07834	0.064721	-1.21	1
vascular plants vs. reptiles	-0.04026	0.040611	-0.991	1

Figure S3e: Proportion of occupied cells that contain one or more sources of pollution category 9.5 – *Air-borne Pollutants*, by taxonomic group

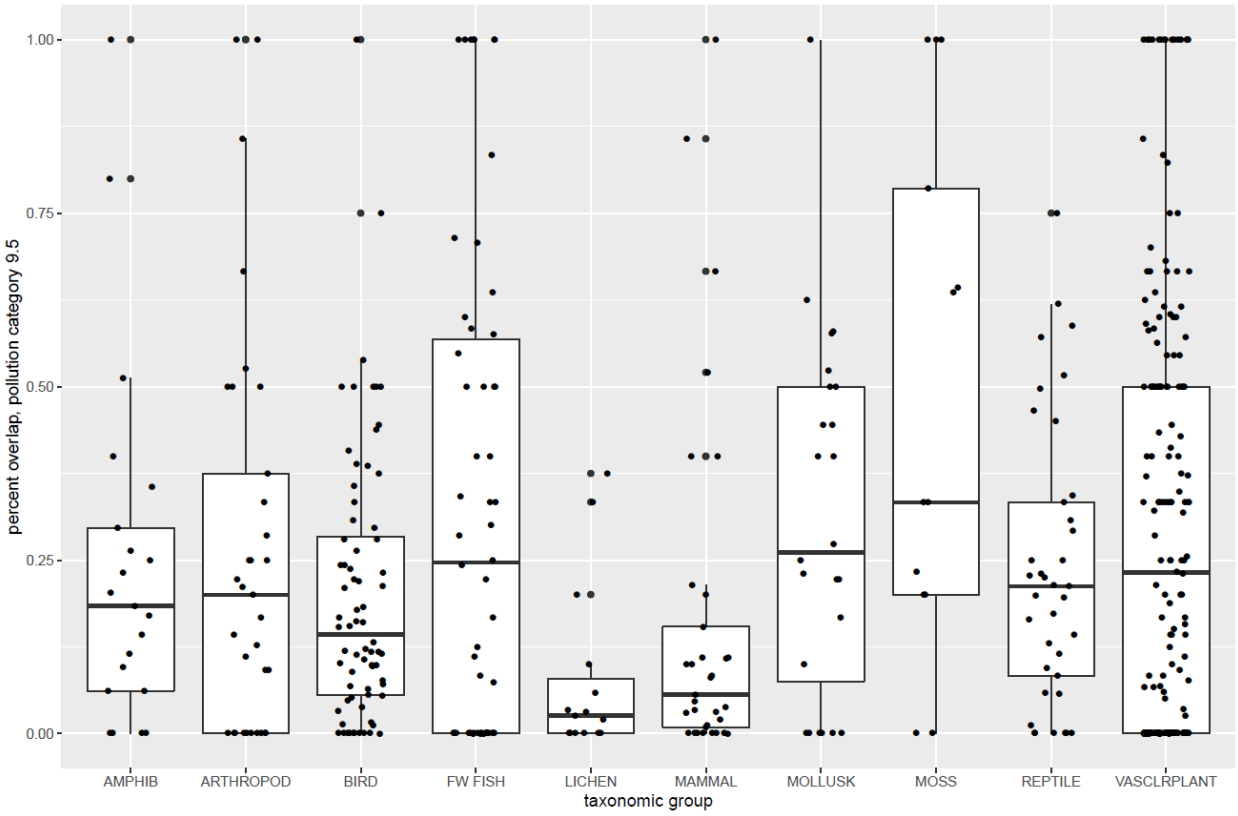

Table S3l. Analysis of Variance Table for effect of taxonomic group on percent geographic overlap with pollution sources, category 9.5 only

	degrees of freedom	sum of squares	mean square	F value	p(>F)
taxonomic group	9	2.431	0.270091	3.2749	0.00698
residuals	478	39.422	0.082474		

Table S3m. Results of Tukey's post-hoc pairwise comparison of means, with Bonferroni correction, for differences between taxonomic groups in the percent geographic overlap with pollution sources – category 9.4 only. Pairs with significant differences (Pr(>|t|)<0.05) are bold.

comparison	Estimate	Std. Error	t value	Pr(>|t|)
arthropods vs. amphibians	0.017377	0.080166	0.217	1
birds vs. amphibians	-0.04568	0.071224	-0.641	1
freshwater fishes vs. amphibians	0.085932	0.073855	1.164	1
lichens vs. amphibians	-0.16648	0.097085	-1.715	1
mammals vs. amphibians	-0.08199	0.080166	-1.023	1
molluscs vs. amphibians	0.065818	0.085812	0.767	1
mosses vs. amphibians	0.244672	0.101348	2.414	0.72657
reptiles vs. amphibians	-0.00802	0.078462	-0.102	1
vascular plants vs. amphibians	0.059414	0.066111	0.899	1
birds vs. arthropods	-0.06305	0.060371	-1.044	1
freshwater fishes vs. arthropods	0.068555	0.063455	1.08	1
lichens vs. arthropods	-0.18386	0.089429	-2.056	1
mammals vs. arthropods	-0.09937	0.070699	-1.405	1
molluscs vs. arthropods	0.048442	0.077043	0.629	1
mosses vs. arthropods	0.227295	0.094039	2.417	0.72096
reptiles vs. arthropods	-0.0254	0.068762	-0.369	1
vascular plants vs. arthropods	0.042037	0.054246	0.775	1
freshwater fishes vs. birds	0.131608	0.051699	2.546	0.50489
lichens vs. birds	-0.1208	0.081509	-1.482	1
mammals vs. birds	-0.03631	0.060371	-0.601	1
molluscs vs. birds	0.111495	0.06769	1.647	1
mosses vs. birds	***0.290348***	***0.086543***	***3.355***	***0.03856***
reptiles vs. birds	0.037653	0.05809	0.648	1
vascular plants vs. birds	0.10509	0.039861	2.636	0.38929
lichens vs. freshwater fishes	-0.25241	0.083819	-3.011	0.12322
mammals vs. freshwater fishes	-0.16792	0.063455	-2.646	0.37827
molluscs vs. freshwater fishes	-0.02011	0.070454	-0.285	1
mosses vs. freshwater fishes	0.15874	0.088721	1.789	1
reptiles vs. freshwater fishes	-0.09396	0.061289	-1.533	1
vascular plants vs. freshwater fishes	-0.02652	0.044393	-0.597	1
mammals vs. lichens	0.08449	0.089429	0.945	1
molluscs vs. lichens	0.232297	0.094523	2.458	0.6454
mosses vs. lichens	***0.41115***	***0.108823***	***3.778***	***0.00801***
reptiles vs. lichens	0.158455	0.087905	1.803	1
vascular plants vs. lichens	0.225892	0.077082	2.931	0.15956
molluscs vs. mammals	0.147807	0.077043	1.919	1
mosses vs. mammals	***0.32666***	***0.094039***	***3.474***	***0.02520***
reptiles vs. mammals	0.073965	0.068762	1.076	1

comparison	Estimate	Std. Error	t value	Pr(>|t|)
vascular plants vs. mammals	0.141402	0.054246	2.607	0.42424
mosses vs. molluscs	0.178853	0.098897	1.808	1
reptiles vs. molluscs	-0.07384	0.075269	-0.981	1
vascular plants vs. molluscs	-0.00641	0.062288	-0.103	1
reptiles vs. mosses	-0.2527	0.092591	-2.729	0.29628
vascular plants vs. mosses	-0.18526	0.082387	-2.249	1
vascular plants vs. reptiles	0.067437	0.051696	1.305	1

Figure S3f: Proportion of occupied cells that contain one or more sources of pollution category 9.6 – *Excess Energy*, by taxonomic group

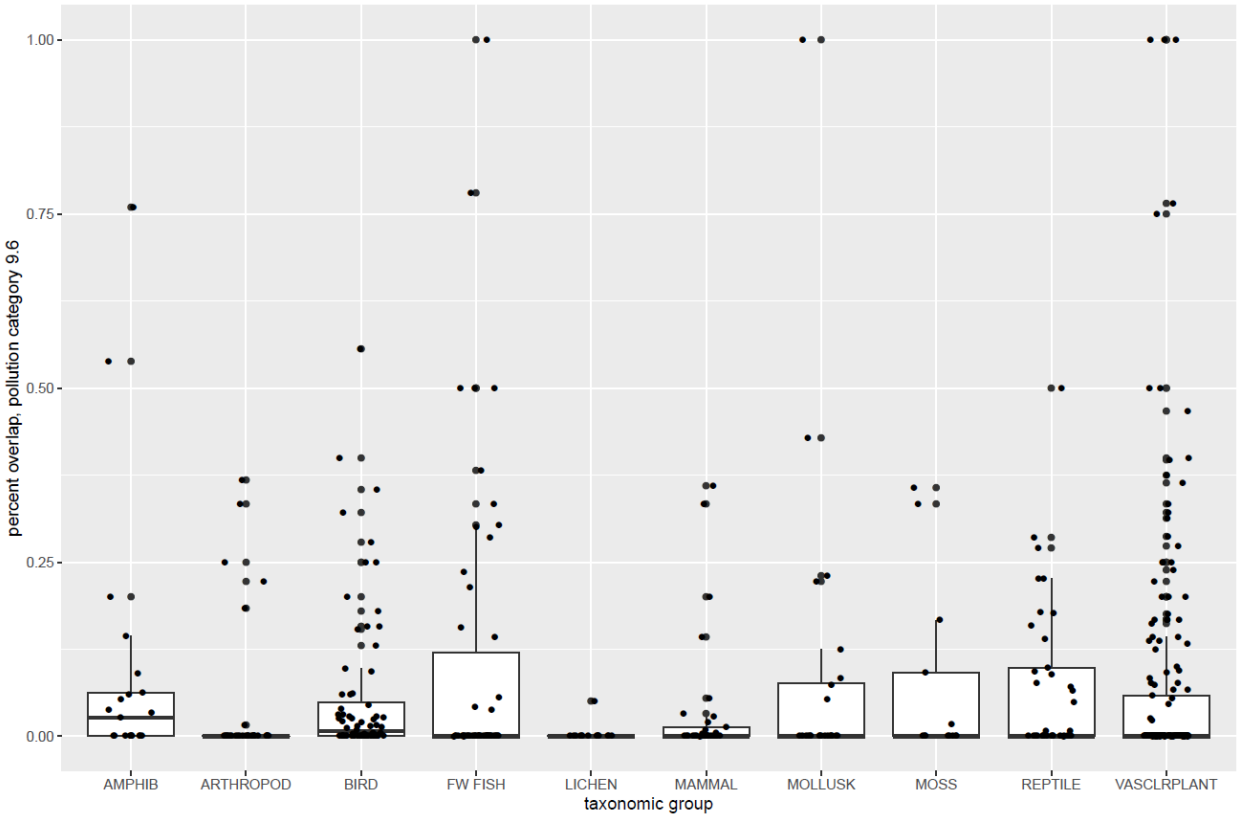

Table S3n. Analysis of Variance Table for effect of taxonomic group on percent geographic overlap with pollution sources, category 9.6 only

	degrees of freedom	sum of squares	mean square	F value	p(>F)
taxonomic group	9	0.2418	0.026870	1.0618	0.3898
residuals	478	12.0963	0.025306		

Table S3o. Results of Tukey's post-hoc pairwise comparison of means, with Bonferroni correction, for differences between taxonomic groups in the percent geographic overlap with pollution sources – category 9.4 only. Pairs with significant differences (Pr(>|t|)<0.05) are bold.

comparison	Estimate	Std. Error	t value	Pr(>|t|)
arthropods vs. amphibians	-0.05398	0.044406	-1.216	1
birds vs. amphibians	-0.03726	0.039453	-0.945	1
freshwater fishes vs. amphibians	0.011202	0.040911	0.274	1
lichens vs. amphibians	-0.09227	0.053779	-1.716	1
mammals vs. amphibians	-0.05924	0.044406	-1.334	1
molluscs vs. amphibians	-0.00324	0.047534	-0.068	1
mosses vs. amphibians	-0.02139	0.05614	-0.381	1
reptiles vs. amphibians	-0.02212	0.043463	-0.509	1
vascular plants vs. amphibians	-0.02244	0.036621	-0.613	1
birds vs. arthropods	0.01672	0.033441	0.5	1
freshwater fishes vs. arthropods	0.065187	0.03515	1.855	1
lichens vs. arthropods	-0.03828	0.049537	-0.773	1
mammals vs. arthropods	-0.00525	0.039163	-0.134	1
molluscs vs. arthropods	0.050744	0.042676	1.189	1
mosses vs. arthropods	0.032594	0.052091	0.626	1
reptiles vs. arthropods	0.031869	0.038089	0.837	1
vascular plants vs. arthropods	0.031548	0.030048	1.05	1
freshwater fishes vs. birds	0.048467	0.028638	1.692	1
lichens vs. birds	-0.055	0.04515	-1.218	1
mammals vs. birds	-0.02197	0.033441	-0.657	1
molluscs vs. birds	0.034023	0.037495	0.907	1
mosses vs. birds	0.015874	0.047939	0.331	1
reptiles vs. birds	0.015148	0.032178	0.471	1
vascular plants vs. birds	0.014828	0.02208	0.672	1
lichens vs. freshwater fishes	-0.10347	0.04643	-2.229	1
mammals vs. freshwater fishes	-0.07044	0.03515	-2.004	1
molluscs vs. freshwater fishes	-0.01444	0.039026	-0.37	1
mosses vs. freshwater fishes	-0.03259	0.049145	-0.663	1
reptiles vs. freshwater fishes	-0.03332	0.03395	-0.981	1
vascular plants vs. freshwater fishes	-0.03364	0.02459	-1.368	1
mammals vs. lichens	0.033028	0.049537	0.667	1
molluscs vs. lichens	0.089025	0.052359	1.7	1
mosses vs. lichens	0.070876	0.06028	1.176	1
reptiles vs. lichens	0.07015	0.048693	1.441	1
vascular plants vs. lichens	0.06983	0.042698	1.635	1
molluscs vs. mammals	0.055997	0.042676	1.312	1
mosses vs. mammals	0.037848	0.052091	0.727	1
reptiles vs. mammals	0.037123	0.038089	0.975	1

comparison	Estimate	Std. Error	t value	Pr(>|t|)
vascular plants vs. mammals	0.036802	0.030048	1.225	1
mosses vs. molluscs	-0.01815	0.054782	-0.331	1
reptiles vs. molluscs	-0.01887	0.041694	-0.453	1
vascular plants vs. molluscs	-0.0192	0.034503	-0.556	1
reptiles vs. mosses	-0.00073	0.051289	-0.014	1
vascular plants vs. mosses	-0.00105	0.045636	-0.023	1
vascular plants vs. reptiles	-0.00032	0.028636	-0.011	1