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

Supplementary Material 5: Cumulative logit models relating scope in Threats Calculator (scope$_{TC}$; 6 categories) to percent geographic overlap (scope$_{GEO}$; continuous)

Figure S5a. Prediction of a cumulative logit model relating scope$_{TC}$ (any pollution) to percent geographic overlap. The probability of scope$_{TC}$ '0' declines with increasing spatial overlap, and the probability of scope$_{TC}$ '85' (pervasive) increases with increasing spatial overlap, but the middle categories have little relationship to geographic overlap.
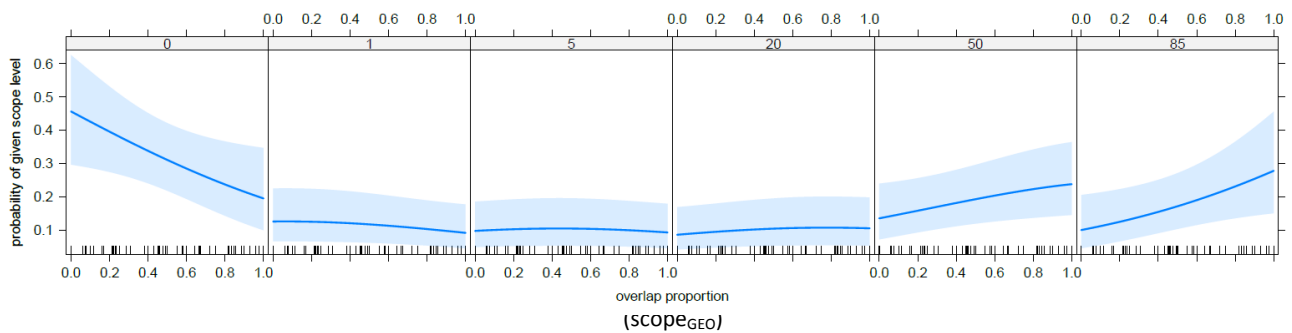
Figure S5b. Proportion of geographic overlap (scope$_{GEO}$) of species' ranges with sources of pollution category 9.1 (*Household Sewage and Urban Waste Water*) versus assessed scope from Threats Calculators (scope$_{TC}$). Significant relationship according to cumulative logit model.
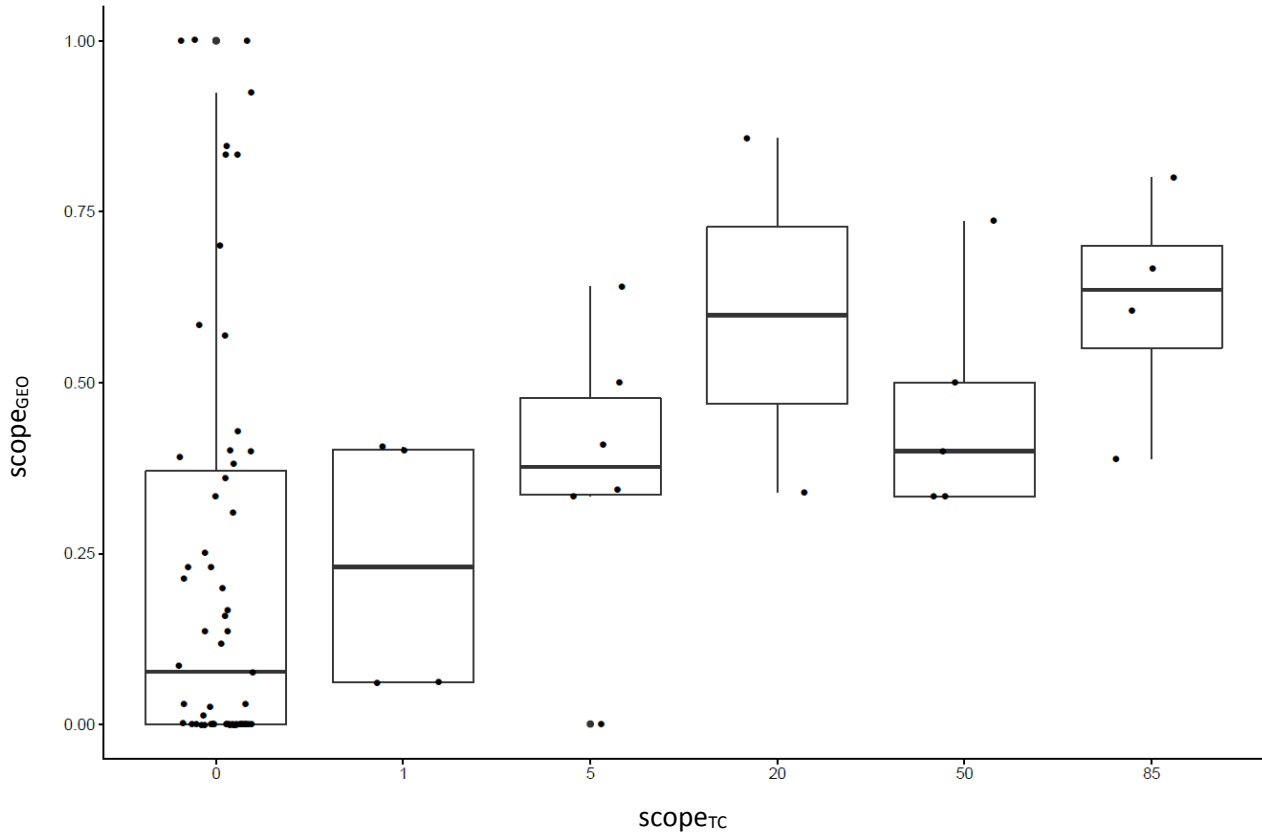
Figure S5c. Proportion of geographic overlap (scope$_{GEO}$) of species' ranges with sources of pollution category 9.1 (*Household Sewage and Urban Waste Water*) versus assessed scope from Threats Calculators (scope$_{TC}$), by taxonomic group.
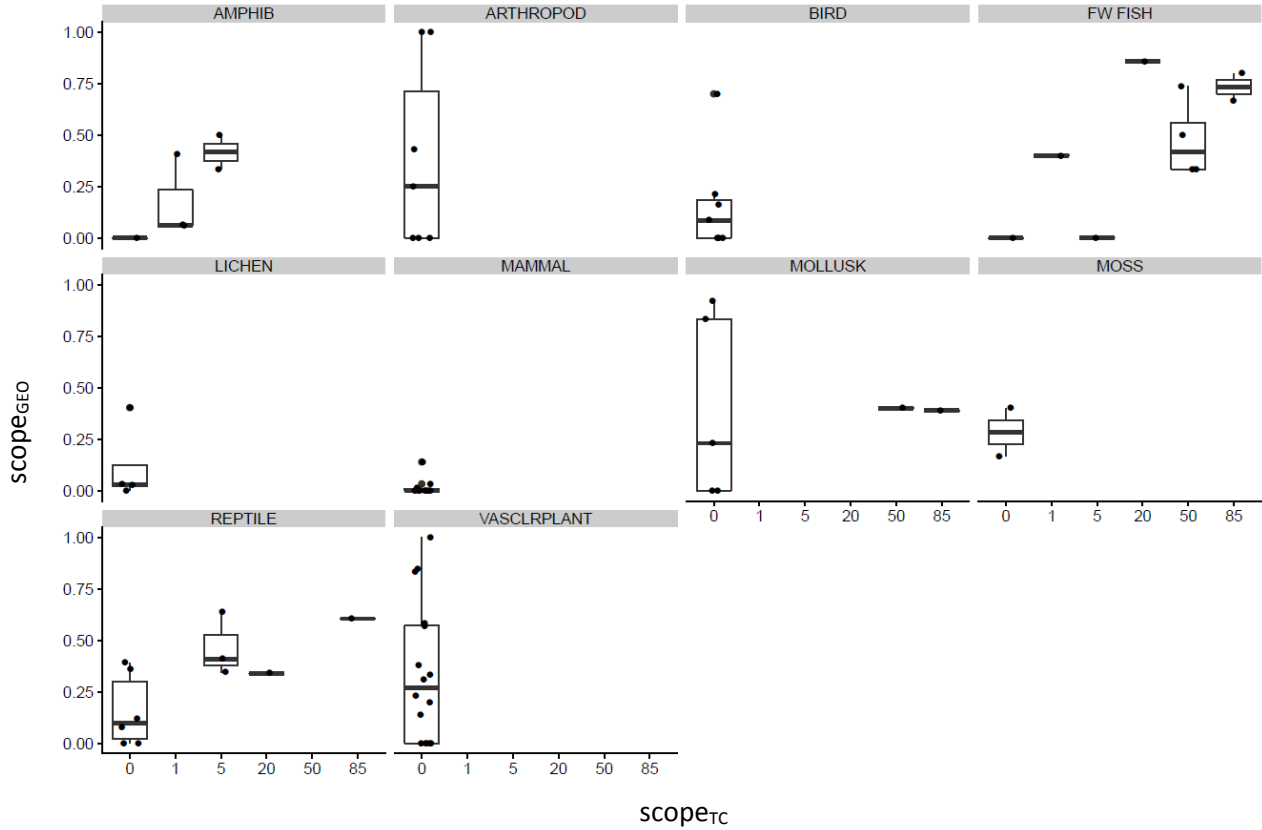
Figure S5d. Proportion of geographic overlap (scope$_{GEO}$) of species' ranges with sources of pollution category 9.2 (*Industrial and Military Effluents*) versus assessed scope from Threats Calculators (scope$_{TC}$). No significant relationship based on a cumulative logit model.
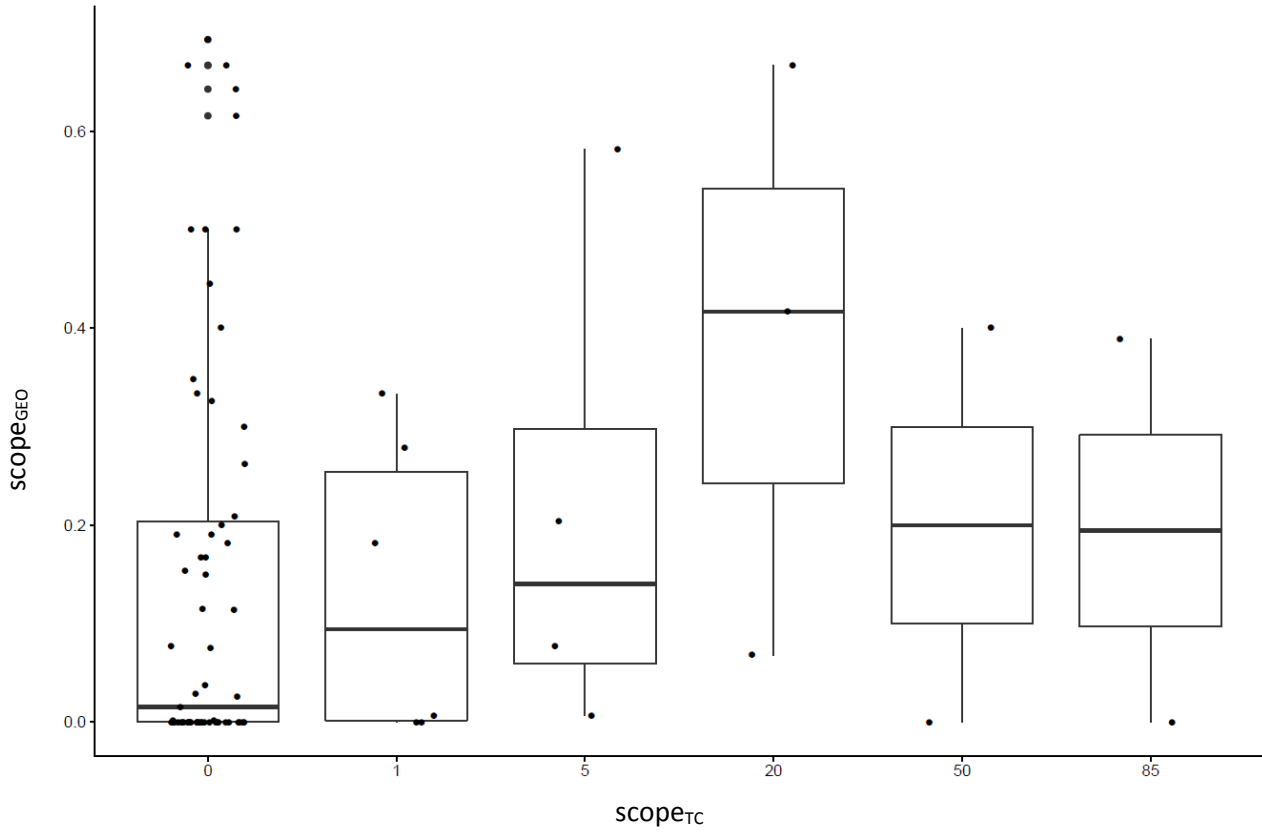
Figure S5e. Proportion of geographic overlap of species' ranges (scope$_{GEO}$) with sources of pollution category 9.2 (*Industrial and Military Effluents*) versus assessed scope from Threats Calculators (scope$_{TC}$), by taxonomic group.
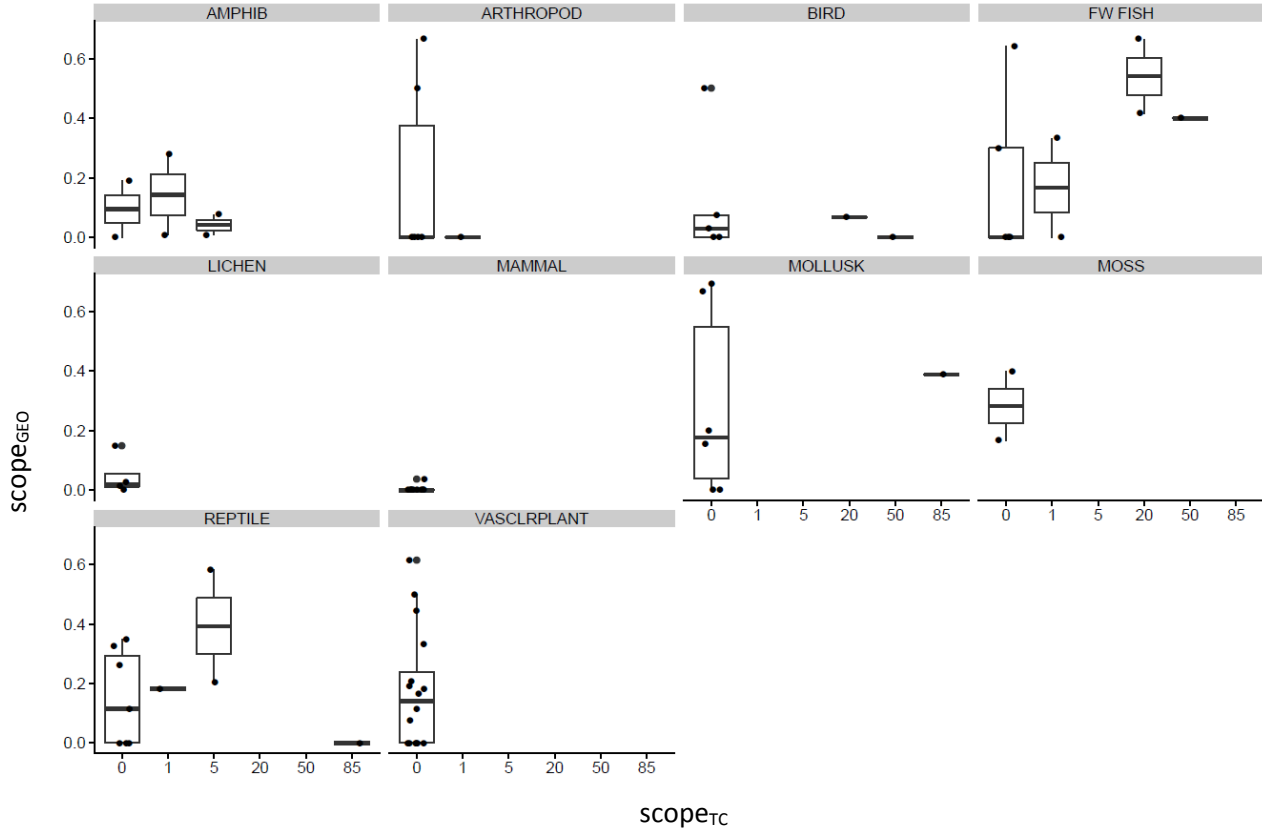
Figure S5f. Proportion of geographic overlap of species' ranges (scope$_{GEO}$) with sources of pollution category 9.3 (*Agricultural Effluents*) versus assessed scope from Threats Calculators (scope$_{TC}$). Significant relationship according to cumulative logit model.
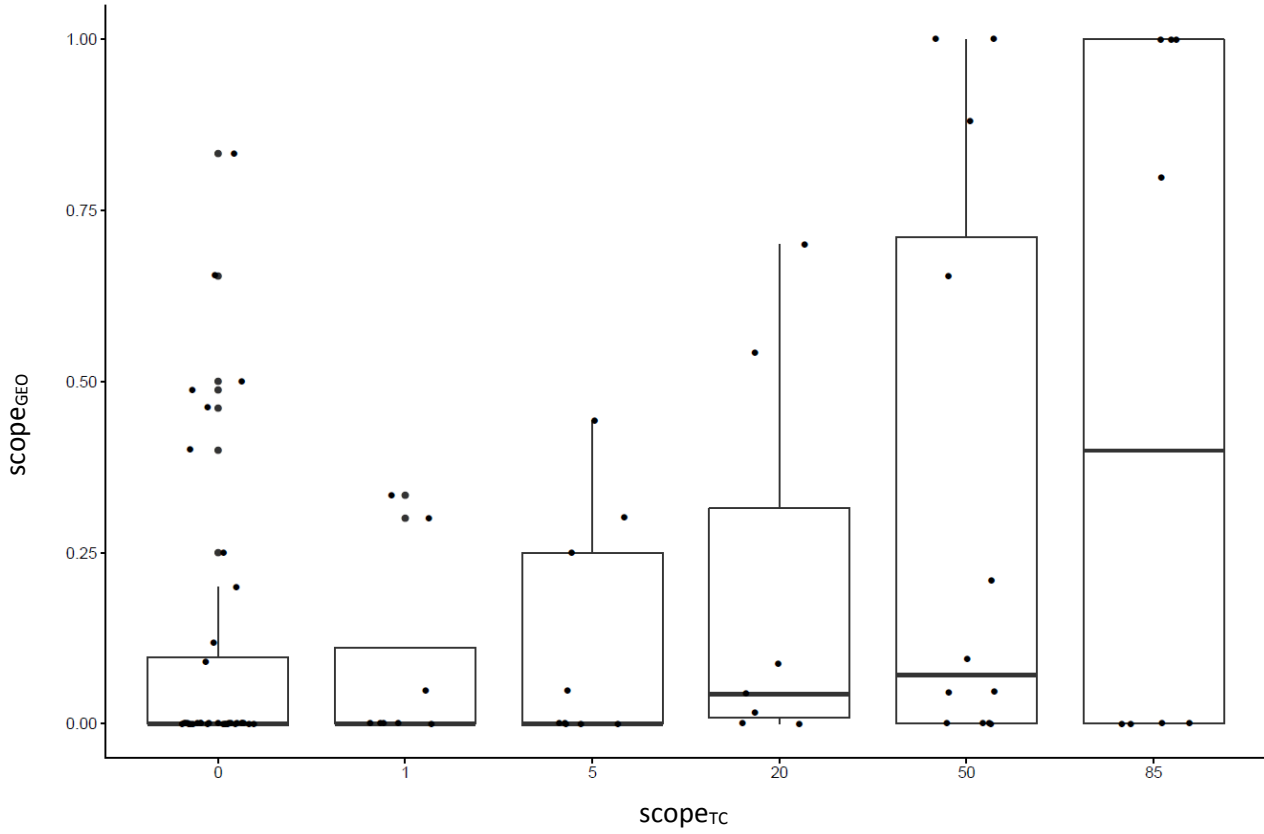
Figure S5g. Proportion of geographic overlap (scopeGEO) of species' ranges with sources of pollution category 9.3 (*Agricultural Effluents*) versus assessed scope from Threats Calculators, (scope$_{TC}$) by taxonomic group.
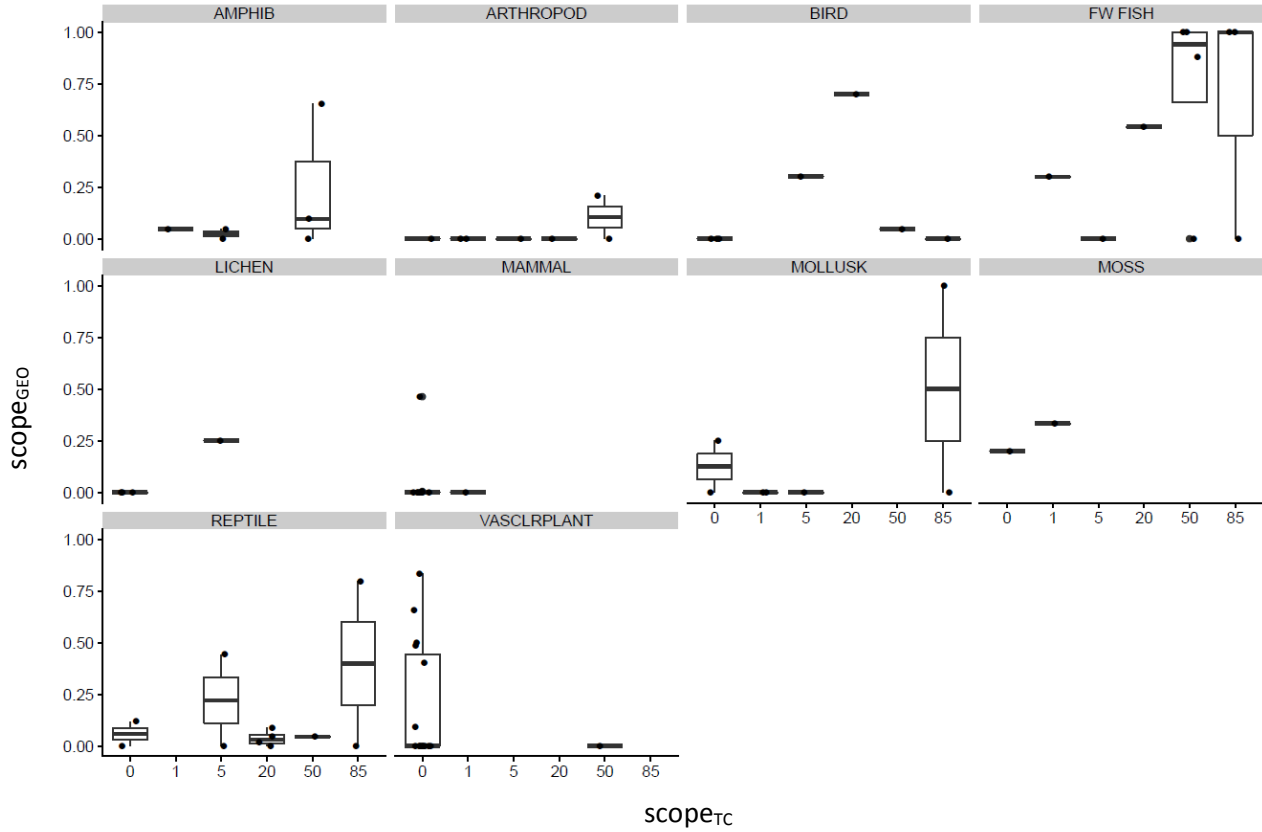
Figure S5h. Proportion of geographic overlap of species' ranges (scope$_{GEO}$) with sources of pollution category 9.4 (*Garbage and Solid Waste*) versus assessed scope from Threats Calculators (scope$_{TC}$). No significant relationship based on cumulative logit model.
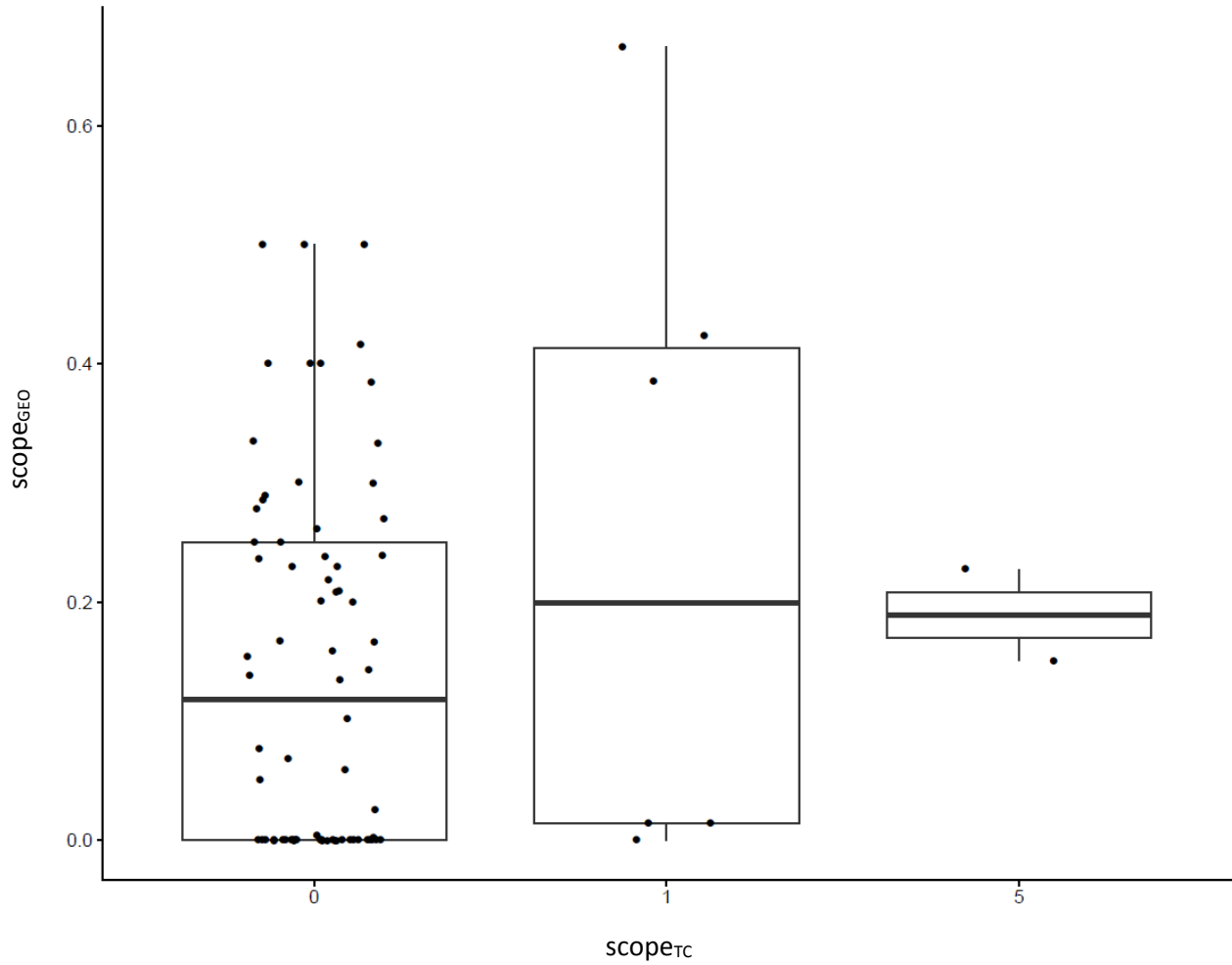
Figure S5j. Proportion of geographic overlap of species' ranges (scope$_{GEO}$) with sources of pollution category 9.4 (*Garbage and Solid Waste*) versus assessed scope from Threats Calculators (scope$_{TC}$), by taxonomic group.
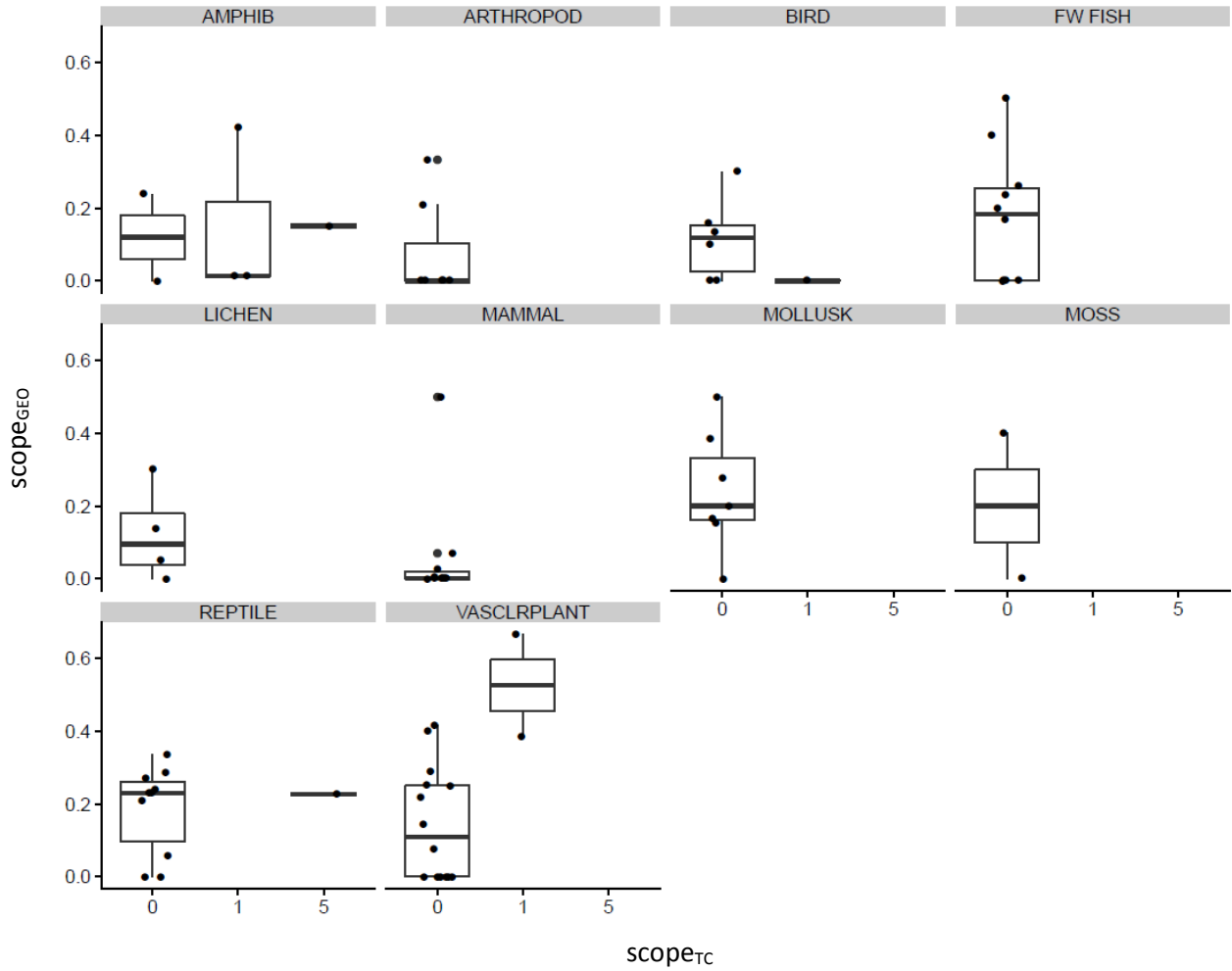
Figure S5k. Proportion of geographic overlap of species' ranges (scope$_{GEO}$) with sources of pollution category 9.5 (*Air-borne Pollutants*) versus assessed scope from Threats Calculators (scope$_{TC}$). No significant relationship based on cumulative logit model.
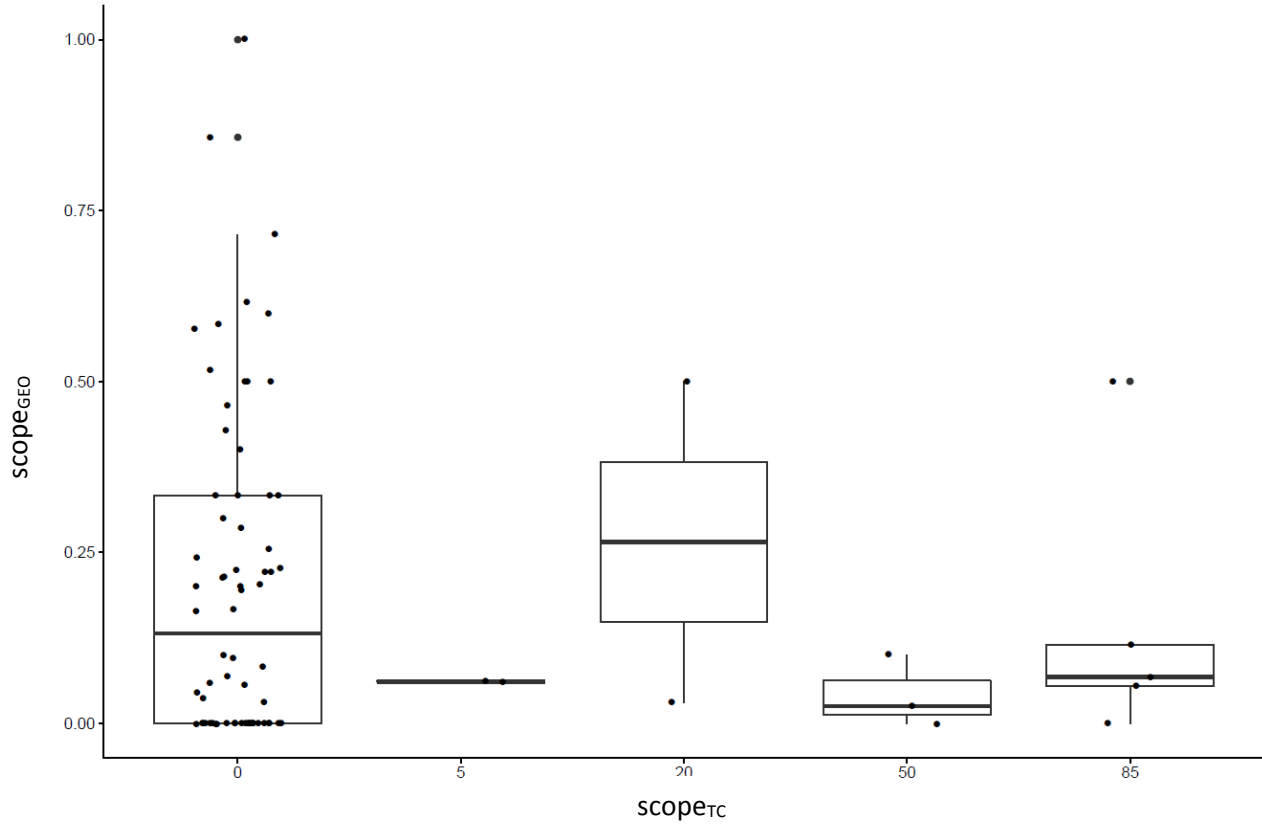
Figure S5l. Proportion of geographic overlap of species' ranges (scope$_{GEO}$) with sources of pollution category 9.5 (*Air-borne Pollutants*) versus assessed scope from Threats Calculators (scope$_{TC}$), by taxonomic group.
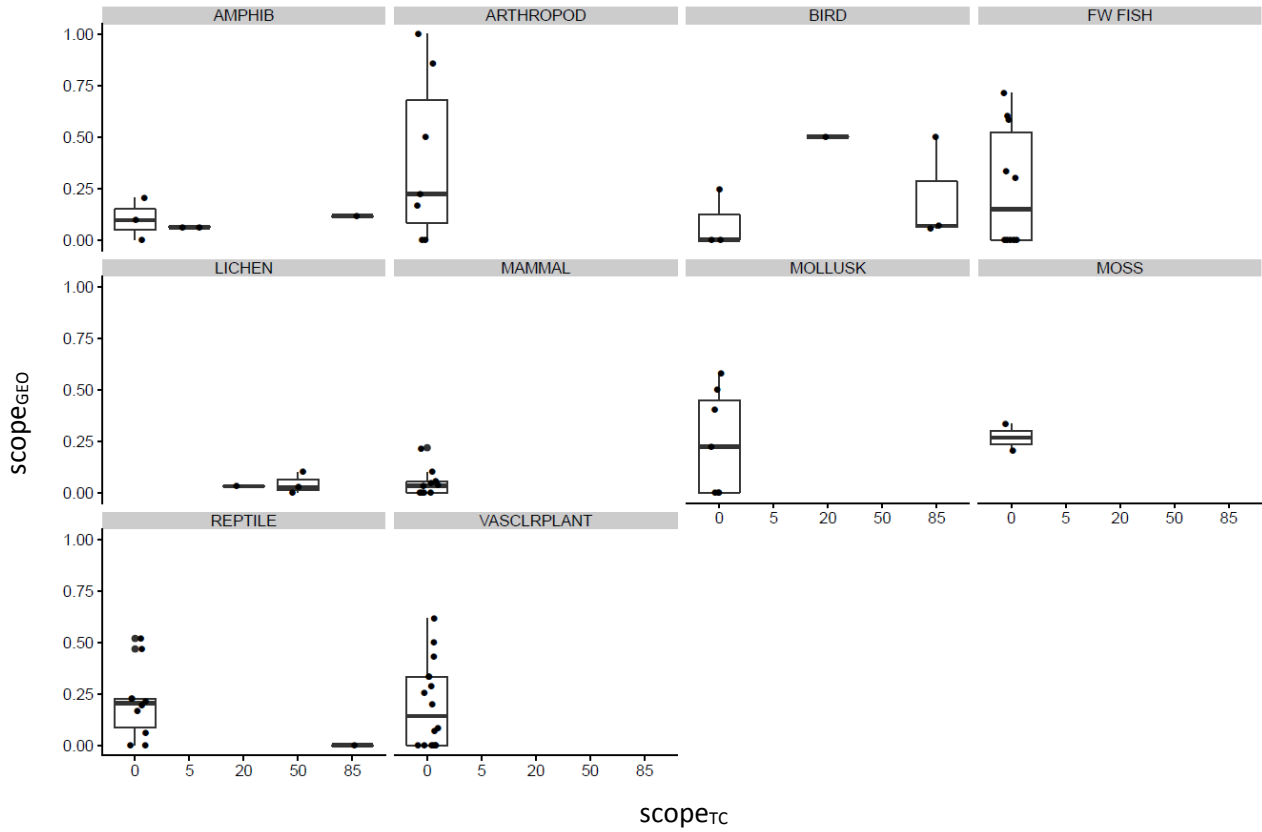
Figure S5m. Proportion of geographic overlap of species' ranges (scope$_{GEO}$) with sources of pollution category 9.6 (*Excess Energy*) versus assessed scope from Threats Calculators (scope$_{TC}$). Note that geographic overlap is for bright lights only, so does not include sources of noise. No significant relationship according to cumulative logit model.
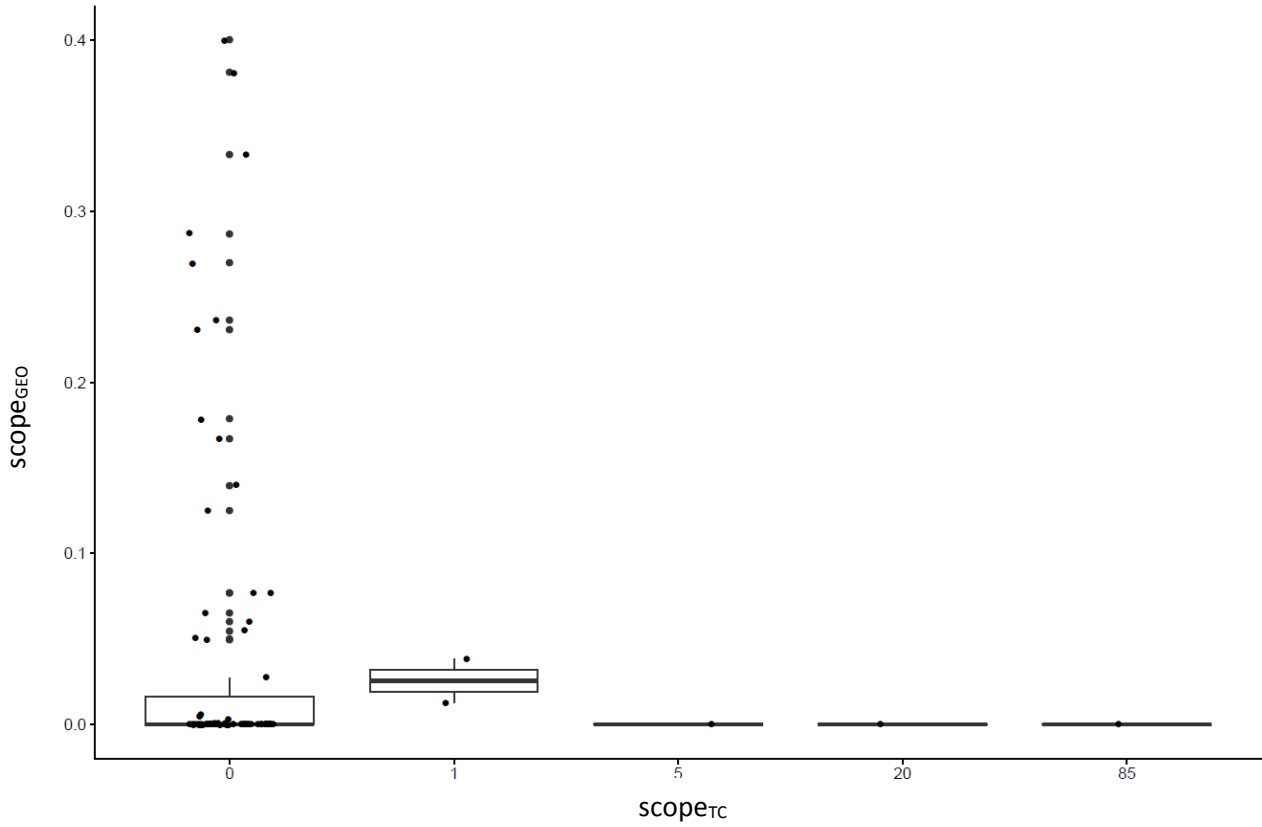
Figure S5n. Proportion of geographic overlap of species' ranges (scope$_{GEO}$) with sources of pollution category 9.6 (*Excess Energy*) versus assessed scope from Threats Calculators (scope$_{TC}$), by taxonomic group. Note that geographic overlap is for bright lights only, so does not include sources of noise.