**EXPOSURE OF RAPTORS TO TOXICANTS**

**Methods**

**Data Sources**

*Search strategy*. We conducted a literature search on the effects of various toxicants on raptors in two literature databases (Web of Science and PubMed). We used different combinations of contaminant terms (i.e., pesticide, heavy metal, flame retardant, anticoagulant rodenticide, PCBs, organochlorine insecticides) and focal species terms (i.e., raptor, bird of prey, falcon, vulture, hawk, buteo, owl, eagle, buzzard, kite). Then, we exported citations from both searches in these databases (n=861). When needed, we downloaded full-text articles from Google Scholar.

*Exclusion and inclusion criteria.* Articles were initially screened based on their relevance. Those that were deemed irrelevant (e.g., studies where effects of a given contaminant were not related to raptors) were not reviewed further. We excluded review papers, conference papers, book chapters and papers published after 2020. From our initial list of articles to review, we filtered out duplicates from the searches. We included all studies that reported empirical findings on the association between exposure to toxicants and an indicator of population-level responses (e.g., susceptibility, presence-absence, effect on survival and other demographic parameters; n=113). For each study, broad toxicant group studied (i.e., pesticide, heavy metal, flame retardant, anticoagulant rodenticide, PCBs, organochlorine insecticides), specific toxicant group studied (e.g., lead, difenacoum, etc.), sample type, concentration of contaminants (with unit of measure), subject species, country of study, sample size, and type of sublethal effects assessed were collected. When available, information on the proportion of individuals exposed, analytical methods employed, age class and sex of subject species, and the detection limits of the contaminant were also collected.

**Data Analyses**

*Descriptive statistics*. XXXX

*Beta-binomial model.*  We assessed the relationship between the exposure of raptor species to different toxicants and a morphological trait (i.e., body mass (g)) using a hierarchical beta-binomial model.