

Supplementary Materials for

Leveraging Machine Learning and Geo-tagged Citizen Science Data to Disentangle the Factors of Avian Mortality Events at the Species Level

Anni Yang, Matthew Rodriguez, Di Yang, Jue Yang, Wenwen Cheng, Changjie Cai, Han Qiu

Table S1. The optimal parameters for RF models by controlling ntree=500 for each species.

	mtry	Node size	Sample fraction
Wilson's Warbler	3	2	0.59
Barn Owl	10	9	0.60
Common Murre	8	3	0.9

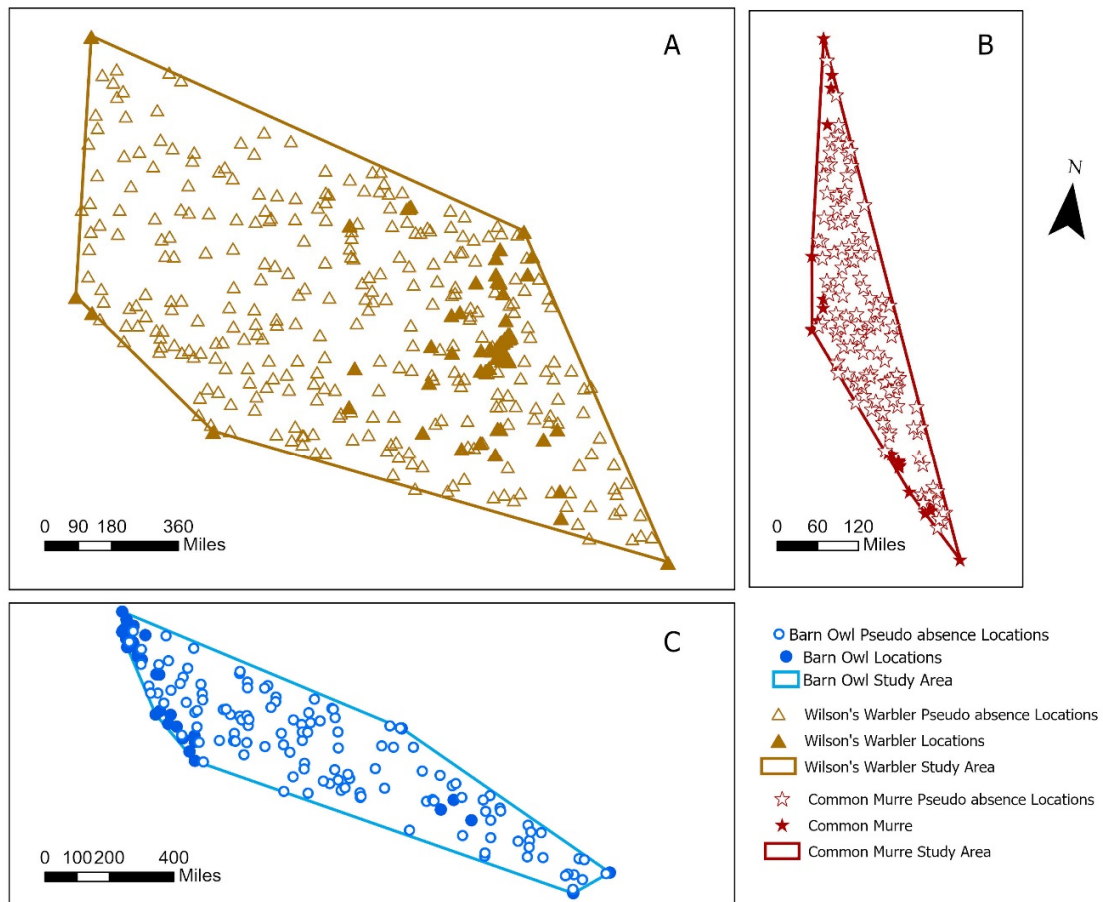


Figure S1. Distributions of the presence and pseudo-absence locations for the (A) Wilson's Warbler, (B) Common Murre, and (C) Barn Owl.

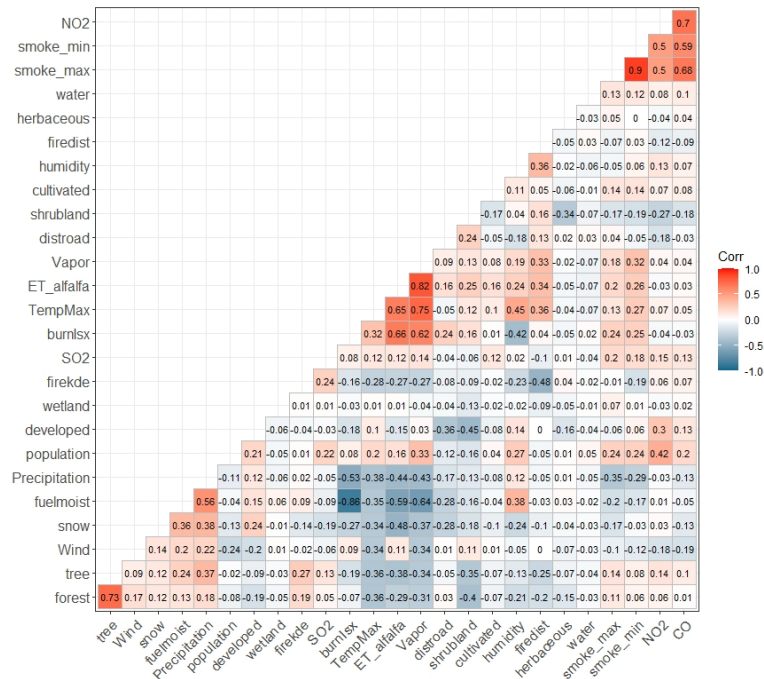


Figure S2. Pearson's correlations for the potential variables used to predict the spatial distributions of mortality of Wilson's Warbler.

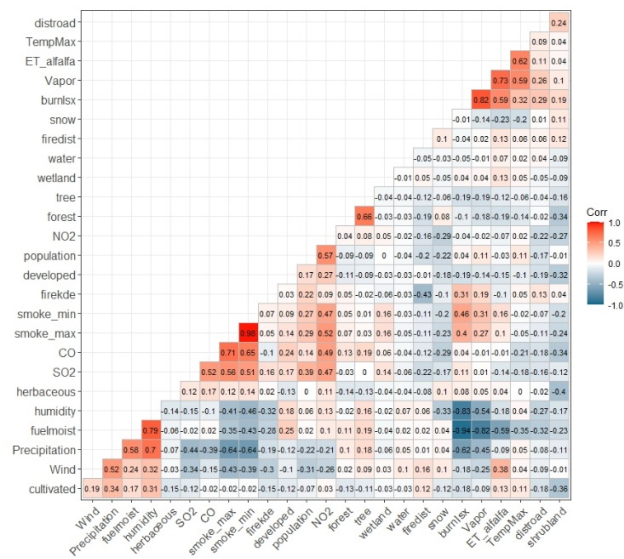


Figure S3. Pearson's correlations for the potential variables used to predict the spatial distributions of mortality of Barn Owl.

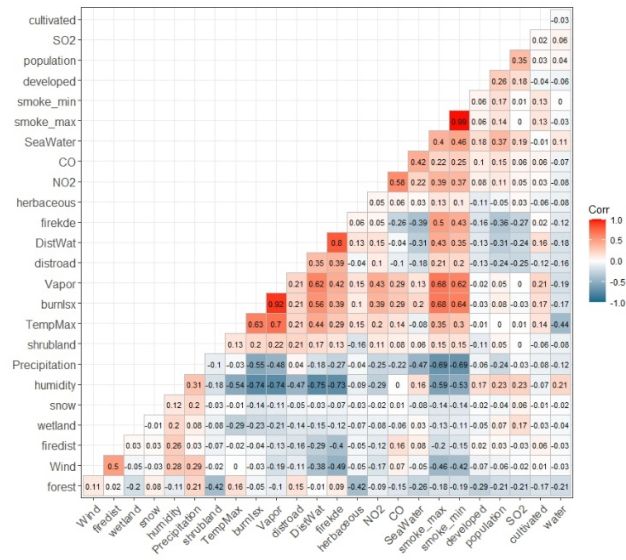


Figure S4. Pearson's correlations for the potential variables used to predict the spatial distributions of mortality of Common Murre.