Appendix

Design- and Model-Based Approaches to Estimating Burrowing Seabird Colony Size in Haida Gwaii, Canada

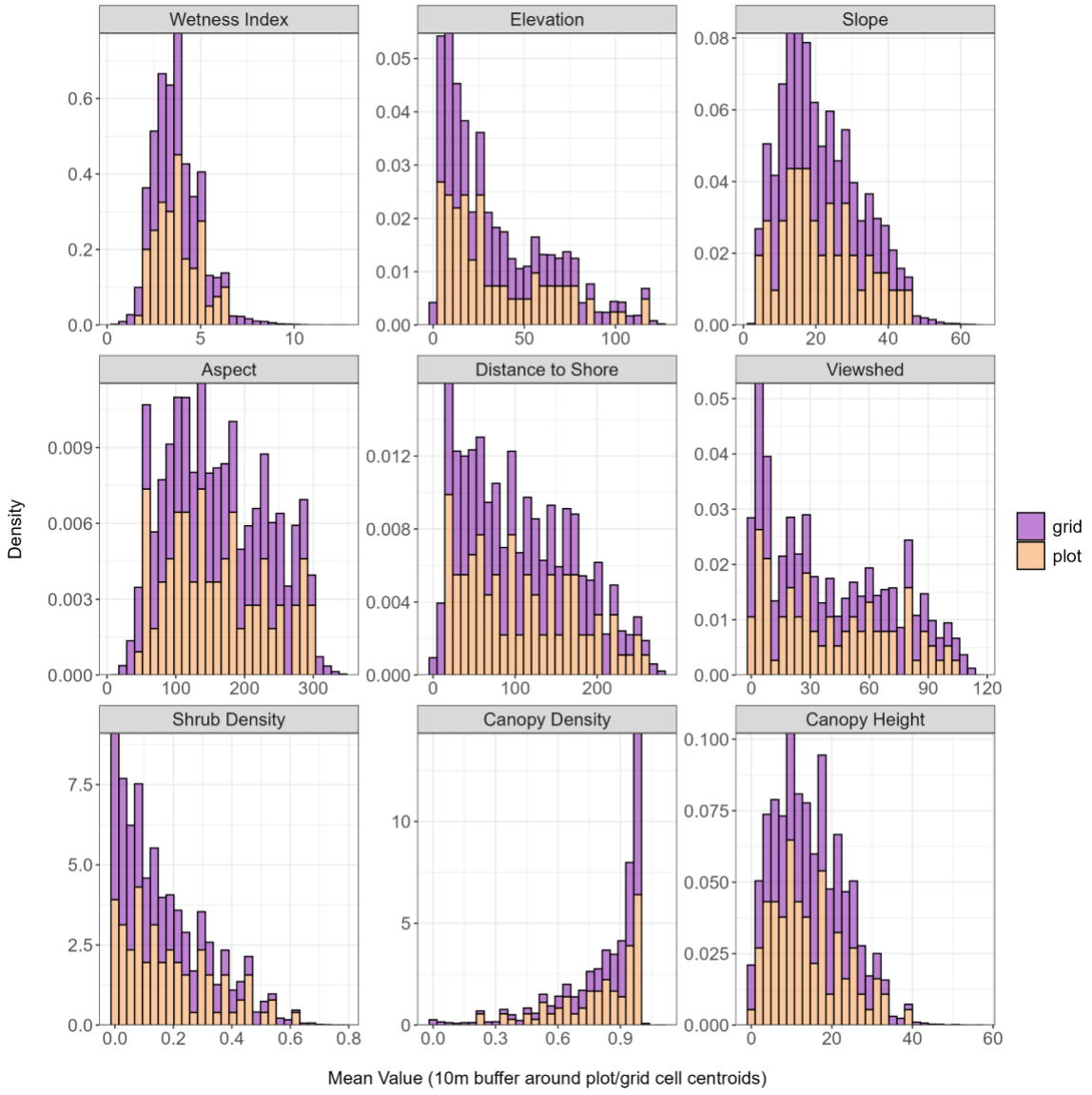


Fig. A1. Habitat metrics within burrow density plots compared to habitat metrics within 7 x 7 m grid cells covering the habitable area of Alder Island, British Columbia, Canada.

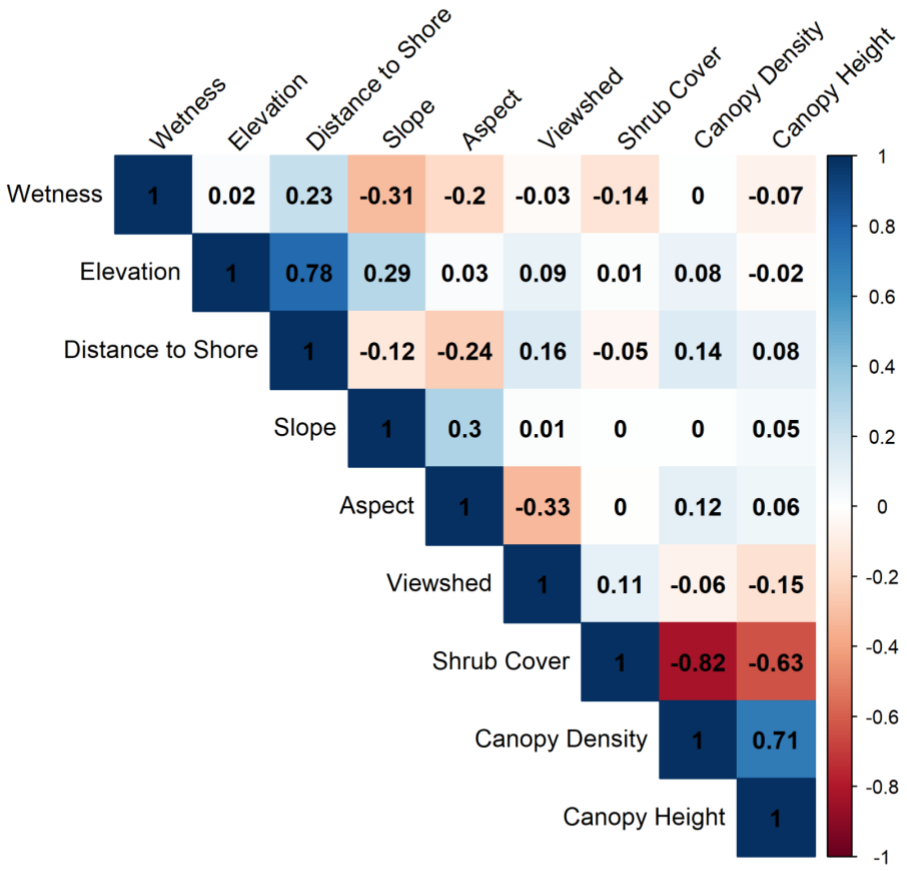


Fig. A2. Habitat metrics correlation matrix for habitat within burrow density plots on Alder Island, British Columbia, Canada.

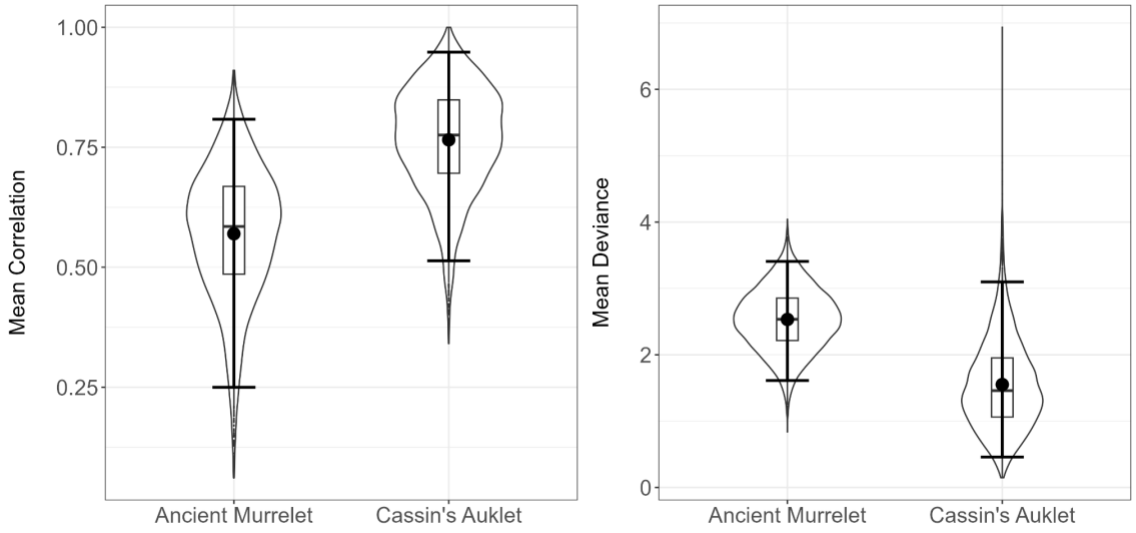


Fig. A3. Boosted Regression Tree cross-validation statistics including mean correlation and mean deviance across 5000 bootstrap iterations for Ancient Murrelets *Synthliboramphus antiquus* and Cassin's Auklets *Ptychoramphus aleuticus*.

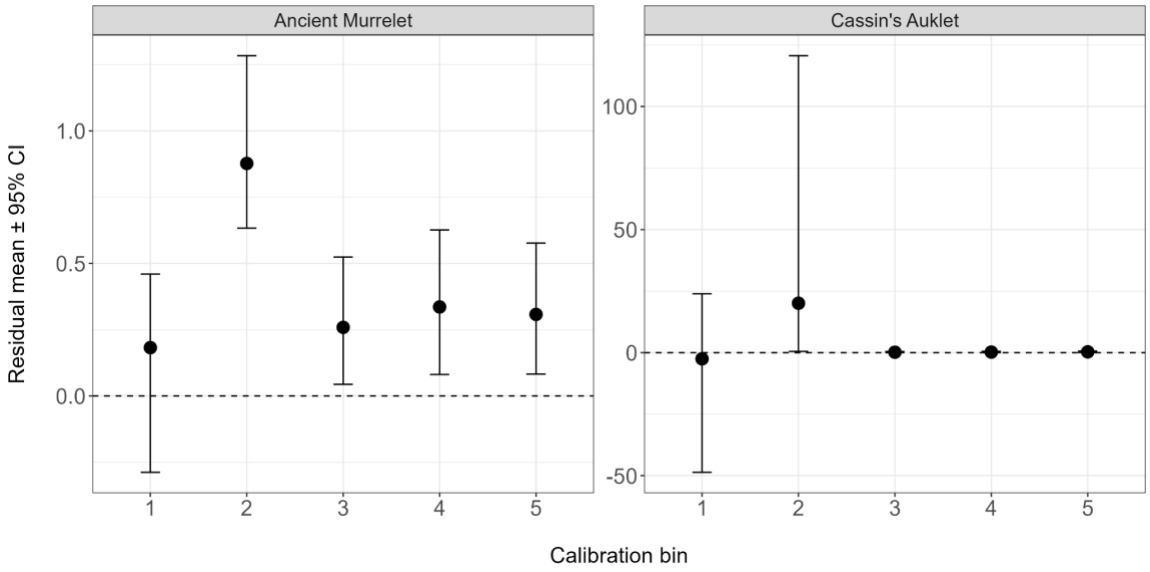


Fig. A4. Boosted Regression Tree cross-validation calibration residuals across 5000 bootstrap iterations for Ancient Murrelets *Synthliboramphus antiquus* and Cassin's Auklets *Ptychoramphus aleuticus*.

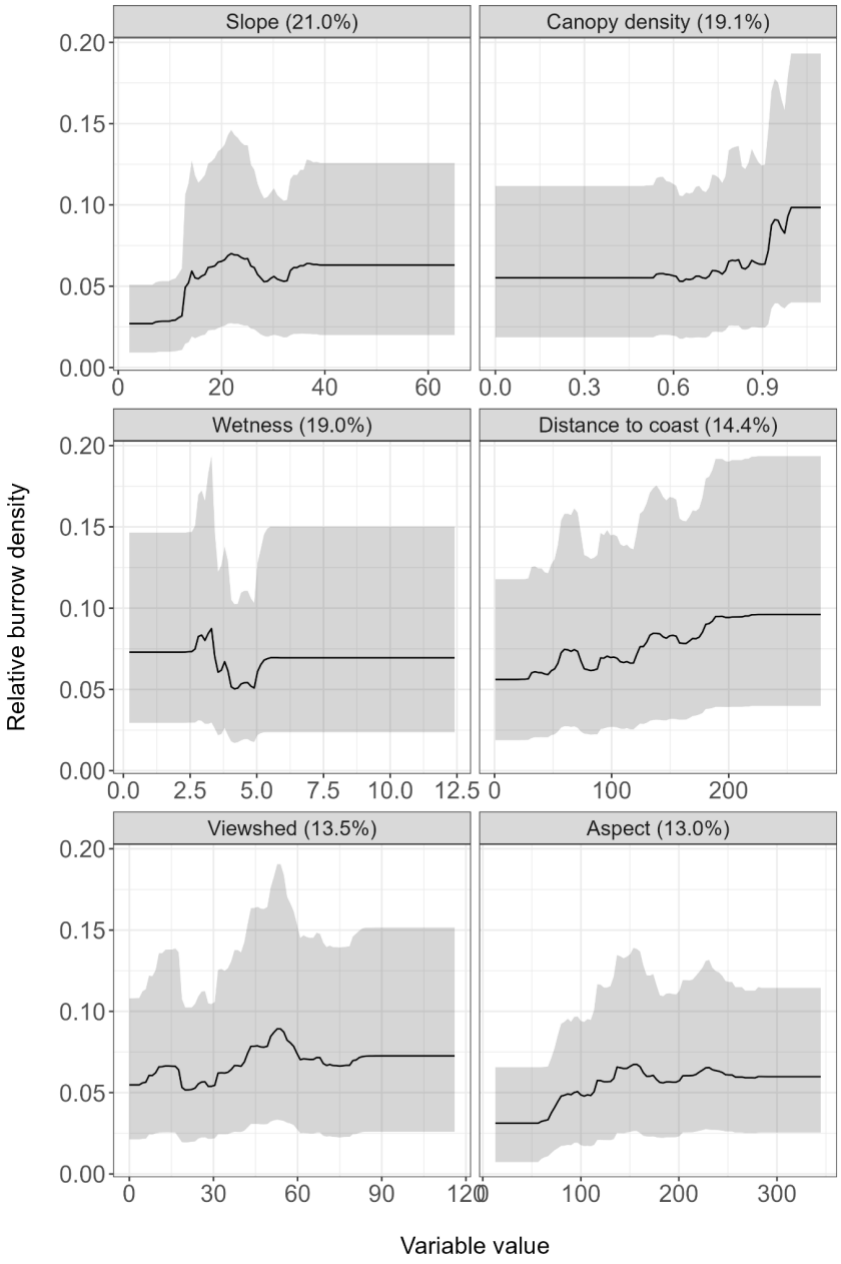


Fig. A5. Ancient murrelet *Synthliboramphus antiquus* Boosted Regression Tree habitat predictor partial dependence across 5000 bootstrap iterations. Mean predictor relative influence values are shown in facet labels.

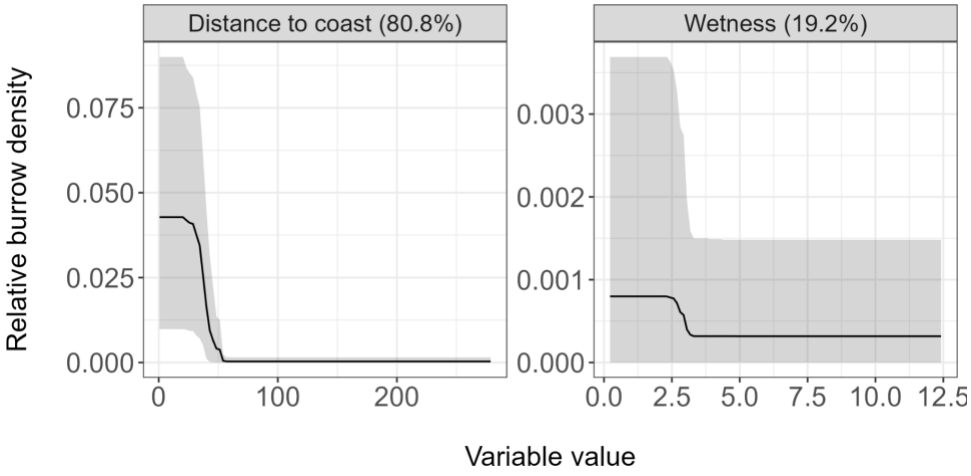


Fig. A6. Cassin's Auklet *Ptychoramphus aleuticus* Boosted Regression Tree habitat predictor partial dependence across 5000 bootstrap iterations. Mean predictor relative influence values are shown in facet labels. Note the differing y-axis scales.