

Ecography

ECOG-00740

Betts, M. G., Fahrig, L., Hadley, A. S., Halstead, K. E., Bowman, J., Robinson, W. D., Wiens, J. A. and Lindenmayer, D. B. 2014. A species-centered approach for uncovering generalities in organism responses to habitat loss and fragmentation. – *Ecography* doi: 10.1111/ecog.00740

Supplementary material

Appendix 1

Table A1. Performance metrics for distribution models (Boosted Regression Trees) for the four focal species examined.

Species	AUC*	Threshold \hat{p} [†]	Sensitivity	1-Specificity
Hermit warbler	0.82	0.48	0.82	0.82
Spotted towhee	0.84	0.41	0.87	0.85
Lazuli bunting	0.83	0.26	0.91	0.78
Lesser goldfinch	0.81	0.30	0.83	0.88

*Area Under the Receiver Operating Characteristic Curve

[†]The threshold in fitted value (from BRT) that maximized true positives (sensitivity) and true negatives (1-specificity).

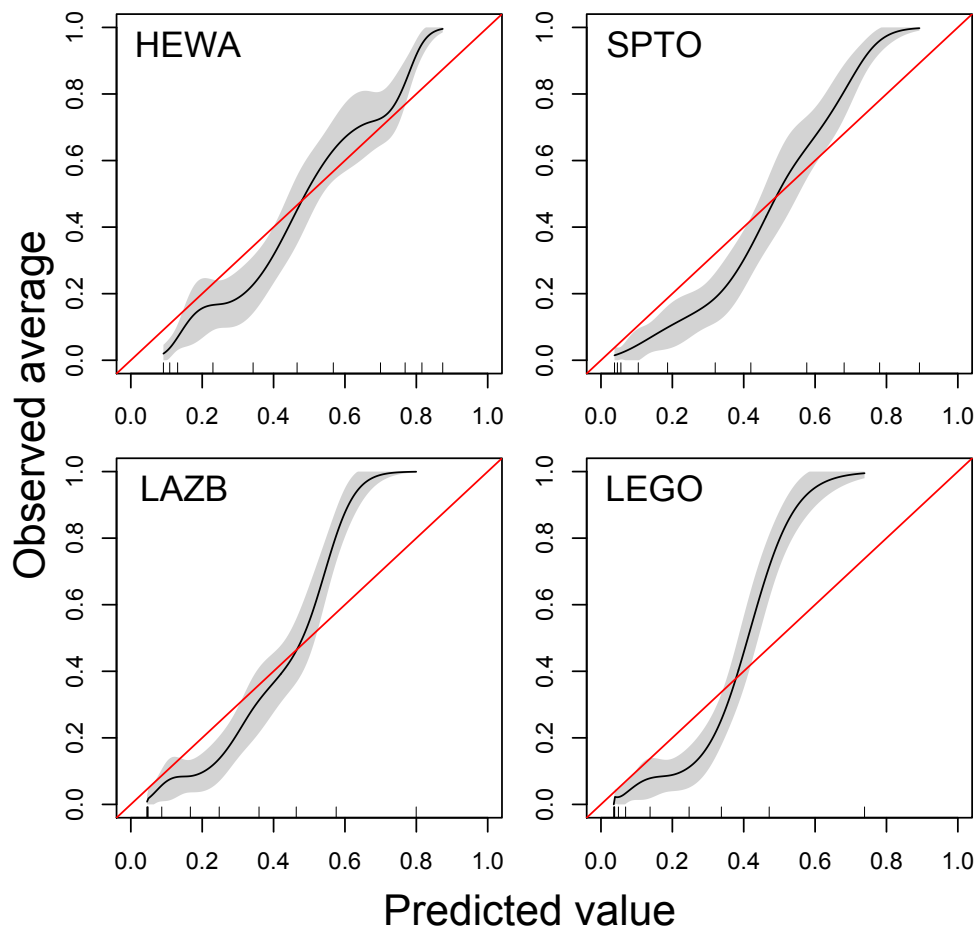


Figure A1. Calibration plots for local-scale species distribution models of four focal bird species. Well-calibrated models show strong correspondence between predicted and observed values (black line \pm 95% confidence intervals) and should be isometric (follow a 1:1 line with intercept zero; red line). Rug plots show data density across the gradient of predicted values. Note that, as should be expected, LAZB and LEGO fit poorly where data density is low. Species codes are: lesser goldfinch (LEGO), lazuli bunting (LAZB), spotted towhee (SPTO) and hermit warbler (HEWA).