

Ecography

ECOG-00127

Madon, B., Warton, D. I. and Araújo, M. B. 2013.
Community-level vs species-specific approaches to
model selection. – *Ecography* 36: xxx–xxx.

Supplementary material

Appendix 1

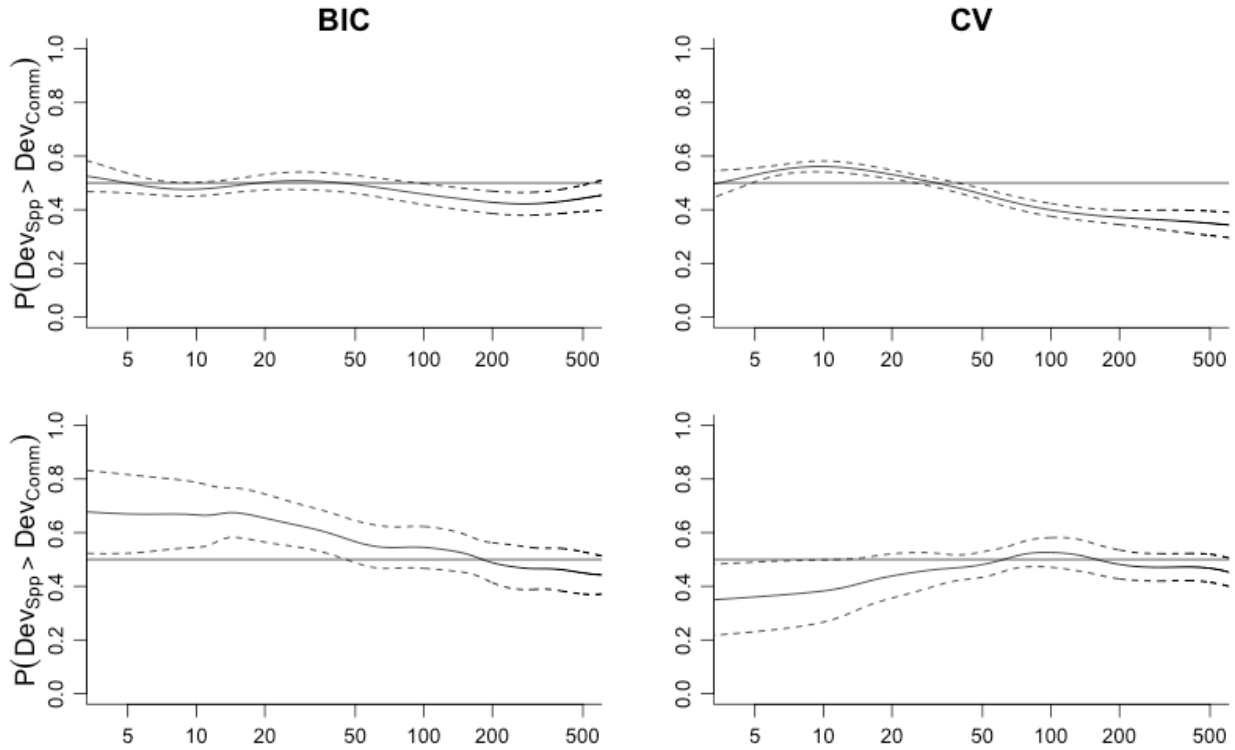


Fig. A1- Estimates of the proportion of species for which community-level model selection outperforms species-specific model selection, as a function of species prevalence (solid line: GAM smoother, dashed lines: ± 2 SE), using other model selection criteria (predictive deviance, “CV”, and BIC). Results are presented for both the *Blue Mountains* dataset (top row) and the *Europe* dataset (bottom row).

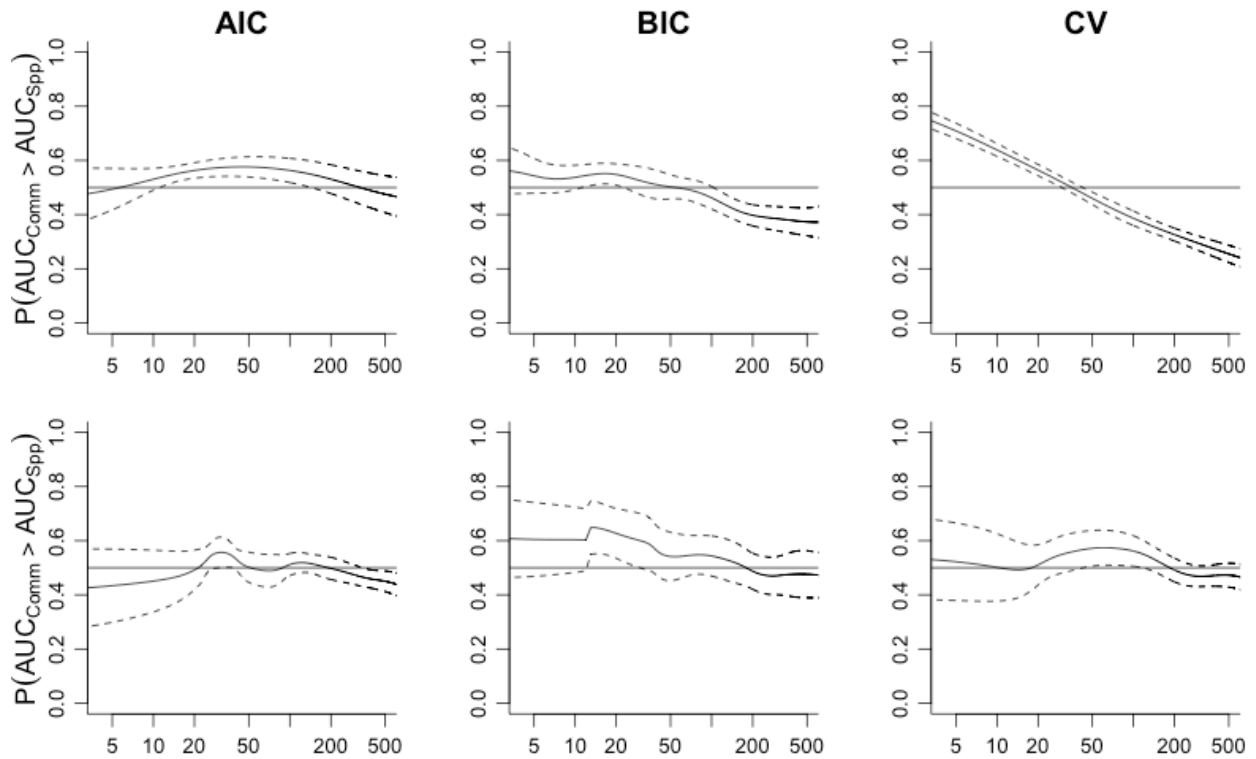


Fig. A2 - Comparison of predictive error (AUC for test data) of community-level (“AUC_{comm}”) and species-specific (“AUC_{spp}”) model selection, as a function of species prevalence. Solid curve is the estimated proportion of times community-level model selection outperformed species-specific model selection (dashed lines: ± 2 SE). Results are presented for all three model selection criteria (AIC, CV, and BIC), for both the *Blue Mountains* dataset (top row) and the *Europe* dataset (bottom row).

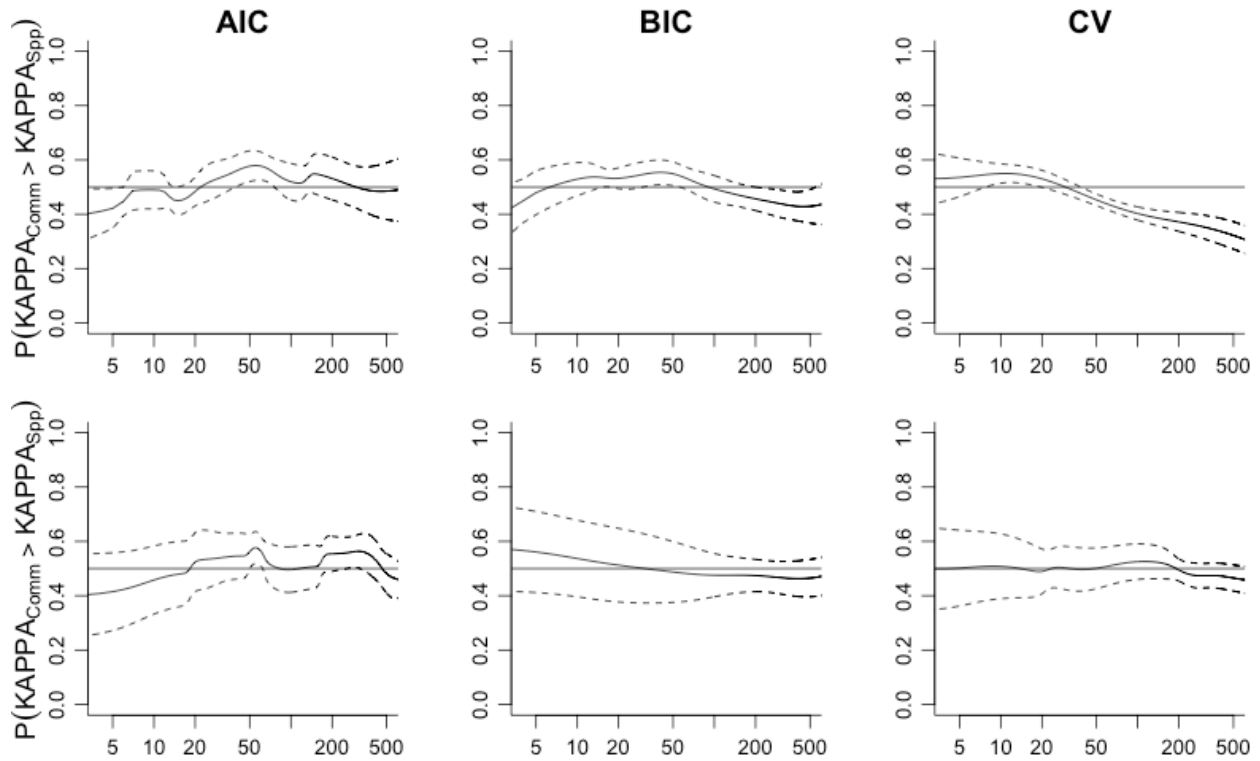


Fig. A3 - Comparison of predictive error (Kappa statistic for test data) of community-level (“KAPPA_{comm}”) and species-specific (“KAPPA_{spp}”) model selection, as a function of species prevalence. Solid curve is the estimated proportion of times community-level model selection outperformed species-specific model selection (dashed lines: ± 2 SE). Results are presented for all three model selection criteria (AIC, CV, and BIC), for both the *Blue Mountains* dataset (top row) and the *Europe* dataset (bottom row).

Appendix 2

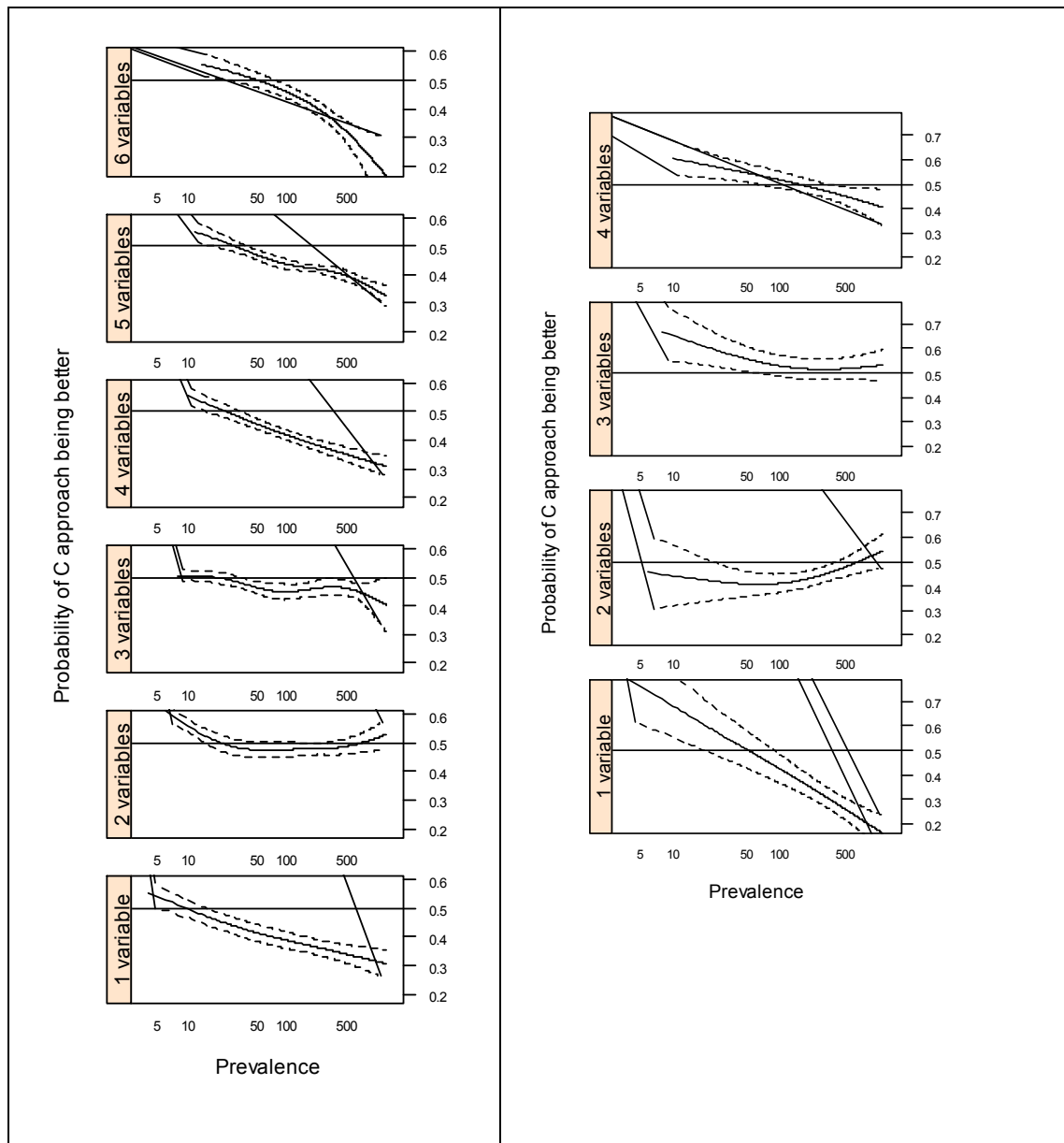


Fig. A2- Probability of the community approach (“C”) being better than the species approach (“S”) as a function of prevalence when model complexity is hold constant for the BM and ET datasets (solid line: GAM smoother, dashed lines: ± 2 SE, i.e. roughly 95% CI).