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ELECTRONIC APPENDIX

This is the Electronic Appendix to the article

Dissecting the species–energy relationship

by

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Electronic appendices are refereed with the text; however, no attempt is made to impose a uniform editorial style on the electronic appendices.

Appendix A Minimum Adequate Models of species-energy relationships amongst British breeding birds obtained using step-wise selection in General Linear Models. Either summer or annual measures of energy availability are used according to which measure provides the best fit to the data in tests that used a single energy metric as a predictor (see Table 1).
 ++++ $P < 0.0001$, +++ $P < 0.001$, ++ $P < 0.01$, + $P < 0.05$; Negative effects --- $P < 0.0001$, -- $P < 0.001$, - $P < 0.01$, - $P < 0.05$.

Response	Temperature	Temperature ²	NDVI	NDVI ²	r ²
All species	F _{1,2257} = 141.71++++	F _{1,2257} = 118.28----	F _{1,2257} = 173.58++++	F _{1,2257} = 167.04----	30.4%
Non-passerines	F _{1,2257} = 59.61++++	F _{1,2257} = 50.92----	F _{1,2257} = 186.80++++	F _{1,2257} = 196.37----	16.0%
Passerines	F _{1,2257} = 205.16++++	F _{1,2257} = 168.46----	F _{1,2257} = 88.30++++	F _{1,2257} = 71.51----	43.1%
Long distance resident	F _{1,2257} = 171.71++++	F _{1,2257} = 149.66----	F _{1,2257} = 198.10++++	F _{1,2257} = 193.91----	28.4%
Long distance migrant	F _{1,2257} = 176.88++++	F _{1,2257} = 157.80----	F _{1,2257} = 97.20++++	F _{1,2257} = 89.84----	26.0%
Partial resident	F _{1,2257} = 187.57++++	F _{1,2257} = 145.16----	F _{1,2257} = 198.65++++	F _{1,2257} = 187.06----	45.6%
Partial migrant	F _{1,2257} = 49.47++++	F _{1,2257} = 52.52----	F _{1,2257} = 93.82++++	F _{1,2257} = 95.47----	7.2%
Red list	F _{1,2257} = 67.16++++	F _{1,2257} = 35.38----	F _{1,2257} = 242.39++++	F _{1,2257} = 236.29----	53.0%
Amber list	F _{1,2257} = 86.66++++	F _{1,2257} = 98.45----	F _{1,2257} = 174.08++++	F _{1,2257} = 177.06----	15.1%
Green list	F _{1,2257} = 146.72++++	F _{1,2257} = 119.12----	F _{1,2257} = 108.44++++	F _{1,2257} = 100.83----	33.2%
1 st population quartile	F _{1,2257} = 533.25++++	F _{1,2257} = 440.20----	F _{1,2257} = 267.04++++	F _{1,2257} = 238.93----	62.2%
2 nd population quartile	F _{1,2257} = 161.13++++	F _{1,2257} = 152.68----	F _{1,2257} = 88.97++++	F _{1,2257} = 82.33----	18.4%
3 rd population quartile	F _{1,2257} = 3.81 -ns	F _{1,2257} = 6.02+	F _{1,2257} = 89.17++++	F _{1,2257} = 95.80----	8.6%
4 th population quartile	ns	ns	F _{1,2259} = 7.23++	F _{1,2259} = 12.57----	7.9%
1 st mass quartile	F _{1,2257} = 108.51++++	F _{1,2257} = 79.47----	F _{1,2257} = 60.44++++	F _{1,2257} = 49.01----	40.6%
2 nd mass quartile	F _{1,2257} = 148.15++++	F _{1,2257} = 134.01----	F _{1,2257} = 118.07++++	F _{1,2257} = 112.84----	21.2%
3 rd mass quartile	F _{1,2257} = 91.9++++	F _{1,2257} = 62.35----	F _{1,2257} = 287.34++++	F _{1,2257} = 290.19----	42.5%
4 th mass quartile	F _{1,2257} = 56.03++++	F _{1,2257} = 67.74----	F _{1,2257} = 61.50++++	F _{1,2257} = 63.88----	12.2%
Farmland	F _{1,2257} = 195.96++++	F _{1,2257} = 107.87----	F _{1,2257} = 291.38++++	F _{1,2257} = 286.10----	72.7%
Woodland	F _{1,2257} = 68.01++++	F _{1,2257} = 46.92----	F _{1,2257} = 90.41++++	F _{1,2257} = 71.31----	40.8%
Other habitats	F _{1,2257} = 82.87++++	F _{1,2257} = 93.52----	F _{1,2257} = 60.60++++	F _{1,2257} = 67.27----	10.8%
Niche breadth (broad)	F _{1,2257} = 324.54++++	F _{1,2257} = 192.07----	F _{1,2257} = 203.65++++	F _{1,2257} = 185.21----	78.5%
Niche breadth (narrow)	F _{1,2257} = 282.09++++	F _{1,2257} = 315.90----	F _{1,2257} = 104.41++++	F _{1,2257} = 97.27----	27.2%
Niche position (low)	F _{1,2257} = 462.75++++	F _{1,2257} = 373.01----	F _{1,2257} = 243.33++++	F _{1,2257} = 215.99----	62.3%
Niche position (high)	F _{1,2257} = 201.45++++	F _{1,2257} = 165.73----	F _{1,2257} = 55.67++++	F _{1,2257} = 46.19----	41.6%
Herbivores	F _{1,2257} = 108.69++++	F _{1,2257} = 67.25----	F _{1,2257} = 250.16++++	F _{1,2257} = 254.97----	52.1%
Omnivores	F _{1,2257} = 98.6++++	F _{1,2257} = 63.05----	F _{1,2257} = 223.58++++	F _{1,2257} = 213.07----	49.7%
Predators - inverts	F _{1,2257} = 172.1++++	F _{1,2257} = 162.2----	F _{1,2257} = 79.4++++	F _{1,2257} = 76.94----	16.9%
Predators - verts	F _{1,2257} = 29.95++++	F _{1,2257} = 38.12----	F _{1,2257} = 34.40++++	F _{1,2257} = 82.36----	9.7%