

Appendix 2: Correlation coefficients for environmental variables included in species distribution models for the Plains and Ozarks Ecoregions of Missouri (See Appendix 1 for variable codes):

Plains Ecoregion

| | EDU | AES | SO | DS | RG | SG | GEO | URB_L | AG_L | GRS_L | FOR_L | WET_L | AG_U | GRS_U | FOR_U | WET_U | SPR_L | SPR_U | DAM_L | DAM_U | HI_L | HI_U | RS_L | RS_U | HTI_L | HTI_U | LRI | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|-----|--|
| EDU | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AES | -0.22 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SO | 0.02 | -0.02 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DS | -0.05 | 0.02 | 0.62 | | | | | | | | | | | | | | | | | | | | | | | | | |
| RG | -0.03 | 0.16 | -0.44 | -0.30 | | | | | | | | | | | | | | | | | | | | | | | | |
| SG | -0.04 | 0.18 | -0.62 | -0.44 | 0.68 | | | | | | | | | | | | | | | | | | | | | | | |
| GEO | -0.14 | 0.10 | -0.05 | -0.01 | 0.08 | 0.02 | | | | | | | | | | | | | | | | | | | | | | |
| URB_L | 0.03 | -0.06 | 0.02 | 0.01 | 0.00 | 0.00 | 0.00 | | | | | | | | | | | | | | | | | | | | | |
| AG_L | -0.02 | -0.18 | 0.14 | 0.07 | -0.19 | -0.24 | -0.13 | -0.11 | | | | | | | | | | | | | | | | | | | | |
| GRS_L | -0.10 | 0.07 | -0.24 | -0.19 | 0.14 | 0.20 | 0.08 | -0.07 | -0.61 | | | | | | | | | | | | | | | | | | | |
| FOR_L | 0.12 | 0.16 | 0.05 | 0.09 | 0.10 | 0.10 | 0.07 | 0.00 | -0.56 | -0.30 | | | | | | | | | | | | | | | | | | |
| WET_L | -0.01 | -0.03 | 0.24 | 0.21 | -0.10 | -0.13 | -0.05 | -0.02 | -0.03 | -0.17 | 0.12 | | | | | | | | | | | | | | | | | |
| AG_U | 0.28 | -0.13 | -0.06 | -0.09 | 0.02 | -0.01 | -0.19 | -0.08 | 0.50 | -0.34 | -0.24 | -0.05 | | | | | | | | | | | | | | | | |
| GRS_U | -0.36 | 0.05 | 0.03 | 0.05 | -0.10 | -0.09 | 0.14 | -0.11 | -0.40 | 0.44 | 0.04 | 0.05 | -0.84 | | | | | | | | | | | | | | | |
| FOR_U | 0.04 | 0.19 | 0.07 | 0.08 | 0.11 | 0.17 | 0.14 | 0.15 | -0.31 | -0.05 | 0.40 | 0.02 | -0.56 | 0.05 | | | | | | | | | | | | | | |
| WET_U | 0.05 | -0.12 | 0.20 | 0.18 | -0.11 | -0.19 | -0.01 | -0.04 | 0.12 | -0.15 | -0.02 | 0.35 | 0.11 | -0.10 | -0.06 | | | | | | | | | | | | | |
| SPR_L | 0.12 | 0.00 | -0.01 | -0.07 | -0.01 | 0.04 | -0.03 | -0.02 | -0.01 | -0.02 | 0.05 | -0.02 | 0.03 | -0.08 | -0.02 | | | | | | | | | | | | | |
| SPR_U | 0.15 | -0.01 | 0.19 | 0.12 | -0.08 | -0.10 | -0.03 | 0.04 | 0.05 | -0.03 | -0.04 | -0.02 | 0.07 | -0.12 | 0.06 | -0.04 | 0.04 | | | | | | | | | | | |
| DAM_L | -0.05 | -0.06 | -0.06 | -0.07 | 0.07 | 0.07 | -0.03 | 0.11 | -0.09 | 0.04 | 0.04 | 0.00 | -0.06 | 0.04 | 0.04 | -0.02 | -0.02 | | | | | | | | | | | |
| DAM_U | 0.15 | -0.18 | -0.07 | -0.12 | 0.06 | 0.10 | -0.02 | 0.13 | -0.05 | 0.05 | -0.02 | -0.03 | -0.07 | -0.03 | 0.17 | -0.02 | 0.03 | 0.01 | 0.31 | | | | | | | | | |
| HI_L | -0.07 | 0.00 | -0.12 | -0.08 | 0.23 | 0.08 | 0.03 | 0.00 | -0.03 | 0.13 | -0.09 | -0.03 | -0.01 | 0.05 | -0.06 | 0.03 | 0.00 | -0.03 | 0.08 | 0.17 | | | | | | | | |
| HI_U | -0.18 | -0.25 | -0.17 | -0.20 | 0.13 | 0.10 | 0.00 | -0.01 | 0.06 | 0.12 | -0.19 | -0.08 | 0.01 | 0.12 | -0.21 | -0.06 | -0.04 | -0.09 | 0.08 | 0.29 | 0.20 | | | | | | | |
| RS_L | 0.00 | -0.03 | 0.11 | 0.06 | 0.00 | -0.06 | -0.02 | -0.01 | 0.04 | -0.04 | 0.00 | 0.00 | 0.07 | -0.05 | -0.05 | 0.13 | -0.02 | 0.01 | -0.01 | -0.02 | -0.04 | 0.03 | | | | | | |
| RS_U | -0.07 | -0.05 | -0.06 | -0.11 | 0.16 | 0.19 | -0.01 | 0.36 | 0.00 | 0.00 | -0.08 | -0.07 | 0.03 | -0.10 | -0.03 | -0.06 | -0.02 | 0.01 | 0.15 | 0.21 | 0.04 | 0.35 | 0.04 | | | | | |
| HTI_L | 0.10 | -0.02 | 0.11 | 0.11 | -0.07 | -0.11 | -0.01 | 0.33 | 0.16 | 0.13 | -0.40 | -0.08 | 0.05 | -0.10 | 0.01 | -0.08 | 0.01 | 0.12 | 0.17 | 0.24 | 0.08 | 0.07 | 0.04 | 0.28 | | | | |
| HTI_U | 0.07 | 0.03 | 0.28 | 0.18 | -0.05 | -0.14 | 0.00 | 0.27 | 0.04 | -0.08 | -0.03 | 0.06 | 0.10 | -0.15 | -0.06 | 0.08 | 0.00 | 0.01 | 0.12 | 0.33 | -0.01 | 0.24 | 0.10 | 0.52 | 0.36 | | | |
| LRI | 0.09 | 0.16 | -0.14 | -0.14 | 0.25 | 0.27 | 0.10 | -0.08 | -0.46 | -0.19 | 0.78 | 0.13 | -0.19 | 0.02 | 0.34 | 0.00 | 0.06 | -0.06 | 0.01 | -0.01 | 0.03 | -0.10 | 0.17 | -0.12 | -0.50 | -0.13 | | |

Ozarks Ecoregion

| | EDU | AES | SO | DS | RG | SG | GEO | URB_L | AG_L | GRS_L | FOR_L | WET_L | AG_U | GRS_U | FOR_U | WET_U | SPR_L | SPR_U | DAM_L | DAM_U | HI_L | HI_U | RS_L | RS_U | HTI_L | HTI_U | LRI | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|--|
| EDU | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AES | 0.17 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SO | -0.10 | 0.06 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DS | -0.07 | 0.10 | 0.60 | | | | | | | | | | | | | | | | | | | | | | | | | |
| RG | 0.04 | 0.06 | -0.43 | -0.35 | | | | | | | | | | | | | | | | | | | | | | | | |
| SG | 0.04 | 0.12 | -0.63 | -0.48 | 0.66 | | | | | | | | | | | | | | | | | | | | | | | |
| GEO | -0.01 | 0.08 | 0.03 | -0.01 | 0.01 | -0.03 | | | | | | | | | | | | | | | | | | | | | | |
| URB_L | -0.01 | -0.08 | -0.11 | -0.04 | -0.01 | 0.01 | -0.01 | | | | | | | | | | | | | | | | | | | | | |
| AG_L | 0.08 | -0.31 | 0.02 | 0.07 | -0.16 | -0.23 | -0.10 | -0.03 | | | | | | | | | | | | | | | | | | | | |
| GRS_L | 0.10 | -0.03 | 0.04 | -0.05 | -0.13 | -0.21 | 0.07 | -0.06 | -0.12 | | | | | | | | | | | | | | | | | | | |
| FOR_L | -0.14 | 0.20 | -0.02 | 0.02 | 0.21 | 0.31 | -0.02 | -0.13 | -0.38 | -0.85 | | | | | | | | | | | | | | | | | | |
| WET_L | 0.05 | -0.05 | 0.03 | 0.06 | -0.04 | -0.06 | -0.02 | -0.01 | 0.11 | -0.06 | 0.00 | | | | | | | | | | | | | | | | | |
| AG_U | 0.11 | -0.53 | -0.09 | -0.09 | -0.11 | -0.16 | -0.10 | 0.00 | 0.57 | -0.04 | -0.25 | 0.00 | | | | | | | | | | | | | | | | |
| GRS_U | 0.04 | -0.14 | 0.09 | -0.01 | -0.20 | -0.28 | -0.02 | -0.03 | -0.03 | 0.66 | -0.59 | 0.01 | 0.00 | | | | | | | | | | | | | | | |
| FOR_U | -0.09 | 0.36 | -0.03 | 0.06 | 0.23 | 0.32 | 0.07 | -0.06 | -0.23 | -0.57 | 0.65 | -0.01 | -0.44 | -0.89 | | | | | | | | | | | | | | |
| WET_U | 0.08 | -0.22 | -0.09 | -0.06 | -0.05 | -0.06 | -0.06 | 0.06 | 0.13 | -0.03 | -0.06 | 0.02 | 0.46 | -0.05 | -0.16 | | | | | | | | | | | | | |
| SPR_L | -0.08 | -0.01 | 0.04 | -0.02 | 0.04 | 0.04 | 0.03 | 0.06 | -0.10 | -0.07 | 0.10 | 0.04 | -0.07 | -0.03 | 0.04 | 0.04 | | | | | | | | | | | | |
| SPR_U | 0.11 | 0.22 | 0.48 | 0.39 | -0.18 | -0.29 | -0.01 | -0.05 | -0.17 | 0.05 | 0.04 | -0.02 | -0.23 | 0.06 | 0.05 | -0.09 | 0.06 | | | | | | | | | | | |
| DAM_L | 0.00 | -0.03 | -0.07 | -0.06 | 0.05 | 0.03 | 0.04 | 0.01 | 0.06 | -0.07 | 0.03 | -0.01 | 0.11 | -0.07 | 0.01 | 0.02 | -0.01 | -0.05 | | | | | | | | | | |
| DAM_U | 0.04 | -0.01 | -0.18 | -0.12 | 0.07 | 0.07 | -0.02 | 0.04 | 0.18 | -0.20 | 0.08 | -0.03 | 0.17 | -0.28 | 0.17 | 0.22 | -0.04 | -0.16 | 0.17 | | | | | | | | | |
| HI_L | -0.06 | -0.12 | -0.07 | -0.14 | -0.05 | -0.04 | -0.05 | 0.00 | -0.01 | 0.20 | -0.18 | 0.00 | 0.08 | 0.24 | -0.26 | 0.07 | -0.01 | -0.05 | 0.17 | 0.01 | | | | | | | | |
| HI_U | -0.07 | -0.20 | 0.04 | -0.04 | -0.18 | -0.27 | -0.02 | -0.03 | 0.08 | 0.45 | -0.45 | 0.00 | 0.07 | 0.68 | -0.64 | 0.02 | -0.07 | -0.04 | 0.03 | 0.12 | 0.28 | | | | | | | |
| RS_L | 0.05 | 0.05 | 0.02 | -0.01 | 0.15 | 0.03 | 0.08 | 0.03 | 0.01 | 0.08 | -0.08 | -0.02 | -0.05 | -0.06 | 0.07 | -0.03 | -0.04 | -0.01 | -0.02 | 0.00 | -0.09 | -0.05 | | | | | | |
| RS_U | -0.09 | 0.02 | -0.04 | 0.00 | -0.04 | -0.03 | -0.04 | 0.31 | -0.01 | 0.19 | -0.23 | -0.02 | -0.02 | 0.32 | -0.32 | -0.01 | 0.00 | 0.01 | 0.00 | 0.01 | 0.17 | 0.30 | -0.03 | | | | | |
| HTI_L | 0.08 | 0.00 | 0.17 | 0.15 | -0.21 | -0.25 | -0.06 | 0.24 | 0.15 | 0.51 | -0.60 | 0.01 | 0.01 | 0.47 | -0.44 | 0.00 | -0.02 | 0.15 | 0.08 | -0.05 | 0.30 | 0.36 | 0.08 | 0.33 | | | | |
| HTI_U | -0.01 | -0.11 | 0.20 | 0.16 | -0.28 | -0.39 | -0.09 | 0.21 | 0.17 | 0.35 | -0.46 | 0.00 | 0.16 | 0.57 | -0.61 | 0.10 | -0.05 | 0.10 | 0.06 | 0.12 | 0.21 | 0.55 | -0.08 | 0.61 | 0.54 | | | |
| LRI | -0.05 | 0.17 | -0.21 | -0.17 | 0.31 | 0.43 | -0.01 | -0.14 | -0.31 | -0.73 | 0.85 | -0.01 | -0.19 | -0.59 | 0.62 | -0.03 | 0.09 | -0.07 | 0.04 | 0.13 | -0.15 | -0.45 | 0.04 | -0.22 | -0.63 | -0.50 | | |