

Appendix 5. Bird species richness.

Additional results from the bird species richness analysis, including correlation between bird species richness and land cover composition (Table A5.1) and mean species richness for sites in the five vegetation classes (Fig. A5.1).

Table A5.1. Spearman's correlation coefficients (ρ_s) and P -values for relationships between point-level bird species richness and forest or shrubland on the landscape at 200, 400 and 1200 buffers surrounding riparian bird survey points in the Missouri National Recreational River.

| Buffer | Forest ρ_s | Forest P | Shrubland ρ_s | Shrubland P |
|--------|-----------------|------------|--------------------|---------------|
| 200 m | 0.19 | 0.001 | -0.11 | 0.051 |
| 400 m | 0.21 | < 0.001 | -0.06 | 0.288 |
| 1200 m | 0.18 | 0.002 | -0.04 | 0.459 |

Figure A5.1. Bird species richness for each of the five vegetation categories recovered by cluster analysis. Large dots are means, lines are 95% confidence intervals, and small dots are bird survey points. For each point, abundance was calculated as the maximum number of individuals seen at the point across four visits over two years. Only shrub/forest associated breeding species are included. There was a statistically significant difference in richness between at least two vegetation classes ($F_{4,69} = 3.719$, $P = 0.008$), with early successional cottonwood-willow sites being less species rich than both mid-successional ($P = 0.028$) and equilibrium ($P = 0.033$) sites.

