

Appendices

Appendix 3: Statistical Results

We gather here the statistical results for the NBC-based analyses summarized in the species accounts under the “Nevada-Specific Studies and Analyses” heading. For the priority songbirds in this plan that were sufficiently well sampled by the NBC, we conducted analyses of NBC data using GIS-derived transect attributes as explanatory variables. In general, we referred to this as “landscape-level” analysis. The statistical analyses are described in detail in *Appendix 1*, apart from the results which are reported below. In brief, the dependent variable was presence/absence of a given priority species. Most of the explanatory variables examined were proportional surface areas of each habitat type within each transect’s effective sampling area (defined as the region lying within 200 m of at least one of the transect’s ten point-count stations). Habitat types were those identified in the original GAP-based NBC stratification process, which varied slightly from the habitat types otherwise defined in this plan (see *Appendix 1*). One additional explanatory variable was:

DISTANCE TO WATER: Shortest distance from any portion of the transect sampling area to the nearest year-round water source (with a maximum value of 10 km). Note that a positive relationship with distance would mean that the bird was more likely to occur farther from water.

We used logistic regression to analyze the relationships between bird presence (detection or non-detection) and habitat types or distance to water. The p-values of the univariate relationships are reported in the following tables:

Table App-3-1: Univariate p-values for habitat models of six Priority species in the **Great Basin** region. Significant positive relationships are in **Bold**. Positive relationships are denoted by “(+)” and negative relationships by “(-)”.

Habitat Type (Proportion)	Brewer’s Sparrow	Gray Fly- catcher	Green- tailed Towhee	Pinyon Jay	Sage Sparrow	Sage Thrasher
Mojave Scrub						
Salt Desert Scrub	0.241 (+)	0.007 (-)	<.001 (-)	0.098 (-)	<.001 (+)	<.001 (+)
Lowland Sagebrush	<.001 (+)	0.013 (+)	0.276	0.213 (-)	<.001 (+)	<.001 (+)
Montane Sagebrush	<.001 (+)	0.475	0.001 (+)	0.038 (-)	0.139 (-)	0.550
Montane Shrub	0.495	0.038 (-)	0.798	0.515	0.197 (-)	0.290
Montane Riparian	0.579	0.047 (-)	0.133 (+)	0.277	0.002 (-)	0.009 (-)
Aspen	0.562	0.038 (-)	<.001 (+)	0.034 (-)	0.004 (-)	0.003 (-)
Mt. Mahogany	0.063 (-)	0.084 (-)	0.001 (+)	0.652	0.014 (-)	0.004 (-)
Pinyon-Juniper	<.001 (-)	<.001 (+)	0.001 (+)	<.001 (+)	<.001 (-)	<.001 (-)
Coniferous Forest	<.001 (-)	0.012 (-)	0.194 (+)	0.149 (-)	0.030 (-)	0.011 (-)
Mesquite-Catclaw						
Lowland Riparian	0.238 (-)	0.190 (-)	0.069 (-)	0.561	0.118 (-)	0.090 (-)
Wet Meadow	0.055 (-)	0.032 (-)	0.006 (-)	0.151 (-)	0.158 (-)	0.060 (-)
Wetland	0.081 (-)	0.109 (-)	0.045 (-)	0.226 (-)	0.300 (-)	0.300
Agricultural	0.089 (-)	0.009 (-)	0.003 (-)	0.110 (-)	0.084 (-)	0.390
Developed	0.057 (-)	0.023 (-)	0.324	0.719	0.524	0.060 (-)
DISTANCE TO WATER	0.110 (-)	0.588	0.274	0.027 (+)	0.017 (+)	0.590

Appendices

Table App-3-2: Univariate p-values for habitat models of five Priority species in the Mojave Desert region. Significant positive relationships are in **Bold**. Positive relationships are denoted by “(+)” and negative relationships by “(-)”.

Habitat Type (Proportion)	Abert's Towhee	Bell's Vireo	Lucy's Warbler	Gambel's Quail	Black- chinned Sparrow
Mojave Scrub	0.233 (-)	0.091 (-)	0.131 (-)	0.002 (+)	0.140 (+)
Salt Desert Scrub	0.456	0.441	0.410	0.320	0.234 (-)
Lowland Sagebrush	0.178 (-)	0.208 (-)	0.119 (-)	0.017 (-)	0.064 (-)
Montane Sagebrush	0.276	0.370	0.204 (-)	0.099 (-)	0.230 (-)
Montane Shrub	0.251	0.759	0.117 (+)	0.399	0.011 (+)
Montane Riparian	0.151 (-)	0.865	0.188 (-)	0.012 (-)	<.001 (+)
Aspen					
Mt. Mahogany		0.577	0.639	0.084 (-)	0.841
Pinyon-Juniper	0.217 (-)	0.725	0.384	0.239 (-)	<.001 (+)
Coniferous Forest	0.468	0.619	0.492	0.325	0.486
Mesquite-Catclaw	0.902	0.064 (+)	0.012 (+)	0.015 (+)	
Lowland Riparian	<.001 (+)	<.001 (+)	<.001 (+)	<.001 (+)	0.021 (-)
Wet Meadow		0.425	0.524	0.281	0.633
Wetland	0.525	0.676	0.022 (+)		0.446
Agricultural	<.001 (+)	0.012 (+)	0.003 (+)	0.029 (+)	0.535
Developed	0.035 (+)	0.439	0.003 (+)	0.587	0.527
DISTANCE TO WATER	0.008 (-)	0.013 (-)	0.003 (-)	0.119 (-)	0.731

Table App-3-3: Univariate p-values for habitat models of two Priority species whose range encompassed both southern and east-central Nevada. Significant positive relationships are in **Bold**. Positive relationships are denoted by “(+)” and negative relationships by “(-)”. Only data from the south and east NBC regions were analyzed (*see Appendix 1*).

Habitat Type (Proportion)	Gray Vireo	Virginia's Warbler
Mojave Scrub	0.065 (+)	0.075 (-)
Salt Desert Scrub	0.122 (-)	0.318
Lowland Sagebrush	0.022 (-)	0.068 (-)
Montane Sagebrush	0.095 (-)	0.727
Montane Shrub	0.410	0.711
Montane Riparian	0.753	0.168 (+)
Aspen	0.253	0.560
Mt. Mahogany	0.144 (-)	0.002 (+)
Pinyon-Juniper	0.001 (+)	0.001 (+)
Coniferous Forest	0.310	<.001 (+)
Mesquite-Catclaw	0.270	
Lowland Riparian	0.229 (-)	0.347
Wet Meadow	0.203 (-)	0.384
Wetland	0.432	0.552
Agricultural	0.182 (-)	0.345
Developed	0.233 (-)	0.158 (+)
DISTANCE TO WATER	0.790	0.524