

Appendix 2. Covariates determined to be important for the three model sets of structure, management, and anthropogenic features for five grassland birds in the Dry Mixed-grass Subregion of southern Alberta, 2013–2018.

Species	Management model set		Structure model set					Anthropogenic model set						
	Range Health	Distance to Water	Bare Soil	Litter	Vegetation Height	Shrub Cover	Forb Cover	Distance to Crop	Distance to Arterial Roads	Distance to Collector Roads	Distance to Fence	Distance to Active Wells	Distance to Inactive Wells	Field Size
Sprague's Pipit			Q [§]	+++ [†]	Q	--- [‡]	---							
Thick-billed Longspur	---			---	---	---			N/A	N/A	N/A	N/A	N/A	N/A
Baird's Sparrow	+++		---	Q	+++		+++				+++		---	---
Chestnut-collared Longspur	N/A	N/A	---	Q	---	---	---							
Grasshopper Sparrow	N/A	N/A		Q					N/A	N/A	N/A	N/A	N/A	N/A

+[†] Positive relationship, -[‡] Negative relationship, Q[§] quadratic relationship, N/A^{||} null model within $\Delta AIC < 2$ so not significant relationships