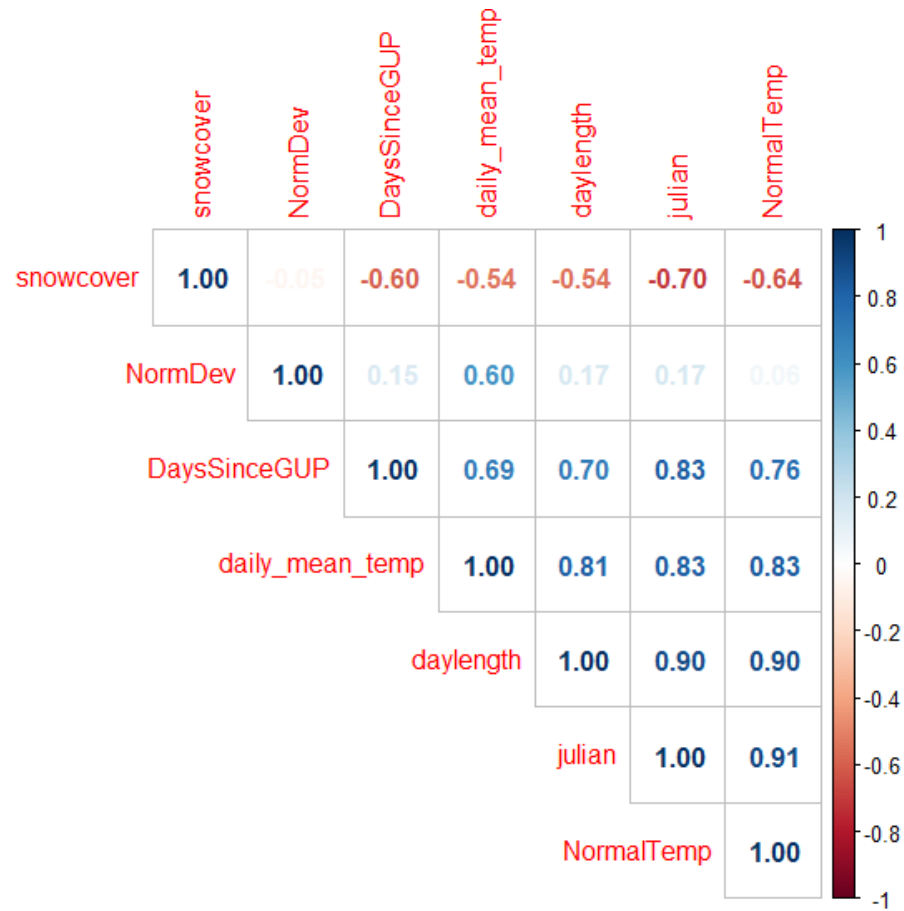
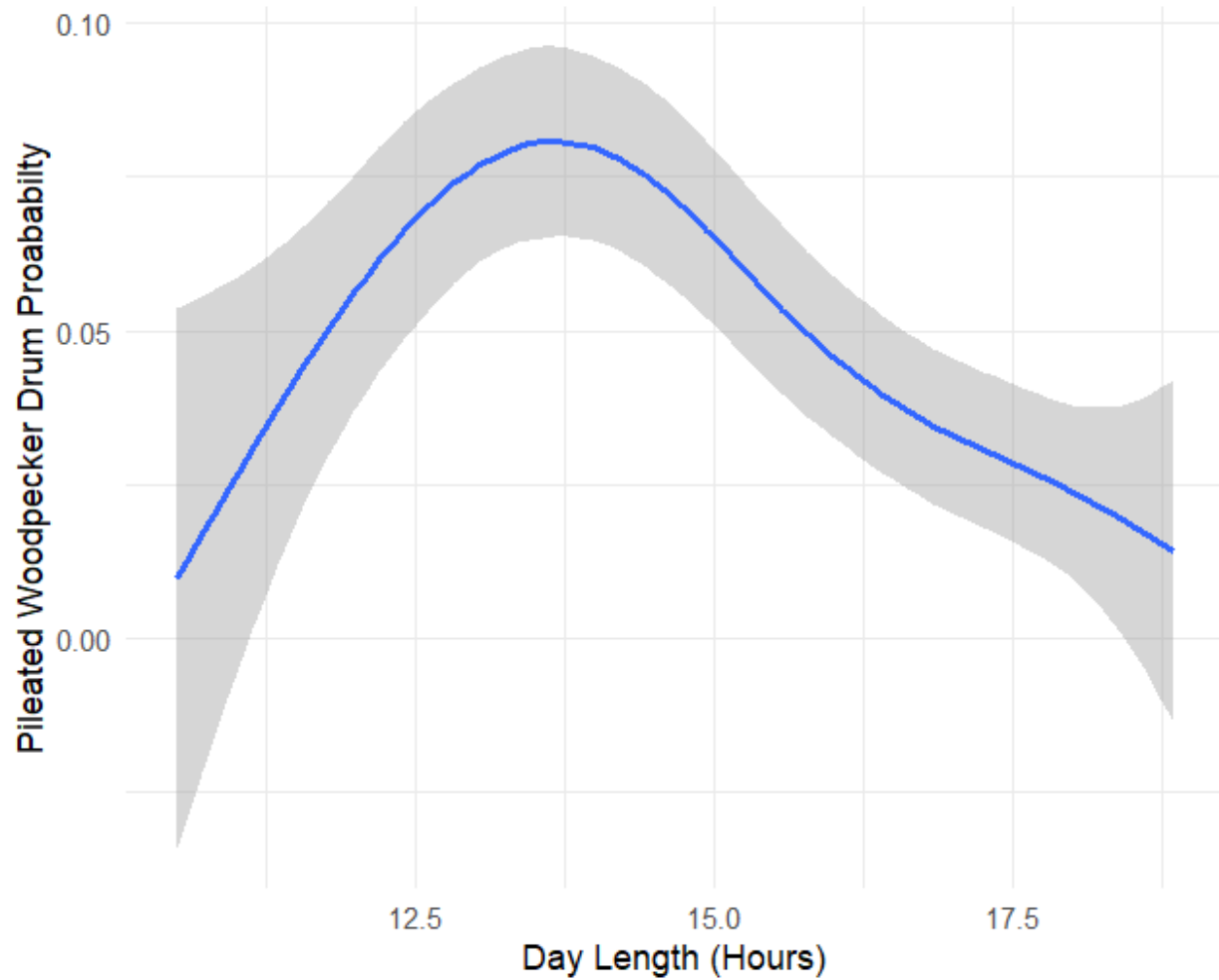


## APPENDIX



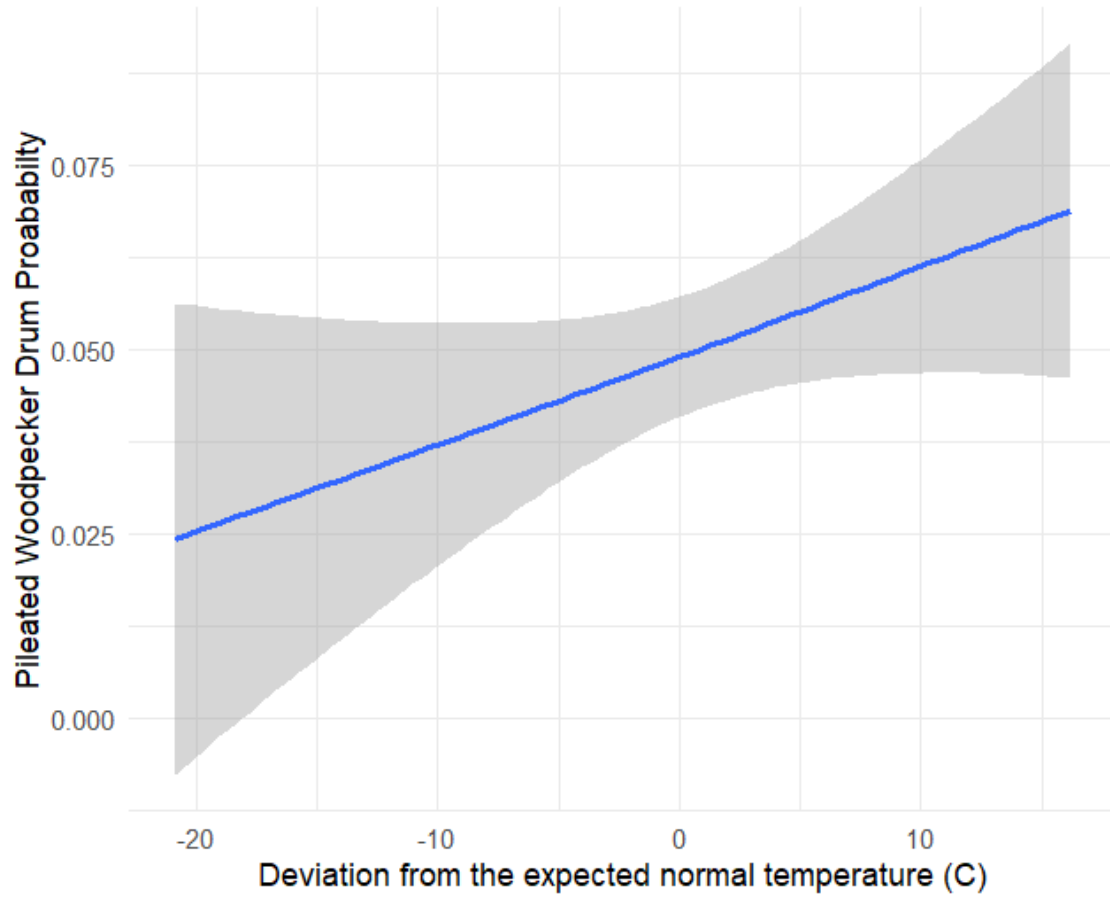
**Figure 1.A** Correlation matrix for variables examined in objective 2: environmental factors influencing Pileated Woodpecker drumming. “NormDev” is the deviation from the expected normal temperature and “DaysSinceGUP” is the days since green up.



**Figure 2.A** Relationship of day length (hours) and Pileated Woodpecker drumming as estimated by the smoothing term generated via GAMM. The shaded area represents the bounds of the 95% confidence intervals.

**Table 1.A** Model results for multivariable models with/without interactions between variables explored in Chapter 2, objective 3. Interaction term represents the interaction between precipitation and deviation from the expected mean temperature.

Model	Variable	Beta coefficient	P-value	AIC
	Precipitation	-0.009	0.755	1128.929
<i>Precipitation + deviation from the expected mean temperature</i>	Deviation from the expected mean temperature	0.038	0.022	
	Precipitation	-0.033	0.376	1128.026
<i>Precipitation X deviation from the expected mean temperature</i>	Deviation from the expected mean temperature	0.043	0.009	
	Interaction Term	-0.013	0.075	



**Figure 3.A** The relationship between the deviation from the expected normal temperature (Celsius) and the probability of detecting a Pileated Woodpecker drum. Shaded area represents the 95% confidence interval.