

(1) Jonathan Meyer Contribution: Initially conducted the process of establishing a preliminary model to use as a benchmark to later be compared with our final model. This was performed by observing the full model and simply eliminating predictors that appeared to be insignificant based on their p-value of the full model. The goal of this process was to potentially demonstrate the dangers of using this method to produce a final model equation. Overall this became a relatively insignificant part of our project that was abandoned in our presentation and report in favor of more discussion regarding how our best model was created, as well as examining relationships between variables and greater model analysis. In terms of final result my portion was primarily showcasing that the final model met the appropriate assumptions of residual normality and constant variance. A few visualizations were made to show that appropriate transformations were performed, constant variance and normality assumptions were met, and illustrations of relevant general descriptive statistics.

(4) Based on the data and our analysis we estimate that if you fix the variables of gestation, body, and nondream that for each increased level in predation (the more likely an animal is to be preyed upon) that they lose 16.5 mins of sleep per night.