## Methods in Experimental Ecology II (PCB 6468) Exercise 1 - Assumptions Due January 22, 2016

A highly regarded scientist collected information on body mass (g) and body length (cm) of an endangered bird endemic of Florida. Please use the data generated by one run of the R script provided in the class website to evaluate if there is any evidence of differences in mass among birds from different locations. Use ALL the information provided in the file.



- 1. Inspect and plot *your* data (publication quality)
- 2. State *your* scientific hypothesis
- 3. Select and justify a statistical model to test *your* hypothesis using the data
- 4. Plot *your* best predictive model along with its 95% CI
- 5. Verify the assumptions of the model *you* selected using plots
- 6. Compare your results to those of at least another student in class
- 7. Interpret *your* results

**NOTE:** Please submit your paper as a single word document. Remember to include your raw data and all the appropriate R code as appendices at the end.