

Exercise – One-Way ANOVA

Answer the following questions with R code by creating (*and editing if you make a mistake*) an R script and iteratively running the code in RStudio.

1. Load the data in the **InchLake2.csv** file into a data frame in R. Isolate the Bluegill data and then isolate the Bluegill data from 2007 (i.e., should result in two data frames – Bluegills and Bluegills in 2007). Note that length is inches and weight is in grams.
2. Construct relative weight and five-cell length class variables.
3. Compute summary statistics of relative weight of Bluegill by five-cell length classes.
4. Statistically determine if there is a difference in relative weight among length classes. If so, which length classes differ? [*For simplicity, ignore assumption violations at this point.*]
5. Construct a plot of mean relative weights with symbols that represent significant differences.
6. *If time permits ...* repeat the above analysis for Bluegills captured in 2008.