# Methods in Experimental Ecology II (PCB 6468)
# Exercise 5 - Count Data
# Due February 19, 2016

Three groups of students from universities u, z and g went to work in a pasture in the tropics. After one day of work (max. 10 hours) they counted the number of ticks in their bodies, and then corrected their counts by the number of hours each of them spent in the field. Are there significant differences in the risk of attracting ticks among individuals from different universities?

1. Use the `Exercise5_data.R` script provided in the class website to generate a sample [`ticks`] following the description above (you only need to run it once and then keep the data as a fixed input for your analyses).

2. State *your* scientific hypothesis.

3. Inspect and plot *your* data (publication quality).

4. Select and justify a statistical model to test *your* hypothesis using the data.

5. Verify the assumptions of the model *you* selected using plots.

6. Plot *your* predictive model along with its 95% CI (publication quality).

7. Compare *your* results to those of at least one other student in the class.

8. Interpret *your* results.

**NOTE 1:** The variable hours was centered by subtracting the values from their overall mean.

**NOTE 2:** 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.