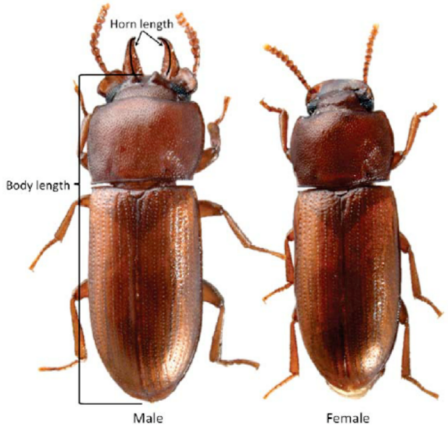
Download dataset horns.csv from the course website. This data is for the size of horns in the broad-horned flour beetle. The horn sizes are for two strains of the beetle a control strain and a strain where soft-selection has been applied. Based on this breeding design we expect the experimental group to have larger horn size. Use a test you have learned about to test whether horn size is enlarged in this line relative to the control.



Download dataset grasshopper.csv from the course website. This data is for the range of motion in the middle walking leg of lubber grasshoppers. In the experiment each grasshopper had the primary nerve serving the right leg crushed. The grasshopper was allowed to recover and then the nerve was recrushed. This experiment was done to test whether recovery in the grasshopper was due to repair of the crushed nerve or plasticity in some other nerve that hadn't been crushed. Use a test you have learned to say whether recovery is due to repair of the crushed nerve or due to some other nerve taking over the role of the crushed nerve.

1) I used a _____ test comparing ____ and _____ and found that these were _____ different from each other. The 95% confidence interval for the difference in these is _____. From this I conclude that soft-selection on horn size leads to _____. The p-value associated with this test was_____ .

2) Pre and post crush range of motion was compared using a _____ test. For the initial crush my p-value was _____ suggesting that _____ _____. Postcrush and recovered range of motion was compared using a _____ test. For this comparison my p-value was _____ suggesting that _____ _____. Recovered and recrush range of motion was compared using a _____ test. For this comparison my p-value was _____ suggesting that _____ _____. When I visually explored the data I found that _____ samples from _____have range of motions that suggest that _____ _____ _____

Amazing plot