Savannah Bergquist

Leandra King

Callin Switzer

Alex Boota

**Does bee length of buzz correlate with plant type?**

Bumblebees vibrate flowers in order to get pollen: this is called buzz pollination.  We are interested in whether or not the length of the buzz correlates with plant type, as this provides evidence for learning in bees and/or plants manipulating bees via flower morphology to be better pollinated.

Callin collected this dataset over last summer.  He had previously conducted some analysis on bee frequency, in which he showed that frequency correlates with flower type.  We are interested in furthering his analysis by considering whether or not flower type is correlated with buzz length.

The data includes bee buzz length, irritation frequency, wing beat frequency, size, temperature, time of day, relative humidity and day of the year for over 300 bees of the species *Bombus impatiens*.  We are planning to use a number of the tools we covered in class, including: the ANOVA F-test, multiple regression, t-tests and multiple comparison corrections.