**Derek Thedell - Extension Questions**

1. Thus far for my project I have collected ~60 field soil samples and completed lab pretreatment. This involved hand separating soil horizons, milling samples and packing them into CHN analyzer tins for all 60 samples. All collected samples are prepared to begin CHN analysis.

On the writing side, I have fully drafted the Introduction, Literature Review & Methods sections and currently working on revisions. I have partially drafted the Results section with a complete summary of the descriptive statistics for my 6 independent variables and 3 of my soil carbon variables. I have begun making considerations for the most usable and unusable samples, intercorrelation and pseudo-replication.

1. Primarily I will be unable to finish by the end of this quarter due to the unexpected lift involved in the lab analysis portion. Most significantly I have been unable to use the CHN analyzer to collect percent carbon data due to machine maintenance. I currently cannot progress any further until I have my primary dependent variable measurement. Unfortunately, we have decided that it is too late to finish this quarter, especially considering any potential future challenges with the machine.
2. I ambitiously believe that once I have the percent carbon data, I will be able have a complete draft of my thesis within a month. We expect to have the machine fully operational at any moment. Right now, I will continue making progress on the writing portions I am able to. Once I have the CHN data, I will begin model development by first considering individual relationships with each variable. Then I will build a classical multiple linear regression model and my final machine learning model. I plan to submit a complete draft to Erin by **June 23rd**. Then, given a few weeks of review I will aim to have a 100% finished draft by **July 14th.** This is well in advance of the required deadlines for the summer, but I believe it is best to continue with the momentum from the winter and spring quarters. I plan to present at the end of summer quarter.