2023 – 570L Week 2 Worksheet:

In Lab Activities (10 Points):

1. Record your metadata:

   Weather:

   Date & Time:

   Transect Starting Position:

2. Run a transect to the top of the hill (approximately 75m).

3. Walk up your transect. As you ascend the hill, record the species and DBH of any tree that falls within 1m of either side of your transect. Be sure to record its position along the transect as well (in meters!).

4. Once all trees have been recorded along your transect, it is time to collect soil invertebrate samples. The samples should occur in distinct regions (discuss in field with Alex). In each region, sample directly next to a representative tree species in each region. Additionally, collect samples away from trees. Samples should be 10cmx10cm plots with all surface litter removed. Then excavate the top 3cm of soil as well. Place them into a Ziploc bag.

   a. Label bags with the Region, Transect Replicate (group #), sample (tree species or open)
   b. Ex: Low-Group1-Poplar-1 or High-Group2-Open-3

Completion Activities
Experiment Results (30 points):

a. What was the hypothesis for this activity (2.5)?

b. What data were collected in this activity? List all explanatory and response variables and what types of data (categorical, continuous, count, rate, etc.) (2.5):

c. Create a figure which shows your key results (10):
Note for this lab there are two key figures for each hypothesis, with multiple options. Display two (or more) figures of your choosing. These should reflect the two hypotheses.

d. Report the key results in a short statement here. Utilize appropriate statistical analyses. (10):

e. Make a short statement about how well these results support the original hypothesis. (10)

1. Experimental Evaluation (10 points):
    a. Do you think this experiment effectively addressed the hypothesis? What could have been done better? How would you better approach this activity if you were to do it again:

2. Ecosystem Observation:
   Write at least 5 ecological questions about the ecosystem or study topic we addressed today. Questions can be broad and across any topic however, they should be focused on ecological topics: