STAT 8801 – Case Study #1
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Recap of Situation

For the first case study the client wants help determining how to structure the data recording process for a forest study. They plan on using 21 employees that should be arranged in 3 groups of 7 people each. Each group will go out during the week and 1 of the group members records data while the other 6 collect data. The client wants both the groups mixed up and every person to get a chance to perform the data collection task over the 9 week period.

Possible Issues with Study

There was not a specific research question posed so we did not know what they were planning to do with the data. Without knowing the type of analysis that will be performed on the data, the group assignment scheme chosen may not be ideal. There may be differences in the methods of the data collectors or recorders that could influence the results.

Questions for Client

We would ask the client if the 21 employees a sample of possible employees that could perform the data collection, and if so how were they chosen? Do they expect a possible bias due to different recorders?

We were concerned we may be missing some information about the data collection. The question was whether the groups go out to different locations during the week or if they overlap areas for data collection. If they are taking samples from different locations it should be taken into account as well and possibly be randomized.

Ideas for Methods

Our ideas were to assign a random order to the data recorders, enforcing that each person gets to record at least once and rotate the recorder each day. The 7-person crew would be similarly randomized. A blocking method could be used to make the assignments. This could be accomplished without computing resources using a random number table from a textbook or using a random number generator.