Mason Deja

Module 1

Frog survey

1. One of the individuals being sampled is frogs.
2. No it is not reasonable to count all of the frogs in northern Wisconsin in week just for the simple fact that frogs tend to move around.
3. Random sample

Table 1. First random sample of ten lakes.

call visual

1 113 227

2 120 221

3 126 239

4 112 233

5 133 237

6 113 221

7 121 225

8 119 227

9 113 214

10 115 222

1. The visual sightings from 6 frog sightings on day 1 to day 2 and then 18 from day 2 to 3.
2. The average visual count for all of the lakes in the sample was 226.6
3. Random sample 2

Table 2. Second random sample of ten lakes.

call visual

1 115 215

2 124 233

3 120 229

4 106 221

5 123 225

6 115 216

7 123 222

8 121 227

9 116 224

10 119 229

1. The average for the second set of lakes was 202.5
2. The two averages were relatively close. The type of variability is sampling because the results from different samples are not going to be the same.
3. No my average was not equal to the average visual count of all the lake but the first of the two samples was very close. I figured that they were not going to be spot on but I knew they would be in the ball park because the sample pulled out should represent the entire population

Variability

1. Natural variability is the fact that no individuals are exactly alike and sampling variability is that the results from each sample are different
2. Natural variability in a real life situation would be if you were wanting to see how overall fish length differed from sample location to sample location, the fish length would be the natural variability. Sampling variability would be the results from finding out the overall fish length from the study.

Realities

1. The two realities are natural and sampling variability. If there was no natural variability there would be no need for sampling variability because one every individual is the same thus making one individual represent the entire group.

I have neither given nor received unauthorized aid in completing this work, nor have I presented someone else's work as my own