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Seasonal Change Model Analysis – Group 1

1. Using the line of best fit, number of tracks = 0.0103 \* area of light + 2.1, the area of light is 80% there will be approximately 2.10824 tracks. When the area of light is 100% there will be approximately 2.1103 tracks. Using scratch, the number of tracks is 2.9 at 80% area of light and the number of tracks is 3.1 at 100% area of light.
2. Using the line of best fit, solar panels (kilowatts-hours) = -0.719 \* area of light +193, the solar energy is 192.4248 kilowatt-hours at an area of light at 80%. At an area of light of 100% the solar energy is 192.281 kilowatt-hours. The area of light and the solar energy should not be compared because we are basing our information off of leaf coverage. The solar panels have no leaf coverage and therefore they are always available to the maximum amount of light. While the area of light was taken in the backwoods from the ground where there was leaf coverage.
3. The winter months will have a larger area of light because there will be less leaf coverage or no leaf coverage while in the summer there will be leaf coverage causing the area of light to be smaller. Our model is not a reliable predictor because it has a positive slope of 0.0103 which means that both the number of tracks and the area of light are increasing but the number of tracks should be decreasing as the area of light is increasing. Animals are not out and about in the winter so their number of tracks should not be larger than the summer.
4. Our model would be more reliable if we used more exact devices of measurement. To measure the number of animal tracks we only use our eyes and we cannot measure the exact number of tracks every time. To measure the area of light we use a paper towel roll. The paper towel roll gives up an approximation of the area of light and then we use our eyes to finalize the approximation. However, the solar energy is measured with an exact and trustworthy device. I altered the first graph because the fathom graph shows that as the area of light increases so does the animal tracks. In reality, as the area of light increases, it means that it is most likely the winter months, so therefore the animals would be going into hibernation and the animal tracks should be decreasing rather than increasing.

1. A logical explanation for the differences is that each groups “tracker box” is located at a different place. Some logical differences that were observed between the two sets of data are that we collected data on different days and at different times.