How Have Gilmanton’s White Pine Trees Changed Over Time?

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Introduction

We are doing this investigation because we want to see how our White Pine Trees have changed over time. We want to know if they have improved in health or have gotten more unhealthy. We also believe that by looking back at the data we have collected, we can look for patterns to help us better understand what is happening to our climate and forests.

Materials and methods

We hear a lot of negative things about climate and global warming. We also believe that by looking back at the data we have obtained, we can look for patterns to help us better understand what is happening to our climate and forests. We want to know if they have improved in health or have gotten more unhealthy.

Results

We conducted this investigation because we wanted to see how our white pine trees have grown over time. The first comparison that we examined was if there was a relationship between how tall our white pine trees have grown and how wide they’ve grown. We then examined the overall change in our Pixel Sized Sampling Plot’s Canopy and Ground Cover. These results showed that as the Average height for years 1996-2010 increased, so did the dbh. Next, we investigated Total Percent Needle Damage over time.

Conclusions

Our team believed that we would find that our needles and trees would show more signs of damage more recently due to increasing levels of greenhouse gasses. What we found was that even though there is some slight increasing and decreasing in the height and dbh numbers (students error, perhaps?), the general trend is that the trees are growing steadily taller and wider.

This leads us to look at other factors, such as: Was there anything going on at the school property that might have caused a sudden change in the health of our trees? A new septic system leach field? Extension of the softball and soccer field? Or, could this damage be more influenced by the amount of rain that we got in those summers, by higher or lower temperatures, or by High Ozone Exceedence Days?

Literature cited

Forest Watch Data Books: 1996-2010

Acknowledgments

We thank J. Fisher for laboratory assistance, Mary Juana for seeds, Herb Isabell for greenhouse care, and M.I. Mentor for questionable statistical advice. Funding for this project was provided by the Swarthmore College Department of Biology, a Merck summer stipend, and my mom. [Note that people’s titles are omitted.]

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