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|  | * Conclusion:The data that I have received is not startling whatsoever. The sad truth that this reveals is that all it takes is a slight manipulation of an environment to completely alter what lives within it. In the heated tank, the pH dropped almost three levels every single time. This may be due to the break down of the plant material due to the overheating. Perhaps as the plant was broken down, the hydrogen ions were released, affecting the percent of hydrogen in the water. This demonstrates that if global warming is a realistic threat, it could shatter entire ecosystems with change. The lighted tank saw domination by an algae mat that craved all the light it could absorb. It was also in competition with the plants for nutrients. The pH of the tank almost never changed, and the temperature only changed with that of the house. To the onlooker of the data, it appears to be a calm community, but to see the tank (as in several photos), you realize that the mat is controlling the pH with its interaction with the dead plant material and the few microorganisms. This shows that changes in pattern of light and amount of light can affect an ecosystem. A conclusion to be drawn from that is if we continue to pollute and change the weather patterns of the planet, then we affect the amount and frequency of sunlight that hits certain areas of the planet. Once again this could destroy entire ecosystems. However, the ball is in our court, and we do have the ability to prevent such drastic changes to our environment. However, the plants succession is not enough to keep the Earth in balance. It won�t be enough in the future for that matter. The outdoor control tank actually demonstrated tremendous growth while taking the pH closer to pure water every time it was tested. My conclusion is that the Earth will run fine on individual species success for now, but one day, and that day is not far away, our prodigal actions will completely alter the location and amount of plant life on this planet. * Recommendations:There are several more things that could have been done to further analyze the drastic changes in the tanks. Several tests including (but not limited to): 1. Dissolved Oxygen 2. Nitrates 3. Ammonia One problem that I had was counting or determining the overall activity of microorganisms. A better way to do so would be greatly advised in order to provide further evidence to support these results. | |
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