Purpose: To relate environmental conditions to successional changes in ecosystems

Instructions: Obtain a group card from your teacher. Follow instructions on the succession event slides displayed on the projector. Record your points on the succession timeline.

Post Lab Questions:

- 1. What type of organism were you in this activity?
- 2. What would your niche be in an ecosystem?
- 3. According to your timeline, at what time(s) did you have the most points? Explain what event(s) lead to this increase in points.
- 4. According to your timeline, at what time(s) did you have the least points (excluding the start)? Explain what event(s) lead to this decrease in points.
- 5. Everyone started with the same amount of points. Did other organisms have the same amount of points as you throughout the activity? Explain why this would be a realistic scenario.
- 6. List the total number of points for each group of organisms at the end of the activity. Explain why "pines and grasses" had the least points.
- 7. How many points did the "grasses" have 10 years after the glacier receded? Explain why grasses would be so abundant (common) during this time. What abiotic factors would influence the "grasses" sudden increase in points?
- 8. How many points did the "pines" have 5 years after the forest fire? Explain how the biogeochemical cycles influenced this sudden increase for the "pines"
- 9. Which group of organisms had the most points in the end? What type of community resulted after 265 years?
- 10. What type of species were the "lichens"? Explain the importance of the "lichens" in primary succession and soil formation.
- 11. Construct a Venn diagram to compare and contrast primary and secondary succession.
- 12. What type of succession would start on a newly formed volcanic island?
- 13. Explain why putting out forest fires may be damaging to an ecosystem in the long run.
- 14. Over a period of 1000 years, a lake becomes a maple forest. Is this primary or secondary succession? Explain your answer.
- 15. List three <u>additional</u> events that may lead to secondary succession.