

**Lesson 2: Population Dynamics – Class Checkup Results**  
**Georgia Biology (Grades 9-12) Standards Correlations**

***Benchmarks for Science Literacy High School Science Descriptions***

**Life Sciences**

**Interdependence of Life**

The concept of an ecosystem should bring coherence to the complex array of relationships among organisms and environments that students have encountered. Students' growing understanding of systems in general can suggest and reinforce characteristics of ecosystems-interdependence of parts, feedback, oscillation, inputs, and outputs. Stability and change in ecosystems can be considered in terms of variables such as population size, number and kinds of species, and productivity.

**Standards Addressed:**

SCSh3. Students will identify and investigate problems scientifically.

- c. Collect, organize and record appropriate data.
- d. Graphically compare and analyze data points and/or summary statistics.
- e. Develop reasonable conclusions based on data collected.

SCSh5. Students will demonstrate the computation and estimation skills necessary for analyzing data and developing reasonable scientific explanations.

- e. Solve scientific problems by substituting quantitative values, using dimensional analysis and/or simple algebraic formulas as appropriate.

SCSh6. Students will communicate scientific investigations and information clearly.

- c. Use data as evidence to support scientific arguments and claims in written or oral presentations.

**Related Standards:**

SCSh1. Students will evaluate the importance of curiosity, honesty, openness, and skepticism in science.

- a. Exhibit the above traits in their own scientific activities.

SB4. Students will assess the dependence of all organisms on one another and the flow to energy and matter within their ecosystems.

- a. Investigate the relationships among organisms, populations, communities, ecosystems, and biomes.
- f. Relate animal adaptations, including behaviors, to the ability to survive stressful environmental conditions.

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**Georgia Environmental Science (Grades 9-12) Standards Correlations**

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**Related Standards:**

SCSh1. Students will evaluate the importance of curiosity, honesty, openness, and skepticism in science.

- a. Exhibit the above traits in their own scientific activities.

SEV3. Students will describe stability and change in ecosystems.

- d. Explain how biotic and abiotic factors influence populations.
- e. Describe interactions between individuals (i.e. mutualism, commensalism, parasitism, predation, and competition).