Knowledge-based Learning Outcomes

Upon completion of *Isle Royale (WB)*, students should be able to:

1. Differentiate between the exponential and logistic population growth models.
2. Explain why predator and prey populations cycle.
3. Explain how predators can indirectly improve the overall health of a prey species.
4. Explain the "paradox of enrichment."
5. Understand the role of both the null and alternative hypotheses. (Extension Activity)

Skills-based Learning Outcomes

Upon completion of *Isle Royale (WB)*, students should be able to:

1. Graph qualitatively how populations grow absent factors limiting their growth.
2. Evaluate whether a population is experiencing exponential or logistic growth based on a graph of the population's growth rate.
3. Identify the carrying capacity for a population based on a graph of population size versus time.
4. Predict qualitatively what will happen to a population's carrying capacity as a limiting resource either increases or decreases in availability.
5. Predict how a population already at its carrying capacity will respond if its carrying capacity is either artificially increased or decreased.
6. Determine whether there is a statistically significant difference between two means using a t-test. (Extension Activity)