## **Deer Population Assessment Rubric**

Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem. [Clarification Statement: Emphasis is on cause and effect relationships between resources and growth of individual organisms and the numbers of organisms in ecosystems during periods of abundant and scarce resources.]

Science and Engineering Practice	Science and Engineering Practice Disciplinary Core Idea	
Analyzing and Interpreting Data	LS2.A Interdependent Relationships in Ecosystems	Cause and Effect
Students analyze various types of data in order to create valid interpretations or to assess claims/conclusions.	Organisms and populations of organisms are dependent on their environmental interactions both with other living things and with nonliving factors. Growth of organisms and population increases are limited by access to resources.	Students investigate and explain causal relationships in order to make tests and predictions.

4 Advanced	3 Proficient	2 Approaching Proficiency	1 Beginning Proficiency	
I can:	I can:	I can:	I can:	
Analyze and interpret data from <i>multiple data sets</i> to provide evidence that changes in the availability of <i>multiple resources</i> in an ecosystem affect the organisms living in that ecosystem.	Analyze and interpret data from multiple data sets to provide evidence that changes in the availability of multiple resources in an ecosystem affect the organisms living in that ecosystem.	Analyze and interpret data from a single data set to provide evidence that changes in the availability of one resource in an ecosystem affects the organisms living in that ecosystem.	Use general patterns from a single data set to state that the survival of living things is affected by the environment.	
Determine possible causal and correlational relationships between data and <i>the limitations of the data</i> to predict how changes in the availability of resources will <u>affect</u> organisms in an ecosystem.	Determine possible causal and correlational relationships between data and use the data to predict how changes in the availability of resources will affect organisms in an ecosystem.	Predict how changes in the availability of resources will affect organisms in an ecosystem.		