

Lesson Title:	Habitat Survival
Grade(s):	6 (7&8)
Prepared by:	Mike Wilkins
Appropriate Science Areas:	Life and Environmental Science
Science Concept(s):	Supporting Wildlife
Lesson Objective:	Students will be able to relate to over-crowding situations which threaten the stability of a species, and understand that adjustments can be made which benefit that species.
Georgia QCC Standards:	<p>Grades 6, 7 & 8</p> <ul style="list-style-type: none"> Scientific Inquiry Process: Uses process skills of observing, classifying, communicating, measuring, predicting, inferring, identifying, and manipulating variables. Also uses recording, analyzing, and operationally defining, formulating models, experimenting, constructing hypotheses and drawing conclusions. Reference Skills: Selects and uses multiple types of print and nonprint sources for information on science concepts. <p>Grade 7</p> <ul style="list-style-type: none"> Ecology/Interdependence of Life Explains the food web/food chain cycles in nature that affect living things.
Background:	Carrying capacity is that area which is capable of sustaining life for an identified number of species group. Carrying capacity is negatively affected by harsh winters, fire, drought, over-population, and habitat destruction.
Materials:	<ul style="list-style-type: none"> Cones String A field or open area
Preparation Time:	Time to locate activity area and designate sub-areas with string.
Teaching Time:	1 class period
Procedures:	<p>Assemble class in a central location. The teacher will identify students to be predators (wolves) and prey (deer). The object of the game is for the wolves to feed on the deer who have left a habitat area because the area has exceeded its carrying capacity. Each area will have a designated carrying capacity (assigned by the teacher).</p> <p>Explain: "Prey" will be given a chance to locate a "habitat area", once there, they must find the designated carrying capacity for that area. If too many deer are located in that area, the population must be decreased, meaning some must</p>

	<p>relocate to another habitat. Since wolves are pack animals and hunt in that manner, the teacher will establish student pairs. Both wolves in the pair must touch the same deer as it tries to get from area which has not exceeded its capacity. Each deer which is tagged by a pair of wolves outside a habitat area is eliminated from the game. To make the game interesting, change the carrying capacity so the "deer" must scatter to other areas.</p>
Key Questions:	<ol style="list-style-type: none"> 1. What is carrying capacity? 2. What affects carrying capacity? 3. What 4 components are essential to survival of a species?
Student Evaluation:	Participation in the game and in follow up discussion.
Helpful Hints:	Be sure to check the area of the game for sharp sticks and poison ivy before the activity.
Related Activities:	<ul style="list-style-type: none"> • Microhabitats