



curriculum links

Grade 4:

- ◆ Understanding Life Systems:
Habitats and Communities



overview

This activity demonstrates that the Earth provides us the four essential requirements for life: Food, Water, Air and Shelter. This activity introduces the ecosystem concept and the importance of how all things are connected to each other.

grade 4 expectations

Science & Technology

Understanding Life Systems: Habitats and Communities

Overall Expectations

- ◆ analyse the effects of human activities on habitats and communities;
- ◆ investigate the interdependence of plants and animals within specific habitats and communities;
- ◆ demonstrate an understanding of habitats and communities and the relationships among the plants and animals that live in them.

Specific Expectations

Relating Science and Technology to Society and the Environment

- ◆ analyse the positive and negative impacts of human interactions with natural habitats and communities, taking different perspectives into account, and evaluate ways of minimizing the negative impacts;
- ◆ identify reasons for the depletion or extinction of a plant or animal species, evaluate the impacts on the rest of the natural community, and propose possible actions for preventing such depletions or extinctions from happening.

Developing Investigation and Communication Skills

- ◆ use scientific inquiry/research skills to investigate ways in which plants and animals in a community depend on features of their habitat to meet important needs;
- ◆ use appropriate science and technology vocabulary, including *habitat*, *population*, *community*, *adaptation*, and *food chain*, in oral communication.

Understanding Basic Concepts

- ◆ demonstrate an understanding of habitats as areas that provide plants and





animals with the necessities of life;

- ◆ identify factors that affect the ability of plants and animals to survive in a specific habitat;
- ◆ demonstrate an understanding of a community as a group of interacting species sharing a common habitat;
- ◆ demonstrate an understanding of why all habitats have limits to the number of plants and animals they can support;
- ◆ describe ways in which humans are dependent on natural habitats and communities.

key terms

Contaminant: A substance introduced into the air, water, or soil that reduces its usefulness to humans and other organisms in nature (e.g. making water impure and unfit for consumption or use).

Groundwater: Water found in spaces between soils particles underground.

Habitat: The arrangement of food, water, shelter and space within an ecosystem to meet an organism's health and survival.

Surface Water: Water above the surface of land, including lakes, rivers, streams, ponds, floodwater and runoff.

Wastewater: Water that contains unwanted materials from homes, businesses and industries; a mixture of water and dissolved or suspended substances.

