
Micro Safari



curriculum links

Grade 4:

- ◆ Life Systems:
Habitats and Communities



overview

Water is the one thing that is essential to all life as we know it. We are familiar with water in rivers, lakes and oceans; in pools, bathtubs and drinking glasses, but what about a drop of water? What is going on in a drop of pond water? Students will use a variety of microscopes to explore the world of living things that exist in a drop of water.

grade 4 expectations

Science and 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.



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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 and written 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
- ◆ describe structural adaptation that allow plants and animals to survive in specific habitats.
- ◆ Describe ways in which humans are dependent on natural habitats and communities.

key terms

Buffer - An area of land that surrounds and protects a sensitive feature from the adverse effects of activities on, or encroachments from, adjacent land.

Adaptation - An inherited structural, functional or behavioural characteristic of an organism which improves its chances for survival and reproduction in a particular microhabitat or environment.

Aquatic ecosystem - Any body of water, such as a stream, lake, estuary or wetland, and the organisms and non-living components within it, which function as a natural system.

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).

Erosion - the process by which the surface of the earth is worn away by the action of water, glaciers, winds, waves, etc.

