

Grade 4 Full-day Workshop: Habitats & Human Influences on Habitats



OVERVIEW & PROGRAM GOALS

This educational program has been designed with the intention of providing direct curriculum links to the Grade 4 Understanding Life Systems: Habitats and Communities strand of **The Ontario Science and Technology Curriculum**. This exciting full-day workshop provides students and teachers the opportunity to explore the curriculum expectations outside the classroom. The main objectives of this program are for students to:

- Identify a variety of habitats and adaptations that have allowed plants and animals to survive in specific habitats
- Describe ways in which humans can influence habitats and the effects these changes have on plants and animals with the habitats

SPECIFIC EXPECTATIONS

Relating Science and Technology to Society and the Environment:

- 1.1. Analyze 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
- 1.2. 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:

- 2.3. 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
- 2.5. Use appropriate science and technology vocabulary, including habitat, population, community, adaptation, and food chain, in oral and written communication

Understanding Basic Concepts:

- 3.1. Demonstrate an understanding of habitats as areas that provide plants and animals with the necessities of life
- 3.2. Demonstrate an understanding of food chains as systems in which energy from the sun is transferred to producers and then to consumers
- 3.3. Identify factors that affect the ability of plants and animals to survive in a specific habitat

- 3.4. Demonstrate an understanding of a community as a group of interactive species sharing a common habitat
- 3.5. Classify organisms, including humans, according to their role in a food chain
- 3.6. Identify animals that are carnivores, herbivores, or omnivores
- 3.7. Describe structural adaptations that allow plants and animals to survive in specific habitats

TENTATIVE AGENDA

10:00 am Classroom	 Arrival, Introduction to the Topic, and Activity Check-in with Guest Services Meet Program Leader and Volunteer and travel to classroom Introduce habitats and vocabulary Identify components that make up a habitat Identify various types of habitats Habitat Activity (optional) Morning Snack (optional)		
10.50 aiii			
10:40 am On-site Tour	 Habitats & Animal/Plant Adaptations Tour Tour a section of the Zoo (e.g. Australasia Pavilion) and explore different types of habitats and identify adaptations that allow plants and animals to survive in specific habitats 		
12:00 pm	 Lunch Opportunity for students to explore biofacts (e.g. skulls, furs, feathers, etc.) 		
12:25 pm Classroom	Conservation and Human Influences on Habitats Discuss how humans can alter habitats and the impact that those changes can have Introduce conservation and discuss the reasons that lead to the endangerment or extinction of species		
12:40 pm On-site Tour	 Endangered Species Tour Visit a different section of the Zoo and learn about the ways that the Toronto Zoo is working to protect endangered species 		
1:50 pm	 Wrap-up and Departure Recap some of the ways that animals and plants adapt to survive in a specific habitat and discuss how everyone can help conserve species 		

VOCABULARY

habitat	niche	community	population
conservation	endangered	extinct	adaptation
producer	consumer	decomposer	food chain
herbivore	omnivore	carnivore	