



Grade 6 Full-day Workshop: *Biodiversity & Climate Change*

OVERVIEW & PROGRAM GOALS

This educational program has been designed with the intention of providing direct curriculum links to the Grade 6 Understanding Life Systems: Biodiversity 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:

- Investigate the characteristics of living things
- Demonstrate an understanding of biodiversity, its contribution to the stability of natural systems, and its benefits to humans
- Assess human impacts on biodiversity, and identify ways of preserving biodiversity

SPECIFIC EXPECTATIONS

Relating Science and Technology to Society and the Environment:

- 1.2. Assess the benefits that humans societies derive from biodiversity and the problems that occur when biodiversity is diminished

Developing Investigation and Communication Skills:

- 2.2. Investigate the organisms found in a specific habitat and classify them according to a classification system
- 2.4. Use appropriate science and technology vocabulary, including classification, biodiversity, natural community, interrelationships, vertebrate, invertebrate, stability, characteristics, and organism, in oral and written communication

Understanding Basic Concepts:

- 3.1. Identify and describe the distinguishing characteristics of different groups of plants and animals, and use these characteristics to further classify various kinds of plants and animals
- 3.2. Demonstrate an understanding of biodiversity as the variety of life on earth, including variety within each species of plant and animal, among species of plants and animals in communities, and among communities and the physical landscapes that support them

- 3.3. Describe ways in which biodiversity within species is important for maintaining the resilience of those species
- 3.4. Describe ways in which biodiversity within and among communities is important for maintaining the resilience of these communities
- 3.5. Describe interrelationships within species, between species, and between species and their environment, and explain how these interrelationships sustain biodiversity
- 3.7. Explain how invasive species reduce biodiversity in local environments

TENTATIVE AGENDA

| | |
|--|---|
| 10:00 am <i>Classroom</i> | Arrival and Introduction to Biodiversity <ul style="list-style-type: none"> • Check-in with Guest Services • Meet Program Leader and Volunteer and travel to classroom • Introduce topic and vocabulary <ul style="list-style-type: none"> ○ Investigate the interrelationships within and between species ○ Compare habitats that are biodiversity rich (e.g. rainforest) and biodiversity poor (e.g. tundra) |
| 10:30 am | Morning Snack <i>(optional)</i> |
| 10:40 am <i>On-site Tour</i> | Biodiversity Tour <ul style="list-style-type: none"> • Discover a section of the Zoo high in biodiversity (e.g. Indo-Malaya Pavilion) and explore the interrelationships within and between plants, animals, and humans |
| 12:00 pm | Lunch <ul style="list-style-type: none"> • Opportunity for students to explore biofacts (e.g. skulls, furs, feathers, etc.) |
| 12:25 pm <i>Classroom</i> | Introduction to Climate Change <ul style="list-style-type: none"> • Discuss climate change, its impact, and actions we can take to reduce our ecological footprint |
| 12:40 pm <i>On-site Tour</i> | Climate Change Tour <ul style="list-style-type: none"> • Explore a different section of the Zoo (e.g. Tundra Trek and Americas Pavilion) and learn about how climate change is affecting species that live in those habitats |
| 1:50 pm | Wrap-up and Departure <ul style="list-style-type: none"> • Recap biodiversity, the relationships that exist within and between species, and the impact that climate change is having worldwide |

VOCABULARY

| | | | |
|-------------------|--------------|------------|----------------|
| biodiversity | conservation | habitat | niche |
| interrelationship | food chain | adaptation | climate change |
| endangered | extinct | extirpated | |