

Grade 6 Half-day Workshop: Biodiversity



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 half-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:

- 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:

- 1.1. Analyze a local issue related to biodiversity, taking different points of view into consideration, propose action that can be taken to preserve biodiversity, and act on the proposal
- 1.2. Assess the benefits that human societies derive from biodiversity and the problems that occur when biodiversity is diminished

Developing Investigation and Communication Skills:

- 2.4. Use appropriate science and technology vocabulary, including biodiversity, natural community, interrelationships, and stability
- 2.5. Use a variety of forms to communicate with different audiences and for a variety of purposes

Understanding Basic Concepts

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 a 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 (12:00 pm) | Arrival and Introduction to the Topic Meet Program Leader and Volunteer at pre-determined meeting point Introduce topic and vocabulary What is biodiversity and why is it important? Investigate the interrelationships within and between species | | | |
|-------------------------------|--|--|--|--|
| 10:15 am (12:15 pm) | Biodiversity Tour Explore the African Rainforest Pavilion and learn about the interrelationships within and between plants, animals, and the environment | | | |
| 10:35 am (12:35 pm) | Activity • "It's in the Genes" Activity | | | |
| 10:55 am (12:55 pm) | Biodiversity Tour (continuation) Continue to explore the African Rainforest Pavilion and discuss ways in which we can help to conserve biodiversity | | | |
| 11:15 am (1:15 pm) | Wrap-up and Activity Recap biodiversity, the relationships that exist within and between species, and the impact that the loss of biodiversity has on community "Biodiversity Review" Activity (time permitting) | | | |

Vocabulary

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