

# CELEBRATING BIODIVERSITY



ReForest London  
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\*\*adapted from David Suzuki Foundation's "Connecting with Nature"

Name: \_\_\_\_\_

Date: \_\_\_\_\_



Biodiversity: the variety of plants, animals, bacteria, and fungi in an area; the diversity of living things.

## WHY IS BIODIVERSITY IMPORTANT TO THE NATURAL BALANCE OF LIFE?

### Materials:

- Coat hanger
- String
- Pencil/marker/pencil crayons
- Scissors
- Paper
- Single-hole punch

### Instructions:

1. Watch the video "Why Biodiversity Matters"  
(<https://www.youtube.com/watch?v=N5ssjM2Fjuc>)
2. Take a walk in your backyard or in your neighbourhood. Conduct a survey of the different species of plants and animals that you come across. Do you think the variety of species has increased or decreased over the years? Are there any species you think have become more/less common since the area was developed?
3. Read Appendix G1.
4. Use the Internet, books, or other materials to research a native tree (a species that is local to your region or to Ontario).
5. Create a mobile of this species using paper cutouts of drawings and information, and attaching them to the coat hanger with different lengths of string. Some information to include:
  - a. Drawings and pictures of the tree, leaves, and bark
  - b. A description of the species
  - c. Its habitat range
  - d. Role in the ecosystem (what animals eat it, or live in it, etc.)
  - e. Status of the species (endangered, threatened, least concern)

## What is biodiversity? What is a species at risk?

### What is biodiversity?

Biodiversity is a word for the variety of life on Earth. Biodiversity is all around us — from the tiniest insect to the vast northern forest and the coastal oceans.

There are different kinds of diversity:

- **Species diversity** is the number of species found in a certain habitat, region, or ecosystem. There are more than 30,000 species in Ontario alone.
- **Genetic diversity** is the diversity of genes within a species. Genes are the building blocks of life. They determine things like eye and hair colour. A high genetic diversity makes a species stronger, healthier, and more dynamic.
- **Ecosystem diversity** is the number of different ecosystems in a region. Ontario has many different ecosystems, such as forests, prairies, grasslands, lakes, streams, wetlands, and tundra.

### Why is biodiversity important?

- **We're all connected.** Imagine all the maple trees disappeared. Not only would we miss their leafy shade, fall colours, and maple syrup, but we'd lose all the valuable oxygen, homes for birds and animals, and wood for buildings and furniture that maple trees provide. The look of our backyards, forests, and province would change forever. Every species on Earth, including human, is connected. We all rely on each other to survive.



Wild fungi growing in Ontario.  
Photo: Eric Parker

- **It's valuable.** Many medicines are made from natural sources. If we destroy biodiversity, we could also be destroying life-saving medicines, many of which have not yet been discovered. We also rely on biodiversity for clean air and water, food, tourism, and outdoor experiences like hiking, fishing, and canoeing.
- **It needs protecting.** We have a responsibility to protect biodiversity for its own sake. The incredible variety of species in Ontario is a product of thousands of years of evolution. We need to protect biodiversity for future generations of Ontarians.

Adapted from Ontario Ministry of Natural Resources.

## What is biodiversity? What is a species at risk?

### What is a species at risk?

Any naturally occurring plant or animal in danger of extinction or of disappearing from the province is called a species at risk. Once a species is classified as at risk, it is added to the Species at Risk Public Registry. There are four categories, or classes, of species at risk:

- **Extirpated:** a native species that no longer exists in the wild in Ontario but still exists elsewhere (for example, Greater Prairie Chicken)
- **Endangered:** a native species that faces extinction or extirpation (for example, Cucumber Tree)
- **Threatened:** a native species at risk that is in becoming endangered in Ontario (for example, Fowler's Toad)
- **Special concern:** a native species sensitive to human activities or natural events that may cause it to become endangered or threatened (for example, Monarch Butterfly)

Species can become at risk because of habitat loss, pollution, climate change, and land development, as well as the spread of invasive species. By learning more about biodiversity and why we need to preserve and protect it, we can all work to maintain and restore the natural balance that all life needs to survive.

*Adapted from Ontario Ministry of Natural Resources.*



Monarch butterflies are a species of special concern.