



**LAKEHEAD REGION**  
CONSERVATION AUTHORITY

## SPECIES AT RISK

### *Species at Risk, and how do we act to save them?*

#### Species at Risk—Monarch Butterflies

**Lesson objective:** Students identify what factors cause a species to be at risk of survival. Stewardship and the ability of citizens including students to make a change is emphasized.

Species at risk in Ontario and the Lakehead Region are profiled. The monarch butterfly is examined in more detail focusing on its life cycle, migration and threats which make the monarch a species of *Special Concern*. The lifecycle of the butterfly is profiled to illustrate why this creature is vulnerable. The planting of Milkweed is encouraged to feed the monarch caterpillar. This action is an example of how we can aid a species at risk. Seeds are available from the LRCA.

The Primary version of this program emphasizes some of the species at risk in Thunder Bay and includes *Species at Risk* activity and colouring books (limited numbers).

#### Species at Risk-Junior / Intermediate

Using a Smart Notebook lesson students examine species at risk in Ontario and the Lakehead Region. Various species which are extinct, endangered or of special concern are profiled in the lesson.

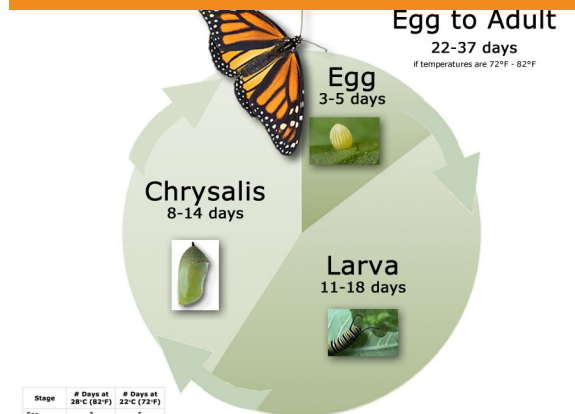
The monarch butterfly is one main focus, and the human caused and natural factors which are putting it at risk are explained. Terminology and concepts are reinforced with a matching activity. This allows Junior and Intermediate Level students to learn the scientific terminology and key facts from the presentation. These can be arranged to create a Species at Risk poster.

Research materials for species at Risk are given to students so that they can select another species at risk. Students can take action by planting a butterfly garden at home or at school. Seeds are available from the LRCA to plant milkweed and pollinator gardens from April through June.

Other “**stewardship**” actions which humans can take are a focus for student exploration and research.



Monarch Butterflies are used as a Species at Risk in Thunder Bay.



The lifecycle of the monarch butterfly is examined



Milkweed seeds are given to participating classrooms to grow.

## **Curriculum Connections- Specific Expectations from Gr. 1-6 Science**

### **Grade 1 Needs and Characteristics of Living Things**

Overall Expectations:

- 1 Living things have basic needs (air, water, food, and shelter) that are met from the environment.
- 3. All living things are important and should be treated with care and respect.

### **Grade 2 Growth and Changes in Animals**

- 2.2 identify positive and negative impacts that different kinds of human activity have on animals
- 2.3 investigate the life cycle of a variety of animals (e.g., butterflies, frogs,
- 2.4 observe and compare changes in the appearance and activity of animals lifecycle e.g., frog, butterfly)

### **Grade 3 Growth and Changes in Plants**

- 1.1 assess ways in which plants are important to humans and other living things, taking different points of view into consideration

### **Grade 4 Habitats and Communities**

- 1.1 analyse the positive and negative impacts of human interactions with natural habitats and communities (e.g., human dependence on natural materials),
- 1.2 identify reasons for the depletion or extinction of a plant or animal species (e.g., hunting, disease, invasive species, changes in or destruction of its habitat), evaluate the impacts on the rest of the natural community, and propose possible actions for preventing such depletions or extinctions from happening
- 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 need
- 3.1 demonstrate an understanding of habitats as areas that provide plants and animals with the necessities of life (e.g., food, water, air, space, and light)
- 3.3 identify factors (e.g., availability of water or food, amount of light, type of weather) that affect the ability of plants and animals to survive in a specific habitat

### **Grade 6 Understanding Lifesystems Biodiversity**

- 1.1 analyse a local issue related to biodiversity (e.g., the effects of human activities on urban biodiversity)