

# MN Mammals



Audubon Center  
of the North Woods

## Purpose:

We have a great diversity of mammals in Minnesota, to make sense of this diversity we must first learn how they are grouped into orders. During this class students will analyze skulls and work with other real mammal artifacts to demonstrate the adaptations of mammals in Minnesota. They will also explore the suitability of habitats for specific mammals and look for their signs.

## Concepts:

- Mammals are unique in having hair and milk glands
- Animals are grouped in ways to help us make sense of the diversity of animals we have.
- Examining skulls and teeth can tell us a lot about a mammal's lifestyle
- Mammals can be found in many habitats, with adaptations suited to those areas
- All animals possess special adaptations to suit their lifestyle

## Learning Outcomes: Students will be able to

- Explain the general characteristics of mammals and distinguish them from non-mammals
- Describe how animals are grouped by characteristics
- Recall 5 mammals that live in MN
- Infer mammal diets by observing skull/tooth structure
- Define adaptation and give examples.

## Minnesota Academic Standards:

- 5.4.2.1.1 Describe a natural system in Minnesota, such as a wetland, prairie or garden, in terms of the relationships among its living and nonliving parts, as well as inputs and outputs.
- 7.4.1.1.2 Describe how the organs in the respiratory, circulatory, digestive, nervous, skin and urinary systems interact to serve the needs of vertebrate organisms.
- 7.4.2.1.1 Identify a variety of populations and communities in an ecosystem and describe the relationships among the populations and communities in a stable ecosystem.
- 7.4.2.1.3 Explain how the number of populations an ecosystem can support depends on the biotic resources available as well as abiotic factors such as amount of light and water, temperature range and soil composition.

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**CLASS LENGTH:** 3 HR

**AGES:** 4<sup>TH</sup>-8<sup>TH</sup>

**SEASON:** Year round

**GROUP SIZE:** 10-16

**SAFETY:** Take care with toothy skulls. There is a short hike, and games that involve crawling on the ground.

**MATERIALS:** Pictures of mammals and orders, skulls, skins, blindfolds, Poker tokens, bingo boards, cones, habitat hike cards, skulls and skins

**PRE-CLASS PREP:** Set out skins on a bench, write outline on the board have pictures and laminated cards to hand.

## CLASS OUTLINE:

### I. Ten Minutes To Teaching

### II. Introduction (10 min)

### III. Class Experiences

- A. What is a mammal? (10 min)
- B. Grouping of Mammals (25 min.)
  1. Orders
  2. Order Bingo
- C. Artifact Race (30 min)
- D. Skulls and Skulldiggery (30-45 min)
- E. Gopher Tunnel Race (5 min)
- F. Echolocation Situation (10 min)
- G. Habitat Hike and Mammal Mission

### IV. Reflection (10 min)

### V. The Sending (10 min)