

## Prairies Gallery



Once you have seen the Nonsuch, follow the signs that take you to the Prairies Gallery and look for the Whitewater Lake Exhibit.



Whitewater Lake is Manitoba's largest Prairie wetland and its constantly-changing water levels make it a vital bird and biodiversity area. Whitewater Lake is an important stopover for migratory birds, attracting tens of thousands every year!

Look for the Whitewater Lake wildlife display. Which of the following is an Arctic visitor (migrating birds)?

- A. Great egret      B. Horned lark      C. Snow goose



The changing climate has influenced the wet and dry periods of Whitewater Lake. Explore how the lake changed over the years. What year did Whitewater Lake go completely dry?

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How do you think the changes in lake levels affect people and wildlife?

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Walk past the steam tractor wheel and check out the exhibits on your left.

**Did you know that Manitoba's biodiversity has changed over the years?**

The introduction of new species, intensive agriculture, and human-caused climate change have affected the species of plants and animals present today.

Endangered species are species that are at risk of becoming extinct. Many plants and animals in Manitoba are considered endangered.

Identify an endangered animal that is also a conservation symbol.

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# EXPLORE MANITOBA BIOMES

Come along and discover the different biomes in Manitoba. Learn how these biomes have changed over the years and how these changes have affected plants and animals.

**Did you know that a biome is a large area that is characterized by its diverse community of soil, plants, and animals adapted to a specific climate?**

There are a total of five major biomes in the world. They are grouped as forest, grassland, desert, tundra, and aquatic, but can be further divided into more specific categories just like what we use in the museum!



## Welcome Gallery



Manitoba is home to four biomes - Prairies, Parklands, Arctic/Subarctic, and Boreal Forest. Look for the AV Map. Learn how the biomes in Manitoba have changed and are expected to change over time.

Describe how Manitoba's biomes have changed from 10,000 years ago to today.

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Can you tell what the projected average August land temperature will be in 2051?

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## Earth History Gallery



**Did you know that extinctions happen every year?**

This does not mean that there are fewer species, since extinctions are balanced by the evolution of new life forms. However, five major extinctions have happened in Earth's history that exceeded the evolution of new species.



Five major extinctions occurred in history that were caused by catastrophic changes. Natural climate change is said to be one of the causes of major extinctions. Identify the three major extinctions that were likely the result of natural climate change.

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# Arctic Gallery



Polar bears are vulnerable to the impacts of climate change. As sea ice melts because of warming global temperatures, it threatens polar bear habitats. They depend on sea ice to catch their prey and raise their young.

What biome do polar bears live in?

- A. Alpine Tundra
- B. Arctic
- C. Boreal Forest

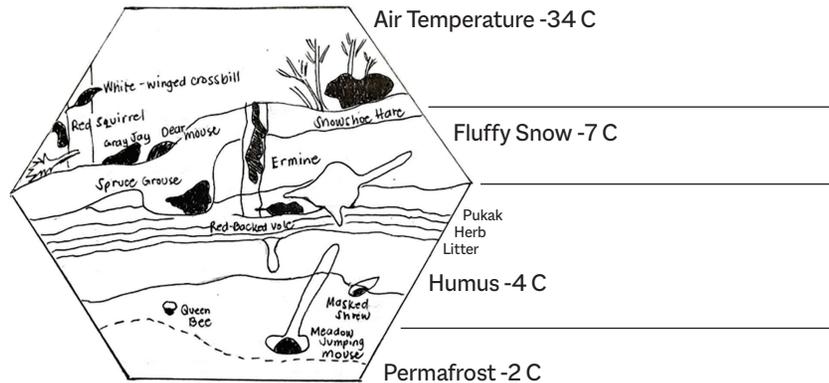
Take a look at the polar bear diorama. Identify the animal that the polar bear feeds on.

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Walk past the polar bear and turn right. Nature has its own insulating blanket. It allows many animals to survive during the cold winter months. Find the cross-section of the subarctic forest floor.

Compare it to this diagram and fill in the missing layers of nature's insulating blanket:



**Did you know that permafrost is any ground that stays completely frozen (0°C or colder) for at least two years straight?**

It plays an important role in the Arctic ecosystem. Many houses, roads, and railways are built on permafrost.



Walk past the caribou diorama then look to your left. Find the picture of the broken railroad. What made the construction of this subarctic railway a 'frustrating enterprise'?

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How do you think the complete thawing of permafrost will affect people and animals in the Arctic?

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**Did you know that trees are unable to grow beyond the tree line?**

The tree line is affected by changing climate conditions. In northern Manitoba, there is evidence that shows how the tree line has extended up to 100 miles further north and 30 miles south of its present position in the 6,000 years since the glacial ice retreated from the area.

Look around you and find the strange-looking tree. It has a German name which means "twisted wood". Identify the German name of the tree:

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What has caused the tree to form this way?

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# Boreal Forest Gallery



The Boreal Forest is the largest biome in Manitoba. It plays an important role in biodiversity maintenance as well as climate regulation.

Here is a map showing Manitoba biomes. Shade or colour in the part of our province that is home to Boreal Forest.

