

8



FUN FACT: Did you know that marshes are among the most biodiverse ecosystems on Earth? They provide food, shelter, and breeding grounds for a multitude of species, from microscopic organisms to large mammals. The shallow water and dense vegetation offer ideal habitats for fish, amphibians, reptiles, birds, and a variety of insects.

Name an animal found in the Delta Marsh diorama.

9



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

FUN FACT: Did you know that the changing climate has influenced the wet and dry periods of Whitewater Lake? Explore how the lake has changed over the years by sliding the panel across the timeline.

What year did Whitewater Lake go completely dry?



10



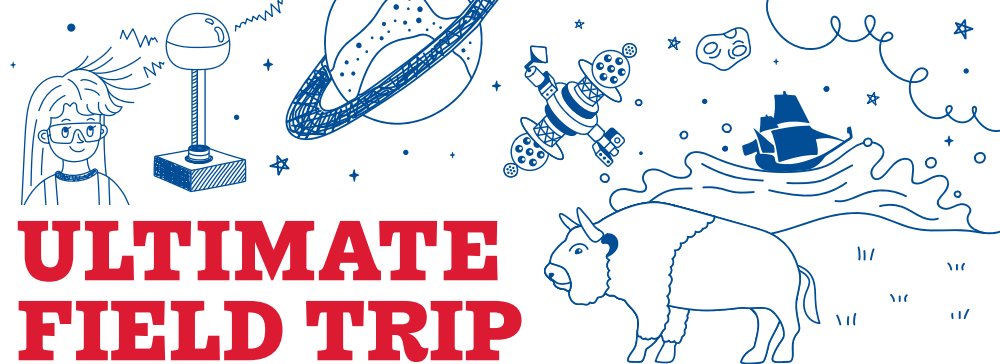
FUN FACT: Did you know that farming has played a role in the loss of biodiversity in the Prairies? The introduction of monoculture farming methods means we have large fields of the same species which makes it harder for nearby animals and plants to thrive. Monoculture can lead to unsustainable environments that reduces the amount of nutrients in the soil and inviting new diseases or pest to affect our crops.



Name a species whose future is uncertain the Prairies.

Name a native newcomer that followed the plow to the Manitoba Prairies.

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ULTIMATE FIELD TRIP

BIODIVERSITY OF MANITOBA EXPLORER TRAIL (Grade 5-8)

Come along and discover the biodiversity found in Manitoba in this explorer trail. Each of these species and organisms work together in their ecosystems, like an intricate web, to maintain balance and support life. Each image will lead you to an exhibit to learn more about the diversity of life in Manitoba and how it is always changing.

1



Manitoba is home to four biomes: Prairies, Parklands, Arctic/Subarctic, and Boreal Forest. **Examine the projected maps of Manitoba.** Learn how the biomes in Manitoba have changed and are expected to change over time.

FUN FACT: 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 five major biomes in the world. They are grouped as forest, grassland, desert, tundra and aquatic, but they can be further divided into more specific categories like what we use in the Museum Galleries!

What biome is Winnipeg ★ located in? _____

What is the largest biome found in Manitoba? _____

2



Five major extinctions occurred in history that were caused by catastrophic changes.

Name one of the five extinction period.

What was the likely cause of this extinction period?

Name an affected species of this extinction period.

FUN FACT: 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, ecosystems are built on plants, animals, and organisms working together. The disappearance of one species could cause a chain reaction of extinctions.

3



FUN FACT: Did you know that lichens are not a plant? Lichens are part fungi and part algae living in a symbiotic relationship. The algae will take sunlight, water and carbon dioxide to create sugar. This is called photosynthesis. Fungi are unable to photosynthesize. They rely on the algae to share the sugar it produces. In return, the fungi will grab nutrients by breaking down plants and help protect the algae.

Some arctic lichens are over _____ years old!

4



Find the picture of the broken railroad.
What made the construction of the subarctic railway a “frustrating enterprise”?



FUN FACT: Did you know that permafrost is any ground that stays completely frozen (0° C or colder) for at least two years? It plays an important role in the Arctic ecosystem. Many houses, roads, and railways are built on the permafrost.

5



FUN FACT: Did you know that when organisms die, their nutrients are recycled through decomposition? Decomposers, such as bacteria and fungi, are essential to ecosystems. They break down organic matter and make nutrients available for other living things. Without decomposers, ecosystems would be overwhelmed with waste, disrupting ecological balance.



Scavengers also play a crucial role in maintaining the balance of ecosystems. As nature’s cleanup crew, these animals consume the remains of dead animals, known as carrion, and help recycle nutrients back into the environment.
Name a scavenger found in this diorama.

6

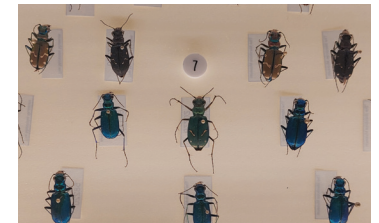


FUN FACT: Did you know that insects play a crucial role in maintaining the balance of an ecosystem? Insects are essential for maintaining the balance in nature.

- They are a source of food for birds, fishes, reptiles, amphibians, and mammals.
- They are pollinators! They collect and share pollen to help plants reproduce.
- They assist with the decomposition of plant and animal materials.
- They assist with pest control by eating the larvae that may destroy a crop.

Find an insect that uses camouflage to look like a predator like an owl.

Name an insect that builds an elaborate structure or nest for storing food or protection.



7



Sand dune ecosystems are often seen as barren and harsh landscapes. However, these dynamic environments host a variety of unique species that have adapted to survive under extreme conditions such as high winds and shifting sands. **Can you spot Manitoba’s only lizard, the Prairie Skink, in the diorama?**

☐ Yes ☐ No

FUN FACT: Did you know the Carberry Sandlands is not a true desert? This area is the remnant of a sandy delta of the Assiniboine River that formed during a time when the river flowed into glacial Lake Agassiz.