

Gallery Trail: Dinosaur Discoveries

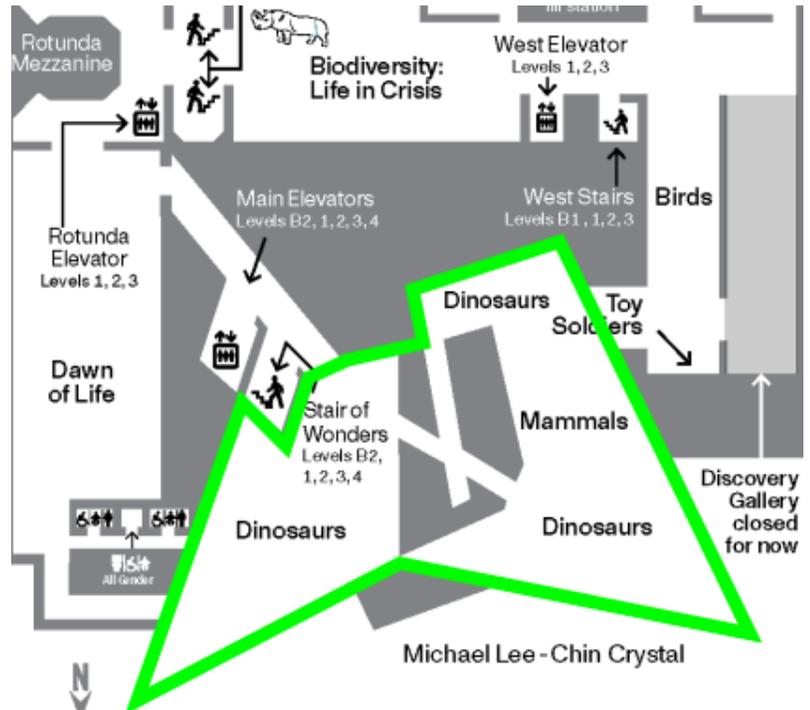
Dinosaur Discoveries

Welcome to The James and Louise Temerty Galleries of the Age of Dinosaurs. These giant reptiles may have roamed the Earth millions of years ago, but they left fossils behind that help us understand how these amazing animals lived and interacted.

Work in small groups to explore these fossil clues and tell their story back in your classroom.

Museum Guidelines:

1. Walk. Do not run.
2. Use indoor voices.
3. Stay with your chaperone.
4. Make way for ROM educators if they need a space for a lesson.
5. Don't touch objects. Only touch objects that are clearly marked as safe to touch.
6. Don't rush. Focus your time on the objects that capture your interest and complete what you can within the time you have.
7. Ask questions and have fun!



Dinosaurs are a very special group of reptiles. All dinosaurs share the following characteristics:

- Their legs are beneath their bodies, not out to the side, so their bellies are off the ground.
- They walk on their toes rather than the bones of their feet.
- They lay eggs with a hard shell.

 Find a reptile in the gallery that is NOT a dinosaur and explain how you know that it's a reptile, but not a dinosaur. Use words, pictures, or both in your answer.

 : Choose a dinosaur in the gallery and identify its role in its environment.

- Is it a herbivore or carnivore?
- Predator or prey?

Explain what characteristics this dinosaur has that let you figure out how it interacts with its environment and the other organisms that live there.

 : Choose one animal in the gallery to learn about. Make some notes about:

- what it looked like
- when it lived
- where it lived
- how it interacted with its environment.

BACK IN CLASS

Tell the story of this animal and how it lived in its environment by:

- writing a story
- making a comic
- filming a video
- creating make an illustrated poem
- your own choice

 : Search the ROM Database to learn more about some dinosaurs you liked. collections.rom.on.ca

- What did you find the most interesting?
- What surprised you?

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- : Find a group of dinosaurs and other living things that might have lived together (hint: check the labels for dates and times – plants and insects count too!)

Assign a species to each person in your group. Identify characteristics each species has to help you figure out its role in the environment. Create a tableau of a scene that involves all of your group members and Have your teacher tweet a photo to [@ROMtoronto](#) [#ROMLearning](#)!

Across the Museum

- : Did you know that birds are actually dinosaurs? Head up the ramp to the [Bird Gallery](#) and find proof that birds share the three defining characteristics of dinosaurs. Make some notes below, or use your cameras to create a photo montage of your evidence!

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- : Create your own dinosaur and decide what role it plays in its environment. Is it a predator? Does it maintain the plants in the environment? Is it an armoured dinosaur?

Draw your dinosaur and explain what adaptations it has to help it fill its role in its environment.

Seek and Discover: Can you find....?



This pterosaur may have loved to eat fish, but this one died of a fish head caught in its throat! What are some other dangers this hunter might have faced?



Find this grasshopper and the remains of its fossil ancestor. Many living things on our planet today haven't changed much over millions of years. Which other insects do you recognize?



Look closely at this ichthyosaur -- can you find the babies in and around her skeleton? How many babies can you spot? Why do you think this reptile kept her eggs inside her body instead of laying them in a nest?



Look for the *Protoceratops* skeleton. Some palaeontologists think that the beak-like mouth and the crest on its head were the inspiration for the mythical griffin. What other skeletons in the gallery resemble mythical monsters?

Did You Know?

Many of our fossils come from the Badlands of Alberta and the US. A Lakota story tells that in the past, this area was inhabited by the *Unktehi*, monsters inhabiting the primordial waters from which the Earth emerged. The monsters caused floods and killed humans, so the Creator punished them by sending down thunderbolts that dried up the waters and consumed the malicious *Unktehi*, whose bones still lie amid the tortured Badlands to remind people of the terror and wonder of the spirits.



[More at ROM](#)

[Learn more about our Barosaurus, Gordo](#)

[Follow the ROM Palaeo research team on a Triceratops dig](#)

[Discover more about the ROM's Research in the Alberta Badlands](#)

[Get the facts on the ROM's maiasaura](#)

Glossary:

Environment - All the biotic (living) and abiotic (non-living) elements that surround and affect organisms or groups of organisms and influence their survival and development.

Ecosystem - A complex system defined by the interaction of a community of living organisms and their environment.

Community - Interdependent groups of plants and animals that live and interact together in a habitat.

Habitat - A place where an organism lives and that provides it with the food, water, shelter, space and access to mates that it needs to survive.

Organism - A form of life composed of mutually interdependent parts that maintain various vital processes (eg. an individual animal, plant, fungus, or bacterium).

Adaptation - A life history trait that helps an organism to survive and reproduce.

Endangered species - A species that is in danger of extinction in the foreseeable future.

Facilitator - A staff member or volunteer who helps visitors interact with museum objects and answers questions about them.

Dinosaur - A group of reptiles characterized by unique characteristics (eg. legs beneath the body, walking on toes, lay eggs with a hard shell)

Palaeontologist - A palaeontologist studies life on Earth before the evolution of humans, primarily by examining fossils and other traces left behind by these organisms.

Create your own glossary for other unfamiliar words you come across. Share your findings with your class!