



Canadian Fossil Discovery Centre

Press Kit

Background:

Located in the beautiful community of Morden, the CFDC has served to attract visitors and scientists from around the world and offers unique opportunities to visitors and members of our community. The CFDC has active educational, scientific and tourism programming.

The current goal of the CFDC is to build a new state-of-the-art fossil museum in the Morden area.

The Canadian Fossil Discovery Centre houses the single largest collection of marine reptile fossils in Canada, with nearly 1000 specimens. Marine reptiles are the underwater equivalent of dinosaurs. The largest member of our collection is “Bruce”, a 43-foot mosasaur. Bruce is the largest mosasaur in Canada and can be suitably compared to the above-land Tyrannosaurus Rex.

The Town of Morden provided an operating grant of \$127,000 in 2011 and over \$1,000,000 since 1971.

Visitation: 2010 – 11,137, 2009 – 10,920, 2008 – 7706.

The Fossil Dig Adventure Tour Program is our hottest offering. We bring people out to a dig site and work with them to find fossils. The program has a 100% success rate in finding fossils since 2008.

The CFDC has unearthed 3 major fossil discoveries in the past 5 years. Betsy – plesiosaur, Angus – mosasaur, Unnamed – Xiphactinus fish.

The CFDC is a good news story waiting to happen. A variety of storytelling angles are available for media outlets to capitalize on! Some stories are prewritten and ready for distribution.

The Discovery Channel has had film crews visit the CFDC twice in the last year. One visit for Daily Planet and one visit for the upcoming *Reign of the Dinosaurs* series.

The museum is open year round. Summer hours are 10am – 5pm.

Formerly known as the Morden & District Museum (1971- 2004). Changed name in 2004 and focused the collection exclusively on marine reptile fossils.

2 paleontologists on staff. 4 full time staff, 4 summer staff.

We collect fossils from these ancient animals:

- [Mosasaurs](#) - Hainosaurus, Tylosaurus, Clidastes, Platecarpus, Plioplatecarpus
- [Plesiosaurs](#) - Elasmosaurids, Polycotylids
- [Sharks](#) - Squalicorex
- [Fish](#) - Xiphactinus, Pachyrhizodus, Ichthyodectes, Enchodus, Elopopsis, Cimolichthyes
- [Turtles](#) - Achelon, Protostega, Toxochelys
- [Birds](#) - Hesperornis, Ichthyomis, Baptornis, Parahesperornis
- [Squid](#)

MAJOR FOSSIL DISCOVERIES UNDERWAY IN MORDEN:

A major fossil excavation was started in 2010 and continues into 2011 (and beyond?). The CFDC fossil crew is on the verge of significant scientific discoveries!

The initial excavation started in 2010 with the discovery of a *Mosasaur* and *Xiphactinus* skeleton and has evolved into an excavation of numerous prehistoric sea monster skeletons. In 2011, the same site has started to produce another *Mosasaur* skeleton, the discovery of a Squid and an *Ichthyornis* (fish) skeleton. In addition, there are currently 2 unidentified fossils discovered from this site.

The impact of these discoveries could have far reaching impact for the global scientific community. Please contact the palaeontologists at the CFDC for more information!

Xiphactinus:

A large, 4.5 to 5 m (15 to 20 feet) long predatory bony fish that lived in the Western Interior Seaway, what is now the middle of North America, during the Late Cretaceous.



Mosasaur:

Mosasaurs were large marine reptiles which had flippers instead of terrestrial limbs. Sometimes referred to as the “T. rex of the Sea” the *Mosasaurs* ruled the Western Interior Seaway between 80 and 90 million years ago. Early into their evolution, mosasaurs enjoyed a rapid speciation, becoming the top predators of the Cretaceous oceans, reaching sizes of over 15 m (50 feet). However, their rule over the oceans would be short lived in the geological record, as they became extinct along with many of their reptilian counterparts during the great Cretaceous – Paleogene Extinction. It was this famous extinction event which also eliminated the dinosaurs from the world’s terrestrial habitats.



Squid:

Squid are invertebrates. Fossilization of organisms without any hard parts is extremely rare. The only part of the squid that fossilizes is the gladius, or pen, which is composed of stiff rods of connective tissue combined as a substance called chitin. This internal element provides structural support for the squid. The largest squid that lived in the Western Interior Seaway reached an approximate length of 18 m (60 feet) including the tentacles. Squid belong to a zoological classification known as the Cephalopods which also includes ammonites and octopus.



Ichthyornis:

With its feathered body, powerful wings and keeled breastbone, *Ichthyornis*, ("fish bird") must have looked and acted like a plump tern. The mouth was armed with backwardly curved teeth which did not reach the front of the upper jaws; the lower jaws had extra joints which allowed them to open widely like the jaws of *mosasaurs*, with which they have sometimes been confused. Though the various species of *Ichthyornis* stood only 6 to 9 inches high, they were apparently able to swallow thick-bodied fish.



Western Interior Seaway:

The Western Interior Seaway was a huge inland sea that split the continent of North America into two halves, Laramidia and Appalachia, during most of the mid- and late-Cretaceous Period.



CFDC Highlights:

- 100% success rate in discovering fossils since 2008.
- Fossil Dig Adventure Tours are quickly becoming one of Manitoba's hottest tourism offerings. The program is unique, successful and memorable.
- The CFDC was a media darling in 2010 as it received international media coverage of its major fossil discovery.
- Great media clips available on YouTube at www.youtube.com/cdnfossildiscovery
- Macleans Magazine listed the CFDC as a top 5 summer travel destination in Manitoba (2009)
- Discovery Channel – Daily Planet (July 12/10) and Reign of the Dinosaurs (May 2/11) have recently visited the CFDC.
- 3 minute video titled “Swimming with Bruce”, produced by David Rabinovitch (Emmy Award Winner – Spanish Inquisition)
- 12 minute educational video “Digging Fossils”, produced by David Rabinovitch (Emmy Award Winner – Spanish Inquisition)
- Last Big Fossil Find: Xiphactinus fish (2010+) & Mosasaur (“Angus” - 2008).
- Recently travelled to southern Alberta with Travel Manitoba to study how regional tourism is built around the Royal Tyrell Museum in Drumheller.
- The CFDC is currently developing a business plan to build a new state-of-the-art facility.
- The entire fossil collection at the CFDC is digitized and available online at <http://www.discoverfossils.com/research/fossilshome.php>

Programs:

Museum Gallery
Fossil Dig Adventure Tours
Summer Day Camp
Guided Museum Tours
School Programs
Field Internship Program
Indoor Fossil Tour
Self-Guided Audio Museum Tours
Gift Shop
Vacation Packages with other local tourism suppliers

New Museum:

The goal of the Canadian Fossil Discovery Centre is to build a new state-of-the-art fossil museum within the Morden area. Work is currently underway to make this dream a reality. It is a process that demands attention to detail and the board & staff at the CFDC are committed to fully exploring the viability of this project.

To date, the following activities have been completed:

- A [project feasibility study \(PDF - 25mb\)](#) by Stantec Architecture

- Confirmed a \$250,000.00 capital grant by the Thomas Sill Foundation
- Completed a [Community Input Survey \(PDF\)](#)
- Secured funding from The Winnipeg Foundation to develop a comprehensive Business Plan for the new museum.



Past Mayor Wilson (Morden) and Mayor Harder (Winkler) supervise the work of the Canadian Fossil Discovery Centre field team (Jackie Kozak, Matt Duda, Ted Nelson, Linda Scott, Anita Janzic, Joseph Hatcher).



CFDC field team hard at work. (Matt Duda, Joseph Hatcher, Anita Janzic, Linda Scott)

Frequently Asked Questions:

How do I find the CFDC?

Please refer to the map on our [Location](#) page that shows how to get here from Winnipeg. Once in Morden, go north on second street off of Thornhill St. (hwy #3) and that will take you right to the Morden Community Centre.

When are you open and how much does it cost to come?

See [Hours & Admission](#) page.

How big is the museum and how long will it take to go through?

The entire museum takes up 16,000 square feet. The average visitor will spend approximately an hour going through the galleries and exhibits.

Can I dig for real fossils?

The CFDC has several dig tours available to the general public. See [Fossil Dig Adventure Tour programs](#).

How successful is the museum at finding fossils?

In 2008, the CFDC found “Angus” a giant mosasaur. This find garnered media attention from around the country. In 2009, the Fossil Dig Adventure Tour programs had a 100% success rate in finding fossils! See more at our [Field Season page](#).

Can I keep any fossils I find?

Unfortunately not. The province requires that only organizations with a Heritage Permit be allowed to legally collect vertebrate fossils in Manitoba. The CFDC is an annual permit holder.

What do I do if I find a fossil?

If you find a fossil, the best thing to do is to leave it there in the ground and remember exactly where it is. Data collected from it’s location and proximity to other fossils can provide valuable information and is vital to the research process.

Can I go the dig site on my own?

The dig sites are all located on private property. Many of the owners are local farmers who have generously allowed us access to their land to find and excavate fossils. The general public is given the opportunity to join the CFDC staff at these sites, but not unsupervised.

Are the fossils from glacial Lake Agassiz?

No! The CFDC has marine reptile fossils from the saltwater Western Interior Seaway which covered central North America during the Late Cretaceous Period, 80 million years ago. Lake Agassiz existed as a freshwater glacial melt lake over southern Manitoba only 12,000 years ago.

Where was Bruce found?

Bruce was found close to Thornhill approximately 10 km west of Morden. See more on Bruce at our [All About Bruce page](#).

How did Bruce get his name?

The bentonite miners who first encountered Bruce were discussing a skit in a Monty Python movie where everybody's name was Bruce. Hence the colossal fossil remains were named.

Is Bruce bigger than a T-Rex?

Yes! Bruce is larger than the average sized Tyrannosaurus rex! Bruce is 43 feet long, the largest mosasaur in Canada, while even a big T. rex measures only 35- 40 feet!

What do you mean “marine reptiles were not dinosaurs”?

During the Mesozoic Era there were many magnificent reptile forms on the earth! Dinosaurs like Spinosaurus, Triceratops, and T. rex ruled the land while their contemporaries the flying reptiles and the marine reptiles ruled the air and sea, respectively. For example, the flying Pteranodon was not a dinosaur... it belongs to a group called the Flying Reptiles that co-existed with the dinosaurs. Here in Manitoba, we had marine reptiles which also so-existed with the dinosaurs. While Albertosaurus and Lambeosaurus were fighting on land, the seaway that covered Manitoba was ruled by the fearsome mosasaur Tylosaurus and the fish-eating plesiosaur Dolichorhynchops. This made the Cretaceous Sea over Manitoba one of the most dangerous seas of all time!