

INSIDE!

Dino Eggs!

Ask a Paleo!

Fossil Hunting!

More!

FREE

the NEWS SAUR

THE OFFICIAL NEWSLETTER of the PHILIP J. CURRIE DINOSAUR MUSEUM

ISSUE 34

June 2014

PUBLISHED BY
the Pipestone Creek
Dinosaur Initiative
on behalf of the

PHILIP J. CURRIE
DINOSAUR MUSEUM

- proudly in print -
SINCE 2011

Motorbikes to the Museum!

Dan Aykroyd to lead mass ride to Currie Museum ribbon-cutting

By Erika Sherk

Dan Aykroyd loves Harleys. He also loves the Philip J. Currie Dinosaur Museum and this August 9, his two passions will combine in spectacular fashion. Join Mr. Aykroyd and approximately 1,000 other bikers to ride en masse to the Philip J. Currie Dinosaur Museum to celebrate the museum building's completion. Mr. Aykroyd, as Ride Captain, will lead the charge on an autographed, 'dino-customized' 2014 Softail Breakout with other celebrities close behind.

It's going to be a great tribute to the completion of the museum building, not to mention a lot of fun. The ride – the first of what will become an annual fundraising event – will begin at the Mighty Peace Harley-Davidson dealership in Grande Prairie.

The group will arrive with great fanfare just in time for the ribbon-cutting ceremony.

If you'd like to participate in this adventure, you can do so online at www.curriemuseum.ca/events or at www.mphd.ca.

For more information or to register off-line, please contact Dawn at (780) 532-2362 x. 1.



photo by MAJ Photography

The 2014 Softail Breakout that Dan Aykroyd will ride in the Mighty Peace Harley-Davidson (MPHD) Aykroyd Family Ride on August 9th. MPHD has donated the bike as a raffle prize fundraiser for the Currie Museum. Go check out the bike's 'dinosaur ghosting' at the dealership.

All proceeds raised through the event will go to the museum project.

The 'dino-customized' Harley-Davidson Softail Breakout 'Dino Bike' (shown above) has been donated by Mighty Peace Harley-Davidson as a fundraiser for the Currie Museum.

Customized by local company Chaotic Kustoms, the bike will be autographed by Dan Aykroyd and raffled off

at the Museum's Amber Ball fundraising gala on August 9th, at 10 p.m.

Tickets may be purchased at the Mighty Peace Harley-Davidson dealership, the Royal Canadian Legion Grande Prairie or the Pipestone Creek Dinosaur Initiative offices, at \$100 per ticket.

They are going fast, so don't delay if you want one!

Only 600 will be sold. The

winner is not required to be on location at the time of the draw.

Riders for the Mighty Peace Harley-Davidson Aykroyd Family Ride must register in advance; there is a minimum \$20 donation to register.

You also can join the fun at the ribbon-cutting without a motorbike. Join us at 1:30 pm on August 9 at the Museum site to celebrate!



Executive Director's Note

Greetings from the Dino project. We are getting closer to completion and with each passing day I am more impressed with our team. We are on time and on budget. Thank you ATB Architecture and PCL, you are both awesome. This past month with the assistance of the Royal Canadian Legion Branch #54 we launched the raffle on the 2014 Softail Breakout provided by the Mighty Peace Harley-Davidson and the registration site for the MPHD family ride to be led by Dan Aykroyd and a number of other celebrities on August 9, 2014. Register online at www.curriemuseum.ca/events. The biggest ride I have ever been associated with was in Calgary where we did a ride to support military families - 980 bikes participated. We would like to beat that number with our ride on August 9. All proceeds from the ride will go to funding the operation of the museum. If you don't have plans for the day please sign up for the ride and we still have tickets available for the ball that evening.

See you all at the Amber Ball and until then have a great Dino Day.

Brian Brake
Executive Director
Pipestone Creek Dinosaur Initiative

Ancient life on the Peace River

By Dr. Matthew Vavrek
PCDI Palaeontologist



photo by Matthew Vavrek

Dr. Phil Bell, hunting for fossils from a canoe on the Peace River. Palaeos have to have adventurous spirits!

During the summer of 2012, I spent five days floating down the Peace River with former Currie Museum palaeontologist Dr. Phil Bell and two graduate students from McGill University by the names of Trina Du and Ben Wilhelm. Although the Grande Prairie area is becoming well known for a whole host of dinosaurs and other extinct creatures, the animals that lived where the Peace River is now were much older. Near Grande Prairie, the exposed rocks are part of the Wapiti Formation, a unit of rocks that ranges from 80 to 69 million years old, while along the Peace River the exposed rocks are mostly from the Dunvegan Formation, and are about 94 million years old. In fact, the rocks along the Peace River contain some of the oldest dinosaurs from Alberta, and as such can help to fill in a number of holes

in our understanding of dinosaur evolution in North America.

Last month, two scientific papers were published that document the fossils that we found on our trip (Burns and Vavrek 2014; Vavrek et al. 2014). The first paper described several bones from an ankylosaur (armoured dinosaur). These bones were dermal ossicles, or bones that were embedded in the skin and that helped make up the bony armour of the dinosaur. Although they don't look like much, we were able to slice open one of them and, by looking at the texture of the bone inside, we could tell that they were indeed from an ankylosaur. These were some of the first dinosaur bones described from the formation (there have been footprints published elsewhere).

The second paper that came out described a piece of a very large sturgeon, a

group of fishes still found in rivers of Alberta, often harvested as a source of caviar. We only found a piece of the skull of this ancient sturgeon, but through comparisons to other more complete skeletons, we estimated the size of this fish to be around 5 metres long. As well, this is likely the oldest sturgeon known from North America, and possibly in the world, extending the record of these animals in Alberta by over 20 million years.

Although these two finds are interesting in their own right, they also show how important it is to keep exploring new areas for fossils. Although areas like those along the Peace River (and the Arctic even more so) do not often contain the most beautiful or complete fossils, discoveries in these areas are still very important in understanding why both ancient and modern ecosystems look the way they do.

Construction accelerating



photos by Karla Horcica

Simultaneous work on the inside, the outside and the site itself means a busy time for the construction team!

By Karla Horcica,
PCL Construction

The construction is now into one of the busiest phases of the project as there is work inside the building constructing walls and mechanical and electrical systems; there is work on the building envelope installing window frames and roofing materials; and work has now re-commenced on the site with the rough grading of the parking and landscaping areas. In total, the site is av-

eraging 50 – 60 workers per day.

One of the activities proceeding on site is the digging out of the storm ponds. There are two storm ponds on site, one to the east of the building and one to the south. The storm ponds are on average 1.5 m deep and will have the combined capacity to hold a total of 896,000 L of water. The water that will be collected in

the storm ponds is run-off from the site and the building during a rain event. Rain that hits the building will be captured in the gutters on the edge of the building, from there the water will travel into the drains which are piped to a large underground storage tank. The storage tank has a capacity to hold 75,000 L of water and empties into the storm pond to the east. The storm ponds

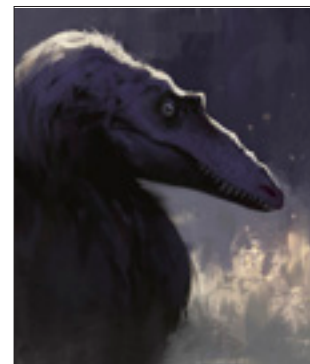
will be “dry ponds” the majority of the time with native grasses growing in them, and will only fill up during a rain event. Once they have water in them, they will gradually discharge the water into the ditches along the roadways leaving the site. The purpose of the ponds is to control the amount of water run-off from the site into the ditches so they are not flooded during a storm.

DINOSAUR OF THE MONTH

Qianzhousaurus sinensis

Qianzhousaurus is a new theropod dinosaur from the late Cretaceous of China, a member of the tyrannosaurid group. It lived about 66 million years ago, near the very end of the Age of Dinosaurs, at the same time as its much larger relative Tyrannosaurus rex.

Unlike T. rex though, it had a long snout and less robust teeth, very similar to another closely related species from Mongolia called Alioramus.



graphic by Ville Sinkkonen

how **big** are dinosaur eggs?

Even though dinosaurs were the largest egg-laying animals to have ever lived, the eggs they laid were not as big as many people think.

As an egg gets bigger, the inside of the egg increases much more quickly than the surface area of the shell.

Because an egg's shell must operate as a kind of lung, letting out carbon dioxide and taking in oxygen, there is an upper limit to how big an egg can get.

Even the largest sauropods – animals the size of whales – laid eggs that were the size of a cantaloupe.



graphic by Julius Csotonyi

Ask a Paleo! by Matthew Vavrek.
Have a question for a palaeo?
Visit curriemuseum.ca

Thank you to our funding partners, donors and sponsors!



Ken and Teresa Sargent
Family Foundation

