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the NEWS SAUR

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PHILIP J. CURRIE
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FREE

THE OFFICIAL NEWSLETTER of the PHILIP J. CURRIE DINOSAUR MUSEUM

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Museum architecture honour

One of 'Top 10 Projects to Follow' in 2014

The world is watching Wembley! The Philip J. Currie Dinosaur Museum has been selected as one of the Top 10 architectural projects to watch world-wide in 2014.

Prestigious architecture magazine 'Azure,' included the museum in their annual 'Top 10 Projects to Follow' list. It includes projects in China, the Netherlands and Italy, focussing on "innovative, forward-looking and socially relevant" design.

The Currie Museum was designed by Teeple Architects, an award-winning Canadian firm. The nine other firms on the list are based all over the world and have already designed projects that include the Times Square revamp in New York and the Tel Aviv Museum of Art.

"We looked at projects from around the world, and one of the most important criteria was a certain adventurousness when it came to form," said David Dick-Agnew, editor at Azure Magazine.

"We wanted projects that aren't afraid to explore new ways of relating to their surroundings," he continued, "and to the different ways people will ultimately use them. Often this means developing new construction methods in order to realize something that nobody has done before. The Philip J. Currie Dinosaur Museum makes a really bold gesture in the way it



Photo by Brent Fisher

Construction on the 41,000 sq. ft. structure started in June 2013 and is continuing full-speed-ahead to the projected opening date of December 2014.

encloses its exhibition space inside a very solid, sculptural shell that seems to burst open into a soaring glass entrance where articulated dinosaur skeletons will be displayed."

The Currie Museum also stood out due to its location, Dick-Agnew said.

"Most of the entries on our list are based in highly built-up urban areas like Milan, Toronto and Vancouver – cities that are already stuffed with landmark architecture. Only the Dinosaur Museum has the opportunity to bring contemporary architecture of this scale into a totally new region. The Museum is sure to

transform its site in a way that the other projects on the list can't match."

It was exciting news for Teeple Architects, the firm that designed the museum.

"We are thrilled that the Philip J. Currie Dinosaur Museum has been identified by Azure magazine as an important and exciting building to watch in 2014," said Martin Baron, partner, Teeple Architects. "This has been a very special project for our firm, one that we have poured our hearts and souls into, and one that we are extremely excited to see realized."

The building design has also

allowed for the creation of a unique, exciting interior.

"The excellent sightlines of the building and the openness of the space have allowed us to create a really special world on the inside," said Stephen Petri, principal, Reich + Petch Design International, the team working with CDM staff to create the exhibits. "All the elements – the building's architecture, the exhibit design, and the palaeontology that's at the root of it all – have come together seamlessly to create an immersive visitor experience capturing the excitement of the discovery of new dinosaur species."



Executive Director's Note

Please accept our sincerest Best Wishes from all of us at the project office.

The year started with a bang when the exhibit designers briefed the Council on their detailed plan for the storyline and museum displays and we received notice that Azure Magazine included the Philip J. Currie Dinosaur Museum in their list of 10 projects from around the world that are due for completion in 2014 and buildings that are worth watching because they incorporate new construction methods in order to realize something that nobody has done before.

This is a huge honour and total validation of the architectural team we have assembled. Work is proceeding nearly on schedule and we are still on budget. The crane is gone, the beams are emerging from the site and around the end of January we expect that work on the roof will start.

With the latest contributions from the County of Grande Prairie we have secured the funds required to complete the building construction and are just \$4.5 million short of our overall goal.

Should you wish to sponsor a museum display or a table at the Amber Ball please call me at your convenience at 780-532-2362. Have a great dino day.

Brian Brake
Executive Director
Pipestone Creek Dinosaur
Initiative



Photo by Martin Baron

Construction is progressing well, including the installation of these one-of-a-kind plywood nodes created in Vancouver. The architectural design of the museum has attracted the notice of the architectural world, including the design being chosen as one of the Top 10 Projects to Follow in 2014 by Azure Magazine.

DINOSAUR OF THE MONTH

Acheroraptor



Graphic by Danielle Dufault

Acheroraptor, just recently described in December 2013, is a small meat eating dinosaur of the raptor family, closely related to animals such as *Dromaeosaurus* and *Velociraptor*. It was approximately nine feet long and weighed about 90 pounds. It was one of the last non-avian dinosaurs and walked on two legs, had a large, long snouted skull and dagger-like ridge teeth. It was the last member of this group that we know existed before the dinosaurs went extinct at the end of the Cretaceous. It would have bumped shoulders with *Tyrannosaurus*, *Ankylosaurus*, and *Triceratops*, other dinosaurs who were alive just before the whole group went extinct.



This baby *Chasmosaurus belli* is estimated to be about three years old. Dr. Philip Currie discovered the remarkably well-preserved and intact skeleton in Dinosaur Provincial Park in 2010.

Are baby dinosaur fossils common to find?



Different kinds of rocks formed in different environments and localities tend to preserve different kinds of

fossils. Some environments preserve huge whole dinosaur skeletons, some collect together bones from many broken up skeletons (a bonebed), while others preserve isolated teeth and tiny bones from things like turtles, lizards, and fish (a microsite).

Small skeletons are not very common in any environment, either of small species, or of young individuals of big

species.

Baby dinosaurs are uncommon in general, and it is especially uncommon to find an articulated skeleton.

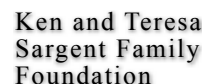
The baby *Chasmosaurus* skeleton found in Dinosaur Provincial Park and recently reported on by Dr. Phil Currie at the latest Society of Vertebrate Paleontology meeting is therefore very special and exciting.

The specimen is nearly complete from tip of nose to tip of tail, only its arms having eroded away before discovery.

It even preserves skin impressions in the chest region and small delicate tendons along the spine.

Ask a Paleo! by Robin Sissons.
Have a question for Robin?
Visit curriemuseum.ca

Thank you to our funding partners, donors and sponsors!





Birds are dinosaurs?!

By Dr. Matt Vavrek

Birds are dinosaurs?!
Yes Virginia, that turkey dinner you had for Christmas really was a dinosaur.

A lot of us probably ate dinosaur some time over the last week – whether it was something like a chicken nugget, or something a bit more fancy like duck confit or roast quail. That’s because all birds, living or dead, are dinosaurs.

This idea that birds are dinosaurs has been around for some time.

Back in 1868, the British biologist T. H. Huxley proposed the idea, after observing how fossils of the then-recently discovered fossil bird *Archaeopteryx* looked very similar to small, carnivorous dinosaurs. Huxley noted that they both had relatively light, hollow bones, they both had long, bony tails, and they both had clawed fingers.

Later specimens of *Archaeopteryx* also showed the teeth in the jaws of this early bird, a feature that has been lost in its living relatives, but that linked it with its dinosaur relatives.

Although the idea of birds as dinosaurs has been around for almost 150 years, the idea was somewhat brushed off for much of the early 20th Century.

Other ideas, linking birds to various groups of reptiles other than dinosaurs, emerged dur-



What IS that thing? A depiction of a feathered ornithomimid (ostrich-mimic) dinosaur found in Alberta shows 'feathery wings.'

ing this time. A big part of the reason why many looked for the origin of birds outside of dinosaurs was because, for a long time, dinosaurs were thought to have lost their collarbones, or clavicles, a bone which is very important for flight in birds.

However, dinosaurs actually did have collarbones, it’s just that because the bone is relatively delicate it had either been destroyed or lost when the animal was preserved or misidentified in the few cases where it was found.

Later in the 20th Century, starting with work

by the palaeontologist John Ostrom, palaeontologists starting reassessing the evidence for a dinosaur origin of birds, and started to come back around to Huxley’s original conclusion that birds are indeed dinosaurs. In fact, testing the origin of birds has become a great example of how a science like paleontology can make and test predictions and hypotheses.

For example, several palaeontologists predicted that if birds were dinosaurs, and even the earliest birds had feathers, that there should be some dinosaurs with feathers

as well. Indeed, that prediction has been proven correct several times over with the discovery of many different kinds of dinosaurs with feathers.

The first feathered dinosaurs were found in the mid 1990’s in China, and were mainly smaller animals, but since then large relatives of *Tyrannosaurus rex* and the ostrich mimic *Ornithomimus* have both been found with feathers.

Also, we can predict that at a molecular level, dinosaurs and birds should be more closely related to each other than either is to any other group. Although ancient dinosaur DNA is only a thing of fiction, certain tissues such as collagen do preserve and can last millions of years.

When scientists first found these soft tissues preserved in dinosaurs, and compared them to birds and other reptiles, they found that, indeed, dinosaurs and birds were the closest match.

Although there once was some debate as to what the relatives of birds really were, there is now evidence from several directions – feathers, collagen, bone structures – that tie birds and dinosaurs together into a single group.

So the next time you sit down to a turkey dinner, take a second look at that bird, and remember that you’re really eating a dinosaur.