

A 'chicken from hell' dinosaur: Large feathered dinosaur species discovered in North America

March 19 2014



Anzu wyliei -- a bird-like dinosaur nicknamed the "chicken from hell" that roamed the Dakotas 66 million years ago -- appears in its natural environment in this artist's depiction. Discovery and description of the new dinosaur was announced by the University of Utah, Carnegie Museum of Natural History and Smithsonian Institution's National Museum of Natural History. Credit: Mark Klingler, Carnegie Museum of Natural History



Scientists from Carnegie and Smithsonian museums and the University of Utah today unveiled the discovery, naming and description of a sharp-clawed, 500-pound, bird-like dinosaur that roamed the Dakotas with *T. rex* 66 million years ago and looked like an 11 ½-foot-long "chicken from hell."

"It was a giant raptor, but with a chicken-like head and presumably feathers. The animal stood about 10 feet tall, so it would be scary as well as absurd to encounter," says University of Utah biology postdoctoral fellow Emma Schachner, a co-author of a new study of the dinosaur. It was published online today in *PLOS ONE*, a journal of the Public Library of Science.

The study's lead author, Matt Lamanna of the Carnegie Museum of Natural History in Pittsburgh, says: "We jokingly call this thing the 'chicken from hell,' and I think that's pretty appropriate."

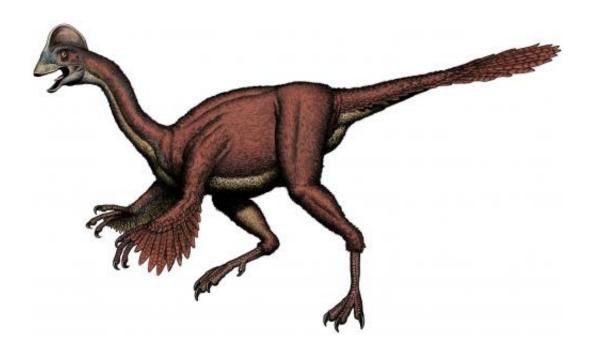
The beaked dinosaur's formal name is *Anzu wyliei – Anzu* after a bird-like demon in Mesopotamian mythology, and *wyliei* after a boy named Wylie, the dinosaur-loving grandson of a Carnegie Museums of Pittsburgh trustee.

Three partial skeletons of the dinosaur – almost making up a full skeleton – were excavated from the uppermost level of the Hell Creek rock formation in North and South Dakota – a formation known for abundant fossils of *Tyrannosaurus rex* and *Triceratops*. The new dinosaur was 11 ½ feet long, almost 5 feet tall at the hip and weighed an estimated 440 to 660 pounds. Its full cast is on display at the Carnegie Museum.

Schachner and Lamanna were joined in the new study and description of three specimens by Hans-Dieter Sues and Tyler Lyson of the Smithsonian Institution's National Museum of Natural History in



Washington.



With its head crest and presumably feathered forelegs, the newly discovered and described dinosaur Anzu wyliei was nicknamed the "chicken from hell" by its discoverers at the Carnegie Museum of Natural History, Smithsonian Institution's National Museum of Natural History and University of Utah. Credit: Courtesy Bob Walters

"I am really excited about this discovery because Anzu is the largest oviraptorosaur found in North America," she says. "Oviraptorosaurs are a group of dinosaurs that are closely related to birds and often have strange, cassowary-like crests on their heads." (The cassowary is a flightless bird in New Guinea and Australia related to emus and ostriches.)

Anzu is also "one of the youngest oviraptorosaurs known, meaning it lived very close to the <u>dinosaur extinction</u> event" blamed on an asteroid



striking Earth 65 million years ago, Schachner says.

The researchers believe *Anzu*, with large sharp claws, was an omnivore, eating vegetation, small animals and perhaps eggs while living on a wet floodplain. The dinosaur apparently got into some scrapes.



This is the skeleton and selected bones of the new oviraptorosaurian dinosaur species *Anzu wyliei* as presented in the paper by Matthew Lamanna and colleagues published in the scientific journal *PLOS ONE*. Credit: The skeleton illustration was done by Scott Hartman [skeletaldrawing.com] and the individual bones by Mark A. Klingler [Carnegie Museum of Natural History].)

"Two of the specimens display evidence of pathology," Schachner says.

"One appears to have a broken and healed rib, and the other has
evidence of some sort of trauma to a toe."



Having a nearly complete skeleton of *Anzu wyliei* sheds light on a category of oviraptorosaur theropod dinosaurs named caenagnathids, which have been known for a century, but only from limited fossil evidence.



This is a mounted replica skeleton of the new oviraptorosaurian dinosaur species *Anzu wyliei* on display in the Dinosaurs in Their Time exhibition at Carnegie Museum of Natural History, Pittsburgh, Pa., USA. Credit: Carnegie Museum of Natural History.

Like many "new" dinosaurs, *Anzu wyliei* fossils were discovered some years ago, and it took more time for researchers to study the fossils and write and publish a formal scientific description. As a graduate student at the University of Pennsylvania, Schachner helped Lyson excavate the least complete specimen – six bones from the neck, forelimbs and



shoulder – in North Dakota. The Carnegie Museum obtained the other specimens.



Emma Schachner, a postdoctoral fellow in biology at the University of Utah, worked with researchers from the Carnegie Museum of Natural History and the Smithsonian's National Museum of Natural History to publish a study unveiling the discovery, name and description of a 66-million-year-old bird-like, beaked, head-crested 500-pound dinosaur species, *Anzu wyliei*, which the researchers nicknamed the "chicken from hell." Schachner recently has studied the respiratory systems of lizards and alligators, like the one she is holding here. Credit: Bob Cieri, University of Utah

At a scientific meeting in 2005 Lamanna, Lyson and Schachner realized



they had fossils of the same new species of dinosaur. They soon began collaborating on the new study and asked Sues to join them because he was an expert on this type of dinosaur, Schachner says.

"It took years since all of us had busy schedules, and I moved to Utah in 2010 to work on reptile respiratory evolution," she says.

The study's four authors finally met for a week at the Carnegie Museum to work on the dinosaur together. Among other tasks, Schachner illustrated and photographed some of the bones.

She says the process was "really exciting. Naming a dinosaur is one of those things I've wanted to be involved in since I was a kid."

More information: Lamanna MC, Sues H-D, Schachner ER, Lyson TR (2014) A New Large-Bodied Oviraptorosaurian Theropod Dinosaur from the Latest Cretaceous of Western North America. PLoS ONE 9(3): e92022. doi:10.1371/journal.pone.0092022. dx.plos.org/10.1371/journal.pone.0092022

Provided by University of Utah

Citation: A 'chicken from hell' dinosaur: Large feathered dinosaur species discovered in North America (2014, March 19) retrieved 28 April 2024 from https://phys.org/news/2014-03-chicken-hell-dinosaur-large-feathered.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.