

Early bird winds back the avian clock

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This image obtained on May 5, 2015 courtesy of the Institute of Vertebrate Paleontology and Paleoanthropology in Beijing, shows a computer generated image of an Ornithuromorph, a wading bird from the Early Cretaceous period in China

Modern birds may have evolved six million years earlier than thought, said Chinese palaeontologists Wednesday after analyzing the fossil remains of a previously unknown prehistoric relative.

The [extinct species](#), of which two fossils were discovered in China's northeastern Hebei province about two years ago, was the earliest known

member of the Ornithuromorpha branch that also gave us Neornithes, or modern birds.

"The new fossil represents the oldest record (about 130.7 million years ago) of Ornithuromorpha," study co-author Wang Min of the Chinese Academy of Sciences told AFP by email.

"It pushed back the origination date of Ornithuromorpha by at least five million years" and the divergence of modern birds by about the same margin.

The previous oldest known example of Ornithuromorpha lived about 125 million years ago.

According to an artist's impression, the new bird, dubbed *Archaeornithura meemannae*, shared many features with its modern cousins, apart from tiny, sharp claws on its wings.

It stood about 15 centimetres (six inches) tall on two legs that had no feathers—suggesting it may have been a wader from a lake shore environment.

The fossils were not complete enough to determine whether the creature had teeth—a common feature of birds from the Early Cretaceous period, a sub-division of the Mesozoic era.

Like some [modern birds](#), it may have used gastroliths, or stomach stones, to break down hard foods like seeds, and it was likely a plant-eater, said Wang.

In the artist's recreation, it sports a striking, purple feather crown.

Ornithuromorpha are believed to have comprised about half of bird

species that lived during the Mesozoic era, which lasted from about 252 million to 66 million years ago. Some evolved into living birds.

Other Mesozoic groups like Enantiornithes, which had teeth and clawed wings, are not thought to have left any living descendents.

Mesozoic bird fossils are rare, and very little is known about the early evolutionary history of birds.

The earliest known relative of [birds](#) is thought to be Archaeopteryx, considered a transitional species from non-avian dinosaurs with feathers which lived about 150 million years ago.

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