SCIENCE & TECHNOLOGY

Scientists: Ancient Creature Grew Quicker Than Expected

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Long before the time of the dinosaurs, an unusual creature called Whatcheeria was a top **predator**.

New research is providing a deeper understanding of Whatcheeria, which lived around 330 million years ago during a time known as the Carboniferous period.

After a close examination of the creature's ancient bones, scientists were surprised to find that Whatcheeria did not grow slowly and continuously like modern **reptiles** and **amphibians**. Instead, the creature grew quickly while young, like birds and mammals.

Whatcheeria was an early tetrapod, as the first land animals with backbones were known. These were the ancestors of today's land vertebrates – animals such as amphibians, reptiles, birds and mammals.

Spending much of its time in lakes and rivers, Whatcheeria reached about 2 meters long, making it the biggest predator at the time.

Megan Whitney of Loyola University in Chicago was the lead writer of the study that recently appeared in Communications Biology. She said, "Whatcheeria was not a slow... oversized amphibian." It was, she added, an active predator that grew quickly in the early part of its life.

Whatcheeria's name comes from the nearly 400 fossils found near the small Iowa town of What Cheer. The creature had a large skull filled with teeth as well as large **limbs**. Whitney said it was the top "predator of its environment that included different kinds of ancient fish and sharks as well as other, smaller early tetrapods."

Unlike many early tetrapods, bones of Whatcheeria have been discovered from different points in the animal's life. "Bones act as storybooks, recording information about animals while they're alive. And one of the important pieces of information that is recorded in bone is how fast the animal is growing," Whitney said.

A careful study of pieces of thigh bones from nine Whatcheeria individuals showed bone growth over time.

"A key finding of this research is that we identified fast-growing bone in **juveniles** of Whatcheeria. This is important because it indicates that the growth **strategy** of this animal was similar to ours: grow fast while young and then slow down growth as you become an adult," Whitney said.

She added that this kind of growth has long been considered special to warm-blooded animals like mammals and birds. However, Whitney added, “what we were able to show here is that this strategy was used even at the earliest **stages** of our evolutionary history."

As a predator, Whitney said, Whatcheeria could have used a number “of hunting techniques.” Researchers were not sure how much time the creature spent hunting on land or water. But the study showed that the animal could walk on land.

Ben Otoo is a co-writer of the study. He added that “Whatcheeria is a really nice demonstration that **evolution** isn't **linear**."

I’m John Russell.

Will Dunham reported on this story for Reuters. John Russell adapted it for VOA Learning English.

Words in This Story

predator -- *n.* an animal that lives by killing and eating other animals : an animal that preys on other animals

reptile -- *n.* an animal (such as a snake, lizard, turtle, or alligator) that has cold blood, that lays eggs, and that has a body covered with scales or hard parts

amphibian – *n.* an animal (such as a frog or toad) that can live both on land and in water

limb -- *n.* a leg or arm

juvenile – *n.* not yet fully grown

strategy – *n.* a method for achieving a particular goal usually over a long period of time

stage -- *n.* a particular point or period in the growth or development of something

evolutionary -- *adj.* describes a process of slow change and development

linear – *adj. :* going from one thing to the next thing in a direct and logical way

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