

Science

'Highly unusual' creature locked in amber for 99MILLION years is confirmed to be a LIZARD

todayuknews June 15, 2021 5 minutes read



© Stephanie Abramowicz/Peretti Museum Foundation/Current Biology

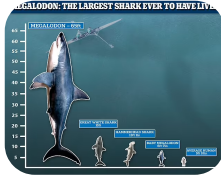
Scientists have identified a new species of the 'really weird' creature previously misclassified as the world's smallest dinosaur, reinforcing the belief it was actually a lizard.

The 99-million-year-old specimen — which is stunningly preserved in amber — is in the same genus as 'Oculudentavis khaungraae', whose

original description as a hummingbird-sized dinosaur was retracted last year.

Both fossils were discovered in the same area of Myanmar.

Related Articles



Giant Megalodon sharks were even BIGGER than previously thought and measured 'up to 65 FEET'

June 17, 2021



\$2 million RV comes with hardwood floors, Miele appliances, and room for a Ferrari

August 20, 2021

Discovery: Scientists have identified a new species of the 'really weird' creature previously misclassified as the world's smallest dinosaur, reinforcing the belief it was actually a lizard. *Oculudentavis naga* is pictured in an artist's reconstruction following the analysis

HOW IS A DINOSAUR DISTINGUISHED FROM OTHER REPTILES?

Dinosaurs had an upright stance which allowed them to run faster and for longer than other reptiles the same size.

This was because of their straight back legs which were positioned directly under their bodies.

By comparison, other reptiles had legs that sprawl out to the side like today's lizards and crocodiles.

Their thigh bones are almost parallel to the ground, meaning they walk and run with a side-to-side motion.

Dinosaur skulls also had distinctive openings behind the eyes and in the snout and lower jaw.

Meanwhile, their teeth fitted into sockets in the jaw in a peg-like fashion, whereas in lizards they are attached directly to the jawbone

by ligaments.

Source: Natural History Museum

'The specimen puzzled all of us at first because if it was a lizard, it was a highly unusual one,' said Arnau Bolet, of Barcelona's Institut Català de Paleontologia Miquel Crusafont.

'We concluded that both specimens are similar enough to belong to the same genus, *Oculudentavis*, but a number of differences suggest that they represent separate species.'

The new species has been named '*Oculudentavis naga*' in honour of the Naga people of India and Myanmar. Its confirmation as a lizard followed the use of CT scans to analyse the fossil skull and partial skeleton.

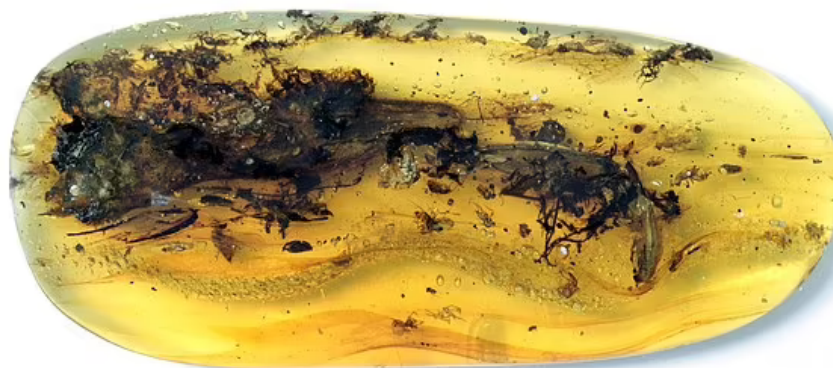
Major clues included the presence of scales, teeth attached directly to its jawbone — rather than nestled in sockets, as dinosaur teeth were — lizard-like eye structures and shoulder bones, and a hockey stick-shaped skull bone universally shared among scaled reptiles, also known as squamates.

Researchers also determined both species' skulls had deformed during preservation.

Oculudentavis khaungraae's snout was squeezed into a narrower, more beak-like profile while *naga*'s braincase — the part of the skull that encloses the brain — was compressed.

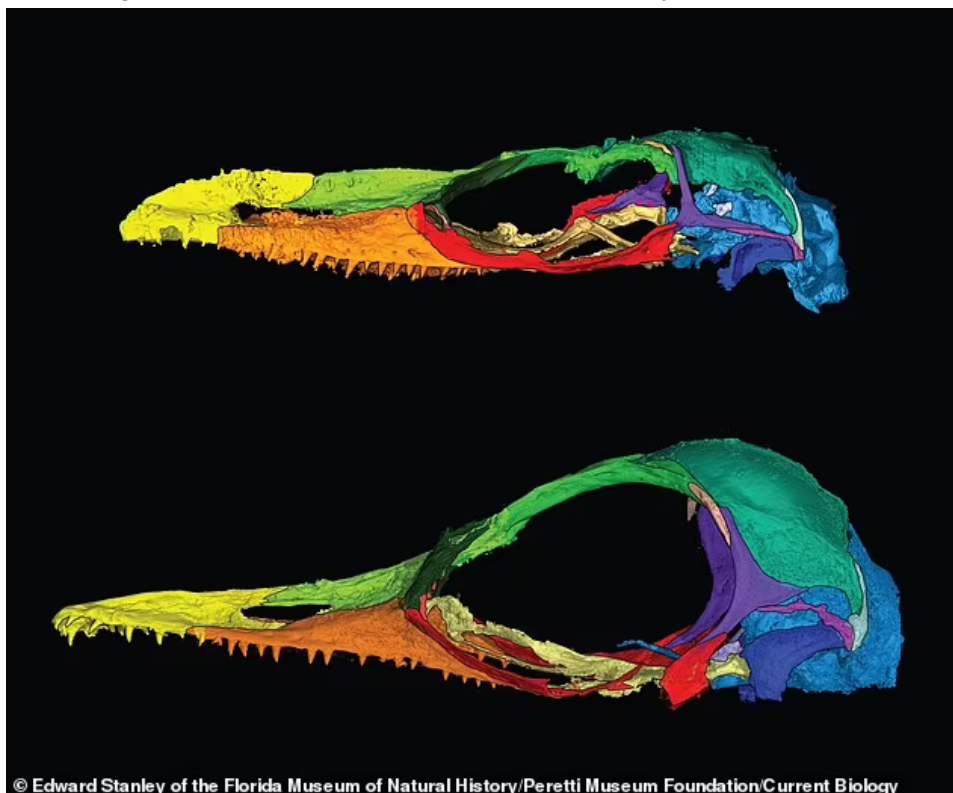
The distortions highlighted bird-like features in one skull and lizard-like features in the other, said study co-author Edward Stanley, director of the Florida Museum of Natural History's Digital Discovery and Dissemination Laboratory.

'Imagine taking a lizard and pinching its nose into a triangular shape,' Stanley said. 'It would look a lot more like a bird.'



© Adolf Peretti/Peretti Museum Foundation/Current Biology

Stuck in time: The 99-million-year-old specimen — which is stunningly preserved in amber (pictured) — is in the same genus as 'Oculudentavis khaungraae', whose original description as a hummingbird-sized dinosaur was retracted last year



© Edward Stanley of the Florida Museum of Natural History/Peretti Museum Foundation/Current Biology

Comparison: The animal's confirmation as a lizard followed the use of CT scans to analyse the fossils. *Oculudentavis naga* (top) is in the same genus as *Oculudentavis khaungraae* (bottom)

Oculudentavis' bird-like skull proportions, however, do not indicate that it was related to birds, according to fellow co-author Susan Evans, professor of vertebrate morphology and paleontology at University College London.

'Despite presenting a vaulted cranium and a long and tapering snout, it does not present meaningful physical characters that can be used to sustain a close relationship to birds, and all of its features indicate that it is a lizard,' she said.

While the two species' skulls do not closely resemble one another at first glance, their shared characteristics became clearer as the researchers digitally isolated each bone and compared them with each other.

'We concluded that both specimens are similar enough to belong to the same genus, *Oculudentavis*, but a number of differences suggest that they represent separate species,' Bolet said.

However, the researchers came up short in their attempts to find *Oculudentavis*' exact position in the lizard family tree.

'It's a really weird animal. It's unlike any other lizard we have today,' said herpetologist Juan Diego Daza. 'We think it represents a group of squamates we were not aware of.'

The Cretaceous period, 145 to 66 million years ago, gave rise to many lizard and snake groups on the planet today, but tracing fossils from this era to their closest living relatives can be difficult, Daza added.

'We estimate that many lizards originated during this time, but they still hadn't evolved their modern appearance,' he said.

'That's why they can trick us. They may have characteristics of this group or that one, but in reality, they don't match perfectly.'

The study is published in the journal **Current Biology**.

WHAT FOSSILS HAVE BEEN TRAPPED IN BURMESE AMBER?

Often used in jewelry, Amber is fossilized tree resin—the oldest of which dates back more than 300 million years.

In recent years the Hukawng Valley in northern Myanmar, formerly Burma, has yielded numerous finds.

In January 2017, researchers discovered a 100-million-year-old insect preserved in amber which bore a passing resemblance to ET.

Its features, including triangular head and bulging eyes, were so unique that researchers placed it into a new scientific order, Aethiocarenodea.

The eyes on the side of its head would have given the insect the ability to see at almost 180 degrees simply by turning its head.

In June 2017, researchers revealed a stunning hatchling trapped in amber, which they believe was just a few days old when it fell into a pool of sap oozing from a conifer tree in Myanmar.

The incredible find showed the head, neck, wing, tail and feet of a now extinct bird which lived at the time of the dinosaurs, 100 million years ago, in unprecedented detail.

Researchers nicknamed the young enantiornithine 'Belone,' after the Burmese name for the amber-hued Oriental skylark.

The hatchling belonged to a group of birds known as the 'opposite birds' that lived alongside the ancestors of modern birds.

Archaeologists say they were actually more diverse and successful – until they died out with the dinosaurs 66 million years ago.

They had major differences from today's birds, and their shoulders and feet had grown quite differently to those of modern birds.

In December 2017, experts discovered incredible ancient fossils of a tick grasping a dinosaur feather and another – dubbed 'Dracula's terrible tick' – swollen after gorging on blood.

The first evidence that dinosaurs had bloodsucking parasites living on them was found preserved in 99 million-year-old Burmese amber.

The newly-discovered tick dates from the Cretaceous period of 145 to 66 million years ago.

In 2021, researchers announced they had discovered a new species of land snail from 99 million years ago preserved in amber moments after giving birth.

The gastropod's 'marshmallow-like' soft body of *Cretatortulosa gignens* was preserved in the sap, as were her five offspring.

The same week, scientists in Myanmar announced another the discovery of a new species of ancient lizard trapped in amber at roughly the same time.

'*Oculudentavis naga*' was confirmed as a lizard following CT scans analyzing its skull and partial skeleton.

Most Related Links :

[todayuknews](#) [Governmental News](#) [Finance News](#) [news](#)

Source link

Tags

[british science society](#)

[british science week](#)

[dailymail](#)

[sciencetech](#)

[today uk news](#)

[todayuknews](#)

[uk science and innovation network](#)