



Realização:



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UNIVERSIDADE FEDERAL DO PIAUÍ – EDITAL 20/2017

EXAME DE PROFICIÊNCIA DE LEITURA EM LÍNGUA ESTRANGEIRA

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HORÁRIO: das 8 às 11 horas

CADERNO DE PROVA

Idioma:

INGLÊS

Área de Pesquisa:

**(1) CIÊNCIAS BIOLÓGICAS, CIÊNCIAS
AGRÁRIAS E CIÊNCIAS DA SAÚDE**

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Hundreds of Pterosaur Eggs Found in Record-Breaking Fossil Haul ***The well-preserved eggs illuminate how the winged reptiles bred—and how their babies may have behaved.***

By **Michael Greshko** – Published on November 30, 2017

In a world first, paleontologists working in northwestern China have discovered a cache of hundreds of ancient eggs laid by pterosaurs, the flying reptiles that lived alongside the dinosaurs. Some of the eggs contain the most detailed pterosaur embryos ever found.

Although scientists have studied pterosaurs for more than two centuries, no eggs were discovered until the early 2000s, and fewer than a dozen turned up in the intervening years. The new haul, discovered by Chinese Academy of Sciences paleontologist Xiaolin Wang, includes at least 215—and perhaps as many as 300—stunningly preserved pterosaur eggs.

His team also found 16 embryos within the eggs, and they suspect that more remain locked away in the stone. Wang and his colleagues announced the finds today in *Science*.

“We get a lot of hyperbole in paleontology, but it’s pretty phenomenal,” says David Hone, a researcher at Queen Mary, University of London who wasn’t involved with the study. “The science is at the absolute start, but the mere raw material is game-changing, potentially.”

The Perfect Storms

The newfound eggs belong to *Hamipterus tianshanensis*, a previously known species of pterosaur that lived in northwestern China more than a hundred million years ago. With a maximum wingspan of 10 feet and a probable taste for fish, these animals may have resembled today’s herons, living near waters that crisscrossed inland terrain.

“The site is in the Gobi desert, and there are strong winds, a lot of sand, with few plants and animals,” says study coauthor Shunxing Jiang of the Chinese Academy of Sciences. “However, when *Hamipterus* lived, the environment [was] much better—we call it Pterosaur Eden.”

Wang’s team suggests that an ancient nesting site may have flooded repeatedly. This would imply that, like modern birds and turtles, *Hamipterus* used the same nesting sites over and over. What’s more, the sheer number of eggs suggests that *Hamipterus* bred in large groups like some living birds.

Leaving the nest

“We could look at the bones and see what features characterize an embryo, a hatchling, and a young individual when he’s matured,” says coauthor Juliana Sayão, a bone-structure expert at the Federal University of Rio de Janeiro. “This is a one-of-a-kind record for pterosaurs—for the first time, we have the whole spectrum.”

Further studies should help flesh out even more of the details about how these winged beasts reproduced. The shells resemble living turtles’ leathery eggs, which means that *Hamipterus* probably buried its eggs to protect them—but where or how is unknown. What’s more, we don’t yet know how many eggs a single female *Hamipterus* laid or the size of its breeding groups.

Given the incomplete fossil record, it’s also possible the proposed *Hamipterus* growth sequence will need to be adjusted. Perhaps the largest embryos the team found weren’t quite ready to hatch, which would throw off the developmental time line. More fossils would help, and Wang’s team remains on the hunt in northwestern China.

(Adapted from <https://news.nationalgeographic.com/2017/11/largest-pterosaurs-eggs-discovered-embryos-fossils-paleontology-science/>)

