



Newly discovered: Fossil giant turtle named after Stephen King novel character

With a shell length of around 180 centimeters, the newly described species is one of the world's largest freshwater turtles

Tübingen, March 13, 2024. An international research team led by Dr. Gabriel S. Ferreira from the Senckenberg Center for Human Evolution and Palaeoenvironment at the University of Tübingen has described a new species of giant turtle from the late Pleistocene. *Peltocephalus maturin* is between 40,000 and 9,000 years old and comes from the Brazilian Amazon. With a shell length of around 180 centimeters, the species is one of the largest known freshwater turtles in the world. The armored reptile was named after the giant turtle "Maturin", a fictional character by best-selling author Stephen King.

With a maximum shell length of 140 centimeters, the Asian narrow-headed softshell turtle (*Chitra chitra*) together with the approximately 110-centimeter-long South American river turtle (*Podocnemis expansa*) is one of the largest freshwater turtles alive today. "In the past, we only know of a few turtles living in fresh waters that had a shell length of more than 150 centimeters," explains Dr. Gabriel S. Ferreira from the Senckenberg Center for Human Evolution and Palaeoenvironment at the University of Tübingen and continues: "Such large animals are most recently known primarily from the Miocene, the period around 23 to five million years ago."

Ferreira and an international team have now discovered a giant representative of this order of reptiles from the end of the Pleistocene period, around 40,000 to 9,000 years ago, and described it as a new species. The fossil remains – part of the turtle's lower jaw – were collected by gold miners at the "Taquaras" quarry in Porto Velho, Brazil. Based on various characteristics, the research team assumes a close relationship with the modern big-headed Amazon turtle (*Peltocephalus dumerilianus*) and an omnivorous diet. "We named the new species after the giant turtle 'Maturin', an overarching protagonist in the Stephen King multiverse. "Maturin is responsible for the creation of the universe in King's novels and films," explains the Tübingen scientist.

The researchers' analyses show that the turtle was an animal with a shell that was around 180 centimeters long. "This is very surprising because freshwater turtles – in contrast to their

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Video clip



<https://youtu.be/BdJ8BrWITM>

Press Images



Visualization of the new discovered giant turtle *Peltocephalus maturin*.
Image: Júlia d'Oliveira

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terrestrial and marine relatives – rarely have such gigantic forms and the youngest giant fossils known to date come from Miocene deposits,” adds Ferreira.

The new find is the youngest known occurrence of giant freshwater turtles and suggests a coexistence of *Peltocephalus maturin* with early human inhabitants in the Amazon region. “People settled in the Amazon region around 12,600 years ago. We also know that large tortoises have been on the diet of hominins since the Paleolithic. Whether freshwater turtles, which are much more difficult to catch due to their agility, were also eaten by early humans and whether *Peltocephalus maturin* – together with the South American megafauna – fell victim to human expansion is still unclear. “Here we need more data from the Late Pleistocene and Early Holocene deposits of the Amazon Basin,” says Ferreira, giving an outlook on future work.

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The holotype of the newly discovered giant tortoise: a massive partial lower jaw. Photo: Senckenberg



First author Dr. Gabriel S. Ferreira (right) taking samples for the geochemical analyses. Photo: Senckenberg

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