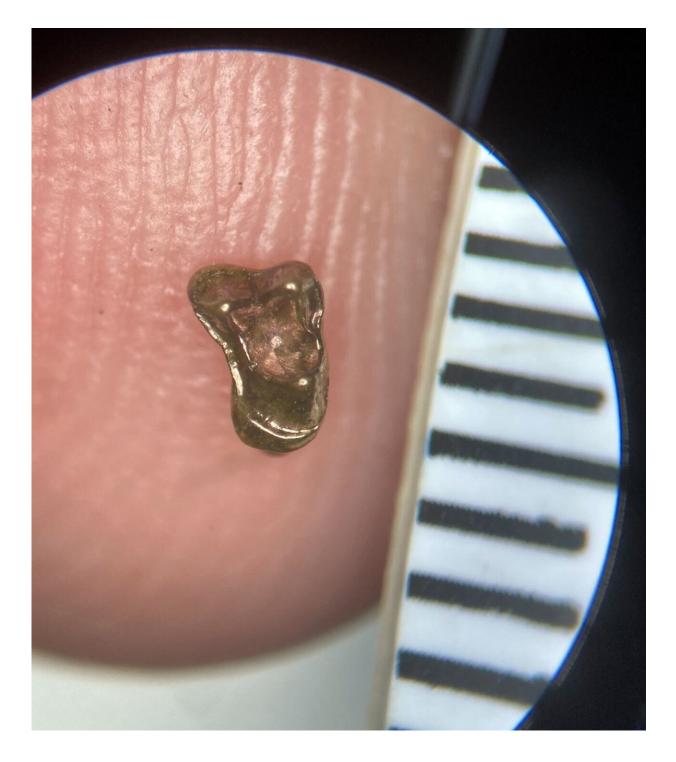


Ancient tooth suggests third kind of monkey made trip from Africa to South America millions of years ago

July 20 2023, by Bob Yirka





The tooth of Ashaninkacebus simpsoni (upper molar). Credit: N. S. Stutz

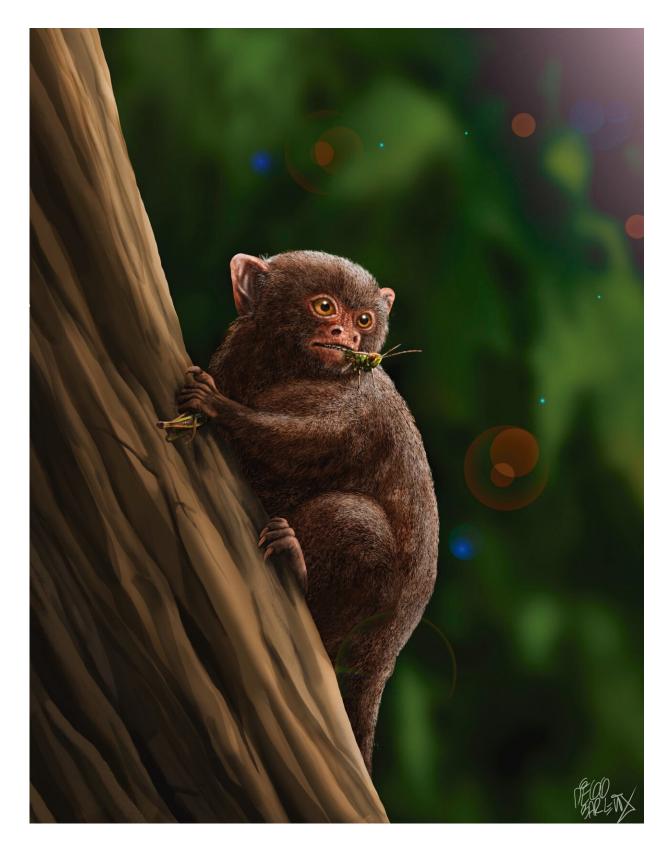


A team of paleontologists with members from France, Brazil and Argentina has found evidence of a third type of monkey crossing the Atlantic Ocean millions of years ago, making the trip from Africa to South America. In their paper published in *Proceedings of the National Academy of Sciences*, the group describes a tooth they found embedded in rock along the Juruá River in Amazonian, Brazil, and their theories about where its former owner might fit in the animal kingdom.

The tooth was a single molar with cusps that showed it was an extinct primate and also an eosimid (a theorized extinct family of primates). Study of the tooth suggested that it had come from a small species, likely about the size of a modern marmoset. It also likely dined in similar fashion to a marmoset on fruits and insects.

The team also found evidence suggesting that it was not a member of two other clades of monkeys that are known to have traversed the Atlantic Ocean from Africa to South America approximately 34 million years ago. That made it an unknown primate taxon, with a possible associated clade.





Artist's reconstruction of the primate Ashaninkacebus. Credit: Diego J. Barletta



and Jorge A Gonzalez.

The research team named the new taxon Ashaninkacebus simpsoni. Further testing showed the newly found tooth likely came from a monkey living during the transition period between the Eocene and the Oligocene.

To learn more about where the ancient monkey may have fit in with other monkeys in the <u>animal kingdom</u>, the team subjected its <u>tooth</u> to CT scanning and compared the scans with others made of other simian primates. They found similarities between A. simpsoni and <u>extinct</u> <u>species</u> that used to live in what is now South Asia. The team then conducted a <u>phylogenetic analysis</u>, comparing the new taxon with Old World anthropoids and monkeys now living in South America. They found that a member of the taxon, or perhaps more than one, likely made the trip across the ocean.





The tooth of Ashaninkacebus simpsoni (upper molar). Credit: A. M. Ribeiro and L. Kerber

Prior research has suggested such a trip could be made by a monkey riding a raft of vegetation blown across the ocean by a large storm. The finding of a new family of monkeys making their way across the ocean suggests it was likely more common than previously thought.





Paleontological expedition in August 2022 on the Rio Juruá, Acre (Brazilian Amazon). Credit: R. Ventura Santos

More information: Laurent Marivaux et al, An eosimiid primate of South Asian affinities in the Paleogene of Western Amazonia and the origin of New World monkeys, *Proceedings of the National Academy of Sciences* (2023). DOI: 10.1073/pnas.2301338120

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