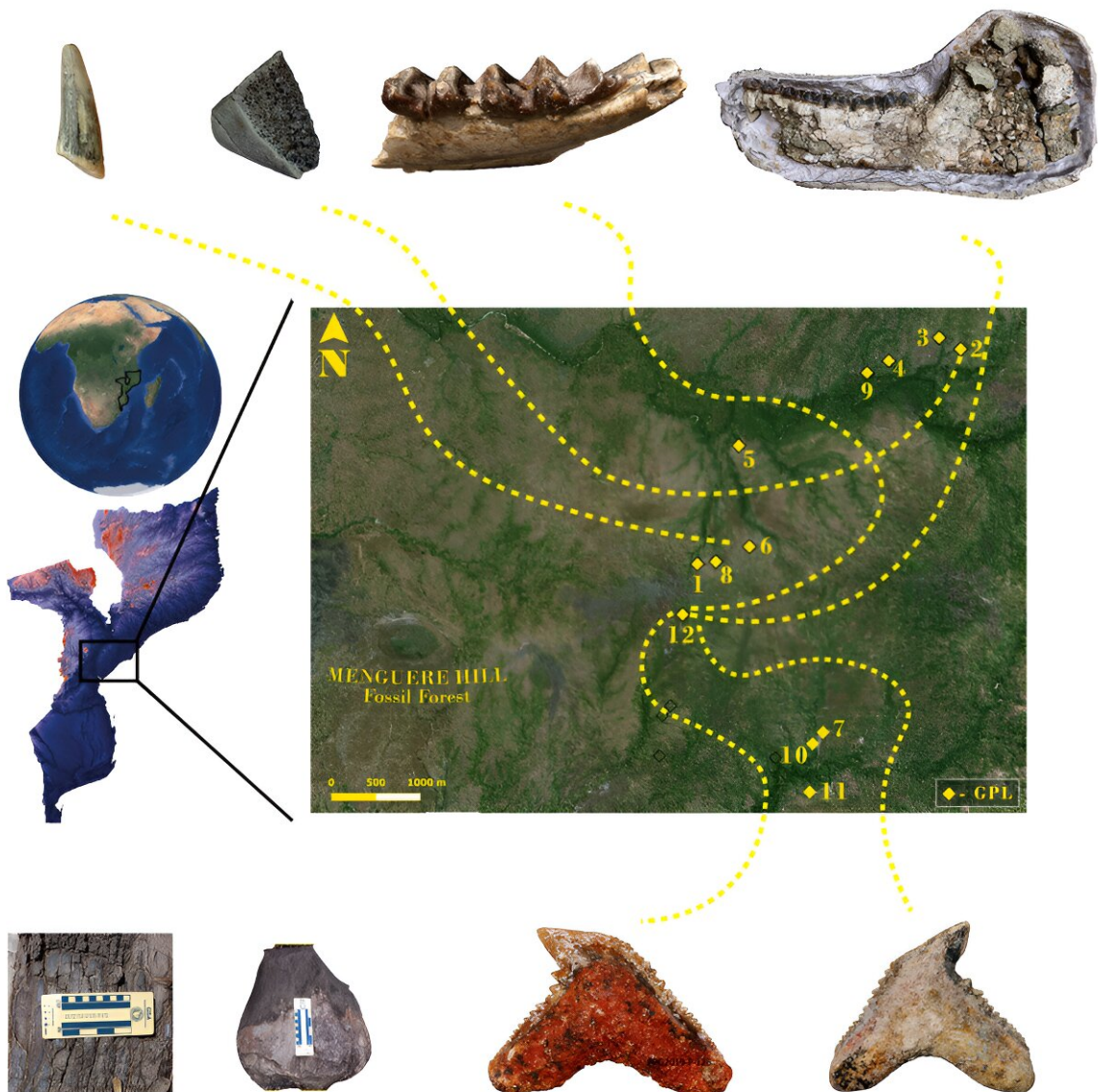


The first Miocene fossils from coastal woodlands in the southern East African Rift

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Graphical abstract. Credit: *iScience* (2023). DOI: 10.1016/j.isci.2023.107644

An international team, with participation by the Geochronology and Geology Program of the Centro Nacional de Investigación sobre la Evolución Humana (CENIEH), has published a paper in the journal *iScience* on the first Miocene mammal fossils found in East Africa, specifically, in the Gorongosa National Park (Mozambique), a coastal woodland setting fundamental to comprehending the evolution of the African ecosystems and how these may have had an impact in the evolution and adaptation of the hominin lineage.

This publication, one of whose authors is Mark Sier, an affiliate scientist at the CENIEH and a Marie Skłodowska-Curie (MSCA) fellows at Utrecht University (Netherlands), reports the first fossil teeth from the Miocene, the period between 5 and 23 million years ago, which is a key period for the origin of the African apes.

The analysis furnishes the first radiometric dates for the geological formation Mazamba, reconstructions of the paleovegetation in the [region](#) based on pedogenic carbonates and fossil woods, and the description of an abundant sample of fossils that includes marine vertebrates and invertebrates, reptiles, terrestrial mammals (among which is a new species of giant hyraxes weighing 124–153 kg), and fossil woods from coastal paleoenvironments.

"This study opens an entirely new vista on an African region that, until now, was paleontologically empty," says Sier, who is currently working on a project to investigate the influence of the orbital cycles on sediments in East Africa.

The present study is part of Paleo-Primate Project Gorongosa, an

international scientific collaboration led by Dr. Susana Carvalho from the University of Oxford, whose objective is to protect the biodiversity and ecosystems of Gorongosa and promote development of the local community.

Sier participated in the archaeological surveys of the national park, in the teaching activities at the field school for students from Mozambique and the University of Oxford, and in the geochronological study of the sites at the CENIEH laboratories.

More information: René Bobe et al, The first Miocene fossils from coastal woodlands in the southern East African Rift, *iScience* (2023).

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