

Ancient crocodile found in Peru sheds new light on their origin

May 23 2022, by Bob Yirka



Credit: Pixabay/CC0 Public Domain

A team of researchers at Universidad Peruana Cayetano Heredia, working with colleagues from the U.S. and France, has uncovered a prehistoric crocodile fossil in Peru. In their paper published in

Proceedings of the Royal Society B, the group describes their find, what they have learned about it and what it shows about the evolution of marine crocodiles.

Though there are two species of modern crocodiles that live in the [ocean](#), they are predominantly freshwater dwelling creatures. This feature, the researchers with this new effort note, makes it difficult to understand the evolution of the creatures from crocs that predominantly lived in the sea in the past. Also, prior research has suggested that crocodiles have been living in southeastern parts of the Pacific Ocean for approximately 14 million years. In this new effort, the researchers have been looking for evidence of early crocodiles in western parts of South America, most specifically, Peru. And as part of that effort, they have uncovered the partial remains of an ancient crocodile.

The crocodile fossil (a skull and jaw) was uncovered in East Pisco Basin, (in the Sacaco desert) in Peru in 2020. Since that time, the researchers have been studying its attributes and characteristics and have been seeking to find its place in the evolutionary history of crocodiles. Their testing has shown that the fossil is from approximately 7 million years ago. They have named it *Sacacosuchus cordovai* and have concluded that when alive, it would have been approximately four meters long.

The Sacaco site has been under study for a number of years: Prior fossil discoveries have shown that millions of years ago, the entire area was under the sea. Finding the crocodile fossil in the area suggests it was a saltwater creature, a finding that helps trace the evolution of crocodiles in South America.

The researchers suggest crocodiles made their way to South America by crossing the Atlantic Ocean. From there, some may have followed the coastline to arrive at what is now Peru. They further suggest that such marine [crocodiles](#) would have all had long thin faces and that there were

two main types: one that lived almost exclusively on fish, and another that had a more varied diet.

More information: Rodolfo Salas-Gismondi et al, Miocene fossils from the southeastern Pacific shed light on the last radiation of marine crocodylians, *Proceedings of the Royal Society B: Biological Sciences* (2022). [DOI: 10.1098/rspb.2022.0380](https://doi.org/10.1098/rspb.2022.0380)

© 2022 Science X Network

Citation: Ancient crocodile found in Peru sheds new light on their origin (2022, May 23)
retrieved 28 April 2024 from <https://phys.org/news/2022-05-ancient-crocodile-peru.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.