

Animal bones found at bottom of Hoyo Negro shed light on the Great American Biotic Interchange

May 1 2019, by Bob Yirka



Diver with Protocyon jaw and vertebra. Credit: © Roberto Chavez-Arce

A team of researchers from the U.S. and Mexico has found bone skeletons at the bottom of the Hoyo Negro cave that show that some



animals thought to have existed only in South America also existed in Mexico. In their paper published in the journal *Biology Letters*, the group describes their recovery and study of multiple skeletons retrieved from the floor of the Hoyo Negro cave and what they learned from them.

The Hoyo Negro <u>cave</u> is located on the eastern coast of the Yucatán Peninsula in Mexico. Back in 2007, researchers discovered that the cave was a treasure trove of bones from ancient animals dating back as far as 30,000 years ago—they also found two human skeletons. Thousands of years ago, the cave was completely dry, and it had an opening at the top through which unsuspecting animals fell 200 feet to their deaths. Since that time, melting glaciers filled part of the cave with water, which served to preserve the bones. Over the past 12 years, researchers have unearthed a host of skeletons. In this new effort, the researchers report on a trove of skeletons they recovered and studied.

The researchers report that they found one human skeleton among the bones, which was dated to approximately 12,000 years ago, providing evidence that humans existed during the time of the ground sloths. The other <u>human skeleton</u> found in 2007 dated back to approximately 13,000 years ago, and is one of the oldest human skeletons ever found in the Western hemisphere.

Also among the skeletons were the bones of a creature called Protocyon troglodytes, which resembled a wolf, and a short-faced bear. The bear <u>skeleton</u> was notable because it represents a species that is believed to be the largest ever to roam the Earth. The wolf and bear were also notable because both are believed never to have made it out of South America as part of the Great American Biotic Interchange–the time period after a <u>land bridge</u> joined North and South America (approximately 3 million years ago), allowing animals from both sides passage to the other.





Diver collecting Arctotherium cranium. Credit: © Roberto Chavez-Arce





Diver recovering Arctotherium cranium. Credit: © Roberto Chavez-Arce





Diver with Arctotherium cranium. Credit: © Roberto Chavez-Arce

More information: Blaine W. Schubert et al. Yucatán carnivorans shed light on the Great American Biotic Interchange, *Biology Letters* (2019). DOI: 10.1098/rsbl.2019.0148

© 2019 Science X Network

Citation: Animal bones found at bottom of Hoyo Negro shed light on the Great American Biotic Interchange (2019, May 1) retrieved 28 April 2024 from <u>https://phys.org/news/2019-05-animal-bones-bottom-hoyo-negro.html</u>

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.