

Giant extinct snake may -- or may not -- shed light on ancient climate

August 3 2009, BY CHRISTINE BLACKMAN

(PhysOrg.com) -- Snakes coil up when they sense danger. Some snakes curl up in order to spring into action and strike. Snakes may also coil to preserve body heat, and this warming behavior could affect our understanding of ancient climates.

Scientists from the University of Toronto discovered the skeleton of a giant, extinct snake last year and used its size and metabolic rate to estimate mean annual temperature of ancient times.

The 40-foot-long snake would have weighed over two thousand pounds, making it the world's largest snake, according to the Toronto scientists.

For such a giant snake to stay alive, the mean [annual temperature](#) of the Paleocene epoch of 58 to 60 million years ago had to have been four to eight degrees Celsius higher than previously estimated, the researchers concluded.

But Mark Denny, professor in marine sciences at Stanford has a different view. After running some tests with artificial metal snakes in a [wind tunnel](#), he found that the huge creatures could have conserved heat by coiling up—enough heat to live without the temperature increase inferred by the Toronto researchers.

What it all comes down to is whether or not snakes of that size coiled up or behaved the same as smaller snakes, Denny said.

“We suggest that the huge ancient snake was big enough to open up an avenue of behavioral regulation that’s not there for smaller snakes, in which case the giant [snake](#) becomes an unreliable paleo-thermometer,” Denny said.

Denny’s findings will be published as a letter in *Nature*, where the University of Toronto research paper appeared. Brent Lockwood, a graduate student in biology, and George Somero, a professor in marine sciences, also participated in the project at Stanford’s Hopkins Marine Station.

Provided by Stanford University ([news](#) : [web](#))

Citation: Giant extinct snake may -- or may not -- shed light on ancient climate (2009, August 3) retrieved 26 April 2024 from <https://phys.org/news/2009-08-giant-extinct-snake-ancient.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.