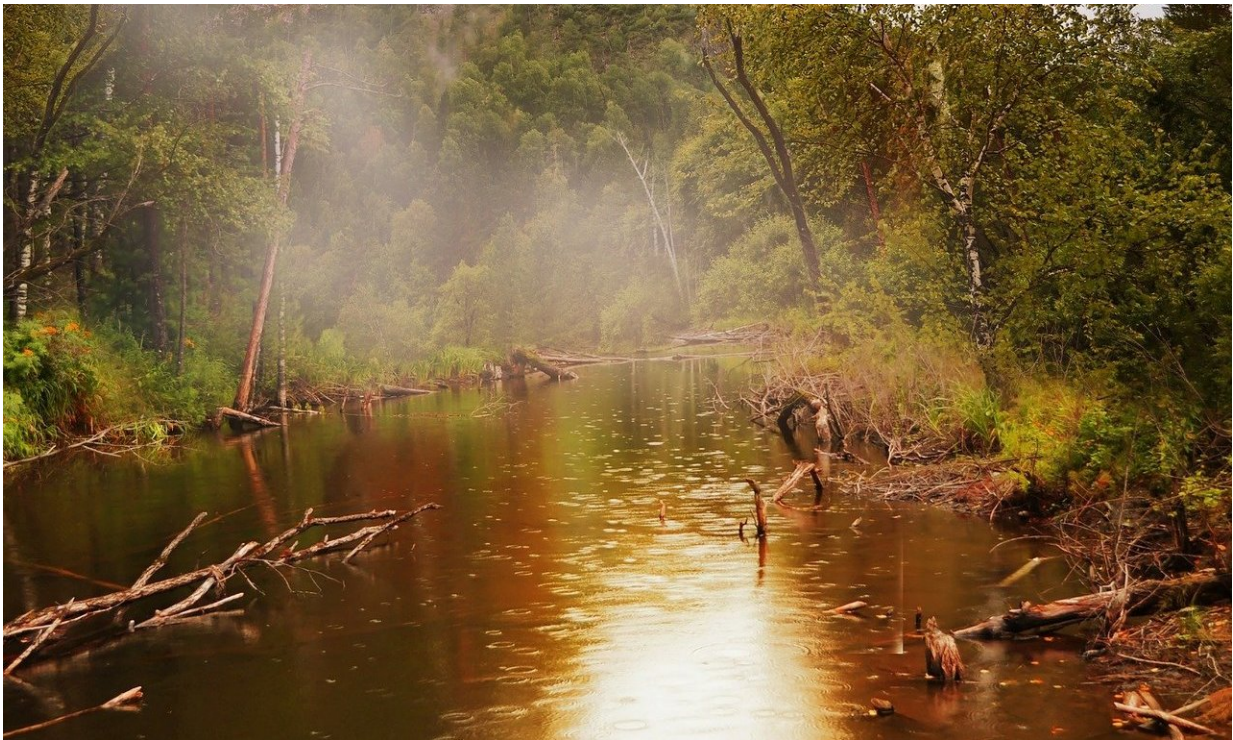


A possible explanation for why pygmy people in the jungle are so short

November 7 2018, by Bob Yirka



Credit: CC0 Public Domain

A team of researchers from the Institute for Advanced Study in Toulouse, Harvard University, the University of Exeter and the University of California has come up with a new theory to explain the short stature of pygmies living in the jungle. In their paper published in *Proceedings of the Royal Society B*, the group suggests that shorter steps

taken by shorter people are an evolutionary advantage in the jungle.

Scientists have long been stumped by the [short stature](#) of pygmy people. Most pygmy people have developed shorter stature while living in a tropical region, such as in Malaysia or the Amazon jungle. But what about living in the jungle causes nature to select for shorter stature? Some have suggested a smaller body dissipates heat better, or can better deal with high humidity levels. But the truth is that no one knows the real reason. In this new effort, the researchers set out to find the answer. They first came up with a hypothesis, and then carried out some experiments to test their ideas.

The hypothesis was that it is easier for shorter people to walk around in the dense jungle—taller people with longer strides find it more difficult to get around in dense jungle forests. To test this idea, the researchers built models meant to mimic the behavior of people of different sizes making their way through a jungle. They then compared what they found with real human beings—watching and recording as both taller people and pygmy people made their way through the jungles of the Batek of Peninsular Malaysia and the Tsimane in Bolivia.

The researchers report that both their models and their observations of people walking in jungle environments agreed with their hypothesis—the shorter [pygmy](#) people were far better at making their way through the [jungle](#), and it appeared that shorter step length was the reason. The shorter steps allowed the Pygmy people to move much more quickly through the dense underbrush, making foraging much more efficient. The researchers suggest their results offer the first evidence of the shorter stature of the Pygmy people being a phenotype with adaptive benefits.

More information: Vivek V. Venkataraman et al. Locomotor constraints favour the evolution of the human pygmy phenotype in

tropical rainforests, *Proceedings of the Royal Society B: Biological Sciences* (2018). [DOI: 10.1098/rspb.2018.1492](https://doi.org/10.1098/rspb.2018.1492)

© 2018 Science X Network

Citation: A possible explanation for why pygmy people in the jungle are so short (2018, November 7) retrieved 27 April 2024 from <https://phys.org/news/2018-11-explanation-pygmy-people-jungle-short.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.