TAKING A TREE SAMPLE IN THE BRAZILIAN RAIN FOREST

Tropical rainforests are home to about two thirds of all known animal and plant species. It is beyond debate that they are essential for the climate of the entire Earth. However, the fact that they can also tell us a great deal about the cultural aspects of past times has been largely ignored until now.

The giant, centuries-old tropical trees are living time capsules for those who know how to interpret them. During their lifespans, they absorb carbon from the air as well as water and minerals from the soil, incorporating them into their wood. Researchers at the Max Planck Institutes for the Science of Human History, Developmental Biology, and Biogeochemistry combine modern analytical methods such as dendrochronology, radiocarbon dating, stable isotope analysis, and gene analysis to reconstruct changes in the growth conditions of trees. In this image, a relevant sample is being taken from a several hundred-year-old Brazil nut tree in the Tefé National Park in Brazil.

The researchers' studies also make it possible to understand the effects of human activities on the forest ecosystem. Contrary to popular opinion, the peoples of the rain forest have been cultivating this region from 10,000 years ago. Far-reaching events such as wars and colonialism have left their marks on the tree archive just as deeply as the industrial extraction of rubber and precious woods for worldwide consumption have.



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