

KERATAN AKHBAR

(Bahagian Canselori)

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Tajuk : Learning about the climate from corals

Learning about the climate from corals

CORAL reefs can be used as climate archives and have yearly bands just like trees and within each band one can evaluate the chemical content - oxygen and carbon isotopes - to learn more about temperature at the time of deposition. It also tells us about changes in the sea level over time which is very important for global climate models.

A team from Swinburne University of Technology Sarawak has been collaborating with a team from UNIMAS to unravel temperature changes in local waters around Borneo.

"Our Aquatic and Environmental Research Group (AquES) is a collaboration between myself and Dr Aazani Mujahid from UNIMAS. The group was set up 3 years ago and currently we supervise 8 PhD and 7 MSc students," said Dr Moritz Muller, who heads the team from Swinburne.

The group also works with Universiti Malaysia Terengganu and Nanyang Technological University in Singapore on their research.

According to Dr Muller, by drilling out 12 tiny samples 5 cm wide from each growth band, it is possible to determine temperatures during each month of the year of deposition.

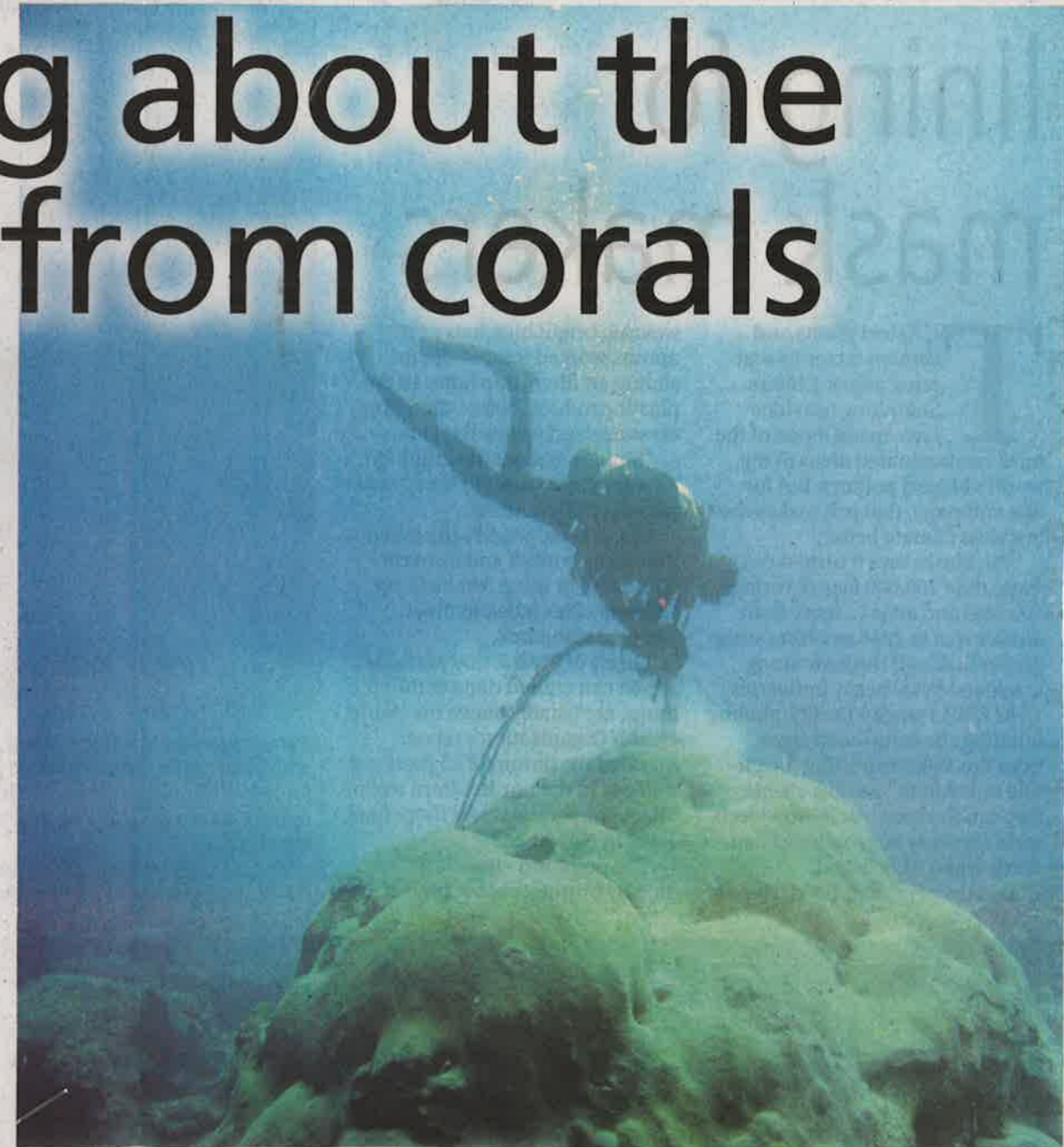
"The drilling does not damage the coral and the holes are plugged with a bio-cement to avoid damage from other organisms," Dr Muller explained.

He added that during a recent sampling trip to Talang Talang island, the team managed to drill a big Porites coral and recovered a coral core over 2m long.

"The information in this core is going to cover the past 200 years!" said Dr Muller.



A X-RAY of a coral core.



CORAL drilling. PHOTO: DON HICKEY, US GEOLOGICAL SURVEY

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