

Great Barrier Reef facing its toughest test ever

Facing the heat: The GBR is reeling from bouts of coral bleaching due to warming sea temperatures. | Photo Credit: [SARAH LAI](#)

Australia's Great Barrier Reef, under severe stress in a warmer, more acidic ocean, has returned from near-extinction five times in the past 30,000 years, researchers said on Monday.

And while this suggests the reef may be more resilient than once thought, it has likely never faced an onslaught quite as severe as today, they added. "I have grave concerns about the ability of the reef in its current form to survive the pace of change caused by the many current stresses and those projected into the near future," said Jody Webster of the University of Sydney, who co-authored a paper in the journal *Nature Geoscience*.

In the past, the reef shifted along the sea floor to deal with changes in its environment — either seaward or landward depending on whether the level of the ocean was rising or falling, the team found.

Based on fossil data from cores drilled into the ocean floor at 16 sites, they determined the Great Barrier Reef was able to migrate between 20 cm and 1.5 metres per year. This rate may not be enough to withstand the current barrage of environmental challenges.

The reef "probably has not faced changes in SST (sea surface temperature) and acidification at such a rate," Mr. Webster said. Rates of change "are likely much faster now — and in future projections."

Over 10 years, they studied how it had responded to changes caused by continental ice sheets expanding and waning over 30 millennia.

Mr. Webster said the GBR "will probably die again in the next few thousand years anyway if it follows its past geological pattern" as the earth is believed to be due for another ice age. "But whether human-induced climate change will hasten that death remains to be seen."

Receive the best of The Hindu delivered to your inbox everyday!

Please enter a valid email address.

Human threats could be exacerbating transmission of bat-related viral infections

END

Downloaded from **crackIAS.com**

© **Zuccess App** by crackIAS.com