

# First signs of coral bleaching in Sydney Harbour: scientists

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Aerial surveys of the Great Barrier Reef coast last month revealed the worst bleaching on record along a 1,000-km stretch of the site's pristine north

Coral bleaching has been detected in Sydney Harbour for the first time, Australian scientists said Tuesday, blaming the damaging phenomenon also found in the Great Barrier Reef on warming sea-surface

temperatures.

Aerial surveys of the World Heritage-listed Great Barrier Reef off Queensland's coast last month revealed the worst [bleaching](#) on record along a 1,000-kilometre (600-mile) stretch of the site's pristine north.

Now marine biologists from two Sydney universities have discovered "paled coral colonies during routine monitoring at a number of locations in Sydney Harbour".

The scientists estimated around 45 percent of corals in some locations in the harbour have been bleached.

Bleaching occurs when abnormal environmental conditions, such as warmer sea temperatures, cause corals to expel tiny photosynthetic algae, draining them of their colour.

"It's enough to cause us quite a bit of concern. This is the first time it's been observed at Sydney Harbour," Matthew Nitschke of University of Technology Sydney (UTS) told AFP.

"It (the bleaching) is slightly different in Sydney Harbour, so we don't reach as high temperatures as we do in the Great Barrier Reef, but we still have reached a high temperature for Sydney Harbour."



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UTS' Samantha Goyen said scientists studying the corals did not expect to see "such a rapid change in their physiology".

"They appear to have bleached in a matter of weeks," she added in a statement.

The monitoring data compiled by the researchers, who also include experts from Macquarie University, showed that waters in Sydney Harbour had reached 26.5 degrees Celsius (79.7 degrees Fahrenheit).

The average temperature for this time of year is 24-24.5 degrees Celsius, Nitschke said.

With water temperatures dipping down to 23 degrees before the southern hemisphere winter begins, the scientists were hopeful the corals would recover from the bleaching in two to three months or longer.

But they cautioned the phenomenon was making marine invertebrates more susceptible to other stresses including disease.

Scientists said in findings [published in the journal \*Science\* last week](#) that a further rise of as little as 0.5 [degrees](#) Celsius could cause reef bleaching to spread dramatically.

The Great Barrier Reef—the world's biggest coral reef ecosystem—is under pressure from the threat of [climate change](#), as well as farming run-off, development and the coral-eating crown-of-thorns starfish.

Nitschke said it was too early to tell if the Sydney Harbour bleaching was linked to climate change, with further monitoring needed.

"If this happens again in the absence of an El Nino event, then it's a clear sign of this being attributable to global climate change," he said.

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