



Australian Government

Great Barrier Reef
Marine Park Authority

Coral bleaching

Updated: 6 May 2016

The mass coral bleaching on the Great Barrier Reef worsened during April due to prolonged heat stress, particularly in the far north above Cooktown.

According to the Bureau of Meteorology, the Reef recorded its highest mean sea surface temperature for April since records began in 1900.

This follows the highest February and March sea surface temperatures on record.

In-water surveys will continue into May, given the unprecedented scale of the mass bleaching.

Overall, 93 per cent of reefs surveyed have bleached to some extent, ranging from severe through to moderate and minor. In general, there continues to be a gradient of decreasing severity from north to south along the Reef.

From the tip of Cape York down to some shallow reef areas offshore from Cairns there is severe bleaching and some subsequent coral mortality.

In the past fortnight, a series of reefs in the far north (above Cooktown) have been resurveyed — these surveys show bleaching and mortality have worsened in the past month.

- For the Princess Charlotte Bay area, the proportion of bleached coral increased from approximately 55 per cent to 70 per cent on average and coral mortality increased from approximately 2 per cent to 30 per cent on average.
- For Cape Grenville, the surveys show the proportion of bleached coral increased from approximately 80 per cent to 90 per cent on average, and that approximately half of these corals had died.

Recent in-water surveys of reefs offshore from Cairns show variable levels of bleaching and mortality. Further extensive surveys of reefs in the Cairns area are due to be conducted shortly and will provide a more comprehensive view of the severity of the bleaching.

Bleaching on reefs from south of Cairns to offshore Mackay continues to range from being mainly minor to moderate, with some severe bleaching. Minor amounts of coral mortality have also been detected.

There continues to be only minor bleaching south of Mackay.

A map is available summarising the observed bleaching.

Bleaching occurs when live corals are stressed from overheating. If the waters cool down quickly enough, the corals can survive, but if the corals remain stressed for many weeks, they will die off.

Reef waters are still warmer than average for this time of year.

As the event is still unfolding, it will be several months until the full impact is known.

Frequently asked questions

Find answers to your questions about bleaching on the Reef.

Current conditions on the Reef

Summary and detailed information on sea surface temperature, tropical cyclones, rainfall levels and flood plumes to date.

Coral bleaching resources

Coral bleaching resources: Image gallery, bleaching infographic, informative video and map of observed bleaching.

Student and teacher resources

Educational materials, including teaching units and a poster series, for primary and secondary school students.

Coral bleaching fact sheet

Find out how and why coral bleaching occurs.

Eye on the Reef program

Eye on the Reef is a monitoring program that enables anyone who visits the Reef to contribute to its long-term protection.

Report your sightings

Download the free Eye on the Reef smart phone app from iTunes/Google play app store or you can use the desktop app to report your Reef sightings.

Coral Bleaching Response Plan

The Coral Bleaching Response Plan was developed to meet the challenge of responding to coral bleaching events.

Sea surface temperatures

Australia's Bureau of Meteorology provides information on sea surface temperatures for monitoring coral bleaching.

ReefTemp

ReefTemp Next Generation is a set of high resolution mapping products that provide information on coral bleaching risk for the Great Barrier Reef region.