



Australian Government

Great Barrier Reef  
Marine Park Authority

# Coral bleaching

**Updated: 27 May 2016**

Further in-water surveys were conducted in the Cairns, Port Douglas and Whitsunday regions during the past fortnight to gauge the current extent of coral bleaching and mortality.

Details on the survey findings can be found below.

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

Approximately, 93 per cent of surveyed reefs on the Great Barrier Reef have bleached to some extent, ranging from severe through to moderate and minor bleaching. There continues to be a gradient of decreasing severity from north to south along the Reef.

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

A map is available summarising the observed bleaching.

## **Far Northern Management Area:**

In the far north, above Cooktown, substantial coral mortality has been observed at most surveyed inshore and mid-shelf reefs.

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

- 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.

Further surveys of the far north are scheduled to begin at the end of May.

## **Cairns–Cooktown Management Area:**

In-water surveys conducted in the past week of inshore reefs off Cairns and Port Douglas show minor to moderate bleaching, with low levels of mortality.

In this same area, mid-shelf and offshore reefs show moderate to severe bleaching and higher levels of mortality.

There is also great variability in severity and mortality in this region.

## **Townsville–Whitsunday Management Area:**

Surveys at the beginning of May offshore of Townsville found severe bleaching at two offshore reefs and moderate bleaching at another offshore reef, with variable levels of coral mortality.

Recent surveys of reefs around and offshore of the Whitsunday Islands have detected only minor bleaching. No bleaching-related mortality has been recorded.

## **Mackay–Capricorn Management Area:**

Mostly minor bleaching has been recorded. Recent surveys of reefs in the Keppel Islands detected moderate bleaching at shallow sites. Only minor bleaching was recorded further offshore.

No bleaching-related coral mortality was detected.

## **Sea surface temperatures**

Bleaching occurs when live corals are stressed, in this case 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.

According to the Bureau of Meteorology, the Reef recorded its highest average sea surface temperatures for February, March and April since records began in 1900.

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

As of 23 May 2016, sea surface temperatures for most of the Marine Park are between 0.5 degrees and 1.5 degrees Celsius above the May average (using a baseline from 2002–2011).

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## **Frequently asked questions**

Find answers to your questions about bleaching on the Reef.

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## **Coral bleaching resources**

Coral bleaching resources: [Image gallery](#), [bleaching infographic](#), [informative video](#) and [map of observed bleaching](#).

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## **Responsible reef practices – Spearfishing**

Fishers and spearfishers should consider leaving plant-eating fish to help control seaweed and enable coral larvae to settle and create new colonies.

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## **Student and teacher resources**

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

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## **Coral bleaching fact sheet**

Find out how and why coral bleaching occurs.

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## **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.

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## **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.

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## Coral Bleaching Response Plan

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

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## Sea surface temperatures

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

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## 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.

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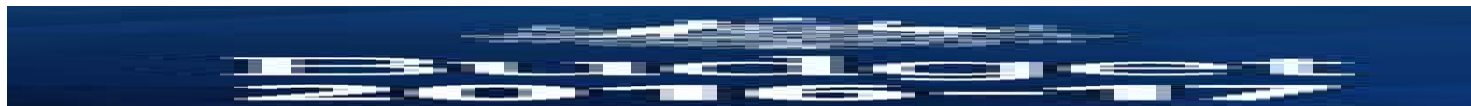
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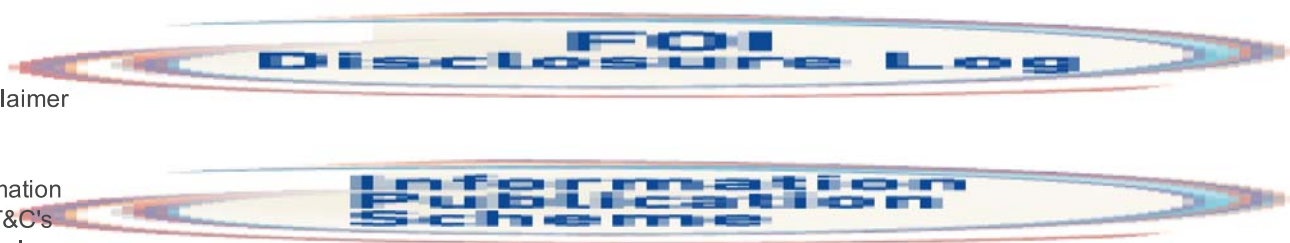
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