



Australia ([GBR](#)) - Far North: Blue stations (Habitat Protection Zone reefs)

Regional summary of 54 dive sites. Figures are averages across the sites that report them (n = sites with a value); each site's own page has its individual values. Part of the [Australia \(GBR\)](#) overview.



Coral Health Index: TBD

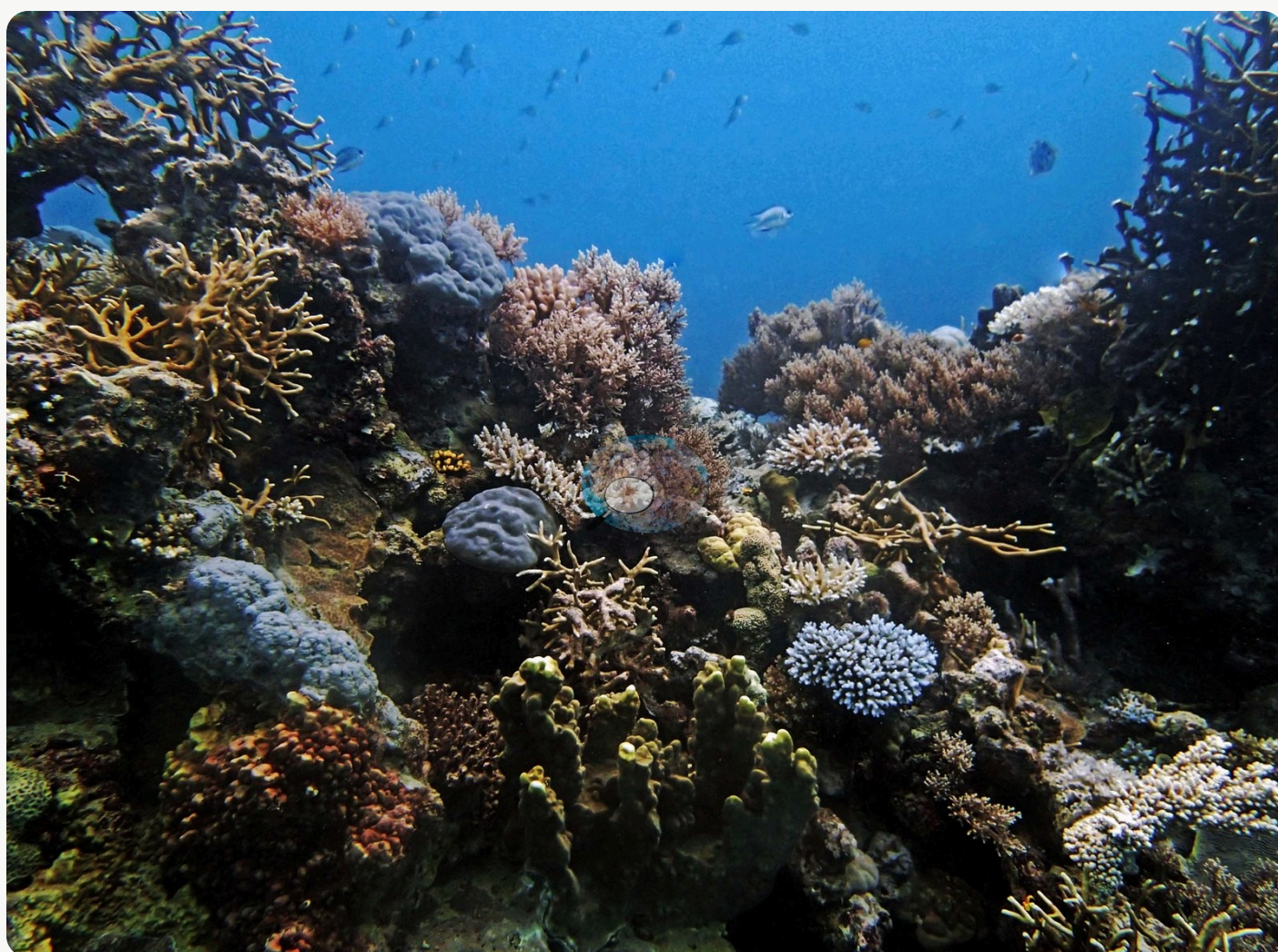


Photo: Anderson Mayfield/Coral Reef Diagnostics — N. GBR - Blue (AU116153)

COUNTRY

[Australia](#)

SITES

54

each linked below

HARD CORAL COVER
(REGIONAL MEAN)

38% ± 15% (std. dev.)

n=54. range 9.8–70%

WATER TEMP. DURING
SURVEYS (REGIONAL MEAN)

23.5°C

n = 1 of 54 sites; surveyed Sep
2014

CORAL HEALTH INDEX
(REGIONAL MEAN)

not yet scored

n = 0 of 54 sites

MOST RECENT WATER
TEMPERATURE RECORD

25.2°C

3 Oct 2026 · [Far Northern GBR](#)

MOST RECENT HEAT
STRESS RECORD



0.0°C-weeks

3 Oct 2026 · below alert level

MEAN ANNUAL MAX DEGREE
HEATING WEEKS (DHW), LAST
5 YEARS

10.0°C-weeks

2021–2025 · regional mean of 54
sites, 2 stations

HIGHEST ANNUAL HEAT
STRESS

15.5°C-weeks 🔥

in 2016 · Far Northern GBR

SEVERE HEAT-STRESS YEARS

7

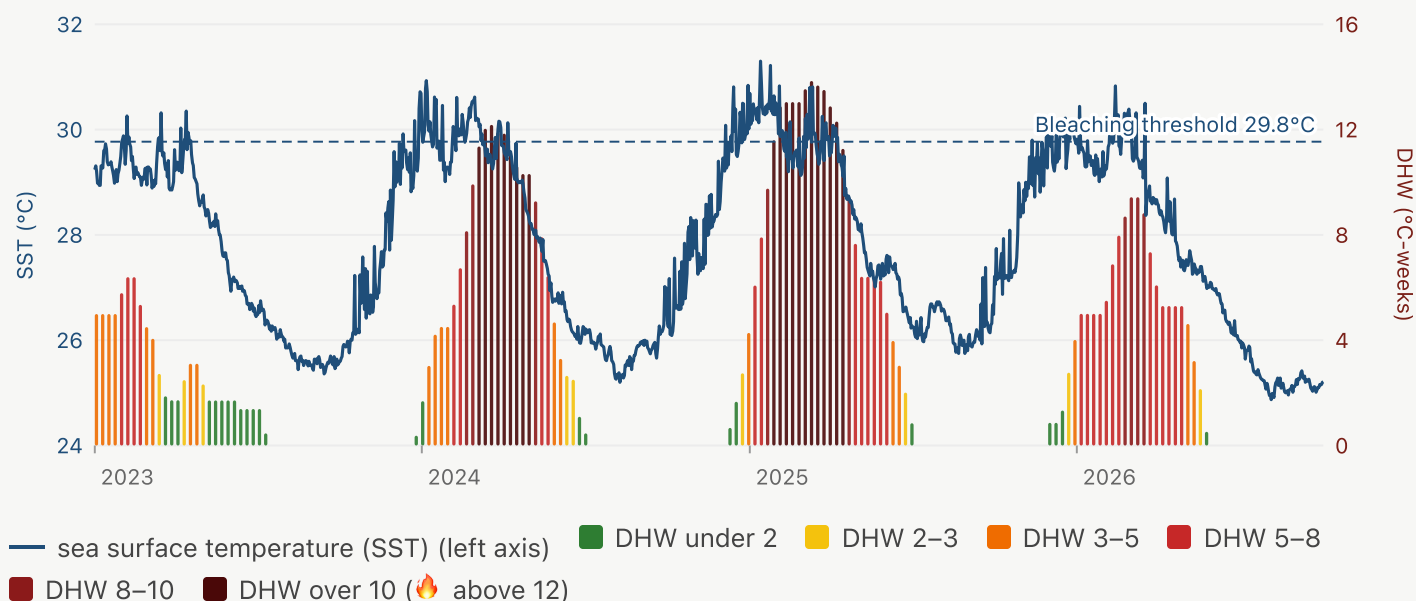
1985–2025 · 7 in the last 10 years

Heat-stress figures: [NOAA Coral Reef Watch](#) 5-km virtual stations: [Far Northern GBR](#); Northern GBR. Each pill links its source record and carries the values behind it.

REGIONAL SUMMARY

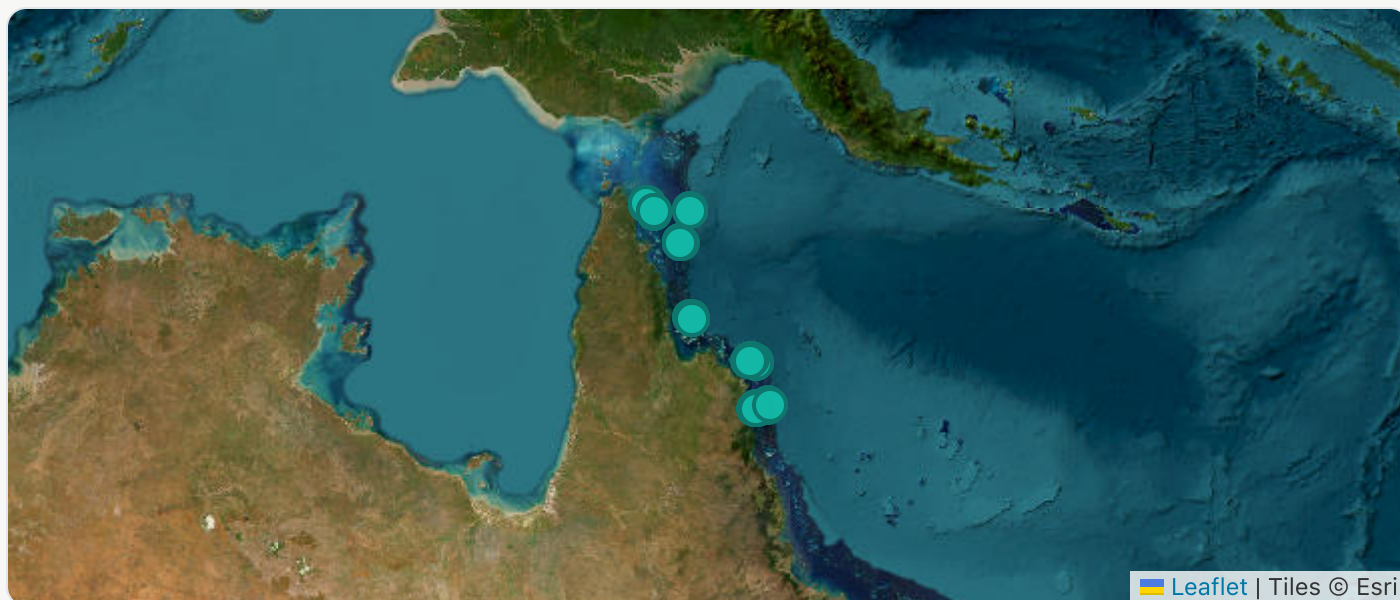
Fifty-four far northern Great Barrier Reef stations, from clear offshore walls and bommie fields to silty inshore reefs, were surveyed by transect in September 2014. Cover ranged from 9.8% to 70% in a best patch, with [crown-of-thorns](#) outbreaks at some stations and stressed [needle coral](#) across the zone.

Heat stress



Daily SST (line) and weekly maximum Degree Heating Weeks (bars), Jan 2023–Oct 2026, [NOAA Coral Reef Watch](#) 5-km Far Northern GBR virtual station. Dashed line: bleaching threshold (maximum monthly mean $28.8^{\circ}\text{C} + 1^{\circ}\text{C}$). DHW ≥ 4 : bleaching likely; ≥ 8 : severe bleaching and mortality likely. A bar is drawn only where DHW exceeds zero, so a stretch with no bar is accumulated heat stress of zero, not missing data — the SST line runs the full period.

Long-term record: 7 years since 1985 reached 8 or more $^{\circ}\text{C}$ -weeks at [NOAA's](#) Far Northern GBR, Northern GBR stations. [Download the annual DHW data \(CSV\)](#).



54 sites in this region — click a marker to open that site.

Regional setting

In the far north, [Spalding et al. \(2001\)](#) describe a [Great Barrier Reef](#) quite unlike its central and southern sections. Off Cape York the shelf is broad at first, then narrows sharply toward Raine Island and continues as a platform usually less than 50 km across. Its outer edge is lined by ribbon reefs, typically under 500 m wide but up to 25 km long, separated by narrow passes and

sitting right on the shelf break, where the seabed falls past 1,000 m within a few hundred meters of some reefs. Behind them lie well-developed mid-shelf and inner-shelf reefs, submerged shoals and banks dominated by *Halimeda*, and fringing reefs along the mainland itself, although coral cover and diversity there are limited; Lizard Island and the Flinders group are among the few high islands. The north holds most of the roughly 350 coral species known from the Great Barrier Reef. [Spalding et al. \(2001\)](#) estimate about 48,960 km² of coral reef for Australia as a whole, and [Souter et al. \(2021\)](#) give 35,487 km² for the [GCRMN](#) subregion covering the Torres Strait–northern GBR, central–southern GBR, and Tweed–Moreton ecoregions. The atlas describes a park zoning plan that paired strictly protected areas with much larger multiple-use areas; at that time roughly 80% of the park's area allowed general use, with commercial fishing and trawling permitted under license.

[Souter et al. \(2021\)](#) identify the 2016 marine heatwave as the heaviest recent blow to the northern GBR: severe [bleaching](#) killed roughly 30% of shallow-reef coral in the northern third, and bleaching and mortality reached mesophotic reefs at 40 m. A second event in 2017 centered on the central third, so between them the two events touched the reef's northern two-thirds. Earlier, between 2002 and 2008, the Torres Strait and northern GBR had gained coral cover. Over the past two decades, 11 severe cyclones exposed most of the GBR to damaging winds and waves, and a [crown-of-thorns](#) outbreak that began in the Cairns–Cooktown section in 2010 spread southward. Across the whole GBR, average coral cover fell from about 34% in 1996–1999 to 24% in 2019.

Overview

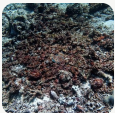
This summary covers the 54 far northern Great Barrier Reef stations in the Blue zone from Anderson's September 2014 survey. Blue is the Marine Park's Habitat Protection Zone, a fished zone open to line fishing; on the park's zoning map, 52 of the 54 stations lie inside it and the other two in neighboring zones. The stations are not a single place. They span roughly 11 to 15.4°S and include Ribbon Reef 5, Hicks Reef, Jewell Reef, and Unnamed Reefs 116, 122, and 128, among others. They were dived between 5 and 30 September 2014. All of them have in situ transect cover, mostly at 5–9 m; recorded depths ran from 4.9 m at [AU238142](#) (the other expedition team's survey depth) to 24.6 m at [AUR515](#).

Reef form varies widely within the zone. There are bommie fields on Unnamed Reef 116, a near-vertical windward wall on Ribbon Reef 5 carrying coral to about 30 m, and a wall on Unnamed Reef 128 that carries coral to at least 40 m, with a 3–4 knot current in the shallows ([AU5R143](#)). Some reefs are very shallow, such as [AU3975](#), where coral gives out at 9–10 m. Hicks Reef has sheer walls and 9 m bommies. Clear offshore stations had 30–40 m visibility and dense [Acropora](#) thickets, and their transect cover was mostly 45–62%. Silty inshore reefs near 15.4°S sat far lower, at 9.8% at [AU4333](#) and 10% at [AU4336](#). At AU4333, [soft corals](#), [sponges](#), and a

forest of red and pink sea fans covered much of the reef in 2014. Cover across the zone ranged from those lows to 70% at [AU116157](#), a murky leeward reef where individual transects were estimated at 90-95%.

Condition problems were concentrated in two places. First, crown-of-thorns starfish were logged on Anderson's dives at [AU2577](#), [AU3995](#), [AU4331](#), [AU4333](#), and [AU4335](#), and their feeding damage at [AU122135](#). AU4335 had an active outbreak of about 30 starfish, and eight were logged at AU4333. Second, needle coral (*Seriatopora*) was pale, sickly, bleached, or dying across much of the zone, sometimes alongside pale Pocillopora. Photographs from AU122135, [AU238141](#), [AU5R145](#), and [AUHK45](#) show bleached or very pale branching colonies, several of them beside pigmented neighbors. On the lagoon reefs near 11°S ([AU2591](#), AU3995), Anderson recorded silt-smothered corals and old dead staghorn, and at AU3995 noted that *Pavona cactus* had mostly died and been replaced by finger *Porites*. Other sites were in better shape. [AU3975](#) had 17% algal cover, 26 juvenile corals, and no crown-of-thorns, bleaching, or disease in Anderson's notes, though cyanobacteria filmed much of the sand between the coral patches. Gray and whitetip reef sharks, Napoleon wrasse, turtles, and aggressive sea snakes were all logged, and on Hicks Reef a whitetip tried to bite the survey chain. All of these surveys came about eighteen months before the 2016 mass bleaching.

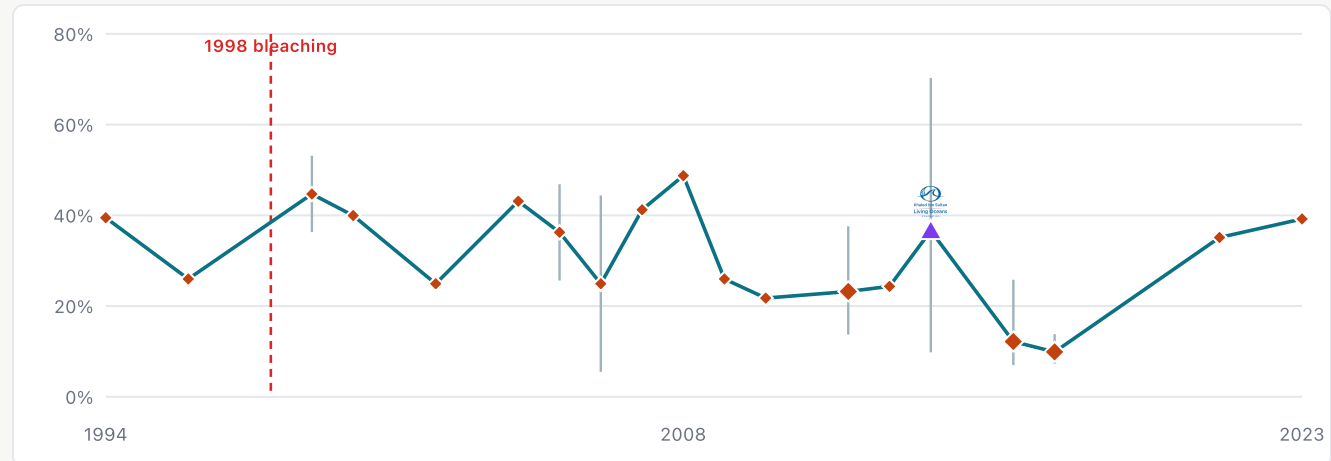
Highlights

- [AU116157](#) on Unnamed Reef 116: 70% coral, with individual transects estimated at 90-95% 
- The silty inshore reefs near 15.4°S had 9.8% ([AU4333](#)) and 10% ([AU4336](#)) live coral; at AU4333, soft corals, sponges, and sea fans in red and pink covered much of the reef 
- An active crown-of-thorns outbreak of about 30 starfish at [AU4335](#) 
- Walls on Unnamed Reef 128 ([AU238141](#), [AU5R143](#)) carry coral to at least 30-40 m, and Ribbon Reef 5 ([AUR513](#)) to about 30 m 
- Needle coral (*Seriatopora*) pale, sickly, or bleached on every transect at [AU5R139](#) and 'terrible virtually everywhere' at [AU238141](#) 
- [AU3975](#): low algae and 26 juvenile corals counted 

► Notable observations (18)

Coral cover over time (pooled)

One point per year: the mean of every hard coral cover value available for this region that year — Anderson's own dives and every independent survey station within 5 km of them. The vertical bar is the full range behind that mean. Different programs use different methods at different stations, so this is a regional summary, not a single comparable series. Years resting on fewer than three values are drawn as smaller points. Non-CRD/LOF points are from [Reef Check Foundation](#), [Australian Institute of Marine Science](#), and [XL Catlin Seaview Survey \(University of Queensland\)](#). Marker shape: ● his own dives, ◆ other organizations' surveys, ▲ a mix of both, that year,  the year includes his [Global Reef Expedition](#) dives with the [Khaled bin Sultan Living Oceans Foundation](#) (CRD+LOF data).



► Sites in this region (54)

Nearby external survey stations

44 independent survey records within 5 km of a site in this region (each record counted once).

► Show all 44 records

All images from [Coral Reef Diagnostics](#). Data are from the [Khaled bin Sultan Living Oceans Foundation Global Reef Expedition](#), Coral Reef Diagnostics, [Reef Check Foundation](#), [Australian Institute of Marine Science](#), [Global Coral Reef Monitoring Network](#), and [XL Catlin Seaview Survey \(University of Queensland\)](#).



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References

- Souter D, et al. (eds) (2021) *Status of Coral Reefs of the World: 2020*. International Coral Reef Initiative / [Global Coral Reef Monitoring Network](#). [\[PDF\]](#)

- Spalding MD, et al. (2001) *World Atlas of Coral Reefs*. University of California Press, Berkeley. [\[PDF\]](#)