



Australia ([GBR](#)) - Far North: Green stations (no-take 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 - Green (AUWO105)

COUNTRY

[Australia](#)

SITES

54

each linked below

HARD CORAL COVER
(REGIONAL MEAN)

39% ± 16% (std. dev.)

n=54. range 1.8–79%

WATER TEMP. DURING
SURVEYS (REGIONAL MEAN)

—

n = 0 of 54 sites

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

9.9°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

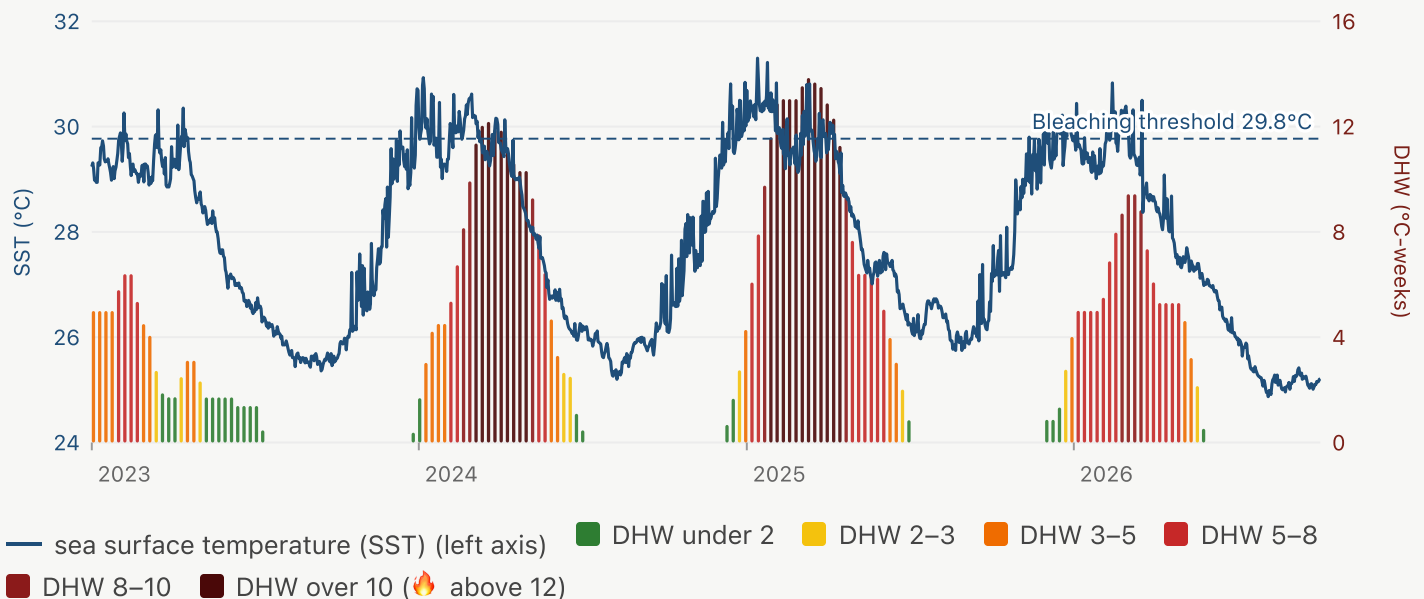
1985–2025 · 7 in the last 10 years

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

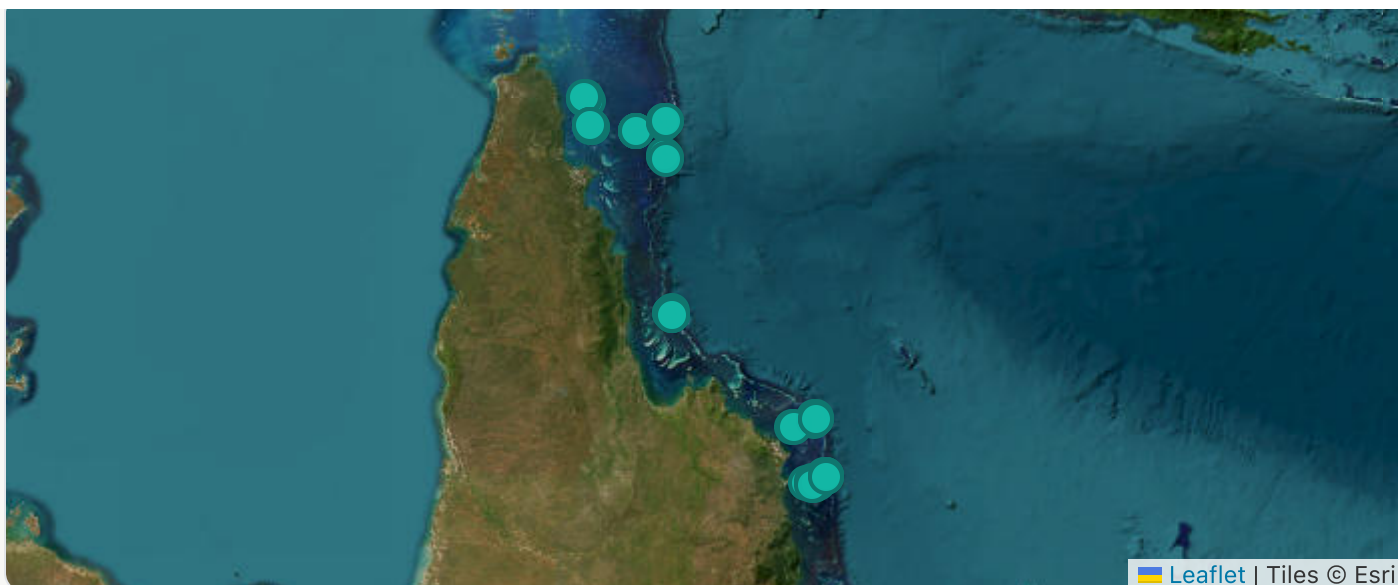
Fifty-four Green stations on no-take reefs on the far northern Great Barrier Reef, surveyed in 2014, span current-swept walls, vast [Acropora](#) meadows, and Wood Reef, which Anderson rated the expedition's best dives. Elsewhere, Lark Reef's staghorn was at least 90% dead, and much [needle coral](#) was [bleached](#).

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 $28.8^{\circ}\text{C} + 1^{\circ}\text{C}$). $\text{DHW} \geq 4$: 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 °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

[Spalding et al. \(2001\)](#) single out the ribbon reefs as the defining feature of the northern [Great Barrier Reef](#). Beyond Raine Island the shelf is generally less than 50 km wide, and along its outer rim long, slender reefs, mostly under 500 m across and up to 25 km in length, are strung out between narrow passes, with water deepening past 1,000 m only a few hundred meters seaward. In the northernmost 80 km or so of this line, sediment swept through the passes by strong currents has built delta-like formations on the sheltered side, which then became a base for new reef growth. Shoreward are mid-shelf and inner-shelf reefs, and fringing reefs that border the mainland directly. The South Equatorial Current divides on reaching the shelf: a weak branch, the Hiri Current, runs north above roughly 14°S, and the East Australia Current carries water south. The atlas records most of the reef's 350 or so coral species from the northern GBR and estimates Australia's national reef area at about 48,960 km²; [Souter et al. \(2021\)](#) give 35,487 km² for the [GCRMN](#) subregion made up of the Torres Strait–northern GBR, central–southern GBR, and Tweed–Moreton ecoregions. When the atlas was written, only about 5% of the Marine Park was closed to fishing, though that share took in more than 120 reefs; [Wilkinson \(2006\)](#) reports that in mid-2004 the Australian Parliament extended highly protected, no-take status to 33% of the GBR World Heritage Area.

According to [Souter et al. \(2021\)](#), the 2016 bleaching did the most recent damage to these northern reefs, killing an estimated 30% of shallow-water coral in the northern third of the GBR, with effects detected as deep as 40 m. Earlier bleaching was less focused on the north: the 1998 event was mostly confined to inshore reefs, the 2002 event reached offshore reefs as well, and the central GBR was the most affected both times. Coral cover in the Torres Strait and northern GBR increased between 2002 and 2008. Since 2009, eight severe cyclones have

struck the GBR, and [crown-of-thorns starfish](#) have erupted periodically since the early 1960s, most recently from 2010 in the Cairns–Cooktown section. By 2019, the GBR-wide mean for hard coral cover stood at 24%, down from about 34% in the late 1990s.

Overview

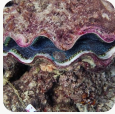
This unit covers the 54 far northern Great Barrier Reef stations coded Green in Anderson's 2014 survey set. The unit is the expedition's Green stratum, its no-take reefs: Marine National Park (Green) Zone reefs plus Yonge Reef, which the Zoning Plan designates a Scientific Research Zone (no-take, research by permit) with a Conservation Park Zone on its lee side ([AUYG37](#)–42). On the zoning map four positions on the Ribbon Reef 7 and Yonge Reef edges ([AUR701](#), [AUR702](#), [AUR703](#), [AUYG38](#)) fall a few tens of meters into the adjoining Buffer Zone. The stations spread from about 11 to 15.3°S and were surveyed by in situ transect between 3 September and 1 October 2014, mostly at 5–9 m; recorded depths ran from 4.9 m at [AU3480](#) (the other expedition team's survey depth) to 24.1 m at [AUWO103](#) on Wood Reef. Named reefs include Lark, Monkman, Siddons, Wood, and Yonge Reefs, Ribbon Reef 7, the area near Hilder and Eyrie Reefs, and Unnamed Reefs 34, 74, and 11-096.

The settings vary widely. On Unnamed Reef 34, a steep wall dived in a 1.5-knot current ([AU3483](#)) carried *Turbinaria*, *Porites*, *Diploastrea*, and plating corals at close to 100% cover by eye at 3–5 m, while silty neighboring dives turned to rubble by 10 m ([AU3479](#)) or sand below 17 m ([AU3481](#)). Siddons Reef has level *Acropora* meadows hundreds of meters wide, with staghorn and elkhorn colonies over 10 m long. On Monkman Reef, *Pavona cactus* carpets the 4–8 m band. At Wood Reef, a slope, a bommie field, and a second platform drop past 35 m, and the second Wood Reef dive ([AUWO105](#)) crossed dense *Acropora* cover with schools of jacks, *barracuda*, and wahoo. Ribbon Reef 7 has a windward slope to 25–30 m and, on its leeward side, bommies rising from sand.

Transect cover ranged from 1.8% at [AULK30](#) and 4.0% at [AULK22](#) on Lark Reef to 79% at [AU74147](#) on Unnamed Reef 74. On Lark Reef, 90% or more of the staghorn framework was dead. That is where the expedition's first [crown-of-thorns starfish](#) were found, but Anderson judged that the die-off predated them. *Needle coral* (*Seriatopora*) was the recurring warning. About 95% of colonies were bleached at Wood Reef station [AUWO103](#), and nearly all were pale or bleached at 20–25 m on Ribbon Reef 7's windward face. Needle coral was healthy, however, at [AUSD133](#) and [AUWO105](#). Crown-of-thorns damage was recorded at 14 m at [AU74151](#) and at about 15 m at AU74147 on Unnamed Reef 74, and starfish at [AUSD131](#) (one) and [AULK21](#), where several colonies in Anderson's frames are also stark white (no extent estimated). At [AU3479](#) the 10 m rubble was blanketed in clay silt and fleshy macroalgae. Silvertip and gray reef sharks,

Malabar groupers, [cuttlefish](#), and benthic comb jellies at Siddons Reef were among the sightings.

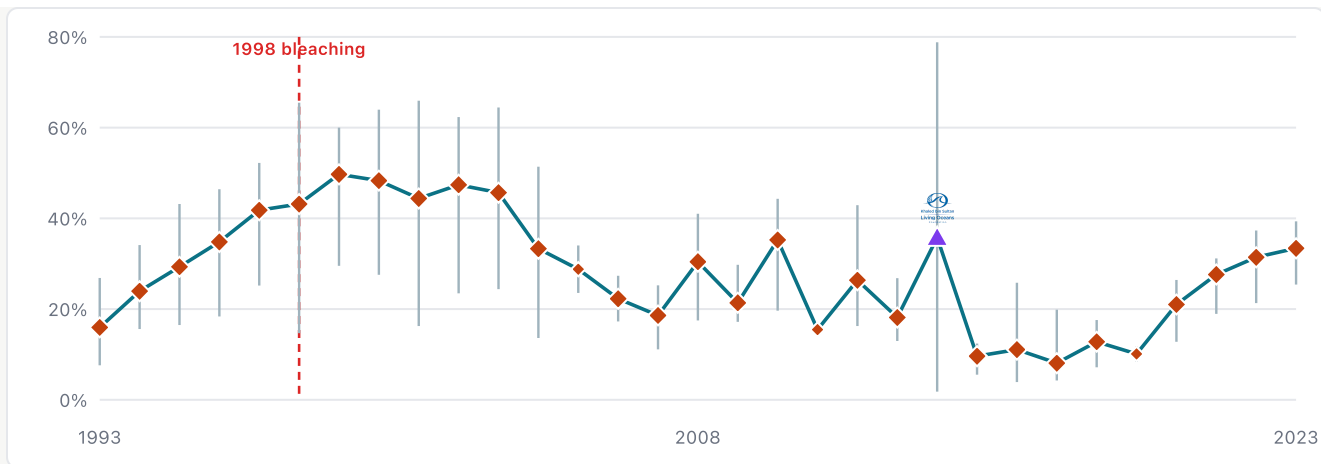
Highlights

- [AU74147](#) (Unnamed Reef 74): 79% coral against 7.8% algae 
- [AUWO105](#) on Wood Reef: 61% coral against 9.3% algae 
- [AUMO97](#) on Monkman Reef: 68% coral, with [Pavona](#) *cactus* carpeting the 4-8 m band 
- Siddons Reef: staghorn and elkhorn colonies over 10 m long in [Acropora](#) meadows hundreds of meters wide ([AUSD131](#), [AUSD133](#)), with 53% and 47% live coral on those transects
- Lark Reef ([AULK19](#)): *Acropora* thickets 90% dead or worse and the expedition's first [crown-of-thorns](#) starfish, five in all; the Global Reef Expedition (GRE) team's [AULK30](#) transects recorded 1.8% live coral 
- About 95% of [needle coral](#) bleached at Wood Reef ([AUWO103](#)) 

► Notable observations (16)

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 (2005, 2011, 2019). 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

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

► Show all 230 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. [\[PDF\]](#)
- Wilkinson C (2006) Status of coral reefs of the world: summary of threats and remedial action. In: Côté IM, Reynolds JD (eds) *Coral Reef Conservation*. Cambridge University Press, Cambridge. [\[PDF\]](#)