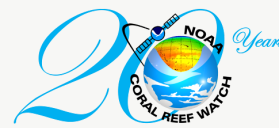




Philippines - Luzon



Regional summary of 7 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 [Philippines](#) overview.



Coral Health Index: TBD



Photo: Anderson Mayfield/Coral Reef Diagnostics — [Philippines](#) - Verde Island Passage: Kirby's Rock

COUNTRY

Philippines

SITES

7

each linked below

HARD CORAL COVER
(REGIONAL MEAN)

25% ± 3.4% (std. dev.)

n = 6 of 7 sites. range 19–29%

WATER TEMP. DURING
SURVEYS (REGIONAL MEAN)

28.7°C

n = 5 of 7 sites; surveyed Sep
2016–Oct 2016

CORAL HEALTH INDEX
(REGIONAL MEAN)

not yet scored

n = 0 of 7 sites

MOST RECENT WATER
TEMPERATURE RECORD

29.1°C

16 Sep 2026 · [Central Philippines](#)

MOST RECENT HEAT
STRESS RECORD



3.5°C-weeks

16 Sep 2026 · below alert level

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

7.6°C-weeks

2021–2025 · regional mean of 7
sites, 2 stations

HIGHEST ANNUAL HEAT
STRESS

15.1°C-weeks 🔥

in 2020 · Central Philippines

SEVERE HEAT-STRESS YEARS

10

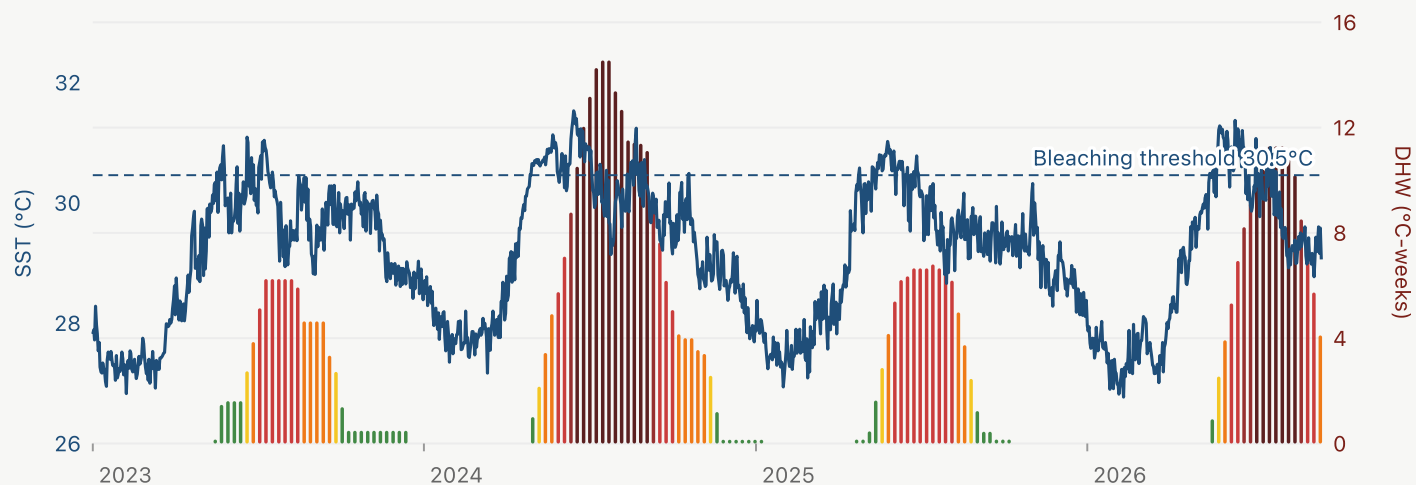
1985–2025 · 6 in the last 10 years

Heat-stress figures: [NOAA Coral Reef Watch](#) — [Central Philippines](#) and Western Philippines 5-km virtual stations. Each pill links its source record and carries the values behind it.

REGIONAL SUMMARY

Anilao and Verde Island Passage sites, dived in 2016, range from a pinnacle and boulder complexes to a managed sanctuary with a [giant clam](#) garden, with [soft corals](#), [sponges](#), and gorgonians as prominent as hard corals. No site-wide [bleaching](#) was seen, only localized white colonies.

Heat stress



— sea surface temperature (SST) (left axis) DHW under 2 DHW 2–3 DHW 3–5 DHW 5–8
DHW 8–10 DHW over 10 (🔥 above 12)

Daily SST (line) and weekly maximum Degree Heating Weeks (bars), Jan 2023–Sep 2026, [NOAA Coral Reef Watch](#) 5-km Central Philippines virtual station. Dashed line: bleaching threshold (maximum monthly mean $29.5^{\circ}\text{C} + 1^{\circ}\text{C}$). $\text{DHW} \geq 4$: 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: 10 years since 1985 reached 8 or more $^{\circ}\text{C}$ -weeks at [NOAA's](#) Central Philippines, Western Philippines stations. Download the annual DHW data (CSV): [palawan-north-borneo](#), [eastern-philippines](#).



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

Read this summary in:

English

Tagalog

Regional setting

[Spalding et al. \(2001\)](#) place the Philippines, with [Indonesia](#), at the center of global coral reef biodiversity and estimate the country's reef area at 25,060 km², with 421 coral species recorded and 577 estimated for its biogeographic region. Around Luzon, they found reefs far from continuous. None are recorded in the far northwest, and the first fringing reefs on that coast are at the Hundred Islands in the Lingayen Gulf, where much of the reef was reported lost to [blast fishing](#). Ash and mudflows from the Mount Pinatubo eruption cut live coral cover on the closest fringing reefs from 60–70% to 10–20%. For southern Luzon, Mindoro, and Marinduque, published information was sparse, although discontinuous fringing reefs occur in many places, notably at Puerto Galera on Mindoro. Their protected-area list includes the Puerto Galera Biosphere Reserve (235.45 km², 1977) and a marine reserve and tourist zone at a site named Sombrero Island (1977). The same account rated 97% of the country's reefs as at risk from

human activity. [Souter et al. \(2021\)](#) place the Philippines in the East Asian Seas region, which holds 78,272 km² of reef, just over 30% of the world total.

[Wilkinson \(2006\)](#) reported that, as of 2004, Philippine reefs were among those in Southeast Asia still in decline despite lying in the zone of highest coral diversity. The chief pressures he listed were overfishing and destructive fishing, land-based pollution, sediment from coastal development, dredging, and deforestation, and the reclamation of reef areas for industry, airports, and marinas; he also found that only 10–20% of the region's more than 630 marine protected areas were effectively managed. Across the East Asian Seas, [Souter et al. \(2021\)](#) estimate a relative loss of almost 11% of hard coral between 2005–2009 and 2015–2019, which they link to the 2010 and 2016 mass bleaching events.

Overview

The seven Luzon sites were dived on 30 September and 1 October 2016, four around Anilao and three in the Verde Island Passage. They cover a wide range of settings: a moderate-relief rocky slope of spurs and boulder faces at Ligpo Island, a managed marine sanctuary with a [giant clam](#) restocking garden at Dive and Trek, a largely man-made house reef at Monte Carlo Hotel, a silty muck flat dived at night at the Anilao Scuba Dive Center house reef, the pinnacle of Kirby's Rock, the submerged boulder complex of Beatriz Island, and the reef at Sombrero Island. Logged maximum depths ran from 12.8 m on the night dive to 26.2 m at Dive and Trek; Kirby's Rock and Beatriz have no logged depth.

[Soft corals](#), [sponges](#), and gorgonians are as prominent as stony corals across much of the group. Ligpo Island carries dense *Dendronephthya*, *Sarcophyton*, and pulsing *Xenia* fields among barrel sponges, and Beatriz is defined by very large barrel sponges, black coral bushes, and gorgonian fans. Where hard coral dominates, the community is varied: tabular and plating *Acropora*, foliose *Montipora*, large scroll *Turbinaria*, and massive *Porites* at Ligpo; near-continuous plating and foliose corals on the deeper slope at Monte Carlo, above a zone of free-living mushroom corals; *Porites* domes over a meter across on the shoulder of Kirby's Rock; and enormous tabular *Acropora* plates meters across with columnar *Porites* at Sombrero Island.

Photo-derived cover estimates ranged from 18.9% at Beatriz to 29.1% at Dive and Trek; no figure applies to the night dive, which was over sediment rather than reef. None of the sites showed a site-wide bleaching signal, but localized flags were recorded at three Anilao sites: a stand of stark-white branching *Acropora* at Dive and Trek, a stark-white branching colony and a partly bleached [host anemone](#) at Ligpo Island, and a partially bleached branching colony at Monte Carlo. Old mortality, rubble, and turf form the background on deeper flanks, and the Monte Carlo shallows were mostly rubble and turf-covered pavement.

Notable sightings include green turtles foraging over the Monte Carlo rubble, banded sea kraits and dorid nudibranchs on the night dive, dense anthias clouds and snapper and fusilier schools at Kirby's Rock, and a school of striped eel catfish at Beatriz, where Anderson's filenames record a probable Bargibant's pygmy seahorse on a gorgonian.

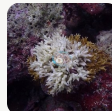
Highlights

- Seven sites dived 30 September-1 October 2016 in Anilao and the Verde Island Passage
- Sombrero Island: tabular Acropora plates meters across with columnar Porites
- Verde Island Passage: Sombrero Island  photo: Philippines
- Kirby's Rock, near Reef Check's Inner Layag Reef station: a true pinnacle with the strongest fish showing of the seven sites  photo: Philippines - Verde Island Passage: Kirby's Rock
- Giant clam restocking garden across several size classes at the Dive and Trek sanctuary
photo: Philippines - Anilao: Dive and Trek 
- Plating and foliose coral field on the deeper slope and deployed coral settlement tiles at Monte Carlo Hotel  photo: Philippines - Anilao: Monte Carlo Hotel
- Photo-derived cover from 18.9% (Beatriz) to 29.1% (Dive and Trek)
and Trek  photo: Philippines - Anilao: Dive

Notable observations

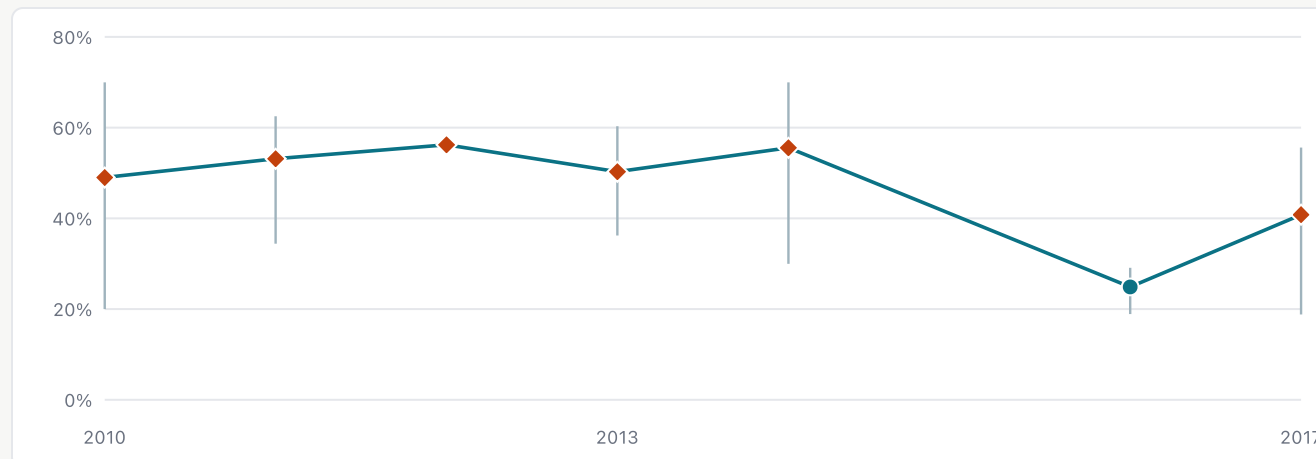
- Philippines - Anilao: Ligpo Island: A host anemone carrying a conspicuous bleached white sector, and one stark-white branching colony amid otherwise healthy growth; no site-wide bleaching signal 
- Philippines - Anilao: Dive and Trek: A stand of stark-white branching Acropora, architecture intact, indicating recent bleaching or very recent mortality; one large host anemone partially bleached 

- [Philippines - Anilao: Monte Carlo Hotel](#): One small branching colony with partial bleaching (chalk-white core, pigmented outer branches); single colony, not site-wide



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. Two values above 70% were excluded as best-patch figures rather than site means. Non-CRD points are from [Reef Check Foundation](#). Marker shape: ● his own dives, ◆ other organizations' surveys.



Sites in this region

- [Philippines - Anilao: Anilao Scuba Dive Center house reef \(night dive\)](#)
- [Philippines - Anilao: Dive and Trek](#) — 29% coral cover
- [Philippines - Anilao: Ligpo Island](#) — 28% coral cover
- [Philippines - Anilao: Monte Carlo Hotel](#) — 22% coral cover
- [Philippines - Verde Island Passage: Beatriz Island \(Beatrice Rock\)](#) — 19% coral cover
- [Philippines - Verde Island Passage: Kirby's Rock](#) — 26% coral cover
- [Philippines - Verde Island Passage: Sombrero Island](#) — 26% coral cover

Nearby external survey stations

21 independent survey records within 5 km of a site in this region (deduplicated across sites).

► [Show all 21 records](#)

All images from [Coral Reef Diagnostics](#). Data are from Coral Reef Diagnostics and [Reef Check Foundation](#).



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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. [\[PDF\]](#)