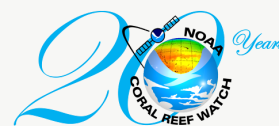




Mauritius



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.



Coral Health Index: TBD



Photo: Anderson Mayfield/Coral Reef Diagnostics — [Mauritius](#) - Carpenter

COUNTRY

Mauritius

SITES

7

each linked below

HARD CORAL COVER
(REGIONAL MEAN)

13% ± 5.9% (std. dev.)

n=7. range 2.9–18%

WATER TEMP. DURING
SURVEYS (REGIONAL MEAN)

28.0°C

n = 7 of 7 sites; surveyed Feb
2025

CORAL HEALTH INDEX
(REGIONAL MEAN)

not yet scored

n = 0 of 7 sites

MOST RECENT WATER
TEMPERATURE RECORD

24.3°C

16 Sep 2026 · [Southern Mauritius](#)

MOST RECENT HEAT
STRESS RECORD



0.0°C-weeks

16 Sep 2026 · below alert level

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

9.0°C-weeks

2021–2025 · Southern Mauritius

HIGHEST ANNUAL HEAT
STRESS

18.6°C-weeks 🔥

in 2016 · Southern Mauritius

SEVERE HEAT-STRESS YEARS

9

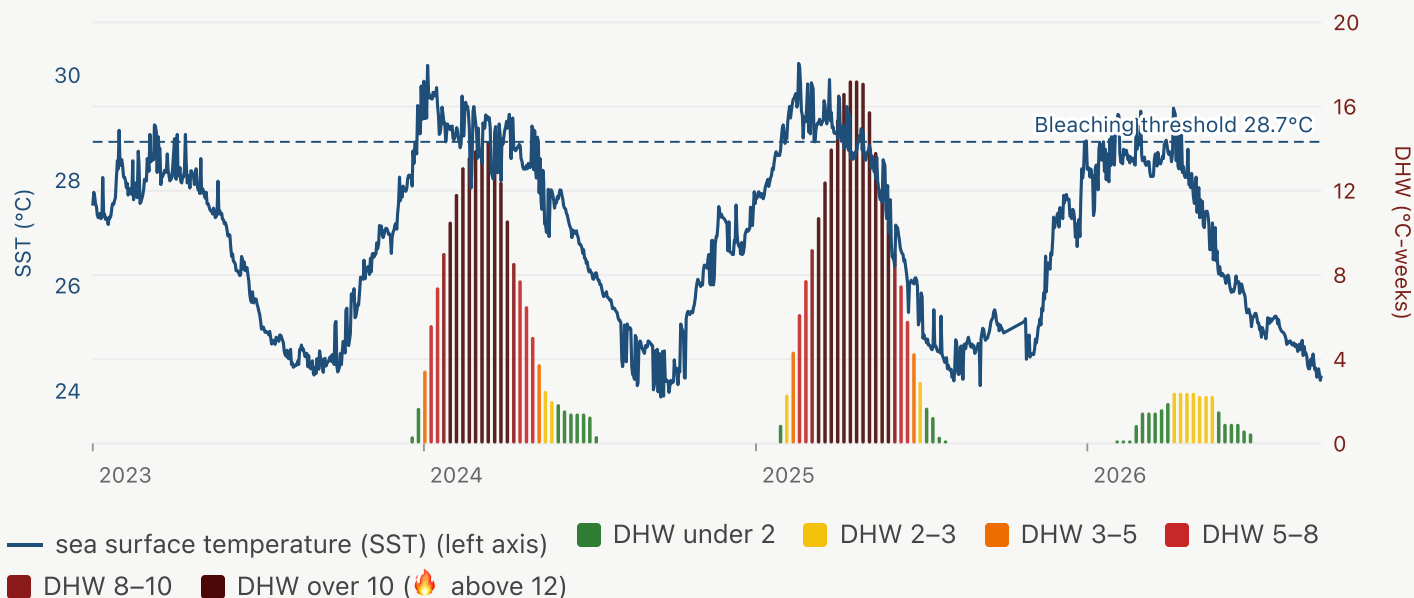
1985–2025 · 5 in the last 10 years

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

REGIONAL SUMMARY

Mauritius's northern patch reefs and boulder fields and its southwest volcanic boulders and walls, dived in February 2025, are built mainly of massive Porites, with live coral patchy on boulder tops. No widespread bleaching was seen, and one lagoon site is carpeted in anemones rather than coral.

Heat stress



Daily SST (line) and weekly maximum Degree Heating Weeks (bars), Jan 2023–Sep 2026, [NOAA Coral Reef Watch](#) 5-km Southern Mauritius virtual station. Dashed line: bleaching threshold (maximum monthly mean $27.7^{\circ}\text{C} + 1^{\circ}\text{C}$). $\text{DHW} \geq 4$: 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: 9 years since 1985 reached 8 or more $^{\circ}\text{C}$ -weeks at [NOAA's](#) Southern Mauritius station. [Download the annual DHW data \(CSV\)](#).



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

Read this summary in:

English

Français

Regional setting

Mauritius, Rodrigues, and Réunion, the three Mascarene Islands, sit toward the southern extremity of the submarine Mascarene Ridge. All three are geologically young volcanic islands, and [Spalding et al. \(2001\)](#) describe a clear sequence of reef development along the chain: reefs are least developed around Réunion, the youngest island, and become better developed and extend farther offshore toward the older islands to the east. Mauritius is almost completely encircled by fringing reefs, with substantial lagoon and barrier-reef development on its east and southwest coasts. Its lagoons are dominated by algae with some [seagrass](#), its reef slopes show a clear spur-and-groove zone, and below about 20 m the coral usually forms only a thin veneer over volcanic rock. [Spalding et al. \(2001\)](#) put the country's reef area at about 870 km², a national figure that includes Rodrigues, the remote Cargados Carajos Bank, and Agalega, and list 161 recorded coral species. The same account notes that the 1998 bleaching event affected 30–40% of Mauritian corals but killed very few, a survival the authors relate to overcast, windy weather during Cyclone Anacelle, and that many reefs had already been degraded by sedimentation and agricultural runoff following forest clearance, domestic and industrial effluent, past [blast fishing](#), anchor damage, [crown-of-thorns](#) outbreaks since the early 1980s,

and tourism-driven coastal development. At a wider scale, the Western Indian Ocean holds about 15,180 km² of coral reef, almost 6% of the global total ([Souter et al. 2021](#)).

More recent assessments describe reefs under mounting pressure. Across the Western Indian Ocean, [Souter et al. \(2021\)](#) report that regional hard coral cover fell after the 1998 bleaching event, recovered from 2004 to a peak of about 32% in 2012, and dropped sharply again in 2013 and 2017, with the 1998 and 2016 bleaching events the clearest signals in the record; they place about 1,076 km² of reef in the Mascarene and Cargados Carajos subregion. Around Mauritius itself, [Elliott et al. \(2018\)](#) documented a decline in stony coral cover between 1998 and 2010 that steepened after about 2005, and [McClanahan & Muthiga \(2021\)](#) recorded a 40% loss of hard coral cover between 2004 and 2019, concentrated in the south and east, where acute thermal anomalies were most frequent. Sea-surface temperatures around the island have been rising by about 0.16°C per decade, above the regional bleaching threshold in most years since 2000 ([Doorga et al. 2023](#) (publisher page: the PDF on file is only the first page)), and [NOAA Coral Reef Watch](#) recorded severe heat stress (8 or more degree heating weeks) in 2016, 2019–2020, and again in both 2024 and 2025. Local pressures add to this: the 2020 grounding of the bulk carrier Wakashio spilled oil along the southeast coast ([Rajendran et al. 2022](#) (publisher page: the PDF on file is only the first page)), and island-wide surveys continue to report [coral disease](#) and compromised coral health ([Jogee et al. 2025](#)).

Overview

The Mauritius unit covers seven sites dived between 1 and 10 February 2025, at depths from 15.6 m (Ti Korail) to 35.3 m (Bamboo). Four northern sites (Reef Garden, Ti Korail, Carpenter, and Lost Anchor off Coin de Mire) are low-relief patch reefs and boulder fields cut by sand and rubble channels, although Carpenter also has steeper boulder faces. Aquarium / Big Rock, off Le Morne, is built on huge volcanic boulders and rock spurs. Bamboo, dived the same day, combines a sand-veneered rubble base with sections of near-vertical wall.

Massive *Porites* is the most consistent framework builder. It is joined by [brain corals](#) consistent with *Platygyra* and *Dipsastraea*/*Favites*, tabular and branching *Acropora*, and *Pocillopora*. At Carpenter some *Porites* domes stand about a diver's height off the bottom. Live coral is patchy and concentrated on boulder tops and flanks, with turf, [crustose coralline algae](#), and [encrusting sponges](#) holding most of the remaining rock. Manually scored hard coral cover at the six reef sites ranged from 7.0% at Ti Korail to 26.3% at Reef Garden, with Lost Anchor at 10.9%, Aquarium / Big Rock and Carpenter at 14.4% and 14.5%, and Bamboo at 17.2%. Reef Garden adds slopes carpeted in [soft corals](#), while Bamboo's open pavement carries dense clusters of *Diadema*-type urchins.

Anemone Garden is not typical reef. It is a lagoon patch whose bommies are carpeted almost wholesale by anemones consistent with *Heteractis magnifica*, with only 3.3% hard coral, and fleshy brown macroalgae over heavily silted rubble hold the flat around them. None of the reef sites showed widespread bleaching; a few pale colonies at Ti Korail could not be separated from natural coloration. Nearby 2019 surveys near Carpenter, Lost Anchor, and Aquarium / Big Rock differ from the 2025 values by only a few percentage points, which is too small to separate from differences in method. Sightings included a resting sea turtle and a day octopus at Aquarium / Big Rock, a leaf scorpionfish at Ti Korail, garden eels, and lionfish.

Highlights

- Reef Garden had the highest manually scored hard coral cover of the seven sites, 26.3%, on bommies rising from a white sand flat.



photo: Mauritius - Reef Garden

- Dive depths ranged from 15.6 m at Ti Korail to 35.3 m on the wall sections at Bamboo.



photo:

Mauritius - Ti Korail

- Carpenter's boulder field holds Porites domes about a diver's height tall, alongside table Acropora.

- Lost Anchor has a stand of large gorgonian sea fans rooted at the base of a rock face.



photo:

Mauritius - Lost Anchor

- Anemone Garden is an anemone-dominated lagoon patch with 3.3% hard coral, not a typical reef.

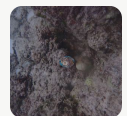


photo: Mauritius - Anemone Garden

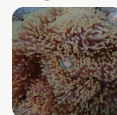
- No widespread bleaching was seen at any site in February 2025.

Notable observations

- [Mauritius - Ti Korail](#): Possible bleaching: a few colonies showed pale or whitened polyps that image quality alone cannot reliably distinguish from natural coloration; no widespread bleaching.

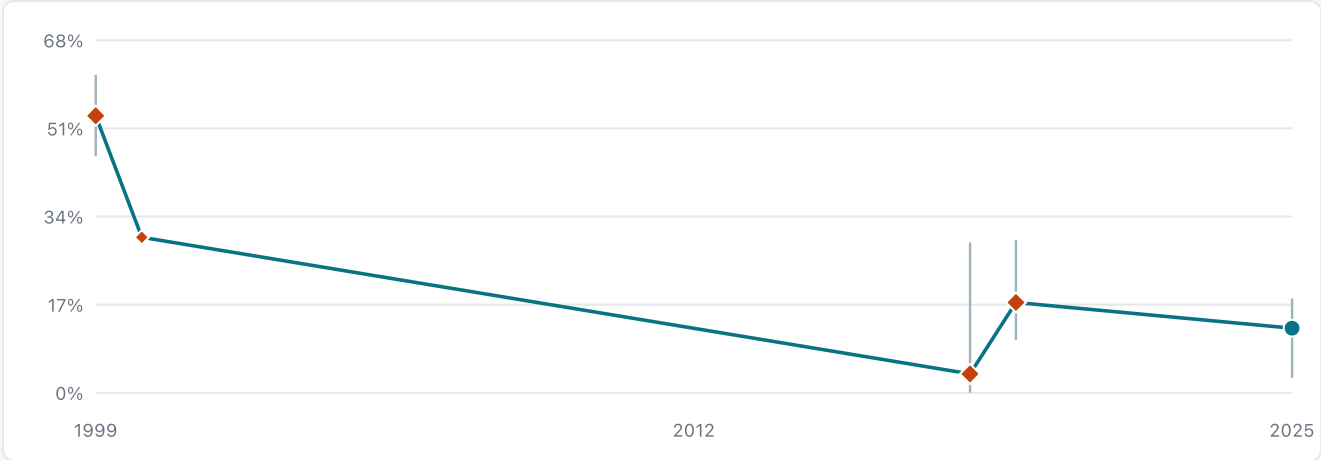


- [Mauritius - Anemone Garden](#): Macroalgae and sediment: fleshy brown algae over silted rubble, not coral, hold the substrate; sediment loading on the substrate is heavy.



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. Four values above 70% were excluded as best-patch figures rather than site means. That exclusion removes the year 2016 from this curve altogether, because every value available for it was a best patch. Years resting on fewer than three values are drawn as smaller points (2000). Non-CRD points are from [Reef Check Foundation](#). Marker shape: ● his own dives, ◆ other organizations’ surveys.



Sites in this region

- [Mauritius - Anemone Garden](#) — 2.9% coral cover
- [Mauritius - Aquarium / Big Rock](#) — 17% coral cover
- [Mauritius - Bamboo](#) — 17% coral cover
- [Mauritius - Carpenter](#) — 18% coral cover
- [Mauritius - Lost Anchor](#) — 10% coral cover
- [Mauritius - Reef Garden](#) — 18% coral cover
- [Mauritius - Ti Korail](#) — 5.4% coral cover

% coral cover by method

Pooled across 7 dive sites

Method	Mean % coral cover	Std. dev. between dive sites	n dive sites	Note
Manual point count (author)	13.2%	±7.6	7	frame-weighted 15.7% over 344 frames
CoralNet automated point classifier	12.3%	±7.1	7	frame-weighted 15.2% over 344 frames
CoralSCOP (SAM-based mask-sum), unedited photos	20.7%	±5.4	7	frame-weighted 20.9% over 344 frames
Claude (Anthropic), blind point count	11.5%	±7.6	7	frame-weighted 14.4% over 344 frames

In-house DINOv3 point classifier

25.2%

±10

7

frame-weighted 28.9% over 344 frames

The mean is an UNWEIGHTED mean of the dive site values — each dive site counts once, whatever its photo count — which is the convention of the published tables and of every other figure on this page. The frame-weighted alternative is given per method in the Note column; where the two differ, the difference is a photo-count imbalance, not a coral-cover finding.

By dive site

Dive site	Manual point count	CoralNet	CoralSCOP (unedited)	Claude	DINOv3
Reef Garden	26.3% n=105	27.8% n=105	22.2% n=105	26.7% n=105	44.6% n=105
Bamboo	17.2% n=40	11.8% n=40	16.9% n=40	13.8% n=40	19.9% n=40
Carpenter	14.6% n=40	10.9% n=40	21.0% n=40	12.3% n=40	21.2% n=40
Aquarium-Big Rock	14.0% n=40	7.0% n=40	13.0% n=40	8.3% n=40	15.3% n=40
Lost Anchor	10.5% n=39	10.0% n=39	20.5% n=39	9.2% n=39	20.3% n=39
Ti Korail	7.0% n=40	10.6% n=40	20.5% n=40	7.4% n=40	21.9% n=40
Anemone Garden	2.7% n=40	7.7% n=40	30.5% n=40	2.9% n=40	33.3% n=40

n under each value is the number of photographs that method scored at that dive site. ⚠ marks a cell that is not an independent check.

Reference: point-count on the photographs (a human scoring the same pixels the models see). Denominator: coral points / all 30 points, water and fish left IN the denominator (the basis the canonical sheet uses). Source: draft manuscript value, not yet published ⚠ This region's values are on the ALL-30 denominator (water and fish left in), not the settled Mayfield-2025 rule used at [Oman](#), [Kenya](#) and the Red Sea. The settled rule would raise every Mauritius site by 0–3.7 pp. Awaiting Anderson's ruling. The Claude row is the manuscript's Claude (with image context) value, scored on the same manual-reference frames as the manual count (v42 Table 3); the last of its five context batches had been seen before, so it is not fully blind. Anemone Garden is flagged non-reef in the source (anemone habitat); its manual value stands but carries no error term.

Nearby external survey stations

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

► Show all 30 records

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



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