Tonga - Ha'apai (TOHA08)

2 visits, 2013-09-13 – 2013-09-14



0 — 5

Coral Health Index: 3.00/5

What was done. Coral cover here was measured on in-situ benthic transects run by divers on the Living Oceans Foundation Global Reef Expedition over 6 transects — a diver measurement, not an estimate read off photographs. The written account of the site is a review of its photographs and of the author's dive notes, not a second survey.

HARD CORAL COVER

22%

Benthic transects+photo-quadrats

MOST RECENT HEAT LOAD RECORD

24.3°C **0.0°C-weeks**

26 Oct 2026 · -2.5°C vs the past-365-day mean (26.8°C) · NOAA No heat stress

HEAT STRESS (5-YR MEAN ANNUAL MAX. DHW)

8.1°C-weeks

NOAA annual peaks averaging 8–12°C-weeks

MAX. DEPTH

30.8 m

WATER TEMP. (SURVEY)

24.3°C

CTD-cast midpoint; the cast read 24.3°C throughout

-2.2°C vs the 2013 mean sea temperature (26.5°C)

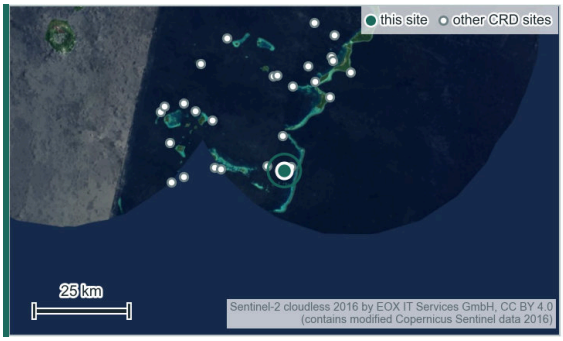
PHOTOGRAPHS

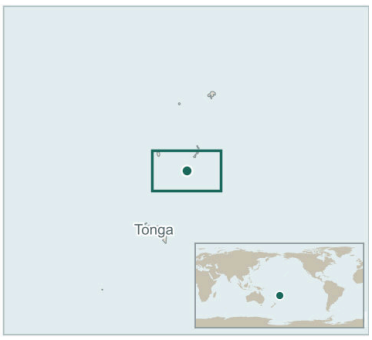
30 in the gallery · 45 on file

POSITION

-20.0668, -174.5032

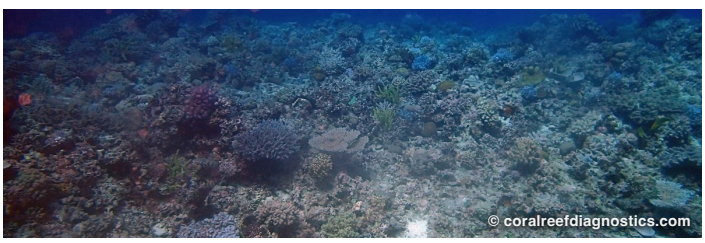
Coordinate from the supporting data of Mayfield et al. (2017, PLoS ONE).

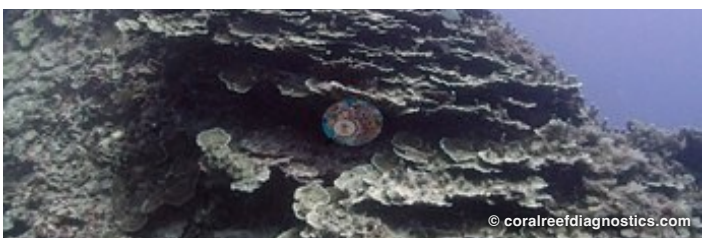




A shallow Ha'apai platform of low spurs dominated by soft corals and a high diversity of hard corals, with a moderately steep slope, vertical in places, from 12 to 20 m, then a gentler descent to 35 m or more. The deeper reef is the showpiece, with huge single-species stands: bottlebrush *Acropora* thickets 20-30 m long, a mound blanketed by overlapping *Coscinaraea* plates over 20 by 20 m, and big fields of *Porites rus* and *Merulina*. Surveyed on the Living Oceans Foundation's Global Reef Expedition.

lea faka-Tonga. Ko ha tu'unga mamaha (platform) 'i Ha'apai 'o e ngaahi spurs mā'ulalo 'oku pule'i 'e he feo molū (soft corals) mo ha kehekehe lahi 'o e ngaahi feo fefeka (hard corals), mo ha tafa'aki tu'u fakalotoloto, 'oku tu'u hangatonu 'i ha ngaahi feitu'u, mei he 12 ki he 20 m, pea toki tō māmālie hifo ki he 35 m pe lahi ange. Ko e hakau loloto ange 'a e me'a mahu'inga taha, mo e ngaahi vao lalahi 'aupito 'o e fa'ahinga pē 'e taha: ko e ngaahi vao *Acropora* fakapulumu (bottlebrush) 'oku loloa 'aki 'a e 20-30 m, ha puke kuo 'ufi'ufi 'e he ngaahi papa *Coscinaraea* 'oku fetaulaki 'o laka hake 'i he 20 he 20 m, mo e ngaahi ngoue lalahi 'o e *Porites rus* mo e *Merulina*. *AI translation of this summary; the English is authoritative. (low confidence)*





CV model comparison (hard coral cover, %): Transect mean (all transects) 22.3 · CoralSCOP unedited 27.6 · Claude (edited photos) 33.8 The two computer-vision methods agree within 6.2 pp (27.6–33.8%) and read 5.3–11.5 pp above the in-water transect (22.3%); the headline is the in-water transect because a diver transect is independent of the photographs.

Photographs: Anderson Mayfield/Coral Reef Diagnostics — 3 on this card; 30 in the gallery · 45 on file; watermarked · Full site record: https://api.coralreefdiagnostics.com/site-pages/gre-tonga-ha-apai-toha08.html · Heat stress is the mean of the latest five annual maxima of NOAA Coral Reef Watch degree-heating weeks for this reef's NOAA CRW virtual station (Southern Tonga) — a five-year heat history for the station's waters, not a measurement at this site on the dive date.