Tonga - Ha'apai (TOHA29)

surveyed 2013-09-20



0 — 5

Coral Health Index: TBD

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 5 transects — a diver measurement, not an estimate read off photographs. The written account of the site is a review of its photographs, the author's sampling sheet, and the expedition's survey records, not a second survey.

HARD CORAL COVER
42%
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

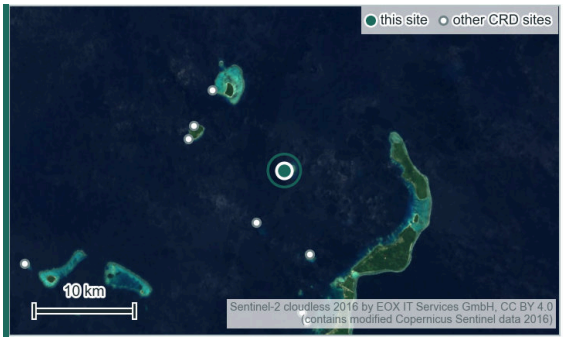
HEAT STRESS (5-YR MEAN ANNUAL MAX. DHW)
8.1°C-weeks
NOAA annual peaks averaging 8–12°C-weeks

MAX. DEPTH
20.7 m
dive-log maximum

WATER TEMP. (SURVEY)
25.8°C
CTD-cast midpoint of 25.5–26.2°C
-0.9°C vs the 2013 mean sea temperature (26.7°C)

PHOTOGRAPHS
18 in the gallery · 18 on file

POSITION
-19.6711, -174.4013
Coordinate from the supporting data of Mayfield et al. (2017, PLoS ONE).

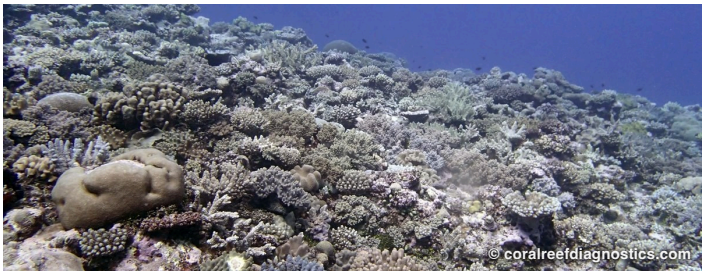




Large spurs 20-50 m wide and over 100 m long run off an emergent island, topped with thick table acroporids. In places soft corals dominate, with leathery *Lobophytum* colonies 6-7 m wide carpeting dead rock and overgrowing hard corals. Surveyed on the Living Oceans Foundation's Global Reef Expedition.

lea faka-Tonga. Ko e ngaahi spurs lalahi ‘oku 20-50 m hono fālahi pea loloa ‘aki ‘a e 100 m tupu ‘oku mafola atu mei ha motu ‘oku hā hake mei he tahi, ‘oku ‘i honau funga ‘a e ngaahi acroporid fakatēpile (table) matolu. ‘I ha ngaahi feitu‘u, ‘oku pule‘i ‘e he feo molū (soft corals), mo e ngaahi kulupu *Lobophytum* fakakili (leathery) ‘oku 6-7 m hono fālahi ‘oku nau ‘ufi‘ufi ‘a e maka mate pea tupu ‘i ‘olunga ‘i he ngaahi feo fefeka. *AI translation of this summary; the English is authoritative. (low confidence)*





CV model comparison (hard coral cover, %): Transect mean (all transects) 42.1 · CoralSCOP unedited 41.2* · Claude (edited photos) 45.1* The two computer-vision methods agree within 3.9 pp (41.2–45.1%) and read within 3.0 pp of the in-water transect (42.1%). *Based on only 13 reef-habitat photos; this estimate is less certain.

Photographs: Anderson Mayfield/Coral Reef Diagnostics — 3 on this card; 18 in the gallery · 18 on file; watermarked · Full site record: https://api.coralreefdiagnostics.com/site-pages/gre-tonga-ha-apai-toha29.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.