Tonga - Ha'apai (TOHA30)

surveyed 2013-09-21



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 8 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
40%
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

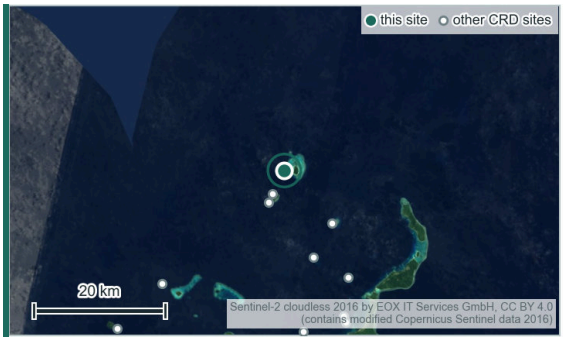
HEAT STRESS (5-YR MEAN ANNUAL MAX. DHW)
8.1°C-weeks
NOAA annual peaks averaging 8–12°C-weeks

MAX. DEPTH
31.4 m
dive-log maximum

WATER TEMP. (SURVEY)
25.5°C
CTD-cast midpoint of 24.8–26.1°C
-1.3°C vs the 2013 mean sea temperature (26.8°C)

PHOTOGRAPHS
11 in the gallery · 11 on file

POSITION
-19.5992, -174.4702
Coordinate from the supporting data of Mayfield et al. (2017, PLoS ONE).





A fringing fore reef off northeast Ha'apai where coral-covered mounds drop near vertically from 10 m to 30-40 m, their faces full of ledges, overhangs, and crevices. Large foliose plating corals line the base of the wall, and a steep slope to the south carries 80-100% cover of plating and encrusting corals, including *Porites* colonies 3-5 m across. Surveyed on the Living Oceans Foundation's Global Reef Expedition.

lea faka-Tonga. Ko ha tafa‘aki tu‘a ‘o ha hakau matafonua (fringing fore reef) ‘i he tokelau hahake ‘o Ha‘apai, ‘oku tō hifo ai ‘a e ngaahi puke kuo ‘ufi‘ufi ‘e he feo meimei hangatonu mei he 10 m ki he 30-40 m, ‘oku fonu honau ngaahi mata ‘i he ngaahi tafungofunga (ledges), ngaahi feitu‘u ‘oku tu‘u atu ki tu‘a (overhangs), mo e ngaahi ki‘i ava. ‘Oku tu‘u ‘a e ngaahi feo fakapaleti fakala‘ā (foliose plating corals) lalahi ‘i he takele ‘o e holisi, pea ko ha tafa‘aki tu‘u ki he tonga ‘oku ‘i ai ‘a e ‘ufi‘ufi ‘o e 80-100% ‘e he ngaahi feo fakapaleti (plating) mo pipiki (encrusting), kau ai ‘a e ngaahi kulupu *Porites* ‘oku 3-5 m hono fālahi. *AI translation of this summary; the English is authoritative. (low confidence)*





CV model comparison (hard coral cover, %): Transect mean (all transects) 39.6 · CoralSCOP unedited 35.8* · Claude (edited photos) 35.8* The two computer-vision methods agree within 0.0 pp (35.8%) and read within 3.8 pp of the in-water transect (39.6%). *Based on only 10 reef-habitat photos; this estimate is less certain.

Photographs: Anderson Mayfield/Coral Reef Diagnostics — 3 on this card; 11 in the gallery · 11 on file; watermarked · Full site record: https://api.coralreefdiagnostics.com/site-pages/gre-tonga-ha-apai-toha30.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.