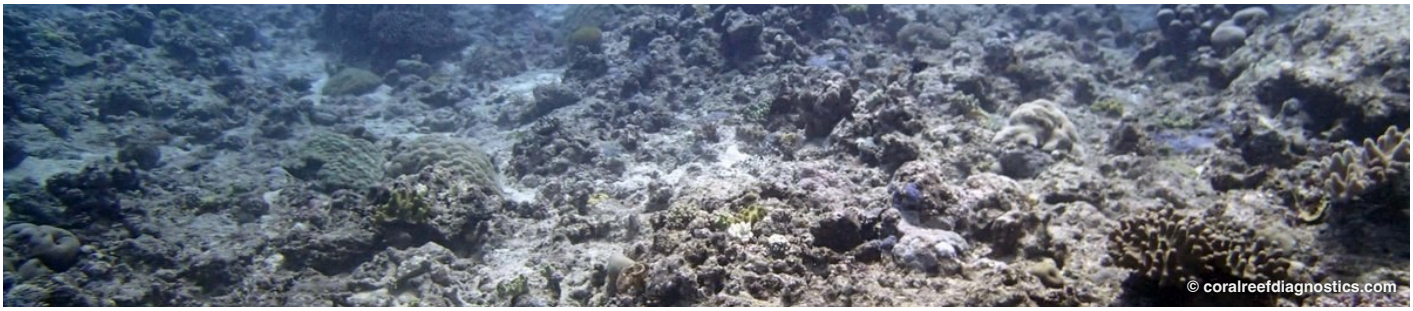
Tonga - Ha'apai (TOHA04)

surveyed 2013-09-12



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 (15 frames) and of the author's dive notes, not a second survey.

HARD CORAL COVER
25%
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

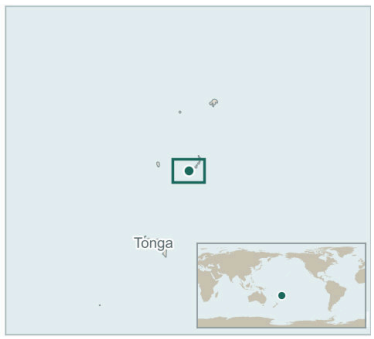
MAX. DEPTH
22.5 m

WATER TEMP. (SURVEY)
24.3°C
CTD-cast midpoint of 24.2–24.3°C
-2.3°C vs the 2013 mean sea temperature (26.6°C)

PHOTOGRAPHS
14 in the gallery · 15 on file

POSITION
-19.8668, -174.4824
Coordinate from the supporting data of Mayfield et al. (2017, PLoS ONE).





TOHA04's dominant habitat is a broad, low-relief pavement and spur ground with sparse live coral, small scattered colonies over turf-darkened dead framework, but isolated coral pillars, one a multi-tiered plate-crowned column, another a massive *Porites* dome, punctuate the scoured ground. Cover measured 25%; the written notes record numerous *Culcita* cushion stars (5 counted) and patches of cyanobacteria and turf algae at 10-20 m (the transects recorded under 0.1% cyanobacteria). Surveyed on the Living Oceans Foundation's Global Reef Expedition.

lea faka-Tonga. Ko e nofo'anga tefito 'o TOHA04 ko ha tu'unga fālahi mo mā'ulalo (pavement) mo e ngaahi spurs 'oku si'i ai 'a e feo mo'ui, ko e ngaahi ki'i kulupu mavahevahe 'i he funga 'o e ngaahi hakau mate kuo 'uli'uli 'i he limu nounou (turf), ka 'oku 'i ai ha ngaahi pou feo (coral pillars) mavahevahe, ko e taha ko ha pou 'oku 'i ai hono ngaahi tu'unga mo e ngaahi feo fakapaleti (plate) 'i 'olunga, pea ko e taha ko ha tumutumu *Porites* lahi, 'oku nau tu'u 'i he kelekele kuo tafi'i. Na'e 25% 'a e 'ufi'ufi; 'oku lēkooti 'e he ngaahi nouti tohi 'a e *Culcita* (cushion stars) lahi (na'e lau 'a e 5) mo e ngaahi konga 'o e cyanobacteria mo e limu nounou (turf algae) 'i he 10-20 m (na'e lēkooti 'e he ngaahi transect 'a e cyanobacteria 'oku si'i hifo 'i he 0.1%). *AI translation of this summary; the English is authoritative. (low confidence)*





CV model comparison (hard coral cover, %): Transect mean (all transects) 25.2 · CoralSCOP unedited 25.8* · Claude (edited photos) 18.4* The two computer-vision methods differ by 7.4 pp (18.4–25.8%) and read within 6.8 pp of the in-water transect (25.2%); the headline is the in-water transect because a diver transect is independent of the photographs. *Based on only 14 reef-habitat photos; this estimate is less certain.

Photographs: Anderson Mayfield/Coral Reef Diagnostics — 3 on this card; 14 in the gallery · 15 on file; watermarked · Full site record: https://api.coralreefdiagnostics.com/site-pages/gre-tonga-ha-apai-toha04.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.