Tonga - Ha'apai (TOHA28)

surveyed 2013-09-20



0 — 5

Coral Health Index: 2.51/5

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, the author's sampling sheet, and the expedition's survey records, not a second survey.

HARD CORAL COVER

31%

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

23.8 m

dive-log maximum

WATER TEMP. (SURVEY)

25.8°C

CTD-cast midpoint; the cast read 25.8°C throughout

-0.9°C vs the 2013 mean sea temperature (26.7°C)

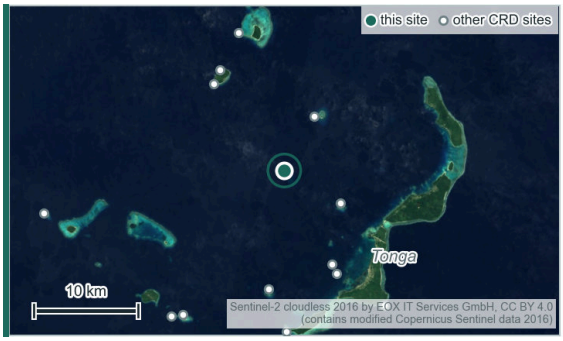
PHOTOGRAPHS

21 in the gallery · 38 on file

POSITION

-19.7176, -174.4283

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

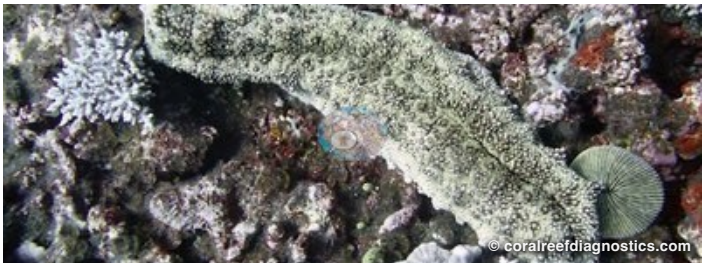




A lagoonal patch reef of shallow, partly emergent mounds whose edges carry a dense *Acropora*-dominated community at 50-80% cover, while the scoured shallows are mostly turf with isolated corals. Undercut ledges at the mound bases are carpeted by the red crust alga *Peyssonnelia*, and long spurs beyond alternate between bottlebrush, mixed, and staghorn communities. Surveyed on the Living Oceans Foundation's Global Reef Expedition.

lea faka-Tonga. Ko ha ki'i hakau ‘i he namo (lagoonal patch reef) ‘o e ngaahi puke mamaha, ‘oku hā hake ha konga ‘i he funga tahi, ‘oku ‘i honau ngaahi tafa‘aki ha kulupu fefu‘ifu‘i ‘oku pule‘i ‘e he *Acropora* ‘i he ‘ufi‘ufi ‘o e 50-80%, lolotonga ko e feitu‘u mamaha kuo tafi‘i ko e limu nounou (turf) pē mo e ngaahi feo mavahevahe. Ko e ngaahi tafungofunga kuo keli ‘i lalo (undercut ledges) ‘i he takele ‘o e ngaahi puke ‘oku ‘ufi‘ufi ‘e he limu kulokula pipiki (red crust alga) *Peyssonnelia*, pea ko e ngaahi spurs loloa ‘i tu‘a ‘oku fetongitongi ai ‘a e ngaahi kulupu fakapulumu (bottlebrush), fefiofiofi, mo e staghorn. *AI translation of this summary; the English is authoritative. (low confidence)*





CV model comparison (hard coral cover, %): Transect mean (all transects) 31.2 · CoralSCOP unedited 31.9* · Claude (edited photos) 46.3* The two computer-vision methods disagree by 14.4 pp (31.9–46.3%) and read 0.7–15.1 pp above the in-water transect (31.2%); the headline is the in-water transect because a diver transect is independent of the photographs. *Based on only 17 reef-habitat photos; this estimate is less certain.

Photographs: Anderson Mayfield/Coral Reef Diagnostics — 3 on this card; 21 in the gallery · 38 on file; watermarked · Full site record: https://api.coralreefdiagnostics.com/site-pages/gre-tonga-ha-apai-toha28.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.