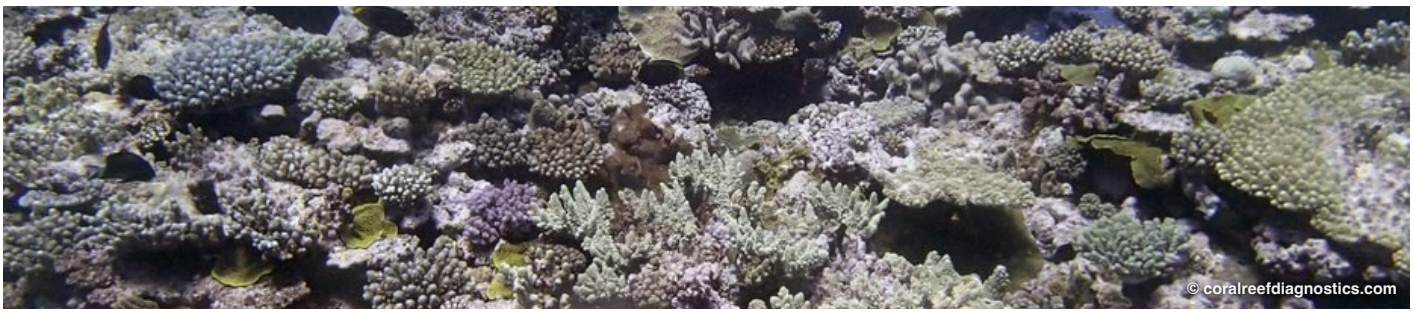
Tonga - Ha'apai (TOHA31)

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 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
34%
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

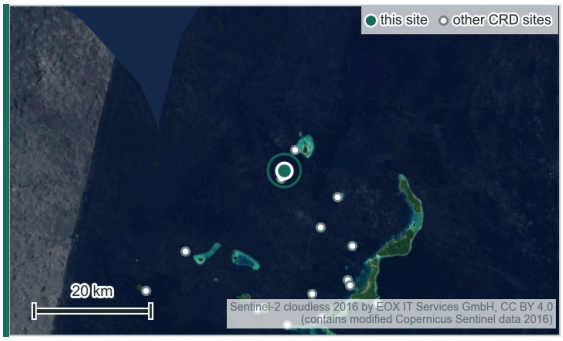
HEAT STRESS (5-YR MEAN ANNUAL MAX. DHW)
8.1°C-weeks
NOAA annual peaks averaging 8–12°C-weeks

MAX. DEPTH
29.9 m
dive-log maximum

WATER TEMP. (SURVEY)
26.1°C
CTD-cast midpoint of 26.0–26.1°C
-0.7°C vs the 2013 mean sea temperature (26.8°C)

PHOTOGRAPHS
22 in the gallery · 22 on file

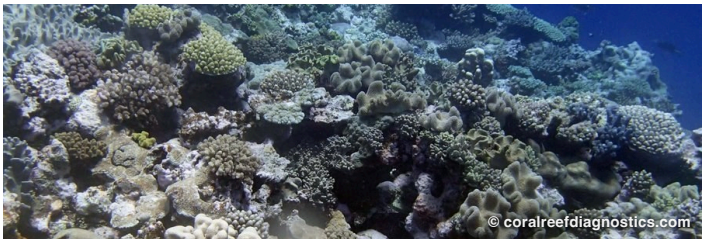
POSITION
-19.6309, -174.4875
Coordinate from the supporting data of Mayfield et al. (2017, PLoS ONE).

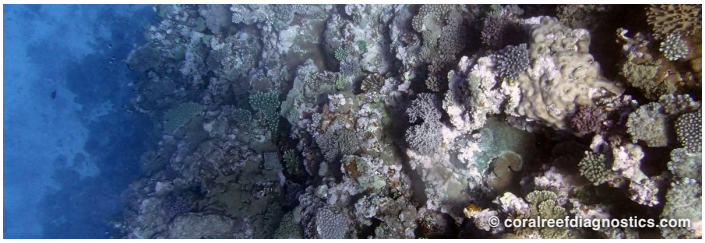




A fringing reef of very large mounds off the north side of the island, with dense coral and soft coral at the mound edges and big *Porites lobata* heads scattered in the rubble channels. Coral death increased with depth, snail damage on *Acropora* was common, and many *Favia stelligera* colonies were partially bleached. Surveyed on the Living Oceans Foundation's Global Reef Expedition.

lea faka-Tonga. Ko ha hakau matafonua (fringing reef) ‘o e ngaahi puke lalahi ‘aupito ‘i he tafa‘aki tokelau ‘o e motu, mo e feo fefu‘ifu‘i mo e feo molū (soft coral) ‘i he ngaahi tafa‘aki ‘o e puke pea mo e ngaahi tumutumu *Porites lobata* lalahi ‘oku mafola ‘i he ngaahi hala vai maka momoa (rubble channels). Na‘e lahi ange ‘a e mate ‘a e feo ‘i he loloto ange, na‘e angamaheni ‘a e maumau ‘a e ‘elele (snail damage) ‘i he *Acropora*, pea na‘e hinehina ha konga ‘o ha ngaahi kulupu *Favia stelligera* lahi. *AI translation of this summary; the English is authoritative. (low confidence)*





CV model comparison (hard coral cover, %): Transect mean (all transects) 34.5 · CoralSCOP unedited 39.2* · Claude (edited photos) 36.6* The two computer-vision methods agree within 2.6 pp (36.6–39.2%) and read within 4.7 pp of the in-water transect (34.5%). *Based on only 18 reef-habitat photos; this estimate is less certain.

Photographs: Anderson Mayfield/Coral Reef Diagnostics — 3 on this card; 22 in the gallery · 22 on file; watermarked · Full site record: https://api.coralreefdiagnostics.com/site-pages/gre-tonga-ha-apai-toha31.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.