NOAA - Bird Key Reef, Dry Tortugas

Florida reef tract · 4 visits, 2021-06-25 – 2021-06-28



0 — 5

Coral Health Index: TBD

What was done. Method: benthic surveys. For comparison only: CoralSCOP run on the author's own photographs (114 frames) gives 42%. That figure is a mask-area index, not a point count, and is not this site's cover. The written account of the site is a review of its photographs and of the author's dive notes, not a second survey.

HARD CORAL COVER

5.1%

Benthic surveys

↘ 56%, 2021–2024

MOST RECENT HEAT LOAD RECORD

28.5°C **13.7°C-weeks**

26 Oct 2026 · +0.4°C vs the past-365-day mean (28.1°C) · NOAA alert that day: no stress (water now below the bleaching threshold; 13.7°C-weeks built up over the last 12 weeks)

HEAT STRESS (5-YR MEAN ANNUAL MAX. DHW)

12.5°C-weeks

NOAA annual peaks averaging 12–16°C-weeks

MAX. DEPTH

22.6 m

WATER TEMP. (SURVEY)

28.6–30.0°C

in situ, range of all logged dives

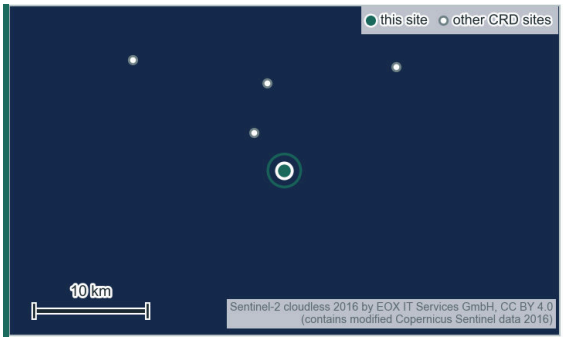
PHOTOGRAPHS

25 in the gallery · 143 on file

POSITION

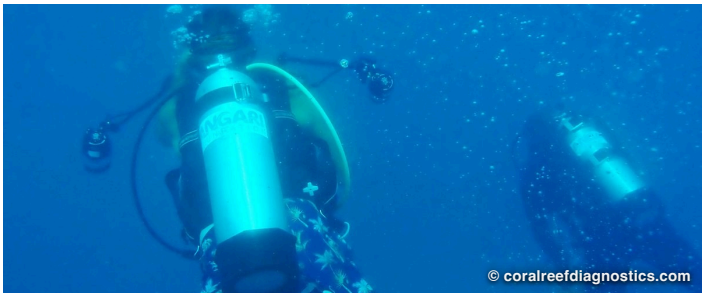
24.6117, -82.8702

Site coordinate from the monitoring program's records.





Bird Key Reef is a gorgonian-draped NOAA Dry Tortugas monitoring station, instrumented during the June 2021 cruise, built around well-spaced massive coral heads, including a *Montastraea cavernosa* dome and an *Orbicella faveolata* head; Anderson photographed tissue-loss fronts on several massive colonies, one *Siderastrea* head among them, and a recently dead colony. Published cover was 5.1% on NOAA's carbonate-budget transects in 2024 (13% in 2015); the Florida CREMP stations read 7.8% in 2021 and 4.0% in 2024.





CV model comparison (hard coral cover, %): Transect (published) 5.1 · CoralSCOP edited 42.4 · Claude (edited photos) 28.2 The two computer-vision methods disagree by 14.2 pp (28.2–42.4%) and read 23.1–37.3 pp above the in-water transect (5.1%); the headline is the in-water transect because a diver transect is independent of the photographs.

Photographs: Anderson Mayfield/Coral Reef Diagnostics — 3 on this card; 25 in the gallery · 143 on file; watermarked · Full site record: https://api.coralreefdiagnostics.com/site-pages/noaa-bird-key-reef-dry-tortugas.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 (Florida Keys) — a five-year heat history for the station's waters, not a measurement at this site on the dive date.