

**HAWAI'I UNDERSEA RESEARCH LABORATORY
QUICK LOOK REPORT
DIVE: P5-650**

MISSION STATUS

Location: Taema Bank, Tutuila, American Samoa

On Bottom: **Latitude:** 14°19.886'S **Longitude:** 170°40.144'W

Mission Date: July 11, 2005 **Duration:** 4 hours 14 mins (bottom time)

Maximum Depth (m): 447 m

Project Title: Benthic Habitats of American Samoa

Principal Investigator: Dawn Wright

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Observer 1 (port): Dawn Wright	Observer 2 (stbd): Doug Fenner
Address: OSU Geosciences, Corvallis, OR 97331-5506	Address: Dept. of Marine & Wildlife Resources (DMWR), P.O. Box 3730, Pago Pago, AS 96799

Pilot 1: Max Cremer

Scientific Data Acquired:

Objectives:

- (1) Investigate full extent of sheer carbonate wall encountered on P5-648. Find base and then video and photographic survey north, wall to ledge and then E at a contour of interest, making observations of biota and physical structure
- (2) Species identification of as many corals and fish as possible

Observations, findings, etc:

Landed at 365 m depth, located carbonate wall and descended further down slope to the south. Found bottom of wall at ~439 m. Proceeded east along 440 m contour making observations, including galatheid and hermit crabs, urchins, shrimp, a few soft corals, sea cucumbers, small stars and an eel. Unfortunately we also encountered quite a few bottles and beer cans all along this contour. Proceeded up slope to explore entire vertical length of face. Encountered large carbonate blocks and rubble that looked as though it had been mass wasted down slope, then at 314 came upon a distinct contact up to a solid, vertical

wall, with many vertical grooves (scour marks from falling debris?). Continued moving up grooved face to ~268 m where large overhangs were noted where many of these large blocks must have broken loose and slid down slope. Several white, soft corals grew upside down from these overhangs. Reached ~217 m, which was maximum depth of previous Taema dive and encountered many wire corals, sea fans again, plus heart urchins (known to burrow but likely unsuccessfully on this hard carbonate substrate) Vertical grooves were no longer present above this depth. Reached top of ledge at ~115 m, noting family rubble piles with small fish. Large province of “discs,” thought to be coralline algae, but took small sample to confirm. Moved up to 80 m and moved east, noting a few “lounging pillow” sea stars, “doughboy” seastar, sea cucumbers, damselfish, and a small ray. At 1230 moved from 82 m to 195 m in order to leave bottom.

Species List:

Anemone
Bat seastar
Cidarid urchin
Common lionfish – *Pterois volitans*
Coralline algae “discs”
Crinoid on black coral(?) (A “dichotoma”?)
Damselfish
Dendronephthya soft trees
Eel
Galatheid
Gorgonians (sea fans)
Hermit crab
Ray
Red grouper
Redtooth triggerfish
Sand tilefish
Sea cucumbers
Sea stars (large “lounging pillow” and “doughboy”, 6-10 inches in diameter)
Shrimp
Spatanoids (heart urchins)
Soft corals (white, branching)
Toadfish
Tuna

MISSION EVALUATION:

A. Limitations, failures, or operational problems noted:

Sony camera experienced a little bit of interference while thrusters were on.

B. Recommendations for corrective action or improvement:

C. In your opinion, did the mission essentially achieve its purpose?

Yes, by all means.

D. Compare actual work accomplished with the work that was expected to be accomplished.

No difference. Expected dive to be short as we also had to transit to port that day.

E. List specimens or samples collected on the mission.

Sample Number	Time (L)	Latitude	Longitude	Depth (m)	Comments
None	1156	~14°19.607' S	~170°39.847' W	92	Small bits of coralline algae

DATA RELEASE

Data may be retained by the project leader for up to 2 years after the mission date with the following exception. NOAA may request to use photos for publication or publicity purposes at any time.

Fill in the appropriate statement below and sign this form.

I hereby release the data archived by HURL for public consumption following the mission

Benthic Habitats of American Samoa (project title)

held on 9-11 July 2005 (date) in the following way:

- CTD data by any (date)
- voice transcripts, video, and still camera film by 11 July, 2007 (date)
- other N/A (date)
- I will give my written consent to individuals wishing to use these data prior to the above dates depending on the nature of the request(s).

Dawn J. Wright Principal Investigator

Dawn J. Wright