

HAWAI'I UNDERSEA RESEARCH LABORATORY

QUICK LOOK REPORT DIVE: PV- 538

MISSION STATUS

Location: Raita

Latitude: 25° 38.3480 N

Longitude: 169° 19.0713 W

Mission Date: 24 October 2003

Duration: 7 hours, 2 minutes.

Maximum Depth: 587 m

Project Title: Reproductive Biology and Population Genetics of Hawaiian Precious Corals

Principal Investigator: Amy Baco-Taylor

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Observer 1: Stephen Cairns

Observer 2: Wongyu Park

Address: Smithsonian

Address: University of Alaska

Pilot 1: Terry Kerby

Pilot 2:

Scientific Data Acquired: Prepare an abstract outlining your objectives, techniques, findings, etc.

Objectives:

1. Collect precious corals for reproductive biology and genetics.

Observations, findings, etc:

Pisces V landed on a flat, high current scoured, Mn-covered carbonate platform, which supported few animals. The predominant invertebrates were the stony coral *Enallopsammia rostrata* and a rather large gastropod, with an occasional octocoral. This continued for several hours until we encountered a series of terraces that dropped by 10-20 m each terrace. The current was quite strong at these locations, but at least there were a number of *Corallium laauense* projecting perpendicular to the wall. *E. rostrata* also occurred here. We followed this ridge for several hours, the sediment gradually changing to a mixture of Mn-coated carbonate and basalt. Toward the end of the dive we encountered and collected specimens of several enormous *Gerardia* (gold corals), which were intermixed with *Enallopsammia rostrata* (purple, yellow, and rose coral forms) and *Corallium laauense*. One large white *Paragorgia* was also collected at about this time. Few fish were seen. All collections were made within a 58 m depth range (509-567 m), and a rather narrow temperature range (5.8-6.3 C), which appears to be a good set of parameters for precious corals.

Species list:

Enallopsammia rostrata	AA	Carcharinus sp	S
gastropod collected	S	glass sponge	M
ribbon sponge	F	Laemonema rhodochir	F
ophiuroids	F	Shrimp	F
Grammicolepis brachiusculus	S	Beryx decadactylus	F
Micropyga tuberculata	M	Paragorgia	S
Corallium	M	Galatheid	F
Epigonids	F	Stereocidaris hawaiiensis	F
Comatulid crinoid	S	Histocidaris variabilis	F
Macrourid	F		

MISSION EVALUATION:

Limitations, failures, or operational problems noted:

None.

Recommendations for corrective action or improvement:

None.

In your opinion, did the mission essentially achieve its purpose? Compare actual work accomplished with the work that was expected to be accomplished.

Yes. Many samples of coral were collected.

List specimens or samples collected on the mission.

17 Corallium laauense
 5 Gerardia
 2 Enallopsammia rostrata
 1 gastropod
 2 rocks (Deltocyathus attached)

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 mission
Reproductive Biology and Population Genetics of Hawaiian Precious Corals

held on 24 October 2003 in the following way:

- a. CTD data by 24 October 2005 (date)
- b. voice transcripts, video, and still camera film by 24 October 2005 (date)
- c. other 24 October 2005 (date)
- d. 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).

_____ Principal Investigator