

HAWAI'I UNDERSEA RESEARCH LABORATORY

QUICK LOOK REPORT

DIVE: 583

MISSION STATUS

Location: Makapuu Coral Bed

Latitude: 21 ° 19.0' N

Longitude: 157° 32.8W

Mission Date: October 3, 2004

Duration: 7 hours 18 mins

Maximum Depth: 453 m

Project Title: Deep-sea precious corals as habitat for macroinvertebrates in Hawaii

Principal Investigator: Amy Baco-Taylor

**Address: WHOI Biology Dept.
MS#33, 214 Redfield
Woods Hole, MA 02543**

Phone: (508) 289-2331

**Observer 1: Thomas C. Shirley
Address: UAF**

**Observer 2: Aaron Baldwin
Address: UAF**

Pilot 1: Max Cremer

Pilot 2:

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

Objectives:

To observe and collect coral-associated invertebrates. To compare invertebrate assemblages between coral species and to compare to background fauna.

Observations, findings, etc:

We observed many young *Corallium* trees and a few older ones. *C. secundum* was the most abundant species. No crinoids were observed for the first several hours of the dive, however later in the dive a single species of crinoid was very abundant on a variety of corals, mainly on *Corallium*, but also on the bottom. *Gerardia* was more abundant at the deeper depths, but never was a common species. Currents changed directions during the dive, suggesting a tidal source, but also varied with location. Towards the end of the dive, we could not make headway in the current. Most corals were occupied by crinoids rather than galatheid or ophiuroid. We followed a relic beach ridge for much of the last hour of the dive; the ridge had a vertical of up to 20 m and incorporated many wave erosional features. At the upper end of the ridge (the shallowest), many large coral colonies were present. Drift algae of a variety of species was present throughout the dive.

Species list:

Corallium secundum
Corallium lauense
Gerardia sp.
Lepidisis olapa
Parapagurus sp.
Paramuricids
Prinnoids
Leiopathes sp.
Very abundant crinoids (Antedon sp.)
Chirostylid galatheaids (Uroptychus)
Squalids
Octopods (3 specimens)
Squids
Polymixia
Asteroschema
Sphaeriodiscus ammophilus
Other assorted corals and sponges

MISSION EVALUATION:

Limitations, failures, or operational problems noted:

None

Recommendations for corrective action or improvement:

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

yes

List specimens or samples collected on the mission.

Corallium secundum – 2
Gerardia sp – 4
Lepidisis olapa – 2
Galathaeids – 3
Crinoids (Antedon sp.) - 5
Ophiuroids (Asteroschema)– 1
Primnoids – 2

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 (project title)

held on _____(date) in the following way:

- a. CTD data by _____(date)
- b. video and images by _____(date)
- c. other _____(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