

HAWAI'I UNDERSEA RESEARCH LABORATORY

**QUICK LOOK REPORT
DIVE: PV-585**

MISSION STATUS

Location: Lanikai

Latitude: 21° 24.367'N

Longitude: 157° 38.552'W

Mission Date: 6 October 04

Duration: 7 hours 48 mins

Maximum Depth: 470 m

Project Title: Paleoclimate records of Pacific variability from deep sea corals

Principal Investigator: Robert Dunbar

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Stanford University
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Observer 1: Rob Dunbar

Address: as above

Observer 2: Tom Guilderson

Address: Dept. Ocean Sciences
Univ. California, Santa Cruz
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Pilot 1: Terry Kerby

Pilot 2:

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

Objectives: To collect deep sea corals of various species for paleoclimate studies. The focus for this dive was on *Gerardia* spp., particularly on the recovery of large fossil and sub-fossil "stumps".

Observations, findings, etc:

Species list:

Geradia spp.
Leiopathes Glaborrima
Corallium Secundum

MISSION EVALUATION:

Limitations, failures, or operational problems noted:

Pisces performed well on this dive.

LCD monitors for viewing camera feeds from within PV give a washed out image – this makes it difficult to focus manually.

The coral collecting basket worked well. However, the coral collecting mission as not compatible with using the Niskins hose clamped to the edges of the basket. They prevent the use of the sled as a coral ramming tool to remove large specimens.

Some smaller pieces of coral fell through the openings in the basket.

Recommendations for corrective action or improvement:

Bring down a smaller box with finer mesh or otherwise enclosed – to be placed inside of large coral basket on sub sled – for collecting smaller or delicate specimens. This was accomplished prior to our next dive.

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

Yes, we accomplished all main objectives of the dive.

List specimens or samples collected on the mission.

Sample 1. Leiopathes Glaborrima from 470 m

Sample 2. Niskin Bottle at 469 m, T = 6.9°C

Sample 3. Leiopathes Glaborrima from 403 m

Sample 4. Gerardia, small dead limbs collected from notch at base, 406 m.

Sample 5. Niskin Bottle at 406 m, T = 8.6°C

Sample 6. Gerardia spp. From 400 m

Sample 7. Dead Gerardia stump from 400 m.

Sample 8. Dead Gerardia stump from 408 m.

Sample 9. Live Gerardia Branch from 408 m

Sample 10. Corallium Secundum from 396 m

Sample 11. Gerardia stump from 411 m

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