HAWAI'I UNDERSEA RESEARCH LABORATORY

QUICK LOOK REPORT DIVE: P4-097

MISSION STATUS

Location: Maro Reef, NWHI

Latitude: 25°32.0210 **Longitude:** 170°23.9556

Mission Date: 9/13/2003 **Duration:** 8 h 06 min

Maximum Depth: 380 m

Project Title: Canyon & Scavenger Communities of the Main & Northwestern Hawaiian Islands

Principal Investigator: Craig Smith & Eric Vetter

Address: University of Hawaii, Dept of Oceanography
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Observer 1: Craig Smith **Observer 2:** Eric Vetter

Address: same as above **Address:** HPU

Pilot 1: Chuck Holloway **Pilot 2:**

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

Objectives:
1) Conduct surveys, collect at least 6 core samples, deploy baited trap, and observe bait parcels for half an hour at ~1000 m depth in canyon axis.
2) Proceed to 650 m depth in canyon axis, surveying along the way, and deploy scavenger trap and bait parcel (if have enough time).

Dive started in axis of Maro canyon at depth of 1045 m. We moved up slope to 992 m depth, surveying megafauna along the way. We saw many small-medium sized fish. At 992 m, we deployed a marker, baited scavenger trap, and 3 kg bait parcel for 1/2 hour observation. Up to four large synaphibranchid eels fed voraciously on the bait in the first 1/2 hour. We then collected 6 tube cores for sediment macrofauna, and conducted two video surveys at this depth. After this, we moved up canyon towars 650 m depths, surveying megafauna along the way. Between 900 and 800 m depths, fish and invertebrates were abundant and species-rich. The canyon floor was covered with silty sediments, and there was much marine snow in the water column. At 650 m depth we reconnoitered for a few minutes and then surfaced.

Species List:
Please mark whether -single; -few (2-10); -many (11-100); -abundant (>100)
(e.g., Symphysanodon maunaloae-many)

Hexatrygen bickelli?-single
Plesiobatis deviesi-few
Nettustoma parviceps-many
Ijimaia plicatellus-single
Synaphohranchid-many
Adrovandia phalacra-many
juv. Adrovandia-many
Bathypterois atricolor-single
Satyrichthys engyeros-single
Rexea nakamurai?-many
Coelorhynchus doryssus-many
Coryphaenoides longcirrhus-many
Malacophalus antaeus?-single
Nezumia sp.?-single
Brotulid-single

MISSION EVALUATION:

Limitations, failures, or operational problems noted:

It was difficult to conduct quantitative video surveys without knowing the speed or distance traveled over the seafloor.

Recommendations for corrective action or improvement:

I recommend that the Pisces IV and V acquire a Doppler current meter system that allows recording of speed and elevation over the seafloor during surveys.

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

Everything went splendidly. The mission achieved all of its goals.

List specimens or samples collected on the mission.

Took 6 sediment cores from the 990 m canyon and site
Collected one holothurian

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

_ Canyon & Scavenger Communities of the Main & Northwestern Hawaiian Islands

(project title)

held on__ 9/13/2003 _____(date) in the following way:

a. CTD data by____9/13/2005_____(date)

b. voice transcripts, video, and still camera film by___9/13/2005____(date)
c. other___9/13/2005_____(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