# HAWAI'I UNDERSEA RESEARCH LABORATORY OUICK LOOK REPORT DIVE: PV-534

#### **MISSION STATUS**

**Location:** Southeast of Laysan

**Latitude:** 25° 39.9596 N **Longitude:** 171° 24.3271 W

**Mission Date:** 20 October 2003 **Duration:** 6 hours, 12 minutes.

**Maximum Depth:** 1302 m

Project Title: Seamount Surveys of Deep-Water Coral Distributions as Related to

Geological Setting in the Northwestern Hawaiian Islands

Principal Investigator: Amy Baco-Taylor

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**Observer 1:** Chris Kelley **Observer 2:** 

Address: HURL Address:

Pilot 1: Max Cremer Pilot 2: Terry Kerby

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

#### Objectives:

- 1. To perform observational transects of invertebrate fauna along a seamount located southeast of Laysan.
- 2. Collect invertebrate samples for identification and for voucher specimens.
- 3. Collect rock samples to characterize geologic setting.

#### **Observations, findings, etc:**

The dive began at 1206 m on the southeast side of the summit. A 500 meter transect revealed the summit community was composed primarily of sponges, pennatulids, a few gorgonians, large red crinoids, black corals (Bathypathes sp), and halosaurid fishes. A new chrysogorgid was collected as well as a stalked crinoid, sea pen, and other gorgonians. After surveying across the summit, which reached a minimum depth of 1133 m, the sub then moved west and downslope to conduct a transect on the opposite side. Here the community of animals was much more sparse. Following the transect, the team moved further downslope to a wall where rock samples were collected. The wall was an old drowned wave-eroded reef which had dramatic appearance similar to the rugged shoreline terrain seen at various places in the main Hawaiian Islands. After the wall, the sub proceeded across a rippled sediment flat to a small side pinnacle on the seamount. Here, gigantic "Jabba" sponges were found as well as barrel sized stalked sponges that seemed to defy reason. The dive ended on the top of the pinnacle.

#### **Species list:**

Please mark whether S-single; F-Fev	v (2-10); M-Many (	(11-100); A-Abundant (>100)	
Semperella sp	AA	Pseudothesea sp (paramuricid)	F
leaf sponges	M	Large anemone	S
Walteria sp	F	Hexactinellid sponge (like cactus)	S
Farrea oca	F	stalked sponge	F
Narella dichotoma	F	Corynonema sp	F
Ophiuroid	M	Halosaurid	S
Brissingid	S	palmate antipatharian	F
unstalked crinoid	F	Pennatula sanguinea	F
solitary coral, white	S	Iridogorgia superba	F
Metallogorgia melanotriches	S	Shrimp	F
yellow stalked crinoid	S	Lithodid crab	S
Chrysogorgia, new species.	F	Calyptrophora clarki	S
pinnate antipatharians	F	Corallium laauense	S
macrourid	F	cup sponge	S
pennatulid (Virgularia sp)	A	fuzzy sponge	S
tiny eel-like fish	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. Transects were completed as planned and many specimens were collected.

### List specimens or samples collected on the mission.

- 4 different types of sponges
- 11 gorgonians
- 2 pennatulids
- 1 stalked crinoid
- 1 lithodid crab

rock samples from 4 different locations on the seamount

# **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 Seamount Surveys of Deep-Water Coral Distributions as Related to Geological Setting in the Northwestern Hawaiian Islands			
held on 20 October 2003 in the following way:			
a. CTD data by 20 October 2005 (date)			
b. voice transcripts, video, and still camera film by <u>20 October 2005</u> (date)			
c. other 20 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			