

HAWAII UNDERSEA RESEARCH LABORATORY
QUICK LOOK REPORT MISSION NO. RCV-212

MISSION STATUS

Mission Date: 11-23-02

Location (island, bank, seamount, etc): Big Island

Specific Site (NE side, summit, etc): Northwest of South Point
Position (start latitude & longitude): 18° 59.484/155° 47.778
Depth range: 399-516 m

Project Title: Black and Pink Coral Resource Assessment

Principal Investigator: Richard Grigg

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Observer 1: Richard Grigg
Address: same as above

Observer 2: Sam Kahng
Address: same as above

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

Materials & Methods:

Two submersible dives and 2 ROV dives were originally planned for this project however the second submersible dive was cancelled due to mechanical failure. The objective of this ROV dive was therefore to survey the intended site for the cancelled dive. Of particular interest was whether a pink coral bed discovered during the first submersible dive extended further north to the second site. The survey was accomplished by conducting a video-transect using the RCV-150 ROV. The ROV was deployed at a depth of 516 m and recovered at 407 m. During the survey, pink coral, other invertebrates, and fish were recorded.

Scientific data acquired:

The substrate during the survey consisted of basalt bedrock resulting from a'a and pahoehoe lave flows, sediment, cobbles and boulders. The distribution of pink coral, *Corallium regale*, was patchy and colonies were not as dense as that found further south. However, clearly the bed extended up to this second site and may continue further north. A number of other fish and invertebrates were found at this dive, and are provided below in Table 1.

Table 1: Biological organisms observed during the dive.

FISHES	ECHINODERMS, CRUSTACEANS, & MOLLUSKS	CORALS, SPONGES & OTHER INVERTS
Synphobranchid	Stereocidaris hawaiiensis	Corallium regale
Macourid	Shrimp	Chrysogorgia cattail
Uroconger lepturus	Unidentified crab	new stalked antipatharian
Epigonus atherinoides?	Ophiuroids	Stachodes sp
Hollardia goslinei	Gorgonocephalids	Keratoisis sp
Polymixia berndti	Gooseneck barnacles	Corallimorphus sp
Laemonema rhodochir	Brisingid	White gorgonian
Nezumia hebetatus	Parapagurus dofleini	Paramuricid purple
Grammacolepis brachiusculus	Gastropod shell	Acanella sp
Ruvettus pretiosus		Bathypathes conferta
		Cirripathes spiralis
		Iridogorgia bella
		Callogorgia sp
		Hormathiid
		Metallogorgia melanotrichos
		Bolocera sp
		Chrysogorgia stellata
		Regadrella sp 1

Specimens Collected:

None

MISSION EVALUATION:

Limitations, failures, or operational problems noted:

The objective of the cancelled submersible dive was to assess both deep water pink corals as well as shallow water black corals. However, there were safety concerns as a result of the proximity of the black coral depth range to the shore in this area. Therefore, the ROV could only be used to survey further off shore in pink coral depths.

Recommendations for corrective action or improvement:

None, it's unlikely even with dynamic positioning that the captain would be willing to bring the ship closer than 1/2 mile of shore.

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

Yes, partially. The submersible

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 **RCV-212** held on 11-23-02.

- a. CTD data by 11-23-04
- b. video data by 11-23-04
- 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).

Richard Trigg Principal Investigator