## HAWAII UNDERSEA RESEARCH LABORATORY

## **QUICK LOOK REPORT MISSION NO. RCV-201**

#### MISSION STATUS

**Mission Date:** 10-30-02

Location (island, bank, seamount, etc): Molokai

Specific Site (NE side, summit, etc): Penguin Banks, between  $2^{nd} \& 3^{rd}$  Fingers Position (start latitude & longitude):  $20^{\circ}$ ./157°. Depth range: 560 - 696 m

Project Title: Effectiveness of refugia on bottomfish stocks

Principal Investigator: Robert Moffitt

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**Observer 1:** Chris Kelley **Address:** HURL

**Observer 2:** Walter Ikehara **Address:** Division of Aquatic Resources

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

#### Materials & Methods:

The main objective of this study is to complete an evaluation of the effectiveness of DLNR's bottomfish management plan. This is being accomplished with follow-up submersible surveys to our 1998 and 1999 studies, which provided baseline data on densities of onaga and ehu in two refugia and two adjacent control areas. ROV dive objectives are to characterize habitats at and near the study sites. This is being accomplished by conducting videosurveys during which all fish and invertebrate species encountered are recorded along with substrate and depth information.

### Scientific data acquired:

The ROV descended on soft sediment at 671 m which persisted until about 599 m where sediment covered carbonate appeared. At 592 m, exposed carbonate plates appeared, eventually returning to sediment covered carbonate at around 567 m and becoming a sediment slope from 652 m to the end of the dive. A number of unidentified fish and invertebrate species were seen.

## Table 1: Biological organisms observed during the dive.

FISHES	ECHINODERMS, CRUSTACEANS, & MOLLUSKS	CORALS, SPONGES & OTHER INVERTS
macrourid	holothurian	anemone cup
congrid	Paleopatides retifer	Iridiogorgia bella
macrourid – black tail	ophiuroid tan (white)	hexactinellid ribbon
bathygadid – dark, black fin	Hetercarpus laevigatus	hormathiid
margins	1 0	
ophidiid – gray body, black tail	Nematocarcinus	brown cup anemone (Javania?)
eel	brisingid	Paramuricid blue w/ophiuroids
Gnathophis	Callogorgia with ophiuriods	Corallimorphus orange?
Hymenocephalus? – black macrourid (jellyhead)	galathied	Bolocera
macrourid – white top margin	Histiocidaris varabilis	stalked sponge
Caelorhinchus – white dorsal fin	white urchin	hormathiid – bumps on back
macrourid – white, midwater	Hispidodiadema	gorgonian dark red
eel-like macrourid	white sea star	leiopathes
Caelorhinchus auratum	Stereocidaris hawaiiensis	pennatulid
halosaurid – Aldrovandria?	Phormasoma	corallimorphus
caelorhinchid		cerianthid
macrourid – white tail		Umbelula
		hormothid no humps

hormathiid – no bumps cerianthid white

## MISSION EVALUATION:

Limitations, failures, or operational problems noted:

**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.

## 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-201** held on 10-30-02.

- a. CTD data by <u>10-30-04</u>
- b. video data by <u>10-30-04</u>
- 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