

**HAWAII UNDERSEA RESEARCH LABORATORY**

**QUICK LOOK REPORT MISSION NO. RCV-196**

**MISSION STATUS**

**Mission Date:** 10-29-02

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

**Specific Site (NE side, summit, etc):** Penguin Banks, Tip 2<sup>nd</sup> Finger

**Position (start latitude & longitude):** 20°58.5 157°21.75

**Depth range:** 170-380 m

**Project Title:** Effectiveness of refugia on bottomfish stocks

**Principal Investigator:** Robert Moffitt

**Address:** NOAA Fisheries  
2570 Dole St, Honolulu, HI 96822

**Phone:** 983-5373

**Observer 1:** Robert Moffitt  
**Address:** NOAA Fisheries  
2570 Dole Street  
Honolulu, HI 96822

**Observer 2:** Jane Culp  
**Address:** Hawaii Undersea Research  
Laboratory, 1000 Pope Rd, MSB 303,  
Honolulu, HI 96822

**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:

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

<b>FISHES</b>	<b>ECHINODERMS, CRUSTACEANS, &amp; MOLLUSKS</b>	<b>CORALS, SPONGES &amp; OTHER INVERTS</b>
Seriola dumerili	Acanthocidaris hastigera	Corallium tortuosum
Carcharhinus sp.	Stylocidaris rufa	Corallium niveum?
Chromis struhsakeri	Tamaria sp.	anemone
Pontinus macrocephalus	crab	Gardinaria sp.
morid	Plesionika sp	Antipathes intermedia
Etelis coruscans	shrimp	Encrusting sponge
Erythrocles scintilans	Sphaeriodiscus ammophilus	antipatharian
Etelis carbunculus	Heterocarpus laevigatus	Antipathes subpinnata?
eel		Antipathes intermedia
Ariosoma marginatum		cnidarian
Antigonia sp		
Gymnothorax berndti		
scorpaenid		
Polymixia japonica		
Chrionema chryseres		
macrourid		
Epigonus sp.		
Laemonema rhodochir		
Chaunax umbrinus		
Symphysanodon maunaloae		
macrourid		

The habitat for most of the dive was a hard carbonate substrate and carbonate plates with a light sediment cover. *Seriola dumerili* were plentiful. Bottomfish species seen were *Etelis coruscans*, *Etelis carbunculus*, and *Erythrocles scintilans*.

MISSION EVALUATION:

**Limitations, failures, or operational problems noted:** none

**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. Information on an area that had not been previously surveyed was obtained. Very good images were obtained of some species for which better images were needed.

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-196** held on 10-29-02.

- a. CTD data by 10-29-04
- b. video data by 10-29-04
- 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).

\_\_\_\_\_ Principal Investigator