HAWAII UNDERSEA RESEARCH LABORATORY

QUICK LOOK REPORT MISSION NO. RCV-189

MISSION STATUS

Mission Date: 10-24-02

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

Specific Site (NE side, summit, etc): Penguin Banks, near "First Finger"
Position (start latitude & longitude): 21° 00.168/157° 18.981
Depth range: 263-298 m

Project Title: Effectiveness of refugia on bottomfish stocks

Principal Investigator: Robert Moffitt

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Observer 1: Walter Ikehara
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Observer 2: Christopher Kelley
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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.

FISHES	ECHINODERMS, CRUSTACEANS, & MOLLUSKS	CORALS, SPONGES & OTHER INVERTS
Glossanodon struhsakeri	Antedon yellow	Filamentous green algae
Bembrops filifera	Chaetodiadema pallidum	Pennatulid (Virgularia sp?)
Poecillopsetta hawaiiensis	Paramunida hawaiiensis	Anemone barred
Hoplichthys citrinus	Melicertus marginatus	Pteroides sp
Symphurus undulatus	Mursia hawaiiensis	
Saurenchelys stylurus	Calliderma spectabilis	
Synodus sp	Anseropoda insignis	
Symphysanodon maunaloae	Plesionika sp	
Bembrops sp 1	Latreillia sp	
Ophichthid eels?	pagurid	
	Stylocidaris calacantha	
	shrimp	

About 50 small, pink fish were observed during the drop to the bottom. They could not be identified. Detritus rain was relatively heavy in midwater, although less obvious on the bottom.

The habitat at the beginning to the 2/3rd point of the dive was flat, sand and sediment. Near the end of the dive, low sand dunes appeared. No rock outcroppings were encountered. Numerous tracks left by organisms in the sediment bottom were observed. Detritus collected in pockets in the sediment bottom.

There were areas where Chaetodiadema were very common. Paramunida were also abundant in certain areas. The pennatulids were relatively common. The numbers for the rest of the species encountered and identified ranged from 1-10 each. Balls of red and green algae and calcareous material were seen rolling on the bottom with the current. Broad leaves of green algae were also observed drifting on the bottom, probably an Ulva species.

MISSION EVALUATION:

Limitations, failures, or operational problems noted: The weather was a major factor. Windspeeds during the dive ranged from 25-32 mph, with gusts occasionally higher, Only one ROV dive was completed, as it was felt the conditions did not allow for further dives. This particular site for the dive was chosen because the ROV could not dive on the original site in the plan, a pinnacle inside bottomfishing RFA no. 9. The ROV worked very well, but there were some problems getting it back into the house because of weather related factors.

Recommendations for corrective action or improvement: Hope the weather settles down so that dives can be made at all of the primary sites.

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

Partially yes. Information on an area that had not been previously surveyed was obtained. No, in that the habitat was not suitable for bottomfish and none were seen. 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-1 held on 10--02.

a. CTD data by 10--04

b. video data by 10--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