HAWAII UNDERSEA RESEARCH LABORATORY

QUICK LOOK REPORT MISSION NO. P4-070

MISSION STATUS

Mission Date: 10-31-02

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

Specific Site (NE side, summit, etc): Makapuu
Position (start latitude & longitude): 21°20.454'N 157° 35.860'W
Depth range: 327-410 m

Project Title: : Effectiveness of refugia on bottomfish stocks

Principal Investigator: Robert Moffitt

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Observer 1: Robert B. Moffitt
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Observer 2: Jane Culp
Address: HURL

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 a follow-up survey to our 1998 and 1999 studies, which provided baseline data on densities of onaga and ehu in two refugia and two adjacent control areas. This particular dive was conducted off Makapuu Point in RFA 8, one of the two refugia in the study. Specific dive objectives were to assess bottomfish sizes and populations and survey the fish and invertebrate community at a known fishing site. A set of two thirty minute transects and one thirty minute bait station was conducted within the depth range of 300-350 meters, where most species of bottomfish occur.

Scientific data acquired:
We conducted two transects and one bait station as planned. The deeper transect started on at the sediment/hard carbonate interface ending on a light sediment covered carbonate slope. No bottomfish were observed. Ijimaia plicatellus were unusually common. The shallower transect started heavy sediment with scattered carbonate outcrops and ended on hard carbonate. A few small ehu were observed. Glossanodon struhsakeri were very abundant over the sand. Symphysanodon maunaloae were observed in isolated large aggregations mixed with a few Grammatonotus laysanus. The 332 m bait station, on hard carbonate, attracted 1 very small ehu (<6 inches), 4 ophichthid eels, 3 Squalus mitsukurii, and 1 Conger oligoporus. In the area were large quantities of S. maunaloae and G.

struhsakeri. After the transects and bait station we travelled down slope and collected specimens. The hard carbonate slope had a wide variety of gorgonians and antipatharians.

Table 1: Biological organisms observed during the dive.

FISHES	ECHINODERMS, CRUSTACEANS, & MOLLUSKS	CORALS, SPONGES & OTHER INVERTS
Parapercis roseoviridis	Brachyuran crab	Anthomastus sp
Chascanopsetta prorigera	Paramunida hawaiiensis	Cirrhipathes spiralis
Plectranthias kelloggi	Paromola japonica	Corallium regale
Conger oligoporus	Tamaria triseriata	Corallium tortuosum
Epigonus sp.	Octopus sp	Anemone ?? (collected**)
Etelis carbunculus	Pleurobranchus sp	Lyrocteis sp.
Chrionema chryseres	Sphaeirodiscus ammophilus	Antipathes sp 1
Chrionema squamiceps	Shrimp	Bathypathes conferta
Poecilopsetta hawaiiensis	Eumunida balssi	Gardinaria hawaiiensis
Pontinus macrocephalus	Stereocidaris hawaiiensis	Antipathes subpinnata
Scorpaenid	Munidiopsis sp	Regadrella sp 1
Symphysanodon maunaloae	Tutankhamen pteromerus	Leiopathes glaberrima
Parabothus coarctatus	squid	Acanthogorgia striata
Grammatonotus laysanus	ophiuroid	Acanella dispar
Antigonia sp	Parapagurus dolfleini	Isidella sp 2 ? (collected)
Chlorophthalmus proridens	starfish	Keratoisis sp 3
Synodus sp	Henricia sp	Callogorgia gilberti
Hollardia goslinei	goniasterid	Viminella sp
Synagrops argyrea		Callogorgia formosa
Synagrops japonicus		Pennatulid
Glossanodon struhsakeri		Gerardia sp
Ijimaia plicatellus		Polychaete
Beryx decadactylus		
Sphenanthias sp		
Chaunax umbrinus		
Rexea nakamurai		
Caelorinchus spilonotus		
Laemonema rhodochir		
Morid		
ophichthid		
Bembrops filifera		
Plesiobatus daviesi		
Polymixia berndti		
Polymixia japonica		
Setarches guentheri		
Squalus mitsukurii		
Meadia abyssalis		
Satyrichthys engyceros		
Cyttomimus stelgis		
Stethopristes eos		
Zenopsis nebulosus		

<u>Specimens collected:</u>

Carbonate rock 355 m

Anthomastis sp 381 m
Tamaria triseriata 331 m
Isidella sp 2 403 m
Bathypathes conferta with Munidiopsis sp 387 m
Anemone ?? 406 m
Keratosis sp 3 410 m

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.

All objectives were accomplished efficiently leaving additional time at the end of the dive for valuable specimen collection.

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

P4-070 held on 10-31-02.

a. CTD data by 10-31-04

b. video data by 10-31-04

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