HAWAII UNDERSEA RESEARCH LABORATORY

QUICK LOOK REPORT MISSION NO. P4-065

MISSION STATUS

Mission Date: 10-26-02

Location (island, bank, seamount, etc): Molokai, Penguin Banks, Third Finger

Specific Site (NE side, summit, etc): Penguin Banks
Position (start latitude & longitude): 20° 55.731/157° 31.434.
Depth range: 190 - 441 m

Project Title: : Effectiveness of refugia on bottomfish stocks

Principal Investigator: Robert Moffitt

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Observer 1: Christopher Kelley
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Observer 2: Walter Ikehara
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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 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 in RFA 10 on Penguin Banks, 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 in the refugia. A set of four thirty minute transects and two thirty minute bait stations were conducted within the depth range of 190-350 meters, where most species of bottomfish occur.

Scientific data acquired:

The four transects were conducted at 190, 240, 290, and 340 meters. The two bait stations were conducted at 240 and 309 meters. Although a large number of fish species were observed, bottomfish were not abundant on the transects or the bait stations. The first transect took place on steep carbonate slope, with carbonate blocks and sediment patches. The second transect was on a sheer carbonate wall. An anchor line in midwater was found on this transect. The third transect was on a steep cabonate wall with some sediment

slopes. The fourth transect was mainly over a sediment/sand slope with small rock/pebble patches. No bottomfish were seen were seen on the fourth transect, although schools of very small fish were observed over the sand. The fish were too small to be identified. E. carbunculus, Pristipomoides zonatus, unidentified eels, and a Seriola dumerili were seen at the first bait station. At the second bait station, only a Gymnothorax berndti and a Squalus mitsukurii were observed.

Table 1: Biological organisms observed during the dive.

FISHES	ECHINODERMS, CRUSTACEANS, & MOLLUSKS	CORALS, SPONGES & OTHER INVERTS
Synagrops argyrea	Galatheid	Anthomastus red
Glossanodon struhsakeri	Munida brucei	Bathalcyon robusta
Chascanopsetta prorigera	Neopilumnoplax major	Bolocera sp.
Parabothus chlorospilus	Homola dickensoni	Cerianthid brown
Eumegistus illustris	Paromola sp	Cerianthid green
Grammatonotus sp1	Cyrtomaia smithi	Cerianthid white
Grammatonotus laysanus	Scyllarus aurora	Corallium niveum
Antigonia eos	Mollusk	Corallium secundum
Seriola dumerili	Astroceramus sp1	Callogorgia gilberti
Roa excelsa	Goniasterid	Calyptophora japonica
Erythrocles scintillans	Plinthaster ceramoidea	Pennatula flava
Epigonus sp.	Sphaeriodiscus ammophilus	Gardinaria hawaiiensis
Ostichthys sp.	Tamaria triseriata	Javania insignis
Polylepion russelli	Pteraster obesus myonotus	Madracis kauaiensis
Suezichthys notatus	Plesionika sp.	Clavularia purple
Etelis carbunculus	Stylocidaris rufa	Lyrocteis sp
Etelis coruscans		
Pristipomoides sieboldii		
Pristipomoides zonatus		
Caelorinchus spilonotus		
Gymnothorax berndti		
Malthopsis jordani		
Chrionema chryseres		
Chrionema squamiceps		
Parapercis roseoviridis		
Parapercis schauinslandi		
Poecillopsetta hawaiiensis		
Chromis struhsakeri		
Cookeolus japonicus		
Priancanthus alalaua		
Pontinus macrocephalus		
Holanthias elizabethae		
Plectranthis kelloggi		
Pseudanthias fucinus		
Symphysanodon maunaloae		
Symphysanodon typus		
Squalus mitsukurii		
Canthigaster inframacula		
Unidentified small fish		
Unidentified muraenid eel		
Torpedo sp.		

Specimens collected: None

MISSION EVALUATION:

Limitations, failures, or operational problems noted: No major problems, except that dive was cut a little short due to low battery voltage, but this was after all planned objectives were met.

Recommendations for corrective action or improvement: None

In your opinion, did the mission essentially achieve its purpose? Compare actual work accomplished with the work that was expected to be accomplished.
Yes, all mission objectives were met. Four transects and two bait stations were successfully completed.

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

P4-065 held on 10-26-02.

a. CTD data by 10-26-04

b. video data by 10-26-04

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