HAWAII UNDERSEA RESEARCH LABORATORY

QUICK LOOK REPORT MISSION NO. P4-069

MISSION STATUS

Mission Date: 10-30-02

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

Specific Site (NE side, summit, etc): Penguin Banks, Third Finger
Position (start latitude & longitude): N20° 55.625/W157° 31.700
Depth range: 200 – 544 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: 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 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 at a known fishing site. A set of four thirty minute transects and two thirty minute bait stations were conducted within the depth range of 200-350 meters, where most species of bottomfish occur. The four transects were conducted at 350, 300, 250, and 200 meters. The two bait stations were conducted at 252 and 227 meters.

Scientific data acquired:

Pisces IV reached the bottom at 428 m on a sediment slope. Ehu (*Etelis carbunculus*) were observed immediately at this depth. We rose to 350 m to do the first transect to the west over a mixture of sediment slope and steep carbonate walls. The transect at 300 m was to the east. The 250 m transect was to the west over a steep carbonate slope dusted with sediment with occasional steep carbonate walls. The 200 m transect to the east was over a carbonate slope with many small cavities followed by a sediment covered carbonate slope with carbonate outcrops. The 250 m bait station was conducted on steep carbonate outcrops with sediment. Four ehu, two gindai (*Pristipomoides zonatus*) and one eel (*Gymnothorax berndti*) were observed. The second bait station at 227 m drew at least six *Seriola dumerili*, four ehu, one gindai, six *Pristipomoides auricilla*, and two *Pristipomoides sieboldii* and one *Gymnothorax berndti*.

Table 1: Biological organisms observed during the dive.

FISHES	ECHINODERMS, CRUSTACEANS, & MOLLUSKS	CORALS, SPONGES & OTHER INVERTS
Etelis carbunculus	Paromola sp	Gardinaria sp
Chrionema chryseres	Pleurobranchus sp	Javania sp
Chrionema squamiceps	Randallia distincta	Lyrocteis sp
Chloropthalmus proridens	Cyrtomaia smithi	Calyptrophora sp
Symphysanodon maunaloae	small white urchin	Antipathes sp 1
Grammatonotus laysanus	Heterocarpus laevigatus	Callogorgia gilberti
Grammatonotus sp 1	Munida brucei	Corallium niveum
Pontinus macrocephalus		tubularid
scorpaenid		anemone cup
Pristipomoides zonatus		Bathypathes subpinnata?
Polylepion russelli		Bathalcyon robusta
Pristipomoides auricilla		alcyonacean white
Pristipomoides sieboldii		Corallium tortuosum
Erythrocles scintillans		Corallium secundum
Holanthias elizabethae		
Epigonus glossodontus		
Epigonus sp		

Seriola dumerili
Gymnothorax berndti
Etelis coruscans
Pseudanthias fucinus
Symphysanodon typus

Specimens collected: Calytrophora sp (227 m), antipatharian (415 m), anemone cup (521 m), tubularid and small white urchin (543 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.

Yes. All mission objectives were attained efficiently with enough time to collect samples.

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

P4-069 held on 10-30-02.

a. CTD data by 10-30-04

b. video data by 10-30-04

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