HAWAII UNDERSEA RESEARCH LABORATORY

QUICK LOOK REPORT MISSION NO. P4-049

MISSION STATUS

Mission Date: 09-12-02

Location (island, bank, seamount, etc): Brooks Bank

Specific Site (NE side, summit, etc): NE corner
Position (start latitude & longitude): 24° 00.6027/166° 40.4922
Depth range: 170-326 m

Project Title: Impact of Bottomfishing in the NWHI Coral Reef Ecosystem Reserve

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Observer 2: Robert Moffitt
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Scientific Data Acquired: Prepare an abstract outlining your objectives, techniques, findings, etc.

Materials & Methods:

The overall goal of this project is to obtain data on bottomfish populations and their habitat for use in evaluating the impacts of commercial fishing in the NWHI Coral Reef Ecosystem Reserve. This particular dive was conducted on Brooks Bank, one of two Reserve Preservation Areas (i.e., RPAs) completely closed to bottomfishing. Specific dive objectives were to assess bottomfish populations and survey the fish and invertebrate community at a known fishing site. To accomplish these objectives, 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 300, 250, 210, and 170 meters. The two bait stations were conducted at 250 and 170 meters.

Scientific data acquired:

The substrate at the deeper extent of this dive (i.e. 250-300 m) was primarily sediment with carbonate pebbles and cobbles and occasional carbonate outcroppings. A carbonate wall interrupting the cobble covered sediment was encountered on the 210 m transect whereas the 170 m transect was conducted on a largely carbonate substrate on the top of the slope.

Table 1 provides a preliminary list of biological organisms observed on this dive. Many of these are typically observed on bottomfish habitats elsewhere. A large bed of Antipathes intermedia (?) observed on the 170 and 210 m transects. Due to their density, trees in this bed could be vulnerable to anchor damage. An anchor and several pieces of fishing gear were observed in this area confirming that fishing activity did occur at this site prior to it being closed. Bait stations attracted Pristipomoides filamentosus, P zonatus, Etelis coruscans, E. carbunculus, Seriola dumerili, Pseudocaranx dentex, Epinephelus quernus, and one C. galapagensis.

Table 1: Biological organisms observed during the dive.

FISHES	ECHINODERMS, CRUSTACEANS, & MOLLUSKS	CORALS, SPONGES & OTHER INVERTS
Ammodytoides pylei	Cancer macrophthalmus	Antipathes intermedia
Parabothus coarctatus	Munida brucei	Cirrhipathes spiralis
Grammatonotus laysanus	Paromola japonica	Antipathes sp
Antigonia eos	Octopus sp	Corallium tortuosum
Pseudocaranx dentex	Pagurid	pennatulid sp
Seriola dumerili	Henricia robusta	Lyrocteis
Carcharhinus galapagensis	Plinthaster ceramoidea	Pyrosoma
Carcharhinus plumbeus	Sphaeriodiscus ammophilus	
Chaetodon kleinii	Tamaria triseriata	
Roa excelsa	Stylocidaris rufa	
Emmelichthys karnellae		
Myripristis chryseres		
Pristilepis oligolepis		
Sargocentron sp		
Bodianus sanguineus		
Bodianus vulpinus		
Coris balieui		
Suezichthys notatus		

Etelis carbunculus
Etelis coruscans
Aphareus furcatus
Pristipomoides filamentosus
Pristipomoides sieboldii
Pristipomoides zonatus
Gymnothorax berndti
Gymnothorax nuttingi
Malthopsis jordani
Chrionema chryseres
Parapercis roseoviridis
Desmoholocanthus arcuatus
Chromis struhsakeri
Chromis verater
Cookeolus japonicus
Priacanthus alalaua
Priacanthus meeki
Pontinus macrocephalus
Scorpaenid
Caprodon schlegeli
Epinephelus quernus
Holanthias elizabethae
Holanthias fuscipinnis
Luzonichthys earlei
Plectranthias kelloggi
Symphysanodon maunaloae
Symphysanodon typus
Canthigaster inframacula
Torquigener florealis
Oplegnathus punctatus

MISSION EVALUATION:

Limitations, failures, or operational problems noted:

None.

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.

This dive was very successful, we completed all scheduled tasks and collected specimens of important fauna, including Antipathes sp ("brown"), and A. intermedia.

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

P4-049 held on 09-12-02.

a. CTD data by 09-12-04

b. video data by 09-12-04

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