

HAWAII UNDERSEA RESEARCH LABORATORY

QUICK LOOK REPORT MISSION NO. RCV-170

MISSION STATUS

Mission Date: 09-11-02

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

Specific Site (NE side, summit, etc): SE side

Position (start latitude & longitude): 23°57'08.40" N 166°41'20.40"

Depth range: 309-378m

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

Principal Investigator: Christopher Kelley

Address: Hawaii Undersea Research Lab
1000 Pope Rd.
University of Hawaii, Honolulu, Hi. 96822

Phone: 956-7437

Observer 1: Bruce Mundy
Address: : NOAA Fisheries, 2570 Dole
St., Honolulu, HI, 96822

Observer 2: Sean Corson
Address: NOS, 6700 Kalaniana'ole
Highway, Suite 215, Honolulu, HI 96825

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 survey the fish and invertebrate community at a known fishing site. Particular attention was paid to corals and other attached invertebrates that would be vulnerable to damage from anchors and fishing weights. To accomplish this objective, the ROV was deployed along a track running through the coordinates provided for the site. Observers noted all fish, invertebrates, and fishing debris encountered.

Scientific data acquired:

Habitat characteristics and biota were observed and recorded along the SE slope of Brooks Bank. The ROV reached the bottom and began recording at 2245 in 352m of water. During the first half of the dive the substrate consisted of flat hardpan covered by alternating patches of dusted sand and gravel. A strong current made the ROV operations difficult. A ledge was encountered at 2320. This was followed by a steep wall with several small caverns. At the base of the wall, and for the remainder of the dive, the substrate consisted of loose sediment over hardpan. The ROV was retrieved at 2348.

The biota (Table 1) was fairly evenly distributed throughout the dive. Several genera of coral were recorded including *Corallium*, *Bathypathes*, *Narella*, and *Antipathes*. In addition, several fish commonly seen at this depth range were recorded as well, including, *Laemonema rhodochir* and, *Epigonus* sp. *Etelis coruscans* was the only managed bottomfish recorded on this dive. This fish was seen at 355m near the rock wall with caverns.

Table 1: Biological organisms observed during the dive.

FISHES	ECHINODERMS, CRUSTACEANS, & MOLLUSKS	CORALS, SPONGES & OTHER INVERTS
Myctophids	Shrimp	Narella megalepis
Epigonus devaneyi	Sphaereodiscus	Corallium secundum
Trichiurid	Crabs on Narella	Anthomastus fisheri
Chlorophthalmus proridens	Paromola japonica	Niveum like
Scorpaenid	Pteraster	Bathypathes patula
Morid	Calliaster	Antipathes sp. 1
Physiculus rhodopinnis	Charonia like shell	
Laemonema rhodochir	Berrya hoylei	
Pontinus macrocephalus	Lyrocteis	
Caelorinchus spilonotus		
Seriola dumerilii		
Etelis Coruscans		
Chlorophthalmus		

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.

Yes, the mission accomplished its purpose.

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-170** held on 09-11-02.

- a. CTD data by 09-11-04
- b. video data by 09-11-04
- 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