HAWAI'I UNDERSEA RESEARCH LABORATORY

QUICK LOOK REPORT
DIVE: R-450

MISSION STATUS

Location: East Niihau

Latitude: 21° 45.090 **Longitude:** 160° 9.237

Mission Date: 11/30/2009 **Duration:** **1** hours 12 mins

Maximum Depth: 496m

Project Title:

Principal Investigator: Christopher Kelley

Address: HURL

Phone: 956-7437

Observer 1: Christopher Kelley
Address: HURL

Observer 2: Jeff Drazen
Address: Oceanography Dept, UH

Pilot 1: Dan Greeson

Pilot 2: Pete Townsend

Scientific Data Acquired: Prepare an abstract outlining your objectives, techniques, findings, etc.

Objectives: The ROV component of this project is designed to provide data on the nocturnal benthic communities associated with the three main study sites: Pueo Pt Pinnacle, the "Banks" (a guyot on the east side of Niihau), and the South Point Pinnacle. All three of these sites are considered to be candidate "habitat areas of particular concern" for the 5 year review of the Hawaiian bottomfish essential fish habitat. The dive was conducted to survey for benthic fish and invertebrate resources as well as impacts from fishing such as lost gear and anchor damage to coral beds. In addition, a VR2 receiver was attached to the vehicle in an effort to pick up signals from bottomfish previously implanted with transmitters. This particular dive was conducted on the South Point Pinnacle.

Observations, findings, etc:

The ROV was deployed and reached bottom at 410m. The substrate at the start point was sediment with bedforms and burrows. Hard substrate first appeared at 405m and was intermixed with sediment. The dominant invertebrates observed were single polyp scleractinians, Anthomastus fisheri, and Bathypathes sp. Only one fishing line was encountered during the survey although the transect line was along the base of the pinnacle and not on the sides or summit. Of particular interest was the appearance of pillow lava formations starting at 430m and continuing down to the end of the dive at 496m.

Species list:

Single polyp scleractinians
Symphysanodon maunaloae
Anthomastus fisheri
Corallimorpharian
Bathypathes sp (conferta and possibly patula)
Setarches guentheri
Chrionema chryseres
Lyrocteis sp
Centrophorus tesselatus
Heterocarpus ensifer
Chascanopsetta prorigera
Plinthaster ceramoidea
Epigonus sp
Calibelemnon symetricum
Beryx decadactylus
Stereocidaris hawaiiensis
Leiopathes sp
Ijimaia plicatellus
Caelorinchus spilonotus
Malacocephalus boretzi
Carapid
Sericolophus hawaiicus
Benthesicymus sp
Hollardia goslinei
Callogorgia gilberti
Cirrhipathes spiralis
Hormathiid anemone
Paramola sp
Parazoanthid
Corallium sp
Isidid possibly Keratoisis sp
Conger white fins
Ruvettus pretiosus
Hoplostethus sp
Laemonema rhodochir
Sponge
Regadrella sp

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, it was an excellent survey of the base of the pinnacle.

List specimens or samples collected on the mission.

None

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 (project title)

held on 12/01/09 (date) in the following way:

a. CTD data by 12/01/11 (date)

b. video and images by 12/01/11 (date)

c. other 12/01/11 (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