## HAWAI'I UNDERSEA RESEARCH LABORATORY

### QUICK LOOK REPORT
### DIVE: R-452

# MISSION STATUS

**Location:** Pueo Pt. Pinnacle, Niihau

**Latitude:** 21° 49.1571 N                **Longitude:** 160° 04.014 W

**Mission Date:** Dec 1, 2009        **Duration:** 1 hours   35 mins

**Maximum Depth:** 380m

**Project Title:** Bottomfish Habitat Survey and Movement: Value and Effectiveness of State Restricted Fishing Areas and Fishery Effects on Precious Corals

**Principal Investigator:** Christopher Kelley

**Address:** HURL

**Phone:**        808-956-7437

**Observer 1:** Jeff Drazen        **Observer 2:** Kevin Weng
**Address:**                **Address:**

**Pilot 1:** Dan Greeson        **Pilot 2:** Pete Townsend

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

Objectives:

The objective of this project was to conduct three submersible dives and ROV transects on a guyot and two pinnacles off with west coast of Niihau.  This location is actively fished for eteline snappers and other deep living bottomfish species.  The guyot is within a restricted fishing area but the other pinnacles are not.  The site is an active research area where the distribution and size frequency of bottomfish is being  assessed using baited camera stations (Botcam) and where fishes are being tagged with acoustic transmitters to assess movement patterns in relation to habitat features.

The purpose of the ROV dives was to conduct visual transect surveys for lost fishing gear and to identify any benthic invertebrate beds that could be vulnerable to damage from anchors and fishing weights. It's expected that a greater quantity of lost gear will be found on the pinnacles in comparison to the guyot, which lacks a small summit where fishing effort is typically  concentrated. Invertebrate surveys will  primarily  be  looking  for

gorgonian beds, particularly *Corallium* sp, as well as deepwater scleractinians and antipatharians known to occur in bottomfishing depths.

Observations, findings, etc:

We performed an ROV visual transect from the middle of the Pueo Pt pinnacle over the NW peak and down the north slope.  We observed a anchor, an anchor from previous botcam research, and many old anchor lines and fishing weights.

Species list:

Sponges
Small yellow and white sponges
Regadrella sp. 1
Large brown circular sponges

Corals and other Cnidarians
White primnoid fans
Calyptophora sp. 2
Narella gigas
Eguchipsammnia
Cup corals
Small fan like Sytlasterids

Other invertebrates
Stylocidaris rufa
Stereocidaris hawaiiensis
Stylocidaris calacantha
Spheriodiscus
Brown comatulid crinoids
Plesionika sp.
Heterocarpus ensifer
Geryonid crab
Pagurid crabs

Fishes
Etelis carbunculus
Pristipomoides sieboldi
Erothrycles scintillans.
Emmilichthyes
Seriola dumerili
Pontinus macrocephalus
Scorpaena spp.
Antigonia eos
Chrionema chryseres
Cookeolus japonica
Laemonema sp.
Ophidion
Polymixia japonica
Nettastoma parviceps
Congrid white fin

## 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 dive accomplished its mission. We successfully completed our visual transect, evaluated the magnitude of fishing gear impacts, and identified areas of dense coral cover over the seamount.

**List specimens or samples collected on the mission.**

## 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_____12/01/09_____(date)

    b. video and images by____12/01/09_____(date)

    c. other____12/01/09_____(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