

HAWAII UNDERSEA RESEARCH LABORATORY

QUICK LOOK REPORT MISSION NO. RCU-010A

MISSION STATUS

Location: Ewa Beach / Barber's Point

Mission Date: 18 Aug 98

Maximum Depth: 274 m

Project Title: Characterization ... ~~of~~ Two Types of Critical Habitat
for Etelme Snappers - - - -

Principal Investigator: Chris Kelley

Address: Hawaii Institute of Marine Biology
P.O. Box 1346
Kaneohe, HI. 96744

Phone: (808) 236-7418

Observer 1: James D. Parrish

Observer 2: Eric S. Conklin

Address: Hawaii Coop. Fishery Research Unit
2538 The Mall, Univ. Hawaii
Honolulu, HI 96822
Edmondson Hall 165A

Address: Same (Also Chris Kelley)

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

The primary objective was to obtain night observations of the fish and invertebrate communities in the habitats studied by day with Pisces V Dive 362 at approx. the same 3 locations (at 3 depths). This would allow comparison of the fauna by day and night. The ROV cage was held as closely on station as possible at each of the 3 locations, and the ROV made sweeps with the VHS camera of the surrounding bottom, maintaining altitudes of one to several meters above bottom. Scientists monitored the video images continuously and made written and voice notes and a tape log of video excerpts. Two porous bait bags that created a continuous scent trail were carried, one on the cage and one in the manipulator arm. All visible mobile animals that could be identified to any level were annotated and tentatively identified. An onaga (etelme snapper) was clearly photographed at the deepest station, and another possible etelme snapper (currently unidentified) was sighted there. Several kahala jacks were seen at the middle depth station. Many other fish taxa were identified at one or more of the stations, including a shark, a ray, and miscellaneous smaller species. Visible fish abundance and diversity at the deep and shallow stations appeared to be lower by night than by day.

MISSION EVALUATION:

Limitations, failures, or operational problems noted:

The mid depth station (marked by a wrecked aircraft) could not be located. Station holding capability was limited, but probably adequate for the mission purposes. ~~However, it would~~ The loud sound of the ROV was a possible cause for the relatively low numbers of nocturnal species observed.

Recommendations for corrective action or improvement:

The scientific capability of the system would be considerably improved if the ship's ability to hold station were upgraded. Any means to reduce the sound level from the ROV would be of benefit particularly to biological dives.

In your opinion, did the mission essentially achieve its purpose? Compare actual work accomplished with the work that was expected to be accomplished.

The mission largely achieved its purpose.

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 Characterization and Assessment of Two Type of Critical Habitat For Eteline Snappers in the Main Hawaiian Islands (project title)

held on Aug 18, 1998 (date) in the following way:

- a. CTD data by August 18, 2000 (date)
- b. voice transcripts, video, and still camera film by August 18, 2000 (date)
- c. other August 18, 2000 (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).

Cliff Kelley

Principal Investigator

HAWAII UNDERSEA RESEARCH LABORATORY

QUICK LOOK REPORT MISSION NO. RCU-010b

MISSION STATUS

Location: Ewa Beach/Barbers Point

Mission Date: 19 Aug 98

Maximum Depth: 285 m

Project Title: Characterization of 2 Types of Critical Habitat
for Etelina Snappers

Principal Investigator: Chris Kelley

Address: Hawaii Institute of Marine Biology
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Kaneohe, HI. 96744

Phone: (808) 236-7418

Observer 1: James D. Parrish

Observer 2: Eric J. Conklin

Address: Hawaii Coop. Fishery Research Unit
2538 The Mall, Univ. Hawaii
Honolulu, HI 96822
Edmondson Hall 165A

Address: Same (Also Chris Kelley)

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

The objective was to obtain visual ground truth of the substrate type in the target area, for comparison with sonar imagery available, for use in planning further operations. The cage was deployed well within the area of interest, and the ROV followed it at altitudes of one to several meters above the substrate as the ship drifted in a range of about ⁵⁰⁰⁻1000 meters about this location. Video observations were made and recorded during this process, along with written notes and voice notes on tape. Data included observations of animals sighted. A basically hard bottom was confirmed for almost all the area surveyed, with many small-scale, closely spaced protrusions of the hard substrate through an apparently thin covering of sand. Several individuals of a few species of small fishes were seen, also an octopus. Cidarid sea urchins were moderately abundant.

MISSION EVALUATION:

Limitations, failures, or operational problems noted:

Only about 43 min. of the dive were completed because of a hydraulic failure in the ROV.

Recommendations for corrective action or improvement:

The ROV crew made a prompt and apparently successful repair the following day.

In your opinion, did the mission essentially achieve its purpose? Compare actual work accomplished with the work that was expected to be accomplished.

The mission achieved most of its purpose of providing ground truth of the substrate, although the areal extent of the survey was curtailed by the failure (probably about half the planned coverage lost).
Two potential outcrops could not be surveyed as planned.

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 Characterization and Assessment of Two Types of Critical Habitat for Etelive Snappers in the Hawaiian Islands (project title)

held on August 19, 1998 (date) in the following way:

- a. CTD data by August 19, 2000 (date)
- b. voice transcripts, video, and still camera film by August 19, 2000 (date)
- c. other August 19, 2000 (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).

Clyde Kelly

Principal Investigator