HAWAII UNDERSEA RESEARCH LABORATORY

QUICK LOOK REPORT MISSION NO. RCV-009

MISSION STATUS

Location: Barbers Point

Mission Date: 16 Aug 98

Maximum Depth: 316 m

Project Title: Characterization of Two Types of Critical Habitat for Eteline Snappers

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

Objectives were to make a general visual survey, on 3 roughly parallel transects at different depths, of benthic fishes, large invertebrates, substrate, and general physical habitat. An important purpose was to provide reconnaissance for selecting the location of a subsequent submersible dive on this cruise. Observations were made with the ship drifting and the ROV holding at altitudes of 1½ to several meters above the bottom with the video camera scanning the substrate and deepest several meters of the water column. A mixture of bottom morphologies was observed. Rock types ranged from carbonate reef boulders to smooth, basaltic boulders. Bottom sediments ranged from moderately well sorted, medium-coarse grain sands with ripples (spaced at ≈10 cm intervals) to very coarse grain "rubble" consisting of coarse sands and pebble-cobble size clasts of carbonate material (float). Areas characterized by coarse "rubble" did not have ripple laminations. Only the deepest of the 3 planned transects was completed and the starting point of the transect at middle depth. The bottom along the deep transect (272-316 m) contained several areas along its length that appeared to provide good bottomfish habitat, and several medium-size individuals of a snapper Randallichthys (?) filamentosus were seen as well as a ray, 2 eels and a morid fish. The habitat appears promising for a submersible dive in the project.

Dive RCV-009

MISSION EVALUATION:

Limitations, failures, or operational problems noted:

Operations were suspended after the first of 3 planned transects because of loss of oil pressure in a system of the ROV. The ROV currently has no means of estimating scale of objects in view; the crude device that was rigged for the purpose (at the scientists' request and per their "design") was ineffective and interfered with the system controlling illumination.

Recommendations for corrective action or improvement:

Development should continue on a device for size estimation. The basic operation, viewing, and video recording capabilities were very useful, and operating personnel seem to have good command of the system at this early stage in its use.

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

In terms of data acquired, quantitatively the mission accomplished about a third of the work expected. The quality of the product was at least as high as expected. Even though mission length was curtailed, the value as reconnaissance for future dives was high.

List specimens or samples collected on the mission.

None (none planned)