

**HAWAI'I UNDERSEA RESEARCH LABORATORY**

**QUICK LOOK REPORT  
ROV: RCV-285**

**MISSION STATUS**

**Location:** Northwest, Au'au Channel, Maui

**Latitude:** 20° 57.51' N

**Longitude:** 156° 51.73' W

**Mission Date:** September 10, 2004

**Duration:** 0 hours 25 mins

**Maximum Depth:** 148 m

**Project Title:** Ecological impact of an invasive marine invertebrate in Hawaii's coral reef communities

**Principal Investigator:** Richard W. Grigg, University of Hawaii

**Address:** 1000 Pope Road, Honolulu, HI 96822

**Phone:** 808-956-7186

**Observer 1:** Sam Kahng

**Observer 2:** Steve Coles, Bill Browne

**Address:** 1000 Pope Road, Honolulu, HI 96822

**Pilot 1:** Dan Greeson

**Pilot 2:** Peter Townsend

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

Objectives:

An investigation of the deep reef habitat was conducted in select locations in the Hawaiian Archipelago to determine the geographic spread and ecological intensity of the *Carijoa riisei* biological invasion on the deep reef. This dive was one of dives on the Pisces V submersible and 4 remotely operated vehicle deployments of the RCV-125 conducted September 8-15.

Observations, findings, etc:

The RCV track was N across an underwater peninsula feature in the NW corner of the Au'au Channel between West Maui and Lanai.

The bottom at 148m bordering the peninsula was sandy bottomed with fields of wire corals. A couple isolated black coral colonies (likely *Antipathes ulex*) were encountered. Both species indicate that hard substrata underlies the sand. Minimum temperature was 22.0°C.

Large exposed rocks and steep walls were encountered quickly rising to 75m. Some black corals were observed with some completely smothered in *Carijoa riisei*. Other black coral colonies were *C. riisei* free but had other epifauna (i.e., sponge and oysters). The top of the peninsula was dominated by plate corals (*Leptoseris* sp.) mixed with *Halimeda* sp (large segments).

RCV power failure prematurely terminated the transect on top of the peninsula. A sample of plate coral was accidentally retrieved by the RCV.

Species list:

*Carijoa riisei*

*Antipathes dichotoma*

*Antipathes ulex*

*Leptoseris* sp.

*Halimeda* sp.

Wire corals

**MISSION EVALUATION:**

**Limitations, failures, or operational problems noted:**

**Recommendations for corrective action or improvement:**

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

Mission accomplished. The crew did a fine job in helping us meet our scientific objectives.

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

## DATA RELEASE

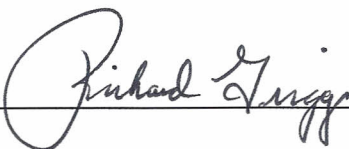
Data may be retained by the project leader for up to 2 years after the mission date with the following exception. NOAA may request to use photos for publication or publicity purposes at any time.

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 9/10/00 (date) in the following way:

- a. CTD data by \_\_\_\_\_ (date)
- b. video and images by \_\_\_\_\_ (date)
- 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

**HURL RCV-285; September 10, 2004**  
**South Ridge, Au Au Channel**  
**Summary Assessment**

**Chief Scientist:** Sam Kahng, University of Hawaii  
**Observer:** Steve Coles, Bill Browne, Marc Crepeau  
**Operator:** Dan Greeson, Peter Townsend

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