

**JOB PROGRESS REPORT
RESEARCH PROJECT SEGMENT**

STATE: Territory of Guam

PROJECT NO.: F-IR-9
SUBPROJECT NO.: F-4
STUDY NO.: 1
JOB NO.: 1

STUDY: Stock Assessment Surveys

JOB TITLE: Visual Stock Assessment Surveys of Marine Preserves and Control Sites

PERIOD COVERED: October 1, 2000 to September 30, 2001

OBJECTIVE

To conduct fish counts and timed swim counts on 34 permanent transects located in reef flat and lagoon habitats in Achang Reef Flat Marine Preserve, Piti Bomb Holes Marine Preserve, Asan Bay, Pago Bay, and Cocos Lagoon over a two year period. To conduct fish counts, timed swim counts, and video transects on 32 permanent transects located at the 20', 30', 40' and 50' depth contours of the fore reef slopes in Achang Reef Flat Marine Preserve, Piti Bomb Holes Marine Preserve, Asan Bay, and backside of Cocos Lagoon over a two year period.

RESULTS

Because of a lack of personnel and a boat, combined with an increase in the number of DAWR projects, only 20 permanent transects were surveyed and a thirty-minute timed-swim count was conducted during FY 01. Video transects for substrate cover were not conducted this fiscal year. Comparison data were collected at the Piti Bomb Holes Preserve and one control site, Pago Bay, to evaluate the effect on sport fish stocks. Sixteen strip transects, 50 m X 5 m, were laid out on the reef flat and the fore reef slope of the Piti Bomb Holes Preserve while four strip transects were laid out on the reef flat of Pago Bay. Two divers, one on each side of the tape, moved along transects recording the number and sizes of important food fishes, butterflyfishes, and visually obvious fishes.

A thirty-minute timed-swim count was conducted on the seagrass bed of the Piti Bomb Holes Preserve. All other fish counts, timed swim counts, and video transects will be conducted during the second year of this study.

PROJECT COST: \$105,000

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