## PTEROCLADIA PROJECT FINAL REPORT

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MARINE OPTION PROGRAM

UH-HILO

## PTEROCLADIA PROJECT

On Saturday, October 12, 1991, two cages were placed on the north side of Punalu'u Bay. The cages were placed in a location that had a high yeild of <u>Pterocladia</u> and in a place where green turtles were observed grazing.

The purpose of the cages were to prohibit grazing of <a href="Pterocladia">Pterocladia</a> so that the growth of it could be measured. Each cage had a card explaining about the project, the date, phone numbers to UH-H MOP and George Balazs, and the names of the people involved.

Local fisherman and other locals were informed of the project, and all seemed supportive. Furthermore, those spoken to said that they would help keep an eye on the cages.

## CAGE A

Cage A was placed in water approximately 1.5 meters deep. The location was about 45 meters down the coastline from the boat ramp, and three turtles were seen grazing in the vicinity.

Four stones about 5 to 8 pounds in weight having approximately 10% of its surface covered with <u>Pterocladia</u> were then selected for the project. Two stones were placed inside the cage and the other two stones, marked with rubber bands, were placed on the outside of the cage. The cage was then securely wedged next to a giant boulder.

## CAGE B

Cage B was placed in water with the depth of one meter. The location was approximately 20 meters down the coastline from the boat ramp. Again, four stones about 5 to 8 pounds in weight and 10% of its surface covered with <u>Pterocladia</u> were selected for the project. Two stones were placed inside the cage and two stones marked with rubber bands were left outside of the cage.

The project went very well for almost a month. There was considerable growth of <u>Pterocladia</u> on the stones inside the cage. Turtles were seen grazing near Cage B at one point.

On Monday, November 11, 1991, Dave Rose and I returned to check on the cages. However, they were not in there respective locations. On this particular day, and on previous weekends, the current was very strong. The two possibilities for the missing cages was theft or our underestimation of the strength of the current resulting in the cages being swept away.

After a breif search, in which we were taken by the current also, we found Cage A wedged in a crevice almost 35 meters from its original location. The rocks were not inside the cage, and Cage B was not found. We salvaged Cage A.

A recommendation for future attempts at this project would be to put a considerable amount fo weight in the cages in addition to the rocks. We simply underestimated the strength of the current and the size of waves at Punalu'u. For a short time, though, the project did work, and the locals demonstrated that they would not interfere with the cages.