ABSTRACT

Anchor Damage to Coral Reefs on the South and West Coasts of Barbados: Present Status and Management Suggestions

Annette Elizabeth Edwards

At a public consultation held in March 1993 to canvass recommendations for coral reef management in Barbados, user-groups identified anchor damage as one of the most critical non-pollutant stressors of coral reefs.

Interviews held with coastal boat users suggested that the main source of anchor damage to the reefs was from dive boat anchors at dive sites. Eleven of these dive sites with varying levels of reported use were surveyed. Measured damage ranged from 0-1.5% of colonies within a survey area of 160m^2 for all except one site where damage was comparatively higher at 5.5%. This latter site is located in the Quarantine Anchorage, an area frequented by larger vessels including commercial cargo ships with larger and heavier anchoring systems.

Although the survey revealed a small amount of damage, there is still need for concern since any form of damage can have serious implications for the sensitive reef community and where reefs may already be under stress from factors such as pollution and sedimentation, for example at

Holetown, the cumulative effect can be significant. In addition, the potential for increasing the harmful impacts of anchors is high, since the number of dive operators is increasing significantly and there are plans by the diving and tourism sectors to attract more diving tourists to Barbados.

Strategies recommended for protecting reefs from anchor damage include placing mooring buoys at the most popular dive sites; designating severely damaged sites as no-anchoring areas, while providing alternative anchoring areas; and education of the resource users.

The dive operators represent one of the key user-groups of reef resources in Barbados and one with a clear incentive for protecting the reefs. Consequently, they should be involved, with other user-groups, at all levels of the management plan being developed by the Coastal Conservation Project Unit (CCPU) to protect the reefs. This will allow for important user-group input into what has been predominantly a top-down approach by the CCPU to environmental management. The user-groups can bring substantial knowledge, skills and expertise to all levels of a management programme, from planning to the implementation and evaluation stages.