HOL CHAN MARINE RESERVE MANAGEMENT PLAN



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Phone:(506) 2410101 • Fax:(506) 2409934 P.O. Box 146-2150 Moravia, San José, Costa Rica E-mail: correo@iuen.org This program should focus on the following aspects:

- Limit the number of snorkellers to the Hol Chan cut by using Shark and Ray Alley as a "spill-over" area for snorkellers. The carrying capacity for snorkellers at the Hol Chan cut needs to be determined before any limits are put into place. The HCMR Advisory Committee should participate in this process.
- Conduct more vigilant "underwater" patrols to deter visitors from damaging the reef. Often snorkellers are not well informed about the sensitivity of the coral reef environment and the rationale for not touching or breaking the reef. Fines should be levied upon the guides whose guests are found touching or breaking the reef.
- Limit scuba diving in the Hol Chan cut, especially when there is a strong current flowing through the channel. Both guides and divers have the tendency to cling to the corals to help slow them down. This practice should be banned in the reserve. Similar fines should be levied on the guides who are caught holding on to the reef.
- Even though Shark and Ray Alley should serve as a "spill-over" to the Hol Chan cut, carrying capacity should also be determined at this site to regulate visitor interactions with the nurse sharks and stingrays.
- Create an artificial reef for snorkellers at Zone D by deploying several "reef balls" in the Exclusive Recreational Zone. This new site could eventually serve as another "spill-over" area for the Hol Chan cut. This project could be organized jointly with the SPTGA "Reef Ball" Project.
- Continue the reef-mooring program by installing moorings where necesary. Several of the dive sites inside the reserve currently need moorings.

• Close Zone A and D (excluding Shark and Ray Alley) to visitors during a bleaching event or an outbreak of Black Band Disease. These usually indicate that the reef is under severe stress and therefore needs time to recover.

Artificial Reefs

Like FADs, artificial reefs are known to attract fish, coral, plants and other marine creatures. Everything from old tires, vehicles, and ships have been used to create artificial reefs; however, they all have their drawbacks - tires break loose and metal rusts. A promising new way of creating reefs involves the use of concrete dome structures called "reef balls". These concrete structures are now being used in Florida and parts of the Caribbean to help damaged or dead reefs recover.

The SPTGA has embarked on a Reef Enhancement Project using the 40 concrete "reef balls" to create an artificial reef on western Ambergris at Slackchwe. Once deployed, the SPTGA plans to use this site during unfavorable weather conditions on the east side of the island.

Since the molding for the "reef balls" are available in San Pedro, the reserve should embark on a similar program to create an artificial reef in the Exclusive Recreational Area in Zone D.

12.3. Alternative Sites

Mexico Rocks, Dos Cocos, Tuffy & Coral Forest

Mexico Rocks has been considered for protection since the early 1990s. In fact, the HCMR was very instrumental in conducting several studies and drafting a management plan for this area. This unique patch reef is said to have a higher coral diversity than Hol Chan. Mexico Rocks, together with Dos Cocos, Tuffy and Coral Forest should all be declared as marine reserves. Management of these sites should be carried out by the SPTGA and the HCMR. The Hol Chan Advisory Committee for implementation by the SPTGA and HCMR could develop a Voluntary Protection and Enforcement Program.