

## Tobago Cays Marine Park: How is this MPA Doing?

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The Tobago Cays are a cluster of tiny uninhabited islands and shallow coral reefs situated in the St. Vincent and the Grenadines archipelago in the eastern Caribbean. Their sheltered mooring areas and outstanding natural beauty have made them a favourite tourist attraction in the Grenadines. The cays were declared a marine park and acquired by the government for management by a multi-stakeholder board. An announcement that government was considering a proposal from a foreign private firm to manage the Tobago Cays Marine Park (TCMP) prompted concerned citizens to form the Friends of Tobago Cays (FOTC) in order to stop this process and raise public awareness that the TCMP should be managed by Vincentians for the benefit of Vincentians. Among the activities of the FOTC is the collection of secondary data from reports and the popular press. Using the publication “How is your MPA doing?” as a guide to biophysical, socioeconomic and governance indicators, the secondary data were analysed and preliminary results were obtained. The data suggest the importance of socio-economic and governance matters to the NGO stakeholders in the TCMP. It is intended that additional research be done to complete the evaluation of management effectiveness and to investigate the potential of the area for co-management.

KEY WORDS: Tobago Cays, MPA, management

### **Parque Marino Cayos Tobago: Como se encuentra esta APM?**

Los Cayos Tobago son un conjunto de pequeñas islas deshabitadas y arrecifes coralinos poco profundos situados en el archipiélago de San Vicente y las Granadinas al Este del Caribe. Sus áreas de amarraduras abrigadas y extraordinaria belleza natural la han convertido en una atracción turística favorita en las Granadinas. Los cayos fueron declarados parque marino y adquiridos por el gobierno para ser manejado por una junta compuesta de multiaccionistas. Un anuncio de que el gobierno estaba considerando una propuesta por parte de una firma privada foránea para el manejo del Parque Marino Cayos Tobago (PMCT) impulsó a consternados ciudadanos a formar el denominado Amigos de los Cayos Tobago (ACT) a fin de detener este proceso y despertar el interés público de que el PMCT debe ser manejado por Vicentinos para el beneficio de los Vicentinos. Entre las actividades de los ATC figura

la recolección de datos secundarios provenientes de informes y de la prensa popular. Utilizando la publicación “Como se encuentra tu APM”? como guia de indicadores biofísicos, socioeconómicos y de gobernabilidad, los datos secundarios fueron analizados y obtenidos los resultados preliminares. Los datos sugieren la importancia de asuntos socioeconómicos y de gobernabilidad para los accionistas de ONGs en el PMCT. Se pretende efectuar investigaciones adicionales para completar la evaluación de la efectividad del manejo y para investigar el potencial del área para co-manejo.

PALABRAS CLAVES: Cayos Tobago, APM, manejo

## Preliminary Comparisons Between Reef Fish Assemblages on Vessel-Reefs and Natural Substrate in Depths of 70 – 95 Meters

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Offshore of Broward County, Florida, below conventional SCUBA diving depths lies a deep escarpment between 70-95m that is relatively unexplored by research scientists. This escarpment is characterized by patchy sand and low-relief rubble substrate. Ten derelict vessels have been deployed as artificial reefs below 70m with the goals of increasing fish habitat and enhancing recreational fishing. Although reports from local fishers are positive, little quantitative data exists. Previous studies on vessel-reefs in 20m reported greater fish abundance and species richness than surrounding natural reefs. We hypothesized that a similar situation would exist on vessel-reefs in deeper waters. A remotely operated vehicle (ROV) was used to survey three deep-water vessel-reefs and the surrounding natural substrate using a combination of point-counts and timed transects to record fish on digital video. Preliminary results support findings from shallow vessel-reef research, and suggest that deep-water vessel-reefs also harbor greater abundance and species richness than the surrounding natural substrate. However, the deep-water vessel-reefs appear to support a different fish assemblage characterized by a lack of herbivores, lower diversity of haemulids, and the occurrence of several deep-water species such as *Prognathodes aya* and *Equetus iwamotoi*. Despite these differences, several species are common to vessel-reefs at both depths. A few species, such as *Lutjanus buccanella*, *Mycteroperca phenax*, and *Seriola dumerili* appear to undergo an ontogenetic shift in habitat with larger individuals found on the vessel-reefs in 70-95m. The lack of fishes on surrounding natural substrates, as well as the higher abundance and species richness on the