

# Stakeholder Involvement in the Creation of the Sandy Island/Oyster Bed Marine Protected Area

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## ABSTRACT

The Nature Conservancy is directing efforts towards developing successful case studies of Marine Protected Area (MPA) Management. The Sandy Island/Oyster Bed MPA, located in Grenada, benefits from strong community support, yet lacks sufficient technical and financial resources for achieving conservation success. With input from the community, and through a strong partnership with the Government of Grenada and the Caribbean Regional Environmental Programme, the Conservancy is using its long established Conservation Area Planning methodology to identify priority conservation targets and priority threats. Through this well established scientific method, the Conservancy will help Park Managers devise a management plan that is easy to implement, demonstrate results and has the support of the community. Three key events which have occurred from June to October 2005 will be discussed.

In June of 2005 a workshop (Parks in Peril Scorecard) was held in Carriacou to determine the status of the management of the park and to establish goals for the next year, a key to the success of this workshop was the involvement of stakeholder representatives. Several stakeholders volunteered their time to be trained in the AGRRA protocol and participated in the AGRRA surveys to determine the current status of the coral reef ecosystem surrounding the MPA. In October of 2005, the first of a series of workshops were held in Carriacou to obtain stakeholder involvement in the development of the management plan for the MPA. This workshop helped create the conservation targets of the MPA, assess their viability and determine their locations. These events were successful because of the strong stakeholder support and involvement. Each event will be discussed and a synopsis of the results presented.

KEY WORDS: Grenada, Marine Protected Areas, stakeholder involvement

## **La Participación Del Público Durante la Creación de la Area Marina Protegida Isla Arenosa y la Cama de las Ostras**

The Nature Conservancy (TNC) está dirigiendo esfuerzos para desarrollar estudios enfocados a la administración del parque marino, el área marina protegida (AMP) de la isla arenosa y la cama de ostras, situada en Grenada, contando con la ventaja de una gran ayuda de la comunidad, aunque carece los suficientes recursos técnicos y financieros para alcanzar éxito de la conservación. Con la ayuda de la comunidad, y con una excelente colaboración del gobierno de Grenada y del programa ambiental regional del Caribe, TNC está utilizando su metodología establecida del planeamiento del área de la conservación para identificar áreas de prioridad y amenazas primordiales. Con este método científico establecido, TNC ayudará a encargados del parque a idear un plan de administración que es fácil de poner en ejecución, demuestra resultados y que tiene la ayuda de la comunidad. Tres acontecimientos dominantes que han ocurrido a partir de junio a octubre 2005 serán discutidos.

En junio de 2005 un taller fue realizado en Carriacou (la evaluación de los parques en peligro) para determinar el estado de la administración del parque y establecer las metas para el año próximo, el éxito de este taller fue gracias a la colaboración de varios representantes de la comunidad. Varias personas ofrecieron voluntariamente su tiempo para ser entrenados en el protocolo de AGRRA y para participar en las investigaciones de AGRRA para determinar el estado actual de los arrecifes coralinos que rodea el área marina protegida (AMP). En octubre de 2005, el primero de una serie de talleres fue realizado en Carriacou para obtener la colaboración de la comunidad en la creación del plan de administración para el área marina protegida (AMP). Este taller ayudo a crear los objetivos de conservación, determinar sus posibilidades y examinar las amenazas principales a los recursos del área marina protegida (AMP). Estos acontecimientos fueron victoriosos debido a la ayuda y la amplia participación del público. Cada acontecimiento será discutido y un resumen de los resultados será presentado.

PALABRAS CLAVES: Grenada, Áreas Marinas Protegidas, la participación del público

## INTRODUCTION

The Nature Conservancy (TNC) currently has an on going project in the country of Grenada. This project is part of the Parks in Peril program and is working with the Government of Grenada, local Non-Governmental Organizations (NGOs) and other regional organizations to establish a network of Marine Protected Areas (MPAs) through out the country, through the commitments of the country to the Convention on Biodiversity. Within this system of MPAs, TNC is assisting the Government of Grenada, the Caribbean Regional Environmental Programme (CREP) and the Carriacou Environmental Committee (CEC) to develop a MPA on the island of Carriacou. Carriacou, the largest of the Grenadine islands in Grenada, is part of a chain of small islands, rocks and cays situated in between the main island of Grenada and St. Vincent and commonly know as the Grenadines. The islands are the summits of ancient submerged volcanic mountains. The MPA that was selected for this on the ground project is the Sandy Island/Oyster Bed Marine Protected Area (SIOBMPA) which is located on the West coast of Carriacou. The area within the Sandy Island/Oyster Bed Marine Protected Area has extensive reef development, mangroves, and seagrass beds. The mangroves are renowned as the habitat for the mangrove oyster, and serve as nursery grounds for several species of fish. Sandy Island, with its postcard quality scenery, white sandy beach surrounded by turquoise waters is a cultural landmark for the people of Carriacou.

To accomplish the goal of establishing an on the ground functioning MPA, TNC is providing technical, scientific, and logistical support in creating the management plan for the MPA. A key component of this effort is ensuring that the stakeholders are involved in the planning process, and their views are incorporated into the process and the final results. To achieve this, a series of events of occurred in 2005, to engage the stakeholders in the process. The first event was a workshop held in Carriacou in June of 2005. This workshop was for the Parks in Peril (PiP) Site Consolidation scorecard. The second event was training in and conducting of marine biological surveys following the Atlantic and Gulf Rapid Reef Assessment (AGRRA) protocol. The Third event was the first of a series of workshops engaging the stakeholders in the development of the management plan, this workshop was titled "Building the Vision and Setting the Foundation" Through these events the stakeholders have become engaged and are an integral part of the development of the MPA.

The first event the PiP Site Consolidation Scorecard occurred during June of 2005. Participants of the workshop included members of various agencies within the Government of Grenada, CEC, CREP, TNC, fishermen, tourism operators, and water taxi operators. TNC fosters the local support necessary using a process called "site consolidation." Site consolidation is the process of

bringing together, the resources necessary to support long-term conservation in specific project areas. These resources include financial resources, technical resources, human resources, adequate infrastructure, and a supportive local constituency, strong capacity for strategic planning, political support, and ecological information. A consolidated site is one in which the institutions charged with its management have the tools to deal with current threats and management challenges, as well as the capacity to respond to threats that arise in the future. To manage this process, PiP developed the Parks in Peril Site Consolidation Scorecard. This vital tool helps site managers to set priorities for building conservation capacity, measure their progress, and employ adaptive management to improve program efficiency and impact. At individual project areas, the Scorecard is designed to aid project managers in measuring advances towards multi-year goals. Equally important, it identifies indicators that are not advancing as planned, where additional infusion of human, technical and/or financial resources might be required. The scorecard provides 17 indicators with which to measure consolidation:

### A. Strategic Planning

1. Project area zoning
2. Site-based long-term management plan
3. Science and information needs assessme
4. Monitoring plan development and implementation

### B. Basic Protection Activities

1. Physical infrastructure for the project area
2. On-site personnel
3. Training plan for on-site personnel
4. Land tenure issues within the project area
5. Threats analysis for the project area
6. Official declaration of protected area status within the project area

### C. Long-term Financing

1. Long-term financial plan for the project area

### D. Site Constituency

1. Broad-based management committee/ technical advisory committee for project area
2. Community involvement in compatible resource use in the project area
3. Stakeholder and constituency support for project area
4. Policy agenda development at national/ regional/local levels for project area
5. Environmental communication and education plans for the project area
6. Institutional leadership for project area

The process is a self assessment tool, in that during the workshop the participants determined what the ranking for each indicator should be and what the goal for each indicator should be by June 2006.

The results of the workshop go far beyond just the rankings in that they involved the stakeholders in the process, made them aware of where the MPA is currently and what needs to be accomplished for it to become a functioning MPA, and set clear goals to accomplish over the next year. Since the MPA is just being established many of the indicators were rate low, as expected under these circumstances, but where the MPA did rank high was in the community and stakeholder support and involvement. Many of the indicators which ranked low were predicted to have a higher ranking by June 2006. This is due to the development of the management plan which is scheduled to be completed by then. The other events which occurred in 2005 were developed to assist the site to reach these goals

A crucial component necessary to complete the work on MPAs is the scientific data that helps determine the vitality of the marine environment. This scientific component is the driving force behind decisions that will be made at the site level. Two types of surveys were utilized to capture this data: The Atlantic and Gulf Rapid Reef Assessment (AGRRA) protocol, and habitat distribution surveys.

The surveys which were conducted for Carriacou provided the information on the vitality of the coral reefs around Carriacou both inside the Sandy Island/Oyster Bed MPA and outside the MPA. These surveys are important to establish the baseline condition of the coral reefs, to monitor for effectiveness of the management of the marine protected area, and to guide future efforts for the possibility of establishing new MPAs within a network of protected areas. The information gathered will be incorporated into the management and monitoring plan for the SIOB MPA.

The vitality of a reef depends on complex relationships among corals, fishes, and algae. When changes occur in the community dynamics of one of these components (e.g., algal abundance), the other two components are affected as well, and the whole relationship can be disrupted. Therefore, to evaluate the condition of a reef from a one-time assessment, it is critical that multiple indicators of the corals-algae-fishes relationships are examined. In developing an assessment protocol, AGRRA relied on this principal and the need to have a standardized protocol that could be applied rapidly to a large number of reefs. <http://www.agrra.org/> © 2000 – AGRRA

James Byrne and Phil Kramer of TNC traveled to Carriacou in September 2005, and conducted the training on the survey methodology and lead the surveys. The training was conducted over the first two days and included both classroom and field exercises. The participants in the surveys included two people who had previously attended training in the methodology, one from the Fisheries Department of the Government of Grenada and a researcher from St. George's University in Grenada. The other participants had not received any previous training on this methodology, but had volunteered their time and effort

to learn and conduct the surveys. They included a dive operator, a fisherman, a tourist operator, and another from Grenada Fisheries. While the volunteers had little or no experience in scientific surveys, they were eager to learn and enthusiastic during the training and surveys.

After the first two days of training, surveys were conducted a fifteen sites around the island, and an additional five sites were surveyed for the benthic habitat composition. The preliminary results of the surveys indicate that the majority of the hard corals were being affected by bleaching and there was also a high prevalence of disease in brain corals which had been bleached. Overall, there was good coral cover at most of the sites and there was some obvious damage from the hurricanes over the last year. The results from the fish surveys indicate a very low bio-mass of the surveyed fish species. It was extremely rare to encounter large adult individuals. Several sites had high numbers of juveniles but were missing the larger adults. There were not any large groupers recorded during the surveys and only a few terminal phase parrotfish. This was the case at sites within the MPA as well as those outside the area. Besides providing excellent scientific data the surveys also provided an excellent opportunity for the stakeholders to learn more about the resources of the area and gained experience n conducting the surveys.

In October 2005, the first workshop on developing the management plan of the MPA was held. This first workshop was titled "Building the Vision and Setting the Foundation". This workshop was attended by over twenty-five stakeholders from the Carriacou community, including dive operators, fishermen, tour operators, hotel owners, grocery store owners, representatives of the women's groups, police, Ministry of Carriacou and Petit Martinique Affairs, Forestry, Fisheries, University, local NGO's, TNC, CREP, and other stakeholders. The workshop was held over two days and covered an overview of management planning, selection and revision of goals, selection of the priority conservation targets and their location, and the perceived condition of those targets by the stakeholders.

After the introduction of the planning process the participants were divided into three groups and tasked with creating the long term goals of the MPA. Each group then presented their goals to all of the participants. Through a facilitated discussion involving all of the participants, the goals were able to be consolidated and revised into the final goals which everyone agreed to. The goals developed were:

- i) Conserve the coastal and marine ecosystems through effective management for current and future generation.
- ii) Ensure that all stakeholders/communities are empowered and fully engaged in the management of the park.
- iii) Ensure that SIOBMPA is an integral part of a marine protected areas network in the Grenadines,

the Caribbean and more broadly the world.

- iv) Increase socio-economic benefits to the community of Carriacou and the wider Caribbean while preserving the cultural value SIOBMPA.
- v) Increase awareness and knowledge about the resources of the SIOBMPA.

The next step had the same small groups decide on the conservation targets which should be selected for the MPA. The groups then reported out their lists. Some groups had seven targets, one had eight and one thirteen. Five targets were common to all of the groups and they were first selected as the final priority targets. Then through another facilitated discussion the final two targets were selected. By nesting some targets within a larger classification all of the targets selected by the groups were addressed. The priority conservation targets selected were:

- i) Coral Reefs
- ii) Seagrass Beds
- iii) Sea Turtles
- iv) Mangroves
- v) Sandy Beaches
- vi) Reef fish ( including conch, lobster and other shell fishes)
- vii) Offshore Islands

The final stage of this workshop had the participants map out the locations of the targets and their conditions. Each of the small working groups was assigned specific targets and on individual maps they delineated where these targets are generally located within the MPA. They then color coded the locations based on the condition of the targets at that location. The groups then presented their results back to all of the participants and some modifications were made to obtain agreement among all of the participants on the conditions of the targets. While this is not the scientific condition of the targets, it does provide a good starting point as well as insight into the perception of the targets by the stakeholders.

These events have provided a good beginning to the process of having the stakeholders involved in the design of the management plan for the MPA. TNC and the other partners in the project will build upon this beginning to establish a management plan for the MPA with strong stakeholder support garnered through their involvement in the management planning process. There will be two more stakeholder workshops on the management plan, which will address the threats to the targets and the management actions necessary to address those threats. The stakeholders which were involved in the previous events have all expressed willingness and eagerness to participate in the future workshops as well as encouraging others to participate.