

Towards a Fisheries Management Plan for the Negril Marine Park, Jamaica

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ABSTRACT

The Negril Marine Park (NMP) covers a total area of approximately 160 km², extending approximately 3 km outward from shore. In extension, the park runs from Davis Cove in the north to Salmon Point in the south, covering sections of two neighboring parishes on the western end of the island of Jamaica. The biodiversity existing within the park is presently under severe threat by nutrient overload from fertilizer run-off from agriculture sources, partially treated sewage intrusion, boat anchors, and overfishing.

The Park was declared a protected area under the Natural Resources Conservation Authority Act (1991) on March 4, 1998 and the Negril Coral Reef Preservation Society (NCRPS) was given the mandate to manage the area in conjunction with the stakeholders (NRCA, 2002).

A series of consultations with fishers commenced in June 2005 and targeted the eight major fishing communities within the Negril Marine Park, namely, Little Bay, Homers Cove, Salmon Point, Davis Cove, Cousins Cove, Orange Bay, Green Island and South Negril River. Discussions focused primarily on getting the opinions of the fishers with respect to the compilation of a NMP Fisheries Management Plan. This paper summarizes the responses of fishers to questions related to:

- i) Major threats to the fishery and possible solutions;
- ii) A NMP permit and licensing system for fishers;
- iii) The importance of data in the management of marine resources;
- iv) Alternative livelihoods; and
- v) Fishers organizations.

The opinions of the fishers are critical to the co-management of the area since fisheries management strategies will impact either negatively or positively on their livelihoods. The paper also sets out options and criteria for arrangements to involve fishers more in co-managing the NMP.

KEY WORDS: Co-management, fisheries, protected area, Jamaica

Hacia un Plan de Administración de la Zona Pesquera del Parque Marino de Negril, Jamaica

El Parque Marino de Negril (NMP) cubre un área total de 160 km² aproximadamente, extendiéndose alrededor de 3 km hacia fuera de la costa. En extensión, el parque va desde la Ensenada Davis en el norte hasta la Punta Salmon en el sur, cubriendo secciones de dos provincias adyacentes en el extremo oeste de la isla de Jamaica. La biodiversidad que existe dentro del parque, se encuentra actualmente bajo amenaza severa por la acumulación excesiva de nutrientes que provienen del derrame de fertilizantes de fuentes agrícolas, la intrusión de aguas residuales parcialmente tratadas, las anclas de los botes y la pesca excesiva.

El Parque fue declarado área protegida el 4 de marzo de 1998, bajo el Acta de la Autoridad de Recursos Naturales (1991), y se le dio el mandato de administrar el área a la Sociedad para la Preservación del Arrecife de Coral de Negril (NCRPS) junto con los socios (NRCA 2002).

Una serie de consultas con los pescadores se inició en junio de 2005, y tuvo como objeto las ocho comunidades pesqueras principales dentro del Parque Marino de Negril, a saber, Little Bay, Homers Cove, Salmon Point, Davis Cove, Cousins Cove, Orange Bay, Green Island y South Negril River. Las discusiones se enfocaron primariamente en conocer las opiniones de los pescadores con respecto a la compilación de un Plan de Manejo de Zonas Pesqueras NMP. Este documento resume las respuestas de los pescadores a la preguntas relacionadas con:

- i) Menazas principales a la zona pesquera y las posibles soluciones;
- ii) Una sistema de permiso y licencia de NMP para las zonas pesqueras;
- iii) La importancia de los datos en el manejo de los recursos marinos;
- iv) Alternativas para la subsistencia; y
- v) Organizaciones de pescadores.

Las opiniones de los pescadores son críticas para la administración conjunta del área, dado que las estrategias de manejo de zonas pesqueras tendrán un impacto negativo o positivo en su subsistencia. El documento también determina opciones y criterios para los preparativos, con el fin de involucrar más a los pescadores, en la administración conjunta del NMP.

PALABRAS CLAVES: Administración conjunta, zonas pesqueras, área protegida, Jamaica

INTRODUCTION

The Negril Coral Reef Preservation Society (NCRPS) is currently accommodated at the Negril Marine Park Headquarters in the rural town of Negril in the parish of Westmoreland. Since its inception in 1990, NCRPS in collaboration with the Negril Area Environmental Protection Trust (NEPT) and the Negril Chamber of Commerce, played a key role in the establishment of the Negril Marine Park until official declaration of the Park on 4th March 1998 (NRCA 2002). The Negril Marine Park (NMP) is located at the western end of the island of Jamaica (Figure 1) and the area of the NMP is approximately 160 km². The NMP extends from Davis cove in the North to St. Johns Point in the south (Figure 2).

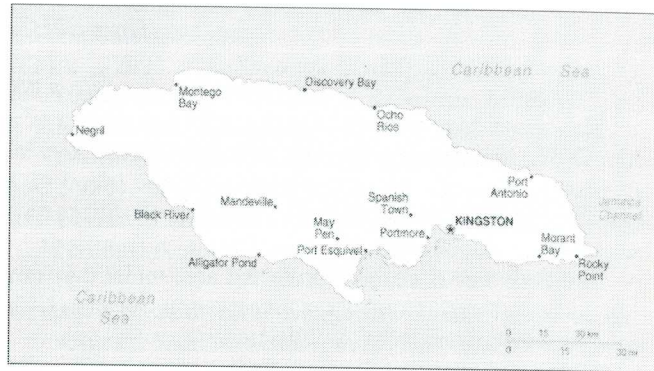


Figure 1. Map of Jamaica showing the location of the Negril Marine Park .

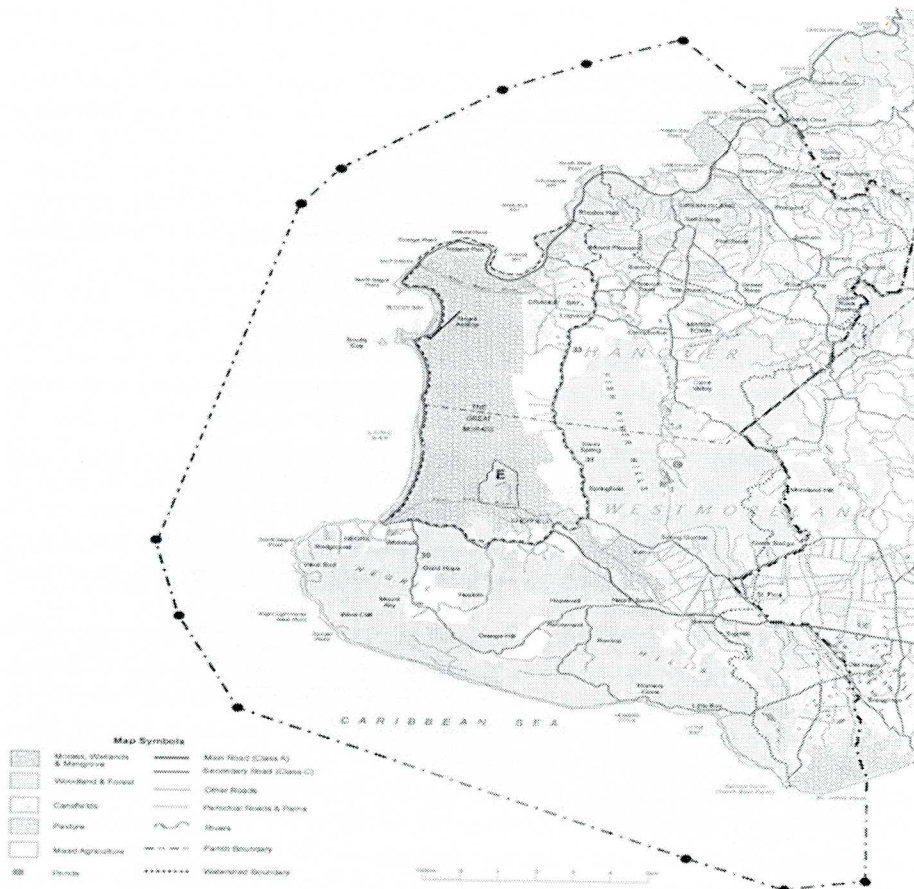


Figure 2. Negril Marine Park Zoning showing boundaries of the Negril Environmental Protection Area and Negril Marine Park.

NCRPS is a non-governmental, voluntary membership environmental organization that was originally formed by a small group of scuba diving operators concerned about the state of Negril's coral reefs. With the growth of tourism came an increase in the number of recreational boats in the area, especially those carrying visitors to the reefs. Boat operators were dropping anchors on the reef, causing damage to the very resources upon which their livelihoods depended. NCRPS' initial plan was to protect the coral reefs from further decline through the elimination of anchor damage and the creation of a national park, but it was later expanded to include efforts at whole-watershed and reef management (Otuokon 1997, Thacker and Hanson 2003). The mission of the Negril Coral Reef Preservation Society (NCRPS) is to protect and preserve coral reef ecosystems, locally, regionally, and globally, through education, research, training, monitoring, lobbying, and the creation of Marine Protected Areas. Programmes and projects implemented by NCRPS addressed related issues such as education, overfishing, zoning, and coral reef and water quality monitoring. NCRPS in collaboration with the Fisheries Division has also collected fish catch and effort data from various fishing beaches and have implemented a mesh exchange programme with local fishermen. Under this programme, more sustainable fishing is encouraged by exchanging larger mesh sizes for the smaller and often illegal mesh being used by fishermen to make fish.

Through a series of annual workshops and other meetings held since 1991, the Negril Coral Reef Preservation Society has been working with the Negril Chamber of Commerce, Government agencies, the community, and other stakeholders in the Negril area to develop plans on various aspects of the management of the park.

A series of consultations with fishers commenced in June 2005 and targeted the eight major fishing communities within the Negril Marine Park, namely, Little Bay, Homers Cove, Salmon Point, Davis Cove, Cousins Cove, Orange Bay, Green Island, and South Negril River. Discussions focused primarily on getting the opinions of the fishers with respect to the compilation of a NMP Fisheries Management Plan. Approximately, eighty (80) fishers participated in the first series of meetings. This paper summarizes the responses of fishers to questions related to:

- i) Major threats to the fishery and possible solutions;
- ii) A NMP permit and licensing system for fishers; c) the importance of data in the management of marine resources;
- iii) Alternative livelihoods; and
- iv) Fishers organizations.

The opinions of the fishers are critical to the co-management of the area since fisheries management strategies will impact either negatively or positively on

their livelihoods. The planning processes for the meetings were also reviewed.

The venues were selected initially to accommodate powerpoint presentations. A combination of flyers, person to person communication was used to spread the word that a meeting was planned to discuss the Negril Fisheries Management Plan. Effort was also made to document what was said using flip charts and notetakers. Fishers who were reluctant to join the meeting were approached quietly by notetakers to get their opinion. Once the comments were summarized, the information would be presented to the fishers during another series of meetings.

Some of the basic principles governing participatory planning/participatory monitoring and evaluation (PM&E) (Geoghagen et al. 2004) and new ideas in managing small-scale fisheries (Berkes et al. 2001) were employed in designing the strategies for involving the fishing community in the possible development of a fisheries management plan for the Negril Marine Park.

RESULTS

Brief summaries of fishers comments regarding Negril Marine Park:

- i) *Threats to fisheries, fish nurseries and habitats* — Main threats included poor agricultural practices (sediment, fertilizers, and pesticides); tourism; global warming, hurricanes, improper waste disposal (sewage, solid waste); seine nets; and dynamite.
- ii) *Fisheries management strategies* — Fishers thought that a combination of 1 ¼" and 1 ½ "mesh for fish traps was ideal for the trap fishery. Ninety percent of the fishers supported a ban on seine nets. Some seine net fishers were of the opinion that it would be difficult to change gear type but were willing to increase the net size while others were willing to change gear type but they wanted to look at possible options before making a decision.
- iii) *Education* — The fishers thought that education was important however the older fishers were of the opinion that this was suitable for the younger generation.
- iv) *Marine Park permitting and license system for fishers* — The majority of the fishers were in favour of a permit and license system.
- v) *Fines and penalties for breach of Fisheries legislation* — Fishers were in favour of harsher penalties for those who break the law. Recommendations were: warning for first offence; fine not less than \$50,000 Jamaican dollars; court action with the possibility of imprisonment.
- vi) *The Fisheries Management Plan and Co-management* — Fishers were in favour of a fisheries management plan and supported the idea of co-management.

- vii) *Stock assessment/data gathering* — Fishers agreed that data was important and that they were willing to participate in such a programme
- viii) *Alternative livelihoods* — The fishers were willing to discuss alternatives but they were non-committal whether they would do something different. The older fishers expressed that it would be difficult to change at this time.
- ix) *Fishers Organizations* — The majority agreed that an organization was required but efforts in the past have failed.

DISCUSSION — LESSONS LEARNED

Stakeholder Involvement, Empowerment and Community Support

- i) It is critical to involve the primary stakeholders at the earliest possible stage. This involvement heightens the sense of ownership and involvement in the decision-making leading towards self policing and effective enforcement.
- ii) A setting that encourages full participation from the stakeholders is critical to the process. The selection of the meeting venue merits serious consideration since this might affect the numbers of fishers that attend.
- iii) Community meetings establish stronger working relationships between Park Rangers and the fishers resulting in more effective enforcement.

Development of Fisheries Management Plans (FMP)

- i) Staging of meetings is a useful tool to get the fishers involved in the decision-making process while keeping them informed of policies that might affect their livelihoods.
- ii) The fishers, park staff, and the government fisheries agency must be involved in the vision, mission and goals of the FMP.
- iii) Active participation by, and empowerment of, critical stakeholders in the development of a management plan to conserve and sustainable use their resources is key to the successful implementation of protected areas.
- iv) A management plan should be arrived at through an extensive and collaborative process involving all stakeholders.

Public Awareness and Education

- i) Public awareness campaigns are an important part of the process in order to level the playing field.
- ii) Experiential hands on training should be provided for fishers.

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