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THE SUSTAINABLE GRENADINES PROJECT

SUSTAINABLE INTEGRATED DEVELOPMENT AND BIODIVERSITY
CONSERVATION IN THE GRENADINE ISLANDS

ANNOTATED BIBLIOGRAPHIC INFORMATION ON THE GRENADINES

Version 3

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NB. All articles listed with an asterisk (*) at the end are available on the “*Annotated Bibliographic Information on the Grenadines*” CD.

1 INTRODUCTION

There is a lot of information available on the Grenadines Islands, which range from Isla Ronde in the South to Bequia in the North. This information covers many aspects of the Grenadines such as the economic, social and environmental issues which affect its people. However, the enormous potential of these studies, as a collection, has not been realized. The output has been made available at different times and sources and varies greatly in its quality and scope. As a result though the information exists, the time and effort which must be invested into obtaining it, is often an effective deterrent to doing so.

This document provides an inventory and review of some of the environmental, social and economic information that can be found on the Grenadines. It is hoped that it will be useful to Non Governmental Organizations (NGOs), community members, and any other parties with any active interest in the area. This inventory is not considered to be complete as it has been based on what has become available, rather than on a systematic bibliographic search.

2 ANNOTATED BIBLIOGRAPHY

Adams, J.E. 1970a. Conch fishing industry of Union Island, Grenadines, West Indies. Trop. Sci., 12: 279-288.

Since the late 1950s conch (*Strombus gigas*) fishing in Union Island had increased in importance to become the island's chief source of income in 1966. Conchs were found primarily between 2 to 9 fathoms of water on turtle grass (*Thalassia testudinum*) and manatee grass (*Cymodocea manatorium*) beds. The main gathering grounds on the south Grenada Bank are illustrated in the book. Details of the boats, effects of weather, transport and marketing, and earnings are given. Conchs were exported to Grenada and to Trinidad and although boats were not yet mechanized, over-exploitation was already evident at this point in time.

Adams, J.E. 1970b. Marine industries of the St. Vincent and the Grenadines, West Indies Ph.D. Thesis, Univ. Minnesota, Minneapolis, MN.

Not seen.

Adams, J.E. 1971. Historical geography of whaling in Bequia Island, West Indies. Caribb. 1971 Stud., 11(3): 55-74.

Through most of the 19th century American whaling vessels took whales in the Windward Islands, primarily humpbacks. These activities declined sharply after 1870. Locally, whaling remained important well into the first two decades of the 20th century. Details of the boats, the hunt, regulations, and the actual processing are given by the author.

Adams, J.E. 1972a. The lobster fishing industry of Mt. Pleasant, Bequia Island, West Indies. Proceedings of the Gulf and Caribbean Fisheries Institute, 24:126-133.*

The development of lobster fishing in Bequia, which intensified after about 1950, is described. Lobsters (*Panulirus argus*) were harvested by divers with spear guns and wire snares and transported live or chilled to Martinique until 1959; then to Grenada. In 1954 and 1965 respectively St. Vincent and Grenada regulated lobster fishing by 1) imposing a minimum total body length of 9 inches, 2) banning the capture of females with eggs, and 3) declaring a closed season from May 1 to September 30th. However, there was no limit on the number of legal-sized lobsters that could be caught in open season. Four divers working steadily over 7 days could catch as much as 3,000 lb. (2,000 individuals). However, the average catch was usually no more than half this amount. By 1964 lobster stocks on the Grenada Bank appeared to have been depleted and could no longer support the scale of fishery which had developed.

Adams J. E. 1972b. Maritime industry of St. Vincent and the Grenadines. American Neptune, 32: 180-194.

Not seen.

Adams J. E. 1972c. Shore whaling in St. Vincent and the Grenadines. Caribbean Quarterly, 19(December 1973): 42-50.

Not seen.

Adams J. E. 1977. Spiny lobster fishing in the Grenadines. Sea Frontiers, (November-December 1977): 322-330.

Not seen.

Adam J.E. (October 1978- January 1979). Union Island, West Indies: A historical and geographic sketch. Caribbean Studies no. 3-4.

Not seen.

Adam, J.E. 1980a. Seafaring Grenadines: an historical geography of traditional fisheries in the Caribbean. University of Minnesota, Duluth.

Not seen.

Adams, J.E. 1980b. Fish Preferences and Prejudices in a Small Caribbean Island: A Study of Fish Consumption Pattern in St. Vincent Based on a Household Survey. Proceedings of the Gulf and Caribbean Fisheries Institute, 32: 15-34.*

This article sought to investigate St. Vincent's fish preferences and prejudices, and to attempt to understand the economic, cultural and organoleptic factors that may account for the fish consumption habits of the island's inhabitants.

Adams, E. 1996. Golden anchor/ silver Chain - A historical and socio-economic perspective on shipping in St. Vincent and the Grenadines. 219 pp.

In this book, the focus is on the local shipping industry, its history and evolution. Shipping and the sea itself are seen as a link between agriculture, which has been the historical economic mainstay, and the national economy. The importance of the sea is perhaps even more relevant in the case of the Grenadines. Chapters 10 and 11 specifically deal with these islands from the times of Caribs dug-out silk tree canoes to more modern schooners and whale boats. Chapter 10 for instance is called 'The Northern Grenadines and Ship-building' while the following chapter focuses on the south. The former examines the change from agriculture to maritime endeavours, fishing for local humpbacks and its effects on Bequia ship- building industry, and the role of Bill Wallace. The latter looks at ship building in Canouan and Union Island, and events such as the blessing, cutting down and launching ships.

Adams. E. 2002. People on the move. The effects of some important historical events on the people of St. Vincent. St. Vincent and the Grenadines. 239 pp.

This book promotes and presents the history of St. Vincent and the Grenadines. Adams presents a panoramic view of Vincentian history in this narrative. It begins in 5000 BC with the arrival of the Siboneys until 2001 AD.

Ahmad, N. 1987. Land capability of St. Vincent (Bequia). Dept. Reg. Dev., Organisation of American States, Washington, DC.

Not seen.

Alexis, A. 1976. The economics and economic geography of small scale farming in Carriacou. B.A Thesis (Geography), UWI, Mona, Jamaica.

Not seen.

Anon. No date (a). Ashton Bay Marine Reserve project proposal No. 5. Source unknown. 9 pp.

Not seen.

Anon. No date (b). SWOT analysis of Tobago Cays Marine Park. Source unknown. 11 pp.

Not seen.

Anon. 1893. Flora of St. Vincent and adjacent islets. Bull. Misc. Inform. Royal Gardens, Kew, 81: 231- 296.

Not seen.

Anon. 1996. Management plan for the Tobago Cays Marine Park. 15 pp.

This document deals with the management of the Tobago Keys Marine Park and as such spans a number of issues. It identifies many similar problems to those that were identified by a recent survey of yachters by the Ministry of Foreign Affairs and the French Mission for Cooperation (1995) on yachters. The management plan describes how SCUBA diving and snorkelling will be managed in the park (Anon. 1996).

In relation to who is responsible for the Park, the Ministry of Agriculture, Industry and Labor is responsible for the TCMP, which will be directed by a Management Committee that includes representatives from all relevant ministries, local government officials and industry representatives. The latter two groups will comprise the Local Management Committee that will oversee the implementation of the management plan. An executive group will implement the plan. This group includes a Park Manager, a Secretary and four or five Rangers, whose roles are described. The fee structure for users remains the primary unresolved issue.

This plan is currently in draft form, and is under discussion by the Board which will oversee its implementation. It is the result of several years of study by the Government of SVG and the French Mission for Cooperation (1994, Anon. 1993, 1996), and has involved public consultation (JEMS 1996). The plan is based on zonation of the TCMP area, which was defined by the Fisheries Regulations. Two demarcated recreational zones are proposed, one central, including Horseshoe Reef and the four cays inside the reef, the other to the west of Mayreau, around the wreck *Purina*. The rest of the TCMP is a general use zone. As such its intended use does not appear to differ from any other marine area in the waters of St. Vincent and the Grenadines.

Anon. 1997. Request for funding for the upgrading of the solid waste management on the southern Grenadines. 31 pp.

The objective of this report is to present a proposal for the improvement of the system of collecting and treating of waste in the islands of Union, Mayreau, Palm Island, Petit Saint Vincent and the Tobago Cays.

Anon. 1998a. Carriacou and Petite Martinique integrated physical development and environmental management plan (planning for sustainable development). Government of Grenada, UNDP, UNCHS and CDB). 193 pp.

The aim of the plan is to achieve 'an integrated planning framework' for rational spatial and sound environmental management that will lead to sustainable between the two. A planning and development context is given by providing an overview of Carriacou and Petite Martinique, the legislative and administrative framework and relevant development plans.

Next attention is paid to the Development Strategy, its objectives are listed, as well as viable development options. The final part of this section looks at strategy, evaluation and proposals. The final part of the development plan deals with a range of relevant areas- land use, population and settlement, environmental management, economic development, housing and community facilities.

Anon. 1998b. Tobago Cays Marine Park Management Plan. June 1998. 19 pp.*

The mission of the Tobago Cays Marine Park is to protect, conserve and improve the natural resources of the Tobago Cays and this management plan is designed to fulfil the park's mission statement and to begin establishing that example for the future. The management plan discusses the management and financial structure and associated legislative arrangements of the park, along with regulations, environmental monitoring and management policy and community and international relations. A budget is listed at the end of the document regarding investments, salaries, expenses expected from the park for the park's yearly requirements.

Anon. 1998c. Tobago Cays Marine Park Management Plan. August 1998. 19 pp.

It is separated in separated into 4 sections. The first is the management plan that shares the mission statement, boundaries and zones of the Tobago Keys marine park, its management structure, rules for vessels, the use of beaches, the fee system and commercial activities in the marine park. A financial summary comprises Section Two and includes methods of financing, initial and annual requirements and projected income. Environmental management and policy is discussed in Section Three. It specifies monitoring requirements and data analysis. The final section, community and international relations identifies some of the groups and interested parties, describes the internship program, educational activities and international policy.

Anon. 2000a. Proposal for cooperation between the Tobago Cays Marine Park and the Mayreau Environmental Development Organisation. January 2000.

Not seen.

Anon. 2000b. Development of the Tobago Cays Marine Park. Presentation summary. May 2000.

Not seen.

Anon. 2000c. Tobago Cays Marine Park Management Plan Revisions. July 2000. 13 pp.

The revisions look at the area of boundaries and zones of the TCMP. Also revised are areas of general policy in particular issues of Garbage/ Waste management, Structure and Operation of the board, Enforcement and some financial revisions are included as well to supplement oversights in the previous plan. July 2000.

Anon. 2001a. Proposal: Application by St. Vincent and the Grenadines for the inclusion of Tobago Cays on the list of International World Heritage sites. 5 pp. May 2001.

This begins with a description of the proposal that is for the Government of St. Vincent and the Grenadines to apply to have the Tobago Cays established as a World Heritage Site. It makes a reasonable case for this action, and attempts to answer some logical questions which readers may have, such as why is an application necessary for the protection of the Tobago Cays, as well as the benefits which may be expected to be gained. The proposal also clarifies what is involved in the process of joining the World Heritage List. It discusses whether the Cays qualify, requirements for application, as well as timing, schedules and deadlines. The respective role of the Tobago Cays Management and the state are also examined in this well-rounded and direct work.

Anon. 2001b. The Tobago Cays Marine Park: Legislative issues in need of consideration. August 2001.

Not seen.

Anon. 2001c. Development of the Tobago Cays Marine Park, November 2001 to May 2002. Summary document. November 2001.

Not seen.

Anon. 2004. Revenue generation and co-management of MPAs with reference to the Tobago Cays Marine Park. 9 pp.

This brief document explores the potential for revenue generation by the Marine Protected Areas such as Tobago cays Marine Park, and also the possible role of co-management in operating MPAs and in realizing these benefits.

Archibald Shaw and Partners. 1969. Report on proposed Developments on the Island of Mustique in the Grenadines. Report prepared for the Mustique Island Company. 22 pp.

Not seen.

Arnoux, A and D. Prat. 1998. Discover St. Vincent and the Grenadines. Eds. Fabre Domergue, Paris, France.

This book provides an overview of the islands of the St. Vincent and the Grenadines and this is followed by pictures which illustrate the history, culture, life and biodiversity of the islands.

Avian Eyes. 1999. Birds of Mustique. January 22-24th. Mustique Island Company. 50 pp.*

Result of a bird study conducted on Mustique during the period January 22nd to the 24th, 1999. The text contains data on terrestrial, marine, residential and migratory bird life on the island. The statuses of the species of birds recorded at key watch points are included. Additionally, the factors that impact avifauna are discussed and recommendations for the conservation of this group of wildlife on Mustique.

Babb, Y., S. Punnett, P. Medley, S. Singh-Renton. 2004: The Red Hind (*Epinephelus guttatus*) fishery of St. Vincent and the Grenadines. (A) Report of the Reef and Slope Fish Resource Working Group (RSWG), pp 27-39. In: Caribbean Regional Fisheries Mechanism (CRFM) (eds.) Report of the First Annual CRFM Scientific Meeting 22 – 30 June 2004. CRFM Fishery Report No. 11.*

This is a brief report on the red hind fishery in St. Vincent and the Grenadines. It begins to provide advice on management of the fishery due to the increased fishing effort on the species. Details on statistics and research recommendations were made to the Fisheries Division. The section on the scientific assessment is an exploratory analyses of the available biological and catch and effort data to examine patterns in size frequency distributions of the red hind species.

Bailey, M. 1992. Case study on management of the Tobago Cays national marine park.

Not seen.

Bailey, M. 1994. Report on the Preliminary Reef Survey in Mustique from the 20th to the 21st June, 1994. Report prepared for the Mustique Company. 6 pp.

No seen.

Balcomb, K. 1981. Whale Reports from Bequia, St. Vincent Grenadines. Cetus, Vol. 3, No. 1, pp. 4-6.

Not seen.

Baldwin, K., R. Mahon, H.A. Oxenford, A. Cooke, D. Gill, T. Staskiewicz. 2006. A profile of marine resource users in the Grenadine islands. Proceedings of the Gulf and Caribbean Fisheries Institute. In press.*

The transboundary Grenadine island chain lies on the Grenada Bank stretching some 120 km between two countries, Grenada, and St. Vincent and the Grenadines. There are over 30 islands, of which 9 have permanent settlements. Marinebased activities are the foundation of the economies of the Grenadine islands in which fishing, tourism and transport are the major sources of employment. It is recognised that a better understanding of the abundance and distribution of key marine resources, marine resource users (MRUs) and the patterns of use is critical to planning and the sustainable use of these resources for social and economic development. The area has been chosen as a site for the development of an integrated participatory marine space-use information system (MarSIS). MarSIS will aid in marine planning as a tool to highlight areas for special management attention such as: critical habitats; representative marine ecosystems; areas of high aesthetic value and cultural importance; areas important for livelihoods: fishing grounds; marine-based tourism; areas of highest human threat; as well as areas which currently or potentially are locations of space-use conflict. This transboundary marine resource user stakeholder assessment identified a total of 826 direct marine resource users (including fishers, dive shop operators, yachting companies, water-taxi operators, day tour operators, ferry operators and ship owners) and 519 boats currently operating in the Grenadine islands. Three quarters of all MRUs identified were Vincentian, and 90% were male. Fishers made up the largest MRU group overall. The majority of MRUs interviewed believe that illegal activities pose the largest threat to the Grenadine marine environment and recommend increased management initiatives. These profiles will be used to help identify community interests and aid the preparation of subsequent participatory marine resource mapping exercises, community-based management and space-use planning initiatives. It is envisioned that through transparent and equitable stakeholder involvement during all stages of the development of the MarSIS, social transformation through local empowerment and capacity building will aid effective collaborative management, allowing for

more efficient sustainable resource management and use, integrated development and improved relationships between government agencies, NGO's and communities.

Baldwin, K. 2006a. Inception Report for the Proposal of Grenadines Marine Space Use Information (MARSIS). A summary if the government agency stakeholder meetings of Grenada and St. Vincent and the Grenadines. March 2006. Centre for Resource Management and Environmental Studies (CERMES), University of the West Indies. 19 pp.*

This report is a summary of the activities and timelines, response and suggestions discussed at the inception proposal meetings held to introduce the Grenadines Marine Space Use Information System (MarSIS) Project to government stakeholder agencies of Grenada and St. Vincent and the Grenadines. From March 13-17, 2006 three meetings were held on the main government headquarter islands of St. Vincent, Carriacou and Grenada. Government agencies or institutions which were identified as stakeholders of the marine environment or public information as well as departments which were specifically recommended by both nations' Chief Fisheries Officers (or in the case of Carriacou: the Permanent Secretary of the Ministry of Carriacou and Petite Martinique Affairs) were invited to attend these initial Grenadines MarSIS proposal and developmental meetings (Appendix 1).

Baldwin, K. 2006b. Summary Report for the Data Scoping of the grenadines Marine Space Use Information System (MARSIS). A summary of preliminary observations and key informant interviews from Grenada, St. Vincent and the Grenadine Islands. May 2006. Centre for Resource Management and Environmental Studies (CERMES), University of the West Indies. 13 pp.*

Marine resources (including fishing and marine-based tourism) are of vital importance to the people of the Grenadines. A greater understanding of the abundance and distribution of key marine resources, marine resource users and the patterns of use is critical to planning and the sustainable use of the coastal resources of the Grenadines. Effective coastal resource management must balance the sustainable use, resource protection and conservation within the communities' need for food security, livelihood and equitable use of resources. Therefore, multi-sectoral collaboration and strong community participation is required to successfully maximise management efforts. The Grenadines MarSIS will integrate social, economic, policy, cultural and biophysical marine resource information in a single GIS framework to aid effective coastal resource management and sustainable livelihoods. By including the social frame of reference and local ecological knowledge with traditional scientific approaches, important information gaps can be filled, potential problems can be identified and management priorities focused accordingly. Furthermore, involving a range of stakeholders in the information gathering and research processes allows for a participatory framework for comanagement and equity in decision making by meaningfully including and considering all sectoral and community interests.

Baldwin, K. 2006c. Summary Report for the Stakeholder Meetings and Space-use Mapping Exercises of the Grenadines Marine Space Use Information System (MARSIS). October 2006. Centre for Resource Management and Environmental Studies (CERMES), University of the West Indies.21 pp.*

Marine resources (including fishing and marine-based tourism) are of vital importance to the people of the Grenadines. A greater understanding of the abundance and distribution of key marine resources, marine resource users and the patterns of use is critical to planning and the sustainable use of the coastal resources of the Grenadines. Effective coastal resource management must balance the sustainable use, resource protection and conservation within the communities' need for food security, livelihood and equitable use of resources. Therefore, multi-sectoral collaboration and strong community participation is required to successfully maximise management efforts. The Grenadines MarSIS research will aim to integrate social, economic, policy, cultural and biophysical marine resource information in a single GIS framework to aid effective coastal resource management and sustainable livelihoods. By including the social frame of reference and local knowledge with traditional scientific approaches, important information gaps can be filled, potential problems can be identified and management priorities focused accordingly. Furthermore, involving a range of stakeholders in the information gathering and research processes allows for a participatory framework for comanagement and equity in decision making by meaningfully including and considering all sectoral and community interests.

Beard, J. 1949. The natural vegetation of the Windward and Leeward Islands. Clarendon Press. Oxford. 191 pp.

To date, no published inventory or mapping of terrestrial vegetation on any of the Grenadines Islands has been found. Beard (1949) provides a very brief and general description of soil types and vegetation in the area. He noted that only secondary forest growth remained, all being of the Dry Scrub Woodland type. In coastal areas, particularly windward coasts

he observed that vegetation consists of various sub-types of the Littoral Woodland type. He also notes the presence of Mangrove Forest vegetation type in various places.

Beck, Horace P. 1987. "Bleows, The Whaling Complex of Bequia," Folklife Annual, Washington, D.C.: Library of Congress. Publication of the American Folklife Center at the Library of Congress; edited by Alan Jabbour and James Hardin.

Not seen.

Beebe, W. and G. Hollister. No date. The fishes of Union Island, Grenadines, British West Indies, with the description of a new species of Star-gazer. Zoologica, N.Y., 19(6): 209-224.

A first list of fishes primarily from a reef about 4-8 m. These were caught by a variety of methods including by seine, hand-line, and trolling. There were 118 species recorded.

Bellairs Research Institute. 1993. Preliminary Survey of the Beach and Nearshore Environment of Plantain Bay, Mustique: Potential for Research and Conservation. 16 pp.

Not seen.

Berwick, N. 1986. Tourism and the near-shore marine environment in the St. Vincent Grenadines. Sector paper submitted to the OAS study for tourism development in the St. Vincent Grenadines. Organisation of American States, Washington, DC.

Not seen.

Bigot P. 1987. Contribution to the hydrology of Carriacou. United Nations Water in Small Islands in the Caribbean Project, Bridgetown, Barbados.

Not seen.

Blackman, K. 2006. Report of the People and Coral Teacher's Training Workshop. CERMES, University of the West Indies, Cave Hill Campus, Barbados, 25 pp.*

The Coral Conservation Awareness in the Grenadines project was designed to promote and improve coral reef conservation in the Grenadines islands by introducing coral reef conservation concepts and approaches at the primary school level on all the islands. In essence, the project will establish a coral reef conservation education program in Grenadines primary schools by providing the Caribbean Conservation Association "People and Corals" workbooks to schools and training teachers to use the workbook. This report was compiled from the People and Corals Teacher's Training Workshop which introduced teachers to the People and Corals Workbook. The report also includes the training materials used at the workshop.

Blencowe, V. 1995. Union Island's dream. Musac Media, USA. 23 pp.

A collection of poems portraying the insights of an author from Union Island.

Bouvier, L. 1984. St. Vincent and the Grenadines: Yesterday, today and tomorrow. Pop. Ref. Bureau, Washington, DC.

Not seen.

Brinkley, F.K. 1971. This is Carriacou. Carenage Press, St. George's, Grenada.

Not seen.

Buckmire, K.U., Chase, V.M., Hammerton, J.L. and Rao, M.M. 1985. Carriacou-A Reconnaissance Survey. CARDI. CARDI/US AID Farming Systems Research and Development. Project No. 538-0099. 62 pp.

Farming systems such as ruminant livestock/pasture, pigs/poultry, *Musa spp* system and the mixed vegetables system are described. The socio-economic determinants of a typical Carriacou farm household, constraints to production and proposed interventions for each farming systems is discussed.

Bullen, R. P. and K. Adelaide. 1972. Archaeological investigations on St. Vincent and the Grenadines, West Indies. The William L. Bryant Foundation, American Studies, Report no. 8. 170 pp.

An exploration of archaeology of St. Vincent and the Grenadines including details on the islands' geological and geographical background and the chronological periods in the Lesser Antilles.

Burke, S. 1996. About Canouan. St. Vincent and the Grenadines.

Not seen.

Byrne, J. 2005. Tobago Cays Marine Park. Analysis of Existing Management Plans. The Nature Conservancy Eastern Caribbean Programme, St. Croix. 16 pp.

Not seen.

Byrne, J. and P Phillip. 2005. Stakeholder Involvement in the Creation of the Sandy island/Oyster Bed Marine Protected Area. 7 pp.*

This report was based upon a series of workshops conducted in Carriacou to obtain stakeholder involvement in the development of the management plan for the MPA. The workshop assisted in creating conservation targets of the MPA, to assess their viability and to determine their locations.

Caldwell, D.K. and M.C. Caldwell. 1971. Porpoise fisheries in the southern Caribbean - Present utilizations and future potentials. Proc. Gulf Caribb. Fish. Inst., 23: 195-206.

Two kinds of whaling were practiced in the Lesser Antilles; the first, for humpback whales or occasionally sperm whales, was restricted to Bequia (St. Vincent Grenadines); the other was for the blackfish or pilot whale (*Globicephala macrorhyncha*).

Caldwell, D.K. and M.C. Caldwell. 1975. Dolphin and small whale fisheries of the Caribbean and West Indies: Occurrence, history, and catch statistics with special reference to the Lesser Antillean island of St. Vincent. J. Fish. Res. Board Can., 32: 1105-1110.

Humpback whaling, and fishing for smaller cetaceans in the West Indies and Caribbean is on the decline, mainly due to economic factors. These include reduced interest by potential fishermen, general world inflation, the world energy crisis, and the recently enacted U.S. Marine Mammal Protection Act of 1972. Catch statistics are tabulated for pilot, killer, false killer, and sperm whales, along with landed weight for mixed catches of dolphins. The pilot whale fishery of St. Vincent has taken 2912 blackfish (*Globicephala macrorhynchus*) in the period 1962-74 (mean 224 per annum). Catches occur in all months, but are lowest in December and January. Ten other species of smaller cetaceans known to be taken in the waters of St. Vincent are the false killer whale, *Pseudorca crassidens*, small sperm whales, *Physeter catodon linnaeus*, the pygmy killer whale, *Feresa attenuata*, the dwarf sperm whale, *Kogia simus*, the goosebeaked or Cuvier's beaked whale, *Ziphius cavirostris*, the rough-toothed dolphin, *Steno bredanensis*, the Risso's dolphin, *Grampus griseus*, the Atlantic bottlenose dolphin, *Tursiops truncatus*, the spinner dolphin, *Stenella longirostris*, and the bridled dolphin, *Stenella* cf. *S. frontalis* (G. Cuvier).

Caldwell, D.K., M.C. Caldwell, W.F. Rathjen, and J.R. Sullivan. 1971. Cetaceans from the Lesser Antillean island of St. Vincent. Fishery Bulletin 69(2): 303-312.

Not seen.

Calinski, M.D., and W.G. Lyons. 1983. Swimming behaviour of the puerulus of the Spiny Lobster, *Panulirus argus*. (Latreille, 1804) (Crustacea: Palinuridae). J. Crust. Biol., (3): 329-335.

The pueruli of spiny lobsters, (*Panulirus argus*), were observed at Manchineel Bay, Carriacou, Grenada, to swim only at night. Swimming was in a linear, straightforward manner within a few centimetres of the surface, at speeds up to 10 cm/s. Swimming, sinking, approach, and retreat postures are well described. Pueruli did not detect motionless objects prior to contact, but reacted to turbulence caused by waves or current acting upon objects. Pueruli in the laboratory usually swam only within 3 hours after sunset, swimming behaviour was the same as in the field and confirmed the inability to detect motionless objects prior to contact. Individuals with more than 2 days, or pigment development never swam. During daylight, the pueruli buried themselves in sand or hid in algae or crevices. In addition they also seldom exhibited any attraction to light.

Cambers, G. 1981a. Sources of Sand Material on the Island of Mustique in the Grenadines, West Indies. Caribbean Planning and Development Company. 35 pp.

Estimates the sand resources at Pasture Bay and assesses the effects, if any, of sand removal at Pasture Bay on the beach and nearshore system. In addition there is an assessment to the potential sand sources on the other beaches of the island, and to locate any other sources of sand supply. However, it must be stressed that any sand sources have accessible and commercially viable.—the study identified the sand dunes at Pasture Bay on the islands east coast as a suitable source of sand for the islands building program

Cambers, G. 1981b. Coastal erosion in St. Vincent and the Grenadines. Prepared for the World Tourism Organisation.

Not seen.

Cambers, G. 1985. Additional sand sources in the island of Mustique. Report prepared for Mustique Island Company. 26 pp.

This is a continuation of the 1980 study on sand source in the island of Mustique. This report was continued because sand requirements have increased mainly because very large houses are being built and Pasture bay dunes were insufficient to supply all the building sand requirements and other sand sources must be located. The purpose of this report is to identify sand sources in the short term (2yrs) and longer term (next 15yrs) time framework. Four major sources investigated: Pasture Bay; Lagoon area, offshore and dredging, importation of sand from St. Vincent.

Cambers, G. 1991. Investigation into beach erosion at L'Ansecoy Bay. Report prepared for the Mustique Island Company. 1 pp

Not seen.

Cambers, G. 1992. Environmental Issues Related to Proposals for the Lagoon, Lagoon Bay, Mustique. Report prepared for the Mustique Company. 29 pp.*

This report investigates the feasibility of making two or more cuts through the coral beach ridge so that the lagoon situated on the west coast of Mustique, remains full of water all year round and does not experience periodic drying out. It was recommended that a baseline survey be conducted of the offshore reefs and seagrass beds in the vicinity of proposed cuts.

Cambers, G. 1994. Evaluation of a Proposed Groyne Modification at Plantain Bay, Mustique, St. Vincent and the Grenadines. Report prepared for the Mustique Company. 25 pp.

This report evaluates the proposed sea defences to be constructed at Plantain Bay, a small bay on the west coast of Mustique in St. Vincent and the Grenadines to provide protection from sea inundation at the Great House. A summary and evaluation of several reports on coastal engineering studies, marine biological studies and a general environmental studies relating to Plantain Bay that have been prepared at the request of the owners of the Great House were also incorporated into the report. The author gives key observations during their visit during October 1994. The discussion of the impacts of

extending and raising groyne included the death of the coral reefs, reduced beach width. It indicates that solutions to erosion at Plantain Bay must include a consideration of the entire beach, adjacent beaches and the health of marine communities in the bay.

Cambers, G. 1995a. Mustique beach monitoring programme field manual. COSALC Beach and Coastal Stability in the Lesser Antilles. UNESCO and the University of Puerto Rico Sea Grant College Program. 48pp.*

Description of a beach monitoring programme established in Mustique in February 1995. The manual describes the criteria used for site selection, the location and photographs of the monitoring sites, and the field and data analysis methodology. This monitoring programme is expected to provide basic data for the effective management of the beaches of Mustique within the coastal zone management framework.

Cambers, G. 1995b. Sea defense proposals for the Gingerbread property, Plantain Bay, Mustique. Report prepared for the owners of the Gingerbread property. 24 pp.

An evaluation of the beach erosion at the Gingerbread property at the northern end of Plantain Bay, using previous reports, aerial photographs and information from field visits. Solutions are proposed to alleviate the problems.

Cambers, G. (ed.). 1997. Managing beach resources in the smaller Caribbean islands. Papers presented at a UNESCO – University of Puerto Rico Workshop, 21-25 October 1996, Mayaguez, Puerto Rico. Coastal region and small island papers, No.1, UPR/ SGCP-UNESCO, Mayaguez. 26 pp.*

This represents a collection of papers presented at the 'Integrated Framework for the management of Beach Resources within the smaller Caribbean Islands' workshop. This was conducted at the University of Puerto Rico, Mayaguez Campus, 21- 23 October 1996, and was attended by a range of stakeholders from the Eastern Caribbean. These ranged from environmentalists, physical planners, regional agencies and NGO's, to hotel owners and sand-miners.

The document classifies the papers under four main headings; Coastal Erosion; Beach Sand Mining; Traditional and Cultural Beach Practices; and Beaches as a Tourism Resource. Also included is a section on regional initiatives in coastal resource management.

One of the papers which deals with Saint Vincent and the Grenadines is titled 'Sand Mining in Saint Vincent and the Grenadines After the Land-mark Decision of 1994' and written by Maxwell Porter.

Cambers, G. 1998. Beach changes in Mustique 1995-1997. Report prepared for Mustique Island Company. 26 pp.*

A beach monitoring programme was started in Mustique in February 1995. Thirteen sites at 7 beaches were measured using standardized techniques. Regular measurements from 1995 and 1997 showed that 6 of 7 beaches were eroding at an average rate of -0.5 m per yr. accretion had occurred at the seventh beach, Plantain Bay where some offshore breakwaters had been constructed in June 1997. During 1995, tropical storm Iris caused considerable erosion; on average the beaches eroded back 0.9m. However measurements taken 3months after showed almost total recovery. It is recommended that the monitoring be continued on a regular basis.

Cambers, G. 2000. Beach enhancement measures, Endeavour Bay, Mustique, St. Vincent and the Grenadines. Report prepared for the Mustique Company. 18 pp.*

This report describes the beach at Endeavour Bay and its characteristics, as well as the changes that have taken place between 1980 and 2000, and develops a proposal for enhancing the beach. The proposal has three main components: additional of 1300m² of beach space at the central section of the beach; addition of 4,152m³ of sand to the central and southwester sections of the existing beach and the construction of an attractive wooden walkway and platform from the beach and across the beach rock so bathers/swimmers can easily and safely access the water.

Cambers, G. 2003a. Beach changes at L'Ansecoy Bay, Mustique, St. Vincent and the Grenadines. Report prepared for the Mustique Company. 17 pp.*

Assessment of the beach changes at L'Ansecoy Bay since 199. Recommendations were made to mitigate the erosion such as the construction of a seawall, vegetation at the sand dune in front of Jacaranda, Ultramarine and Palm Beach., gabions at the dune edge should be removed repairing the gabion.

Cambers, G. 2003b. Report on Gelliceaux Beach. Report prepared for the Mustique Company. 2 pp.

Not seen.

Cambers, G. 2003c. Report on Macaroni Bay. Report prepared for the Mustique Company. 1 pp.

Not seen.

Canadian Marine Waste Management Collaborative. 1993. OECS Waste Management Project: Summary report. St. Vincent and the Grenadines. 11 pp.*

A summary of draft proposals for the management of wastes in St. Vincent and the Grenadines. The proposals are presented under a number of heading.: waste generation and minimization, collection of shore generated waste, disposal of shore generated waste, reuse, recycling and composting, management of ship-generated wastes, management of special wastes, institutional, training, education and legislative proposals, regional roles, privatization and implementation, program costs and cost recovery.

Capital Environmental and Engineering Inc. 1991. Mustique hydrology study. Report prepared for Mustique Company. 12pp.

A hydrological study conducted to determine the most reliable and cost-effective method to provide fresh water on the island of Mustique. The field investigation revealed that the island has a high fresh water aquifer and that 20% of the water could be recovered with a properly designed well system. Drilling of test wells and a pumping test are recommended to confirm the aquifer location and yield and to provide data from which the well system may be designed, strategic placement of reservoirs is recommended in order to increase the amount of water entering the aquifer to slow runoff and allow more water to percolate.

Caribbean Conservation Association. 1991a. Country environmental profile: Grenada. U.S. Agency for International Development. Barbados. 276 pp.

This work was published in 1991 under the aegis of the Caribbean Conservation Association. It begins with a description of the natural environment and then places this in a socio-economic context. Forest and Wildlife, Agriculture and Watersheds Freshwater Resources and coastal and marine resources are examined. The areas of energy, transportation and industry, tourism, pollution and environmental health and growth management follow. All these are approached by looking at an overview, problem and policy, and recommendations. The profile concludes with an institutional framework for environmental management. It gives reference to the mangroves in Carriacou and fisheries resources in Carriacou and Petit Martinique-with information on fish landings in Carriacou from 1984-1988. In section 10 which examines the national park and protected area, a map of the various habitats and the park are shown for Carriacou.

Caribbean Conservation Association. 1991b. Country environmental profile: St. Vincent and the Grenadines. U.S. Agency for International Development. Barbados. 222 pp.

This work was published in 1991 under the aegis of the Caribbean Conservation Association. It begins with a description of the natural environment and then places this in a socio-economic context. Forest and Wildlife, Agriculture and Watersheds Freshwater Resources and coastal and marine resources are examined. The areas of energy, Transportation and industry, tourism, pollution and environmental health and growth management follow. All these are approached by looking at an overview, problem and policy, and recommendations. The profile concludes with an institutional framework for environmental management.

This study, as well as Jackson et al. (1986) make a variety of references to mangroves, particularly those in Ashton Bay, and indicate the need to protect them. It also includes some information on the distribution of wetlands. These are based

largely on the preliminary data atlas prepared by ECNAMP. In this atlas, salt ponds and wetlands are shown by symbols, but these are restricted to only a few major locations.

In its assessment of the status of wildlife on St. Vincent and the Grenadines, it notes in particular that the Grenadines are an important area for seabirds with at least 12 breeding species. Seabird breeding areas should be identified and mapped. Jackson et al. (Annex 5) suggest some key locations, which should be considered for conservation.

CCA CaMMP. 2002. A participatory strategic plan for sustainable development in the Grenadines. Sustainable Integrated Development and Biodiversity Conservation in the Grenadine Islands, Coastal and Marine Management Programme, Caribbean Conservation Association, Barbados, Version 1, 55 pp.*

This report documents the outputs of the strategic planning process that was carried out during Phase 1 of the project Sustainable Integrated Development and Biodiversity Conservation in the Grenadine Islands. The strategic plan will be used as a planning framework for sustainable use of the marine resources and environment in the Grenadines.

CCA and CEC. 2003. Marine Protected Area (MPA) planning for Carriacou and Petite Martinique. Sustainable Integrated Development and Biodiversity Conservation in the Grenadine Islands. Coastal and Marine Management Programme, Caribbean Conservation Association, Barbados, Version 1, 43 pp.*

This activity is part of Phase 1 of the project “Sustainable Integrated Development and Biodiversity Conservation in the Grenadine Islands (St. Vincent and the Grenadines and Grenada)”. The establishment of MPAs was identified in the participatory strategic planning component of the above project as being a priority area for action. This report is aimed at assembling the information pertaining to MPA development in Carriacou and Petite Martinique, developing a proposal for the Sandy Island/Oyster Bed MPA and presenting stakeholder views on the feasibility of, and possible problems with, implementing the proposal. This report comprises, the proposal developed at a technical meeting at the CEC Headquarters (Dec 2002); the report of the consultation held at L’Esterre Roman Catholic School (Dec. 2002); and the way ahead, developed in a meeting at CEC headquarters (Dec 2002).

Caribbean Conservation Association and CERMES. 2003. Final report of Phase 1: Celebration, mini-projects and Phase 2 proposal. Sustainable Integrated Development and Biodiversity Conservation in the Grenadine Islands, Coastal and Marine Management Programme, Caribbean Conservation Association, Barbados, 29 pp.*

Summary of the Phase 1 mini-projects of the “Sustainable Integrated Development and Biodiversity Conservation in the Grenadine Islands” project. The concept of the mini-projects was to provide small NGOs, or groups of NGOs, with the opportunity to implement a project that was of importance to them. This was seen as a means to achieve concrete outputs while planning, but also as a means to build capacity for the various aspects of project implementation. Funds for six projects were available and NGOs were asked to submit proposals for projects outlining what would be done and how the money would be spent. Each of the mini-projects – Ashton wharf beautification; Bequia coastal enhancement; Carriacou historical monument; sustainable garbage disposal in Mayreau; site enhancement at Sanchez Beach Park; and upgrading of two water catchments in Canouan – is summarised in this report according to implementing NGO, location, project description and accomplishments, and learnings/benefits.

The second part of the report provides an overview of Phase 1 of the project complete with conclusions and recommendations as well as the approach to Phase 2. Phase 2 will consist of a Core Program or framework and a suite of associated projects. The proposed duration of Phase 2 is five years. The purpose of the Project Core will be to strengthen civil society to play its role in the sustainable development and livelihoods in the Grenadine Islands, through partnerships with Government and other stakeholders. Project critical activities are outlined as well as project operations and sustainability.

Caribbean Development Bank (Barbados). 1996. Poverty assessment report on St. Vincent and the Grenadines Volume 2/2. Canouan and Mayreau. December 1996.

This comprehensive study was done, incorporating the use of surveys and focus groups. It investigated many factors ranging from- Household Chores, Education, Employment, Economic Activity and Income, Housing and Environmental conditions, Health-care access and Family Planning Service, NGO, CBO & Government Organizations’ presence and effectiveness in the community, Public utilities and services, Communication, Crime/ Social Control, Access to Agricultural Lands to a discussion of the most significant problems in the community.

Caribbean Regional Environmental Programme. 2005. Sandy Island Marine Protected Area. Measuring Success: The Parks and Peril Site Consolidation Scorecard. 57 pp.*

The Nature Conservancy is conducting a program known as Parks in Peril (PiP) which is currently fostering the local support necessary for protecting these parks by using a process called "site consolidation." To manage this process, PiP developed the Parks in Peril Site Consolidation Scorecard which is designed to measure the project area or site's towards consolidation. This report documents the scorecard for Sandy Island Marine Protected Area.

CEC. 2005. Inception Report: Strengthening Environmental Stewardship among Major Stakeholders in the Grenadine Islands. Carriacou Environmental Committee, Hillsborough, Carriacou. 11 pp.

Not seen.

CERMES. 2004. Report of the vision and project planning workshop for Southern Grenadines Water Taxi Association. Centre of Resource Management and Environmental Studies, UWI, Cave Hill Campus, Barbados. 18 pp.*

This report summarizes the workshop conducted for the two water taxi associations in the Grenadines: Carriacou and Petite Martinique WTA and Southern Grenadines WTA. The purpose of the workshop was to further define the mission of the operators, their vision of what successful water taxi operations would look like several years in the future and the generation of a small number of project ideas that would enable the achievement of that vision. The report provides the purpose of the organization, the importance of working together, the WTOs responsibilities towards stakeholder groups (hoteliers, public, customers, suppliers and the government) and the shared vision of the two water taxi associations.

CEMRES. 2005a. Report of the Grenadines Green Schools Planning Workshop, May 27, 2005, Carriacou, Grenada. Centre of Resource Management and Environmental Studies, UWI, Cave Hill Campus, Barbados. 18 pp.*

The report summarizes the workshop for the Grenadines Green Schools Project. The paper provides some of the current "green activities" at the Grenadines schools. It explores the key elements of the Green Schools Program and the steps towards establishing the program in the Grenadines schools. At the end of the workshop, participants agreed that the programme would involve all five secondary schools, and at least two primary schools from each island would participate.

CERMES. 2005b. Report of the Inception Training Workshop for Enhancing the Management Effectiveness of the Tobago Cays Marine Park, St. Vincent and the Grenadines. Union Island 19-20 December 2005. CERMES Regional Project on Enhancing Management Effectiveness at Three Marine Protected Areas in St. Vincent and the Grenadines, Jamaica and Belize. Report No.1. 25 pp.*

A review of the workshop conducted in Union Island, St. Vincent and the Grenadines from the CERMES regional MPA-ME project: Enhancing management effectiveness (ME) at three marine protected areas (MPAs) in St. Vincent and the Grenadines, Jamaica and Belize. The goal of the workshop was for the marine protected area (MPA) managers and key stakeholders in the Tobago Cays Marine Park (TCMP) to learn how to conduct an evaluation of management effectiveness for the MPA using the methods in the WCPA/WWF "How Is Your MPA Doing?" guidebook. In this report, the biophysical, socio-economic and governance indicators were identified to help assess the management effectiveness of the TCMP and various activities were planned to evaluate effectiveness using these three sets of indicators. The report states the human resources, equipment and budget needed to complete the evaluation and it suggests a feasible work plan/timeline based on the guidebook.

CERMES. 2006. Report of the fisherfolk planning workshop. Robert Divonne Marine Centre, Mayreau. February 15-16, 2006. Centre of Resource Management and Environmental Studies, UWI, Cave Hill Campus, Barbados. 18 pp.*

The report was compiled from a workshop which engaged fisherfolk in the Grenadine Islands in discussing approaches to strengthening their capacity for co-management and collective action for self-help aimed at sustainable resource use and personal well-being. In this report, the key fisheries issues in the Grenadines are been identified. These issues range from safety and enforcement to marketing arrangements and fish stocks. The various fisheries stakeholder groups are identified

along with the activities and associated problems of these groups. The report concludes with two projects which participants agreed to develop: (1) formation of a fisherfolk association and (2) to design a series of training modules for the fisherfolk.

Chakalall, B. 1982. The fishing industry of St. Vincent and the Grenadines. The Inter-American Institute for Cooperation in Agriculture, 47 pp.

Not seen.

Chakalall, Y.S., R. Mahon, H.A. Oxenford and R. Ryan. 1995. Fish exporting in the Grenadine islands: Activities of trading vessels and supplying fishers. CARICOM Fisheries Research Document. 81 pp.*

A thorough review of the information that is available on the fisheries and fishery resources of the Grenadines. The study also described the activities of the trading vessels that transport much of the catch to Martinique.

However, the researchers found that fishers were reluctant to provide specific information on fishing location. Without significant long-term public relations, participation effort, fishers probably will not take the time to interact with, or to give accurate information in compiling any meaningful study. This response can be common in fishers, who will not provide accurate information until trust has been developed between them and the interviewer, or until they are convinced disadvantaged by revealing the information. In the southern Grenadines area, the unwillingness to provide information may be partly because many fishers reportedly continue to fish in the Tobago Cays Marine Park.

Charuk, R. 2003. The usual suspects: Boat boys of the Grenadines. July 2003 update. 15 pp.*

This paper provides an inventory of water taxi operators and more professional organisations offering boating and other services at various anchorages in the Grenadines. The inventory includes contact information (VHF channel contact, email addresses) and lists the services provided such as laundry services, water taxi services, diving and snorkelling trips, beach barbecues *inter alia*. This paper also provides suggestions for ways in which charter boats should deal with the boat boys.

Cherrington, J., A.J. Dobson, J.S. Moxon, C. Brittain and G.E. Bishop. 1985. Grenadines Expedition 84/85. Final report. 57 pp.*

The report documents the expedition by Cherrington *et al.* around twelve of the inhabited and uninhabited islands of the Grenadines to seek evidence for a possible influence of artificial light sources on the immigration rate of moth species to islands.

Chislett, G.R. and M. Yesaki. 1974. Spiny lobster fishing exploration in the Caribbean. Mar. Fish. Rev., 36: 43-48.

In the Grenadine Islands the authors report on viable commercial fishing activities of an 80-foot converted shrimp trawler which, with another smaller boat, raised 250 traps twice a week to catch 600-800 pounds of whole lobster. The average weight was reported at 3.5 pounds and median weight at 1.5 pounds. Fishing was in the area between Union, Mayreau and Petite Martinique Islands and the edge of the shelf.

Cirelli, M.T. and R.E. Wilkinson. 2003. Grenada Forest Management Project-Phase II Forestry and Wildlife Legislation Review: Draft Protected Area, Forestry and Wildlife Legislation. Report to the Government of Grenada. DFIDC.

The draft of the Protected Area, Forestry and Wildlife Law has been prepared following a one-week workshop held on 4-8 March, 2002 in St. George's. The draft seeks to regulate protected areas and forests reserves, watershed management, prohibitions and requirements of permits, wildlife and enforcement. However, the existing legal framework is not discussed in this document.

Clement, P. C. 2000. Petit Martinique- Traditions and social change. (New York: Carib Books, 2000). 144 pp.

The author offers us a glimpse into the history and culture of the people of Petite Martinique. This is done successfully for several reasons the author was born on the island and as such is able to give a keen insight into the society. In addition, he manages to give an impression of Petit Martinique as a whole but at the same time reveals many of the facets that make

Petit Martinique unique. This book is easy to read, well set out and very informative, but its best quality is how the writer manages to convey his pride of his home.

Clive A.F. 1976. The Grenadines from Columbus to Today- the settlement of St. Vincent and the Grenadines. Cole's Printery for Consultant Sales & Marketing, Bridgetown. 40 pp.

This is yet another interesting look at Grenadine society. As with many similar texts, it highlights the influence of the sea on Grenadine society and contains information on Whaling, Boat-building and Fishing. In addition to this it discusses the interpretation of dreams, the Big Drum, and the role of the Church and Education.

Comley, J., M. Mason, K. Cordice, and P. Raines. 2002. Tobago Cays marine biodiversity conservation project. Summary report. Coral Cay Conservation Ltd., London. 21 pp.*

A total of 112 survey dives by Coral Cay Conservation volunteers, equating to 276 man-survey-hours surveyed 6.12 kilometres of the reefs within the Tobago Cays Marine Park. Field data collected during this period has been split into survey areas to enable better management of the data: Worlds End and Egg Reef, Horseshoe and Petit Tabac Reefs, Tobago Cays, Mayreau Island. Full quantitative habitat descriptions and biodiversity assessments are given in this report for those habitats found. Worlds End and Egg reef are largely extant calcareous reef platforms with low biological cover. Horseshoe and Petit Tabac support good communities of live coral and associated communities, though there is evidence in the data collected to indicate this area is undergoing a possible phase shift from coral to macro algae dominated communities. The area around the Tobago Cays supports a low diversity of habitats, which in themselves are low in biodiversity. There is evidence however to indicate that this area is important in maintaining the diversity and productivity of the surrounding reef areas. The coastline around Mayreau Island and in particular the area known as Mayreau Gardens supports habitats with the highest diversity of all found in this study. Key management outcomes from this summary report are the need for focussed protection in the areas outlined, such as Mayreau Gardens, alongside monitoring for continued evidence of change in the biological communities as attributable to human impact.

Constantine, S., S. Singh-Renton and L. Straker. 2003. The Red Hind Fishery of St. Vincent and the Grenadines- An interview Study. pp 146-160. In: CRFM (eds.) Report Of The 2002 Joint Meeting Of The CRFM Large Pelagic Fisheries Working Group (CRFM LPWG), The CRFM Reef And Slope Fisheries Working Group (CRFM RSWG), And The CRFM Small Coastal Pelagic Fisheries Working Group (CRFM SCPWG). CARICOM Fishery Report No. 10.*

The red hind is the most important reef fish species landed in the small scale artisanal fishery of St. Vincent and the Grenadines. The document reports on a survey conducted to gather information on the characteristic, spatial and temporal distribution of the red hind fishery and to determine the relationships between length and weights of the red hind caught in St. Vincent and the Grenadines waters. The survey targeted red hind fishers on the mainland of St. Vincent and also Bequia. According to Constantine *et al*, the information gathered from the study offers fishery managers the information needed to begin the development of management plans for the red hind fishery. In addition, it highlights that fishers need to be educated about not only to protect the resources but also the environment that the resource depends upon.

Cooke, M.G. 1980. Report on Roads, Drainage, Runway and Services. Report prepared for the Mustique Company. 32 pp.

Not seen.

Cooke, A. 2005. A Livelihood Analysis of the Water Taxi Operators in the Grenadines. Centre for Resource Management and Environmental Studies (CERMES) UWI. Barbados. 13 pp.*

This article summarizes the results of a livelihoods analysis of the water taxi operators (WTops) in the Grenadine Islands of Grenada and St. Vincent and the Grenadines. The natural resources of the area, including the many beaches, reefs and cays, especially the Tobago Cays Marine Park (TCMP) are the resource base for their operation. These resources form part of their natural assets according to the definition by the Department for International Development (DFID). Given the importance of the natural resources to the water taxi operators, their potential for environmental stewardship may be realized through the monitoring of the same yachts that they supply. They can ensure, possibly through co-management of the Park, that their natural assets are not undermined by a sector that is poorly regulated. The other livelihood assets are

classified into the physical, social, human and financial assets. The vulnerability context and the livelihood strategies were also assessed. The results show that water taxi operators depend on fishing to supplement their livelihoods, both for subsistence and sale to yachts, especially the latter.

Cordice, K. 2004. Environmental Impact Assessment and Management Guidelines for the use of Petit Tobac in the filming of Pirates of the Caribbean. Tobago Cays Marine Park Office. 14 pp.*

This is the report of the EIA that was conducted on Petit Tobac (one of the Tobago cays for the filming of Pirates of the Caribbean.). The report stresses the environmental concern regarding the cay as a film location and has designed management guidelines in terms of vessel movement, flora and fauna, use of exotic species and waste management. Management requirements are also outlined pertaining to marine infrastructure, restricted access to film location.

Crane, J. and E. Rojas. 1985. Assessment of the development potential of Carriacou. Organisation of American States.

Not seen.

Daniel, J. 2005. Legal and Institutional Framework for Environmental Management in Grenada: For Consideration of the Environmental Affairs Division, Ministry of Health, Social Security, Environment and Ecclesiastical Affairs and UNEP/ROLAC. 65 pp.

The author has covered the range of legislation required for environmental management. Under the environmental legislations she looks at water resources, tourism, forestry, waste management, agriculture, planning, land use and development, marine pollution, mining.

The author proceeds to examine the institutional arrangements for environmental management and identified the key divisions in the government with responsibilities for environmental management such as planning development control, agriculture, lands and surveys, forestry national parks and Wildlife, environmental education, fisheries, environmental management and environmental health. Apart from government agencies, non-governmental organizations and donor agencies which play a role in environmental management have been identified. The document concludes with six institutional options for environmental management and key environmental management and policy recommendations

Daniel, Mann, Johnson and Mendenhall. 1970. Reconnaissance Report. Development Potential for Mustique Island. Report prepared for the Mustique Company. 83 pp.

Not seen.

Daudin, J. No date. SOS Union Island! Some ecological aspects of Union Island and other urgent concerns of the people of Union Island. Presented to the International Environmental Conference, Jaycees Headquarters, Kingstown, SVG. 12 pp.*

This looks at the flora and fauna of Union Island. It includes mammals, reptiles, birds, and insects. The latter part of this booklet addresses dangers to the biological balance of Union Island, the first problem identified is the actual expansion of the Airport, and a small illustration is provided as well. Garbage generated by tourism, insecticides, stray animals, and sea pollution are highlighted as major problems as well. The author's brief account of the wildlife on Union Island is one of few studies of this type.

Daudin, J. 2000. Socio-political history of Union Island. Zenith Services Limited. 140 pp.

The author provides a detailed description of the physical environment and original natural environment of Union Island along with the socio-cultural aspects and political history from the 17th to 20th century.

Daudin, J. 2003. A natural history monograph of Union Island. Desormeaux, Martinique. 181 pp.

This book gives an account of the natural history of the Grenadines. It examines the geology and geochronology of Union Island, the physical environment, flora (medicinal plants, toxic and harmful plants, mangroves, vegetation) and terrestrial

fauna. Also included is the article by Wm. Stephen and Purnima G. Price “A survey of the nearshore marine environment of union island, St. Vincent and the Grenadines”.

D’Anglejean, B. and , E. Mountjoy. 1973. Submerged reefs of the eastern Grenadines shelf margin. Bull. Geol. Soc. Amer., 84: 2445- 2454.

Not seen.

Deane, C.A.W. 1978. Tenant House, Mustique, protection against inundation. Report prepared for Consulting Engineers Partnership. 10 pp.

At the request of Lord Tennant, a visit was made to Mustique on Saturday 12th November 1977. During this visit, the writer identified the problems at the Tennant House: High wave uprush and sudden and unpredictable sand movements. A proposal was made for the provisions of advice on protective measures were submitted in Dec, 1977 and finally accepted in May 1978. A land and hydrographic survey was conducted in July 1978. This information, supplemented by study of aerial photographs, maps and existing meteorological and oceanographic data was used to provide the information contained in the report. Recommended protective work were suggested to achieve the following aims: minimisation of interaction of swell approaching the coastline, formation of a wider beach in front of the property

Deane, C.A.W. No date. The great House, Mustique, beach protection. Report prepared for the owners of the Great House.

Not seen.

deSilva, M. and D. Wilson.2005. October 2005 “Fish Kill” at the Mangrove Lagoon Mustique Island, St. Vincent and the Grenadines, West Indies. Mustique Island. St. Vincent and the Grenadines.1st November 2005.4 pp.*

This report provides an account of the massive fish kill which occurred between the 18th and 19th of October, 2005 at the Mangrove lagoon on Mustique Island. The report provides a background of the mangrove lagoon and its surrounding environment and concludes with the possible diagnosis for the fish kills.

deSilva M., G. Alayon Garcia, J. Horrocks. 2006. The Spiders and their relatives of St. Vincent and the Grenadines. Mayreau Environmental Development Organisation (MEDO). 129 pp.

An examination of the diversity of spiders found on the islands of St. Vincent and the Grenadines. It begins with an introduction about the history of the study of St. Vincent spiders, their distribution, endemism and taxonomic notes. Chapter two focuses on spider biology and their families. The reader is introduced to the collection and preservation of spiders and conservation. It explores the spider’s relatives: scorpions, harvestmen, mites and ticks. At the end of the book, Appendix II provides a useful taxonomic checklist of spiders of St. Vincent and the Grenadines.

deSliva, M. and D. Wilson. 2006. A Natural History of Mustique: A field guide to the common flora and fauna and marine species. The Mustique Island Company. Mustique Island. St. Vincent and the Grenadines. 331 pp.

An excellent source on the geology, history, terrestrial and marine biodiversity on Mustique Island.

Deschamps, A., A. Desrochers and K.D. Klomp. 2003. A Rapid Assessment of the Horseshoe Reef, Tobago Cays Marine Park, St. Vincent, West Indies . Atoll Research Bulletin. pp 438-459 in: No. 496. Lang, J. C. (Ed). Status of coral reefs in the Western Atlantic: results of initial surveys, Atlantic and Gulf Rapid Reef Assessment (AGRRA) program. July 2003.*

Over the past 15 years informal reports have indicated that the Tobago Cays reefs were deteriorating and the cays have received little scientific attention. This research article aims to characterize the present condition of the Horseshoe Reef using the Atlantic and Gulf Rapid Reef Assessment (AGRRA) protocol. In the study, coral survey and fish surveys were conducted at selected sites on Horseshoe Reef. The study examined the species composition and abundance and size-frequency categories of stony coral colonies, mean fish abundance and size-frequency distribution of fish carnivores. Additionally, the report suggested that corals may have deteriorated due to white band disease and are now recovering. The

overgrowth of the algal community might have resulted from the lack of grazers such as parrotfish due to intense fishing. Furthermore the lack of large fish and certain species of fish (snappers and groupers) might also be due to overfishing of the resource. The report concluded by heightening the importance of enforcing regulations to protect the reefs and its inhabitants.

Delves, A. 1981. Whaling in Bequia. Cetus, Vol. 3, No. 1, pp. 6-7.

Not seen.

Devas, R.P. 1970. Birds of Grenada, St. Vincent and the Grenadines. Carenage Press, St. George's, Grenada. 87 pp.

Overview of the various birds found in St. Vincent and the Grenadines from seabirds to water birds and also land birds. The physical description, location and feeding habitats are also recorded.

Devas, R.P. 1974. A history of the island of Grenada. Carenage Press, St. George's, Grenada.

Mayreau collection.

Dey, R. M. 1989. In the way of adventure: John Caldwell and Palm Island. The Offshore Press, MA, USA. 35 pp.

A narrative by Ricahrd Dey about John Caldwell who tells the history of Palm Island, the resorts and the yacht clubs.

Duncan, S. 2001. Poetry from Bequia. Bequia, St. Vincent and the Grenadines. 41 pp.

Poetry about life on Bequia on various subjects.

Duncan, S. 2003. Reflections. Bequia, St. Vincent and the Grenadines. 38 pp

Poetry from Bequia

Dunn, J. 1999. Agriculture/Forests/Wildlife Sector Report, NBSAP for Grenada, Carriacou and Petit Martinique.

Not seen.

Eastern Caribbean Central Bank. 2003. St. Vincent and the Grenadines economic and financial review. September 2003.

An economic and financial review of St. Vincent and the Grenadines for the third quarter of 2003. Summary information on performance in the agricultural, construction, tourism and manufacturing sectors; trade and payments; central government fiscal operations; money and credit and projections for the fourth quarter of 2003 are provided.

Eastern Caribbean Natural Area Management Program (ECNAMP 1980). 1980a. Grenada Grenadines: Preliminary data atlas. Survey of conservation priorities in the Lesser Antilles. ECNAMP, St. Croix. VI. 21 pp.

This atlas contains a number of useful maps illustrating much data on the Grenada Grenadines. In addition to coastal currents, important marine habitats and marine resource uses, other maps, such as endangered species, key watersheds and parks and protected areas are included in this extensive collection as well. It would be a very useful resource to have this work updated, as it is quite comprehensive.

Eastern Caribbean Natural Area Management Program (ECNAMP 1980). 1980b. St. Vincent Grenadines: Preliminary data atlas. Survey of conservation priorities in the Lesser Antilles. ECNAMP, St. Croix. VI. 21 pp.

This atlas contains a number of useful maps illustrating much data on the St. Vincent Grenadines. In addition to coastal currents, important marine habitats and marine resource uses, other maps, such as endangered species, key watersheds and parks and protected areas are included in this extensive collection as well. It would be a very useful resource to have this work updated, as it is quite comprehensive.

Eschweiler, J. 1982. Explanatory note to the land use maps of Grenada, Carriacou and Petite Martinique (1982 Scale 1:25,000). Land Use Division, Ministry of Agriculture, St. George's, Grenada.

Not seen.

Espeut, P. 2006. Opportunities for Sustainable Livelihoods in One Protected Area in Each of the Six Independent OECS Territories, for the OECS Protected Areas and Sustainable Livelihoods (OPAAL) Project OECS CONTRACT Number OECS/121/05. 160 pp.*

This report is an output of the OPAAL Project to contribute to the conservation of biodiversity of global importance in the OECS by removing barriers to effective management of Protected Areas and increasing the involvement of civil society and the private sector in the planning and management of Protected Areas and the sustainable use of these areas. The project has 4 components and this report falls under component 2 (Protected Area Management and Associated Livelihoods). The component's objective is to promote biodiversity management and conservation through the establishment and strengthening of protected areas, complemented by support for alternative and/or new livelihoods within or in proximity to the protected areas. The livelihoods sub-project is geared to ensuring stability and adequacy of income and benefits to those groups and persons who depend on the resources in the protected area for livelihood support or where there is a displacement of the livelihoods because of the establishment of the protected area. Livelihood activities supported under the project will focus on improving and demonstrating real economic benefits, especially for new, sustainable enterprises. Potential livelihood opportunities include: tourism and ecotourism development; craft training and development; organic farming; alternative low-impact reef fisheries; all of which will be supported by micro-grants through the OECS Small Project facility (SPF). Also open to support are market research, consultations and interviews with key governmental and NGO agencies, and on-site visits with local entrepreneurs and businesses where needed. Pages 115 to 139 provides the report on St. Vincent and the Grenadines Country Report: The Tobago Cays Marine Park.

FAO Western Central Atlantic Fishery Commission. 2001. National reports and technical papers presented at the First Meeting of the WECAFC Ad Hoc Working Group on the Development of Sustainable Moored Fish Aggregating Device Fishing in the Lesser Antilles. Le Robert, Martinique, 8-11 October 2001. FAO Fisheries Report No. 683, Suppl. Rome, FAO. 2002. 295pp.*

This publication contains the national reports and technical papers presented at the First Meeting of the WECAFC Ad Hoc Working Group on the Development of Sustainable Moored Fish Aggregating Device Fishing in the Lesser Antilles held in Le Robert, Martinique, from 8 to 11 October 2001. The reports and papers are reproduced in the language in which they were presented at the meeting. Pages 35-38 provide a summary on fisheries in the tri-island state of Grenada. The country's report examines fishing for large pelagic for different categories of fishing vessels including fishing fleet, gear used, activity schedule and species targeted. It concludes with the status of fish aggregating devices in Grenada.

Fenger, F. A. 1913. "Longshore Whaling in the Grenadines," The Outing Magazine (March 1913).

Not seen.

Fenger, F.A. 1917. Alone in the Caribbean. George H. Doran Co., NY., USA.

Not seen.

Finisterre, F. and Y. Renard. 1987. A Survey of self help activities relevant to natural resource management in the OECS Member States : Island states island report. St. Vincent and the Grenadines. OECS- Nat . Res. Mgt. Pro., Castries, St. Lucia.

Not seen.

Finlay, J. 1998. Rights based fishing in the beach seine fisheries – Dominica, St. Lucia, St. Vincent & the Grenadines. OECS Natural Resources Management Unit. 49 pp.

Using beach seines to harvest coastal pelagics is a very important social and economic activity in the OECS and this area of importance is the focus of this study. It examines the beach seine fisheries of St. Vincent and the Grenadines, St. Lucia and

Dominica. Within the context of traditional rights based fishing practices. This is an increasingly important issue since it can influence over-fishing and resource conservation, but also exist in an environment where competition exists from uses such as tourism.

This study is based on a previous one conducted in Grenada (1982-84). The purpose of this research was to evaluate to what extent similar strong community and rights based, self-regulating management systems exist in other islands.

It utilized data from garnered from interviews with relevant stakeholders-; beach seine operators, owners, crew, and fishery officers. Informal interviews in each island allowed rules that were seen as to define the traditional management systems to be recorded. The study also gives a brief introduction into, and description of the fishing industry, gear, and methods, stocks targeted and management recommendations for each island as well as a general summary.

In addition data was provided on the main fishing locations, net residences and prevalent species for the Grenadines.

Finlay, J. 1999. Assessment and Analysis of Fisheries, Marine and Coastal Areas. NBSAP for Grenada, Carriacou and Petit Martinique. 94 pp.*

The first section of the report assesses the status of existing biological resources from human access to the use of the resources. The roots causes of biodiversity diminishment are discussed. The second section provides a “SWOT Analysis Treatment” of findings in the assessment so as to generate a Strategy and Action Plan for the sector. While this biodiversity strategy and Action Plan for Fisheries, Marine and Coastal areas is meant to serve as a “stand alone” document, it is also meant to serve the purpose of providing input for formulating an integrated National Biodiversity Strategy and Action Plan for Grenada.

Finlay, J., A. Franklin and R. Mahon. 2003. Government institutional capacity and arrangements for sustainable development in the Grenadine islands. Sustainable Integrated Development and Biodiversity Conservation in the Grenadine islands Grenada and St. Vincent and the Grenadines. 50 pp.*

This is a review of the institutional capacity and arrangements for the Governments of Grenada and St. Vincent and the Grenadines. The document provides the profiles of governance for both countries examining the responsibilities and functions, delivery systems, special arrangements and legislative support of agencies in facilitating integrated sustainable development and biodiversity conservation in the Grenadines. The report further classifies the agencies as either primary and secondary agencies in the process.

Fischer, P.T. 1997. Caribbean Innocents. A thirty year love affair with Bequia. Jewel of the windward Islands. Penfield Press, IA., USA. 127 pp.

Narrative of Bequia from its discovery to the various personalities met by the author Pat Fischer and her husband Karl.

Fitzpatrick, S.M., Q. Kaye and M. Kappers. 2004. A Radiocarbon Sequence For The Sabazan Site, Carriacou, West Indies. Journal of Caribbean Archaeology 5(1): 1-11.*

Research by Fitzpatrick *et al.*, attempts to record the eroded and threatened sites around the islands to provide the first chronology for the Carriacou’s pre-history. Sabazan was noted as one of the areas indicative of long term settlement and samples from this site were analysed via radiocarbon dating. Results from research suggested that the site was occupied intensively since AD 700-1130. The report further suggested that these dates compare well with the only other dates from Carriacou and Union Island, indicating a strong post-Saladoid presence in the Grenadines.

Forestry Division, Ministry of Trade and Agriculture. No date. A-Z of the birds of St. Vincent and the Grenadines.

Not seen.

Francis, C. (197?). The soils and land use of Carriacou and Petit Martinique. St. George’s, Grenada.

Not seen.

Frank, C.A. 1976. History of the Begos: The Grenadines from Columbus to today. Consultant sales and marketing, Christ Church, Barbados. 40 pp.

Frank has attempted to record some of the events of historic importance about St. Vincent and the Grenadines. Most of the information was obtained first hand from a wide cross section of the old people in the community. The book was created to make the youth aware of their heritage.

Franklin, A. 2003. Sustainable Integrated Development and Biodiversity Conservation in the Grenadine Islands. MSc Internship report. Centre of Resource Management and Environmental Studies. University of the West Indies. 94 pp.

Franklin reports on his internship with Caribbean Conservation Association. The purpose of his internship was to develop a participatory co-management framework for integrated sustainable development in the Grenadine Islands and to implement those parts of the design plan associated with the environment and the use of the marine resources.

Franklin, A. and R. Mahon. 2003. Annotated bibliographic information on the Grenadines. Sustainable integrated development and biodiversity conservation in the Grenadine islands, coastal and marine management programme. Caribbean Conservation Association, Barbados, version 1, 16 pp.*

This is the original version of the annotated bibliography on information about on the Grenadines islands. It was prepared by Franklin as a part of his internship with the Sustainable Integrated Development and Biodiversity Conservation in the Grenadine Islands Programme.

Fraser, A. 1980. Development of peasantry in St. Vincent, 1846-1912. PhD thesis, University of the West Indies, Barbados.

Not seen.

Fraser, A. and K. Joseph. 1999. Caribbean social studies: St. Vincent and the Grenadines. Macmillan Caribbean, London, UK. 120 pp.

A book designed for primary schools which covers information on St. Vincent and the Grenadines such as the landscapes and the people, tourism and trade, use of resources, government and the development of the nation.

French Mission for Cooperation. No date. Management plan for the Tobago Cays Marine Park.

Not seen.

French Mission for Cooperation. 1994. Case study on coastal and marine ecosystems of St. Vincent and the Grenadines with special emphasis on the Tobago Cays National Park. French Cooperation Programme on Environmental Management and Land Use. Union Island, March 21-23, 1994. 12 pp.*

This document first provides an overview of environmental impacts on coastal and marine ecosystems in St. Vincent and the Grenadines and then focuses on the Tobago Cays National Park.

French Cooperation and Fisheries Division. 1994. Mustique Island Proposal for Management of the Marine Resources. 11 pp.

Not seen.

French Mission for Cooperation. 1995a. Action plan for the Tobago cays National Marine Park. St Vincent and the Grenadines. December 1993. Updated March 1995. 16 pp.*

This document presents the uses of the resources of the Tobago Cays such as fishing, snorkelling/scuba diving, *inter alia*. The document provides a map showing the proposed zoning of the various activities in the Park. It concludes with the action plan for the Park which looks at zoning, regulations, financial considerations, institutional arrangements and staff duties.

French Mission for Cooperation. 1995b. Survey on the yachting Activities in the Tobago Cays and the Grenadines. 19 pp.*

This is the report of the survey that was conducted by the French Mission for Cooperation on the yachting activity in the Tobago Cays and the Grenadines in 1994-1995. Bequia is seen as the central point for yachting in the country and is both a technical and recreational spot for yachtsmen. Tobago Cays ranks second even though there is a lack of commodities in the area. Yachtsmen are satisfied with their stay except for a number of problems such as overcrowding harassment by vendors and also the degradation of the coral reef environment due to human activities like dumping of garbage. The report recommends that a marine park should be implemented and that the park could finance itself as yachtsmen are willing to pay an entry fee.

French Mission for Cooperation. 1995c. Tobago Cays Marine Park Project Reef Monitoring Programme. Evolution of the Tobago Cays Coral Reefs, June 1994 - January 1995. Unpublished Report. 21 pp.

The French Mission for Cooperation started long-term reef monitoring in the Tobago Cays at several permanent photo-quadrat sites, five each inside the north Horseshoe Reef, north of Jamesby Island, and east of Petit Rameau Island. Two parameters were monitored: the percent of live coral cover, and the abundance of different species of corals.

French Mission for Cooperation. 1997. Request for funding for the upgrading of the solid waste management on the southern Grenadines. St. Vincent and the Grenadines. 31 pp.*

The problems associated with solid waste disposal in Union Island are outlined in this proposal prepared in June 1996, for submission to the EEC.

Friends of the Tobago Cays. 2004. Friends of the Tobago Cays education forum. Union Island, April 24. St. Vincent, April 26, 2004. 19 pp.*

A booklet produced for the education forum hosted by Friends of the Tobago Cays in Union Island and St. Vincent. The information in this booklet is designed to give both stakeholders and the wider public an overview of the history and current issues surrounding the Tobago Cays Marine Park.

Ginsburg, R. N. Compiler. 1994. Proceedings of the colloquium on global aspects of coral reefs, health, hazards and history, 1993. Rosenstil School of Marine and Atmospheric Science, University of Miami. 420 pp.

This work substantiates the various reports which indicate that resources such as reef fishes, lobster and conch and are over-harvested in the waters of the Grenadines Islands. It develops the increasingly accepted view that the depletion of reef herbivores has been a significant contributor to the reduction of live corals by allowing an upsurge in algae.

Goodwin, M.H. 1981. Status of conch mariculture as a management tool in the Grenadines. Proc. Gulf Caribb. Fish. Inst., 33: 22-29.

Conch (*Strombus gigas*) veligers were raised from eggs collected in the field, to metamorphosis. Observations were made between larval density and low pH and mortality. Details of the aquarium design, water quality control, and feeding regimes are provided. Metamorphosis occurred at 20 days; at this point siphonal length equalled 1.26 mm. A growth rate of 0.1 mm/day was considered adequate, while that of 0.04 mm/day was too low. This work suggests that apparently there is potential for rearing conch for farming and for rehabilitation of fisheries.

Godeau, J. 1993. Solid Waste Study in Union Island. Final Report. Laboratory of Combustion and Detonics. France. 20 pp.*

This report documents the solutions to manage wastes of the Southern Grenadines: Union, Mayreau and Tobago Cays. For the Southern Grenadines, the installation of an incinerator seems to be the most appropriate option for waste management. The report provides details on the functions and capabilities of the incinerator, the proposed investment required in terms of purchase and operational costs, site location and installation schedule.

Government of Grenada. 1934. Oyster Fishery Ordinance.*

An Ordinance to empower the Governor in council to frame rules for the control and regulation of the oyster fishery in the colony.

Government of Grenada. Ordinance No. 36 of 1946. Birds and Fish Ordinance.*

An Ordinance for the protection of birds and fish.

Government of Grenada. 1949. Forest Soil & Water Conservation Ordinance.*

An Ordinance to make provision for conservation of the forest, soil and water and other natural resources of the colony.

Government of Grenada. Ordinance No. 18 of 1954. Birds and Fish Ordinance to Lobsters.*

An amendment to lobsters in the Birds and Fish Ordinance for lobsters

Government of Grenada. Ordinance No. 25 of 1956. Birds and Wildlife (Protection Of).*

An Ordinance for the protection of wild birds and other wild life including fish, turtles and oysters. The closed seasons for the animals are also listed.

Government of Grenada. Ordinance No. 25 of 1956, Forest, Soil and Water Conservation Ordinance.*

An Ordinance to make provision for the conservation of forest, soil, water and other natural resources of the colony.

Government of Grenada. Act No. 26 of 1964. Birds and other Wildlife (Protection Of) Ordinance.*

An Ordinance to amend the Birds and other Wildlife (Protection of) Ordinance.

Government of Grenada. Ordinance No. 20 of 1967. Grenada's National Trust.*

The Trust here established as a body corporate shall manage and conserve natural and cultural beauty and wealth of Grenada. In order to achieve this objective it shall in particular: conserve, acquire and hold land; locate and conserve areas of beauty including marine areas and conserve the natural life existing therein; list flora and fauna for purposes of conservation; etc. Powers of the Trust are set out in sections 6 and 7. The Trust shall be managed by a Council.

Government of Grenada. Act No. 40 of 1968. Land Development (Control) Act.*

An Act to make provisions for the orderly and progressive development of land and to preserve and improve the amenities thereof; for the grant of permission to develop land and for the other powers of control over the use of the land.

Government of Grenada. Act No. 23 of 1969. Water Supply Act.*

An Act relating to the regulation and maintenance of the Water supply and the construction and maintenance of waterworks in Grenada; to provide for the creation and establishment of a central water commission with sole jurisdiction in all matters pertaining to the supply of potable water throughout Grenada; for the transfer to that Commission of the assets and liabilities of existing water authority; and for purposes connected with the matters aforesaid.

Government of Grenada. Act No. 35 of 1973. Abatement of Litter Act.*

An Act respecting the littering of places by persons who cause or create a nuisance.

Government of Grenada. Act No. 1979. Beach Protection Act.*

An Act to prohibit the unauthorized removal of sand, stone, shingle and gravel from the seashore.

Government of Grenada. No. 34 of 1984. Forest, Soil and Water conservation (amendment) Ordinance. *

An Ordinance to amend the Forest, Soil and Water Conservation ordinance.

Government of Grenada. Act No. 15 of 1986 Grenada Fisheries Act. *

An Act to provide for the promotion and management of fisheries in the fishery waters of Grenada and for matters relating to fisheries.

Government of Grenada. Act No. 19 of 1986. Plant Protection Act. *

An Act to provide for the control of diseases and pests injurious to plants and to prevent the introduction of exotic species of the same.

Government of Grenada. Act No. 9 of 1987. Fisheries Regulations.*

Regulations to manage fisheries around the island of Grenada.

Government of Grenada. Act No. 25 of 1988. Physical Planning and Development Control Act. Land development Regulations.*

Regulations regarding the development for housing, commercial, industrial and other purposes, hotels, guest houses or apartments, agricultural purposes., government departments boards in Grenada.

Government of Grenada. Act No. 10 of 1990. Abatement of Litter Act.*

An Act to control and punish the depositing of litter.

Government of Grenada. Statutory Rules and Orders No. 3 of 1990. Fisheries (Fishing Vessels Safety) Regulations.*

Regulations for fishing vessels safety such as the application procedures, safety equipment and the penalties resulting from disobeying these regulations.

Government of Grenada. Act. No 18 of 1990. National Heritage Protection.*

An Act to provide for the protection of Amerindian art work and Pre-Columbian artefacts and archaeological remains and for connected matters.

Government of Grenada. Act No. 52 of 1991. National Parks and Protected Areas Act.*

An Act to provide for the designation and maintenance of national parks and protected areas, and for connected purposes.

Government of Grenada. Act No. 52 of 1991. Grenada Ports Authority.*

An Act to establish the Grenada Ports Authority as a corporate body with all the necessary powers, to provide, manage and maintain efficient port services and facilities.

Government of Grenada. Act No. of 1994. Shipping Act.*

An Act relating to the registration of ships; for the control, regulation and orderly development of shipping; to make provision for the proper qualification of persons employed in the sea service; to regulate the terms and conditions of service of persons so employed; for maritime safety and for matters connected with and incidental to the foregoing.

Government of Grenada. Statutory Rules and Orders No. 24 of 1996. Fisheries (Amendment) Regulations.*

These regulations make amendments to fishery conservation measures.

Government of Grenada. Act No. 7 of 1998. Civil Liability for Oil Pollution Damage.*

An Act to make provision for the implementation of the International Convention on Civil Liability for Oil Pollution Damage, 1992, and for matter connected to this.

Government of Grenada. Act No. 17 of 2000. Yachting Act.*

An Act to encourage yachting, to provide for the regulation of yachts generally and for matters relating to yachting.

Government of Grenada. Act No.43 of 2000. Yachting Act. Amendment.*

An Act to amend the yachting Act 2000 No. 17.

Government of Grenada. Act No.43 of 2000. Yachting (Forms and Fees) Regulations.*

Yachting regulation for 2001 and the licenses/permit forms and their associated fees.

Government of Grenada. No date. Grenada- National Report on Sustainable Development. Ministry of Finance. 31 pp.*

This paper provides information on the national circumstances relating to the implementation of the Barbados Action Plan such as the socio-economic structure, national framework for sustainable development, national progress made and problems encountered in sectoral and cross-sectoral areas.

Government of Grenada. 2000. National Biodiversity Strategy and Action Plan. Ministry of Finance. 48 pp.*

The Biological Diversity Strategy and Action Plan (GBSAP) has been prepared in fulfilment of the Government's obligation under the Convention on Biological Diversity and as part of the Government's renewed commitment to sustainable management of the country's natural resources. An assessment of key sectors, namely; Land Use and Environmental Planning; Agriculture /Forests/Wildlife; Fisheries, Marine and Coastal Areas; and Tourism as well as an identification of the gaps in effective management of natural resources is provided. Recommendations are also made for the implementation of the NBSAP along with monitoring and evaluation of the plan.

Government of Grenada. 2001. National Report on the Implementation of Article 6 General Measures for Conservation and Sustainable Use. Convention on Biological Diversity. January 10, 2001. Ministry of Finance. 19 pp.*

A brief summary of the proposed action plan for Grenada with details on the national for issues relating to the protection and conservation of biological diversity. The document lists a set of objectives with supporting activities to mitigate against the mainly human induced negative impacts.

Government of Grenada. 2002. Grenada, Carriacou and Petit Martinique- Second National report on the Implementation of the UN Conventions to combat desertification and drought (UNCCD). 23 pp.*

This is Grenada's report to the Conference of Parties on the implementation of the UNCCD. The report deals with strategic priorities established within the framework of sustainable development plans and policies and also the institutional measures taken to implement the convention.

Government of Grenada. 2005. National Environmental Policy and Management Strategy for Grenada. Ministry of Health, Social Security, The Environment and Ecclesiastic Relations. April 2005. 43 pp.*

This document begins by identifying the seven general principles and values that should guide all aspects of policy formulation and implementation. It states the seven broad objectives which environmental policy must pursue to achieve environmentally sustainable development. The policy instruments/programmes in place, as well as new ones required to fill the existing policy gaps have been identified to achieve these objectives. The Chapter on policy framework discusses the

policy process in the country. The document states a number of key instruments which would be essential for effective implementation of the national environmental policy. Such includes institutional arrangements, legal and planning instruments, economic instruments, financing, research, communication and policy monitoring and evaluation. An array of strategies have also been recommended for the implementation of the environmental Policy and for each strategy the rationale, expected results and the action required for implementation have been indicated. The document concluded with a briefing on the implementation plan which seeks to achieve four main programmes outcomes.

Government of Grenada and the Organisation of American States (GOG/OAS). 1988. Plan and policy for a system of national parks and protected areas. 130 pp.

Not seen.

Government of Grenada and the Organisation of American States (GOG/OAS). 1997. Master plan for the tourism sector-Grenada, Carriacou, Petit Martinique. 459 pp.*

The document provides a general assessment and overview of the tourism sector over the last ten years and sets out the policy framework mandated by Government for the development of tourism in the state. Several key aspects of the Tourism Sector are reviewed and recommendations made for the future development of the sector. An Action Plan and a number of major projects are also detailed in the Plan.

Government of St. Vincent and the Grenadines. Act No. 10 of 1954. Birds and Fish protection Ordinance. *

Government of St. Vincent and the Grenadines. Act No. 32 of 1969. Saint Vincent National Trust. *

An ordinance to establish a Body corporate to be known as St. Vincent National Trusts which aims to conserve and acquire land and building- to help restore and conserve marine zones, restore object of historical and architectural interest.

Government of St. Vincent and the Grenadines. Act 4 of 1974. Birds and Fish Protection Act.*

An Act to amend the Birds and Fish Protection Ordinance.

Government of St. Vincent and the Grenadines. Act No. 8 of 1976. Town and Country Planning Act.*

An Act to enable the orderly and progressive development of land and the proper planning of town and country areas, to make provision for the control of development, and for matters relating to this.

Government of St. Vincent and the Grenadines. Act No. 10 of 1981. Beach Protection Act.*

An Act to protect beaches and to prohibit the removal of sand, corals, stones, shingles, gravel and other materials from the shores of Saint Vincent and the Grenadines and sea beds adjoining.

Government of St. Vincent and the Grenadines. Act No. 15 of 1983. Maritime Areas Act.*

An Act to declare maritime areas.

Government of St. Vincent and the Grenadines. Act No. 8 of 1986. Fisheries Act.*

An Act for the promotion and management of fisheries and other related matters. This focuses on fisheries management and development- plan committee, agreements licences, fees, charges and royalties, fish processing establishments; marine reserves and conservation measures, priority areas, restricted activities-methods, and gear, research; registration of local fishing vessels and enforcements-designation and powers of authority.

Government of St. Vincent and the Grenadines. Act No.1 of 1987. Fisheries Regulations SVG.*

Although there was no fisheries management plan at the time that the regulations were established, a plan is implicit in them. They address the conservation of lobsters, turtles, conch, corals, reef fishes and coastal pelagic fishes, all of which are important living resources in the southern Grenadines.

There has not been any thorough evaluation of the success of these regulations in conserving the resources in question. Various reports indicate that lobster, conch and reef fishes are over-fished in the waters of the Grenadines. It is becoming more widely accepted that depletion of reef herbivores has been a significant contributor to the reduction in abundance of living corals by allowing algae to increase in abundance and overgrow them (various papers in Ginsburg 1994). Populations of herbivorous reef fishes have been depleted throughout the Caribbean for decades. It appears, that black sea urchins replaced their function to some extent. When these died off in the early 1980s, algae were observed to overgrow reefs in many areas of the Caribbean.

It may be the case that widespread depletion of herbivorous reef fishes, coupled with the slow and patchy recovery of black sea urchin populations in the Grenadines are primary causes of coral reef degradation. If so, coral reef conservation must include initiatives to rebuild populations of herbivorous fishes. Dependence on urchins alone, a single species, may be unwise, as they tend to be a nuisance to divers and snorkelers and could be eliminated by another epidemic.

Government of St. Vincent and the Grenadines. Act No. 26 of 1987. St. Vincent and the Grenadines Port Authority Act.*

An Act to provide for the establishment of an Authority to be known as the St. Vincent and the Grenadines Port Authority; to provide a coordinated and efficient system of port facilities and services; and for the purpose of providing duties and powers of the Authority and for the transfer to, investing in the Authority of functions, assets and liabilities of the Port and Marine Department and St. Vincent Port Authority established under the Port Authority Act, 1975 and other matters related to this.

Government of St. Vincent and the Grenadines. Act No. 14 of 1991. Environmental Health Services Act.*

An Act to make provision for the conservation and maintenance of the environment on the interest of health generally and in particularly in relation to places frequently used by the public.

Government of St. Vincent and the Grenadines . Act No. 15 of 1991. Litter Act.*

An Act for the regulation and control of littering in St. Vincent and the Grenadines. It identifies the offences regarding penalties such as disposal of litter from motor vehicles wilfully breaking bottle or glasses in public places and looks at administration such as local authority for providing receptacles.

Government of St. Vincent and the Grenadines. Act No. 16 of 1991. Wildlife Protection Act.*

An Act to provide for the protection of wildlife and matters in the country of St. Vincent and the Grenadines. The first part looks at wildlife management, protection and control through the establishment of a Wildlife Conservation Advisory Committee, the establishment of the reserve, closed seasons and penalties, licences for residents in reserve, special hunting licences and the importation and exportation of wildlife. Part 2 focuses on enforcement, power to search seize and arrest, punishment while Part 3 provides regulations for the prohibited hunting methods. A list of wildlife to be protected (e.g. St. Vincent Parrot) and details on licences for special hunting and keeping the St. Vincent parrot.

Government of St. Vincent and the Grenadines. Act no. 47 of 1992. Forest Resource Conservation Act.*

A provision for conservation, management and proper use of the forests and watersheds, the declaration of forest reserves, cooperative forests and conservation areas, the prevention and control of forest fires.

Government of St. Vincent and the Grenadines. Act no. 9 of 1997. Marine Parks Act.*

An Act to provide for the establishment of Marine Parks and for other related matters.

Government of St. Vincent and the Grenadines. 1998 Statutory rules and orders. Marine Parks (Tobago Cays) Regulations.*

Specifically focuses on the Tobago Cays Marine Park and identifies the different position to be appointed by the board such as park manager, warden, officers and their responsibilities. Sections 6- 12 focuses on activities in the park, licensing and permits.

Government of St. Vincent and the Grenadines. Act. No. 31 of 2000. Waste Management.*

An Act to provide for the management of solid waste in conformity with best environmental practices.

Government of St. Vincent and the Grenadines. 2001 National Parks, Rivers and Beaches Act (draft).

Not seen.

Government of St. Vincent and the Grenadines. 1983. Coastal preservation in St. Vincent and Grenadines. Environmental Improvement Sub-Committee, Kingstown, St. Vincent.

Not seen.

Government of St. Vincent and the Grenadines. 1994. Proposal for the incorporation of coastal and marine environment considerations into integrated planning for Union Island, Mayreau and the Tobago Cays, St. Vincent and the Grenadines. United Nations Centre for Human Settlements, United Nations Environmental Program. 40 pp.

Not seen.

Government of St. Vincent and the Grenadines. 1999. Tourism statistical 1999 end of year report. Prepared by the Department of Tourism.

1999 tourism statistics. Data in this report include visitor arrivals by air and sea and by point of entry; visitor type and by country of residence; tourist air arrivals (stay-overs) by month; market performance; cruise ship passenger arrivals;; air excursionists, yachts; visitor arrivals 1989-1999; room capacity and room capacity by type of accommodation.

Government of St. Vincent and the Grenadines. 2000. Environmental statistics for St. Vincent and the Grenadines 2000. Prepared by the Statistical Office, Ministry of Finance, Planning and Development, St. Vincent and the Grenadines. 21 pp.

This is the maiden issue of “Environment statistics for St. Vincent and the Grenadines” published by the Statistical Office. The publication has been necessitated by the global recognition of the need to incorporate consideration for the sustainable use of natural resources in the socio-economic development planning process so as to ensure that the socio-economic development achieved is sustainable. The Statistical Office has not carried out any survey on the state of the environment. Consequently, the data presented in this publication have been compiled from secondary sources. Statistical information on climate, population, land use and agriculture, forestry, fisheries, energy, water, sanitation, transport and tourism are provided.

Government of St. Vincent and the Grenadines. 2001a. National tourism sector strategic plan 2002 – 2006. St. Vincent and the Grenadines.

Report examines the tourism sector of St. Vincent and the Grenadines focusing on the economic phenomenon of tourism, tourism performance, current tourism infrastructure and strategy for tourism development and expansion; developing the tourism product, and the impact of tourism development and expansion.

Government of St. Vincent and the Grenadines. 2001b. St. Vincent and the Grenadines 2001 population and housing census. Preliminary report. Prepared by the census office. 31 pp.

Data from a population census usually takes years to be published, however, users need timely data for decision-making. It is for this reason that the Statistical Office has decided to produce a preliminary report using the visitation records as source information. As such these figures are preliminary and will be revised when the individual questionnaires have been

processed. The data derived from the Visitation Records are limited to the number of households and population by sex, census divisions and enumeration districts. Statistics contained include: total preliminary enumerated population by sex and census divisions (2001); total preliminary enumerated population by census divisions (2001 compared with 1991); total preliminary enumerated population by sex and census divisions, 2001 and 1991; preliminary enumerated population by sex as a percentage of total in each census division (2001); households by census divisions (2001); non-institutional and institutional population by census divisions (2001); population density by census divisions 2001 and 1991; preliminary non-institutional and enumerated population by enumeration districts, 2001 and 1991.

Government of St. Vincent and the Grenadines. 2001c. Vital statistics report. Draft. Prepared by the Statistical Office, Ministry of Finance and Planning, St. Vincent and the Grenadines.

The report contains a wide range of tables on population, births, deaths and marriages and covers the period 1997 to 1999.

Government of St. Vincent and the Grenadines. 2002. Tourism statistical report, Jan – Dec 2002. Prepared by the St. Vincent and the Grenadines Ministry of Tourism and Culture. 28 pp.

During the year 2002, the tourism sector in St. Vincent and the Grenadines continued to contribute to the country's economy. Visitor expenditure for 2002 increased by 1.3%, moving from EC \$216.45 million in 2001 to EC\$ 219.46 million in 2002, notwithstanding the fact that the total visitor arrivals declined by 2.6% in 2002. The report contains an analysis of visitor arrivals by port of entry, type of visitor and mode of transport.

Government of St. Vincent and the Grenadines. 2003a. Annual tourism statistical report 2003. Prepared by the St. Vincent and the Grenadines Ministry of Tourism and Culture. 33 pp.*

This report provides information on visitor arrivals for stay-over visitors, same-day visitors, cruise visitors and yacht visitors for 2003.

Government of St. Vincent and the Grenadines. 2003b. Department of Tourism monthly statistical report. January 2003. Prepared by the Ministry of Tourism and Culture.

Statistics provided in this report include, visitor and sea arrivals by visitor type (January 2002 and January 2003); visitor air arrivals by country of residence/major market (January 2002 and January 2003); visitor arrivals by visitor type (January 2003); tourist air arrivals by country of residence (stay-overs); visitors by air (tourists and same day visitors) by point of entry; visitor air arrivals by country of origin and visitor type (January 2003); tourist air arrivals by type of carrier; tourist arrival by country of residence and gender (January 2003); all tourists by air (stay over visitors only) purpose of visit; length of stay; place of stay; occupation; tourist arrivals by age group; same day visitors by air and port of entry; same day visitors by air and by point of embarkation; visitor arrivals by sea (January 2003); yacht/visitors by port of entry.

Government of St. Vincent and the Grenadines . 2004. Strategic alliance for the protection and preservation of the Tobago Cays Marine Park between Palm Island Resorts Ltd. and the Government of Saint Vincent and the Grenadines. Draft. 25 pp.*

The purpose and objective of this Strategic alliance is the ecological, biological, environmental, economic and social management of the Tobago Cays Marine Park area, with the primary goals of preserving, protecting and ensuring the environmental and economic sustainability of the Tobago Cays Marine Park.

Government of St. Vincent and the Grenadines. 2005. Marine Tourism Policy. Ministry of Tourism and Culture. June 2005.

Not seen.

Gravesande, N. 1999. National Biodiversity Strategy and Action Plan. The Tourism Sector. NBSAP for Grenada, Carriacou and Petit Martinique. 47 pp.*

Gravesande attempts to focus on an assessment and analysis of Grenada's Tourism Sector. He identified the major issues and challenges pertaining to biodiversity conservation and sustainable development. His report analyses several

technologies for conservation and sustainable use and identifies existing measures and programmes implemented to reduce adverse effects. Section 10.2 made reference to the Carriacou Environmental Management Plan which sought to enhance the country's biodiversity.

His preliminary assessment of the sector has identified a number of gaps regarding the enhancement of biological diversity within the tourism sector in Grenada. Gravesande's report concluded by suggesting some general recommendations for biodiversity conservation within the context of tourism development.

Great Britain Colonial office. 1903. Report on land settlement in Carriacou. Edward Drayton (Cd. 1820) H.M.S.O. 15 pp.

Not seen.

Grenada Board of Tourism. 2004. Annual Statistical Report. 45 pp.*

Provides statistics on tourists arrivals in the accommodation, cruise and yachting sectors and also stay over or same day arrivals to the state of Grenada.

Grenadine Islands, Coastal and Marine Management Programme, Caribbean Conservation Association, Barbados, Version 1, 52 pp.

This review of institutional capacity and arrangements for the Governments of Grenada and St. Vincent and the Grenadines is part of an initial (Phase I) assessment of the capacity of stakeholders to take part in the project on Sustainable Integrated Development and Biodiversity Conservation in the Grenadine Islands. The purpose of this appraisal is to provide for stakeholders and the project implementers an overview of the structure and inter-relations of government as they pertain to the objectives of the project. The document will guide the project and stakeholders in regard to which government departments need to be involved in co-management and the extent of their capability to be involved, for example, in co-managing a park, tourism project, fishery, etc.

Groome, J.R. 1970. A Natural History of the Island of Grenada, West Indies. Caribbean Printers Limited, Trinidad. 115 pp.

Not seen.

Hawthorne, W.D., D Jules, and G. Marcelle. 2004. Caribbean Spice Island Plants: Trees, shrubs and climbers of Grenada, Carriacou and Petit Martinique- A picture gallery with notes on identification, historical and other trivia. Oxenford forestry Institute. 330 pp.

An annotated catalogue showing the various plants of the island, their history, importance and how to cook them. Almost 750 plants are mentioned with 2000 pictures and brief notes. It shows how Grenada's trees, shrubs and climbers are entwined with her heritage and culture.

Hazell, Fred. 1945. The Life of John Hazell.

Not seen.

Hess, E. 1961. The fisheries of the Caribbean Sea. In: Atlantic Ocean fisheries, edited by D. Borgstrom and A.J. Heighway. London, Fishing News (Books) Ltd., pp. 213-232.

The fisheries of the Lesser Antilles are reviewed by island groups. The Grenadines, an archipelago of small islands between Grenada and St. Vincent, provide relatively rich fishing grounds, their main problem was one of transport of the catches to the markets on the main islands. A scheme to provide a fish collecting station with chilled storage and ice storage facilities was being developed on Canouan Island, to supply St. Vincent with fresh fish.

Heyman, A. M., T.J. Riegert, A. Smith, T. Shallow and J.R. Clark. 1988. Project Proposal: Development of the Tobago Cays National Park. Government of St. Vincent and the Grenadines and Organisation of American States. 97 pp.

Heyman *et al.* (1988) surveyed reef sites in the Tobago Cays Marine Park (TCMP). They describe each site's coral species and reef condition and rank them as excellent, good, fair or poor. This gives an idea of the relative distribution of habitats and has been used as a guide to choosing dive sites in the TCMP. A constraint of this aspect of the study is that it is simply descriptive and does not permit quantitative comparison of the reefs over time.

Beaches are one of the most valuable natural resources of the southern Grenadines and are looked at. Heyman *et al.* list the beaches in the TCMP area, giving the length of each and brief comments on its characteristics and usage. There is no level of detail provided that would be required to characterize beaches regarding their susceptibility to erosion. Factors such as, exposure to wave action, natural protection by reefs, alongshore drift direction, and the role of beach vegetation in stabilizing beaches are excluded.

Homer, F. and D. Shim. 2004. St. Vincent and the Grenadines Environmental Management Strategy and Action Plan, 2004-2006. April 16th 2004. 50 pp.*

The report is a requirement of the Government's obligations under the St. George's Declaration (SGD) of Principles for Environmental Sustainability in the OECS, 2001. It is developed to streamline the annual OECS reporting requirements on the SGD and may also assist to harmonise the reporting needs for many of the international agreements. The report seeks to examine each of the principle of the St. George's Declaration and provides a strategy and a list of activities to achieve each of the principles.

Hooper, E. 1887. Report upon the forests of Grenada and Carriacou. Waterlow and Sons, London. pp 11-13.

Not seen.

Howard R. A. 1952. The vegetation of the Grenadines, Windward Islands, British West Indies. Cambridge. Harvard University Press.*

This study is based primarily on a study of the Grenadine flora, including shrub and herbaceous vegetation made in March and April 1950. Eighteen islands in the Grenadine chain were visited and extensive collections were made.

Huber, R. *et al.* 1987. Tourism development in the Grenadines: Immediate action program and investment estimates for private and public sector activities. Dept. Reg. Dev., Organisation of American States, Washington. DC.

Not seen.

Humphreys, H. and Sons, 1960. Domestic water supplies for Grenada and Carriacou. Prep. For Govt. Grenada, St. George's, Grenada.

Not seen.

Issac, C.J. 2006. Resource use Survey, Resource Use, Mapping and Preliminary Zoning of Sandy Island Oyster Bed MPA. Caribbean Environmental Regional Program. 7 pp. *

The report focuses on the Resource Use Assessment for the Sandy island Oyster Bed MPA. The terms of reference and the proposed methodology for conducting the assessment are provided.

Issac, C. and S. Singh-Renton. 2004. Bigeye scad (*Selar crumenophthalmus*) mackerel scad (*Decapterus macarellus*), and round scad (*D. tabl* and *D. punctatus*) fisheries of St. Vincent and the Grenadines and Grenada. (D) Report of the Small coastal Pelagic Fish Resource Working Group. pp 89-104. In: Caribbean Regional Fisheries Mechanism (CRFM) (eds.). Report of the First Annual CRFM Scientific Meeting, 22-30 June 2004. *

This article examines the approach of managing the Bigeye scad fisheries of St. Vincent and the Grenadines and Grenada. In summary it identifies the status of the stocks and makes statistical and research recommendations, summary on the stock assessment and provides the scientific assessments of the fishery.

Jackson, I. 1986. St. Vincent Grenadines Beaches: Short Text and Photographic Summary. 20 pp.

This document provides pictures and short explanations on the status of different beaches in several Grenadines islands, from Bequia to Petit St. Vincent.

Jackson, I., T. Riegart, D. E. Parris, M.L. Berwick and G.A. Rasmusson. 1986. Action plan for tourism development in the Grenadines, 1987-1992. Organisation of American States Mission, Kingston, St. Vincent, 44 pp., 9 annexes.

Jackson et al. (1986, Annex 2) provide more information regarding beaches on islands in the planning area. They indicate orientation, suitability for recreational use, and any major problems, such as the presence of garbage or litter. Annex 6 provides a photographic summary, with comments in the captions, for many of the most important beaches in the area. Also provided is a brief, general discussion of the various processes and human practices which have led to beach erosion in the area.

None of these reports provide the detail that would be required to characterize beaches regarding their susceptibility to erosion. Factors such as, exposure to wave action, natural protection by reefs, alongshore drift direction, and the role of beach vegetation in stabilizing beaches are excluded.

Jackson et al, (1996, Annex 5) suggest some key locations, which should be considered for conservation. These include mangrove areas specifically, especially Ashton Bay area and are suggestions which are echoed by the CCA (1991).

Two studies of yachting activities in the Grenadines have been done. The first completed in 1987, reviews yachting patterns at that time. The authors, in Annex 9, identify all the anchorages in the southern Grenadines and their characteristics such as: usage, depth, type of bottom, sea conditions, and popularity. The study also identifies the available yachting services in the islands at that point and gives an indication of the areas where impacts from yachts (primarily effects of sewage, and garbage dumping) are likely to be greatest.

Jackson, I, D. Gittens, J. Finlay, and M. Jessamy. 2003. Nautical Tourism Strategy Grenada, Carriacou and Petit Martinique. Grenada Community-based Nautical Tourism Development Project. 62 pp.*

The Nautical Tourism Strategy is one of several components of the Grenada community-based Nautical Heritage Tourism Project, whose principal aim is to strengthen, socio-economic linkages between boating and tourism in the geographical area of Carriacou, Petit Martinique and at Gouyave on the main island of Grenada. The scope of work for the study is described specific to the various sections of the report. Section 2 deals with marine resource use regulations and related issues. Section 3 covers planning, marketing and running of the boat regattas. Section 4 covers the prospects for the development of a nautical museum while Section 5 covers attractions.

Jackson, I. and Associates. 2004. Management Guidelines: Tobago Cays Marine Park (draft). Ministry of Tourism and Culture. Government of St. Vincent and the Grenadines. July 2004. 9 pp.

Not seen.

Jackson, T. 1970. Geology and petrology of the igneous rocks at Carriacou, Grenadines, West Indies. MSc Thesis, University of the West Indies, Jamaica.

Not seen.

Jardine, C. and Straker, L. 2003. Fisheries Data Information Document, St. Vincent and the Grenadines. Fisheries Division, Ministry of Agriculture , Forestry and fisheries. 52 pp.*

Essential facts concerning the fishing industry of St. Vincent and the Grenadines are provided. The information may be useful to fishermen, vendors, processors, administration, educators and the general public.

JEMS. 1996. Report of the community consultation on the Tobago Cays Marine Park Project. JEMS, Enhams, St. Vincent. 15 pp.

This public and community consultation process, and the results obtained from it were important elements in the development of the Management plan for the Tobago Cays Marine Park Project. This information was used in conjunction the results of several years of study by the Government of SVG and the French Mission for Cooperation (1994, Anon. 1993, 1996).

Jenkins D. and J. Bobrow. 1985. St. Vincent and the Grenadines: A plural country. W.W. Norton & Company. 56 pp.

On its cover this book is described as ‘the most complete book on St. Vincent and the Grenadines ever produced’. It is easy to read and entertaining and at the same time offers a realistic glimpse at St. Vincent and the Grenadines. This is achieved with the aid of over 200 beautiful color photos and maps which complement the descriptive text.

The section on the Grenadines is 56 pages long and includes individual chapters on Bequia, Mystique, Canouan, Mayreau, the Tobago Cays, Prune Island, Palm Island, Union Island and Petit St. Vincent. This section also examines the history, sailing, boat building, fishing and whaling exploits of the islands' inhabitants.

Jessamy, V. 1999. Land Use and Environmental Planning. NBSAP for Grenada, Carriacou and Petit Martinique. 54 pp.

This review, along with other sectoral reviews, contributes towards the National Biodiversity and Strategy Action Plan for Grenada. This review focuses on land use and environmental planning. The documents initially assesses the status of land use and environmental planning in Grenada, socio-economic and political conditions of land use, existing institutional and legislative framework for land use and environmental planning, and cross sectoral issues, existing measures/ programs. An array of activities with adverse impacts has been identified, along with a summary of gaps within the sector. An analysis of the root causes of biodiversity has been provided such as market failure, government/ policy failure, institutional failure, poverty and proximate causes of loss of biodiversity. Furthermore, it assesses the existing needs such as a comprehensive land policy, physical development plan, *inter alia*, regulations for Environmental Impact Assessments (EIA), and the development of Best Management Practices.

Jenkins, D. and J. Bobrow. 1985. St. Vincent and the Grenadines: Bequia, Mustique, Canouan, Mayreau, Tobago Cays, Palm Island Union island and Petit St. Vincent. A Plural Country. Concepts Publishing Stockbridge. Massachusetts. USA. 123 pp.

The author explores paradise, St. Vincent and the Grenadines, in depth with beautiful coloured photographs and text which depicts the people and their history and special way of life. It gives the reader an idea of the vivid market scenes, carnivals, flora and fauna, business and industries. Details are given on boat building and whaling in Bequia and fishing in Mayreau; world class resorts on Petit St. Vincent, Young Island and Palm Island and the exquisite houses of the rich on Mustique.

John Whittingham Consulting Services. 2004. Noise measurement report for The Mustique Company Limited. Mustique, St. Vincent and the Grenadines. 96 pp. *

Report of the noise survey conducted on the island of Mustique in response to repeated complaints from homeowners on the island that noise from various sources was interfering with their enjoyment of peace and tranquillity they expected to enjoy in the island environment. The problems identified were vehicular and road noise, social gatherings, construction, aircraft operations noise, cargo handling noise at the jetty, legal aspects. The findings of the study are summarized.

KAIRI Consultants Lt. No date. Poverty assessment report – St. Vincent and the Grenadines. Submitted to the Caribbean Development Bank. Submitted by KAIRI Consultants Ltd. in association with the National Assessment Team of St. Vincent and the Grenadines. 6p. www.caribank.org/publications.nsf/Poverty-SVG?OpenPage *

This study sought to understand the phenomenon of poverty in St. Vincent and the Grenadines both from primary and secondary data sources and from the people themselves. The findings are based on three main sources: a national survey, community-level situational analyses (CLSAs) and an analysis of key institutions and organisations. The objective was to arrive at measures to address both the immediate conditions of poverty and the underlying factors that lead to such poverty.

Additionally, the study tackled a core task of training Vincentians in conducting assessments and undertaking project action such that the critical work of poverty reduction and socio-economic development can be sustained on the withdrawal of consultants. Summary findings of the poverty assessment report included information on poverty estimates, causes of poverty, effectiveness of existing responses to the poverty situation and recommendations and strategies for poverty reduction and alleviation.

Kay, F. 1971. This- is Carricou. Carenage Press. St. George's Grenada. 31 pp.

A narration by Francis Kay of his experience while visiting the island of Carriacou. He provides some description of the island regarding flora and fauna and its culture (language, music, food and drink). One can also gain insight into the various villages: Tyrell Bay, Harvey Vale, and Hillsborough which he has visited.

Kaye, Q., M. Kappers, and S. M. Fitzpatrick. 2004. An Archaeological Survey of Carriacou, West Indies. In Proceedings of the XX International Congress for Caribbean Archaeology, Dominican Republic (in press).

Not seen.

Kirgsbury, R.C. 1960. Commercial geography of the Grenadines. 39 pp.

After an overview of the physical settings of the Grenadines, the author gives an account of the historical background, product exports, and finishes with outlook and recommendations. The appendix provides summaries on all the major Grenadines islands –Rhonda, Carriacou, Petit Martinique, Union Island, Mayreau, Canouan, Mustique, Baliceaux, Battowia, Isla a Quatre and Bequia. This document is useful for maps and commercial agricultural production.

Knox-Johnston, R. 1981. A Yachting Study in St. Vincent and the Grenadines. Wallace Evans & Partners. Coopers & Lybrand Associates. CBE.

Not seen.

Kroll, B. and R. Kroll. 1998. Carriacou: Yesterday's Caribbean. Globe and Mail, Toronto. January 10, 1998.

Not seen.

Kuczera, P. 2003. Mayreau nature trail mapping project. Kuczera GIS Solutions, Niagara, Canada. 11pp. *

The objective of the project was to protect the natural state of the island by defining designating trail routes for visitors to follow. The report includes a review of the project's goal, objectives and procedures, a database of the records compiled during the map creation process, as well as conclusions and reflections on the overall project.

Lacroix, D. and P. Lemerrier . 1986. Aquaculture potentialities in Grenada. FAO.FI:TCP/GRN/6651 Field Document 1. 65 pp. <http://www.fao.org/docrep/field/003/AC523E/AC523E00.HTM>*

Report of an assessment of marine and freshwater aquaculture potentialities in Grenada conducted by two engineers of the French Company FRANCE-AQUACULTURE from October 1, 1986 to October 21, 1986. It showed that, technically, Grenada has large aquaculture potentialities and suggests possible opportunities for freshwater prawn.

Lapointe, B.E. 1994. Mustique Coral reef Assessment. International Marine Research Inc. 9 pp. *

Report is a result of a survey conducted to assess marine conservation needs for protection of water quality and coral reef resources of Mustique. Recommendations were made to help improve water quality and minimize other human stresses on coral reef communities of Mustique.

Laukaran, F. 1987. Integrated Development Programme- Carriacou, Grenada. Second Draft. Dept. Reg. Dev., OAS, Washington, D.C.

Not seen.

LEC Environmental Consultants Inc. 2000. Environmental Assessment Report. High North National Park, Carriacou, West Indies. 43 pp. *

The assessment report focuses on High North National Park in Carriacou. The report provides a comprehensive inventory of the natural resources, the biota contained therein and recommendations on the development of general land management based on data collected. The document is expected to be essential towards the development of informed, community based conservation and land management strategies which will ensure protection of these invaluable natural resources through the implementation of the proposed High North National Park. The appendices provides details on the floral and faunal observation, along with reference maps.

Lewis, J. B. 1975. A preliminary description of the coral reefs of the Tobago Cays, Grenadines, West Indies. Atoll Research Bulletin No. 178. 13 pp. *

This provides an initial description of the coral at the Tobago Cays. It lists all corals as well as provides a description of the Horseshoe Reef. A distribution of the shallow water communities around the islands the islands of Petit Rameau, Petit Bateau, Buradal and Jonesby are provided as well. Well-illustrated figures are also included of the shallow water communities. Still, as a study it is simply descriptive and as such would make it impossible to make comparisons over the long-term.

Lizama, D.T. 2005. Assessing Sustainable “Green Boat” Practices Of Water Taxi Operators in the Grenadines. MSc Research Paper. Center of Resource Management and Environmental Studies (CERMES), University of the West Indies. 47 pp.

This article summarises the results of an assessment of sustainable green boat practices of water taxi operators in the Grenadines Islands of St. Vincent and Grenada. Apart from frequent storms and increase tourist arrivals, water taxi operators have been identified as an additional contributor to the degradation of the marine environment due to their non-environmental boat practices. Results from the assessment survey indicated that the water taxi operators’ current practices are often not environmentally friendly. This is evident through improper anchoring, littering, use of non-environmentally friendly cleaning agents and equipment *inter alia*. The results of the survey were used to design a booklet on best environmental practices for boat operation for water taxi operators. This manual is found in the Appendix IV.

Lizama, D. T. and S. D. Mahon. 2006. Sustainable “Green Boat” Practices for Water Taxi Operators in the Grenadines. Caribbean Coastal Co-management and Coral Regeneration (4Cs) Programme, Sustainable Grenadines Project (SGP) and Centre for Resource Management and Environmental Studies, University of the West Indies, Cave Hill Campus, Barbados. 22 pp. *

This booklet has been produced for the water taxi operators in the Grenadines with substantial input from the water taxi operators themselves. The information in this booklet is therefore by the water taxi operators, and for them. It details some of the “best practices” that operators can follow to become better stewards of the marine environment through improved boating operations. This booklet is also useful for: other boat owners, operators of boatsheds, slipways and marinas, local environmental officers, and the public in general.

Llewelyn-Davies, et al. 1972. St. Vincent Tourism Development Strategy. 2 vols.

Not seen.

Llewelyn-Davies, Weeks, Forestier-Walker and Bor. 1971. Mustique Development Plan. 53 pp.

Not seen.

Logan, D. 2001. The socio-cultural history of Petit Martinique: A fishing island community. Universal Printers, Trinidad and Tobago. 120 pp.

The excellent source for the culture and history of Petit Martinique so its people could defend themselves against the Western culture. The book educates the reader on the early inhabitants, economic lifestyle (fishing, sailing, boat building), religion, education, rituals and the historical estates and owners.

Lynn, B.G. 1968. The Grenadines: Undiscovered islands of the Caribbean. Dukane Press Inc., Florida, USA. 52pp.

The book begins with a concise description about the Grenadines islands. The remaining pages show annotated photographs around the island allowing one to visualize the history, culture and biodiversity of the Grenadines.

Mahon, R. 1994a. French Cooperation Program on environmental management and land use: Case study on coastal and marine ecosystems of St. Vincent and the Grenadines with special emphasis on the Tobago Cays National Park. Prepared for the workshop on Coastal and Marine Ecosystems. Union Island. 11 pp. *

Initially providing a background to the St. Vincent and the Grenadines coastal and marine ecosystems and the Tobago Cays Marine Park, this work also identifies the promotion of the sustainable use of the Tobago Cays National Park by developing a functional management system, to be the purpose of the project. The author then categorizes Physical, Non- Physical Inputs and Implementation Procedures and Timetables, under the heading, "Project Implementation". The following section looks at factors ensuring sustainability which cover policy support, appropriate technology and environmental protection measures, socio cultural and legal aspects, institutional and management capacity building and a topic called, Assumptions, Risks and Flexibility. The final sections are on economic and financial sustainability as well as monitoring and evaluation.

Mahon, R. 1994b. Project concept for integrated coastal zone management in the southern St. Vincent Grenadines, with particular reference to impacts on the marine environment. Draft. 5 pp.

Due to the increased development in the Tourism sector and its associated services in the Southern Grenadines, Integrated Coastal Zone Management is as crucial. A project concept plan is to be implemented by the Ministry of Finance and Planning, and this document describes how the acquisition and integration of information on marine habitats will occur. It outlines several activities; inventory of coastal habitats, marine habitat mapping, identification/ inventory of current and proposed land based activities which can impact the marine environment, evaluation of impacts on marine communities at selected locations, the status of Tobago Cays marine habitats, public participation/ education. An overview for each of these is given as well as information on scheduling and resources.

Mahon, R. 1996. Local area development and environmental management plan for Union Island, Mayreau and Tobago Cays (Phase 2): Literature review and identification of interested non-governmental parties. 30 pp. *

This literature review analyses work done on topics ranging from recreational activities, watersheds, waste disposal, conservation, shoreline and beaches, marine habitats, EIAs, management plans, Fisheries and conflicts in the area. It proceeds to highlight information that is of relevance to the Grenadines, while at the same time conveying an impression of their strengths and limitations.

Mahon, R., S. Almerigi and A. Franklin. 2002. Stakeholders in sustainable development in the Grenadine islands. Sustainable integrated development and biodiversity conservation in the Grenadine Islands. Coastal and Marine Management Programme, Caribbean Conservation Association, Barbados, Version 1, 16 pp.*

The purpose of this document is to increase awareness and opportunities for networking among the many stakeholder groups that have an interest in sustainable development in the Grenadine Islands of both Grenada and St. Vincent and the Grenadines. Most of this document is devoted to listing the numerous small non-governmental organisations (NGOs) in the Grenadines. It is hoped that this will increase awareness among these groups of who is doing what, and will lead to greater communication among people with similar interests.

Mahon, R., S. Almerigi, P. McConney, C. Ryan and B. Whyte. 2004. Coastal Resources and Livelihoods in the Grenadines Islands: Facilitating Change in Self-organising Systems. Proceeding of the Gulf and Caribbean Fisheries Institute. [Proc. Gulf Caribb. Fish. Inst.]. no. 55, 56pp. *

The Grenadine Islands lie on the Grenadine Bank extending some 120 km between Grenada and St. Vincent, and occupy about 1,500 km of the bank. This area supports the most extensive coral reefs and related habitats in the south-eastern Caribbean. The international boundary between Grenada and St. Vincent and the Grenadines lies about midway down the bank. The largest islands have towns and communities. Others are resort islands. Most are visited by yachters and fishers. Tourism and fishing are the major sources of employment in the area. Tourism development is proceeding apace, while fishery resources appear to be fully or overexploited. Governments of both countries perceive their Grenadine Islands as having high potential for tourism and associated development. They also recognise the vulnerability of the marine and terrestrial ecosystems of the area to environmental degradation and that sustainable development depends on conservation of the resources. There the emerging view that the entire area should be a transboundary World Heritage Site. The Tobago Cays Marine Park has been established and other MPAs are planned, but a broader approach is needed. Achieving sustainable livelihoods from marine and coastal resources will need organisational change at many levels. There is a complex interplay of local and international private interests, local, national, and international NGOs, as well as tensions between main island government and local inhabitants. Therefore, conventionally planned change is difficult to implement. The model of organisational change that is most likely to be applicable is one based the science of complex adaptive systems and chaos theory. Intervention should employ 'containers', 'significant differences', and 'transforming exchanges' to increase the capacity for self-organisation among stakeholders. Understanding of other chaos elements such as boundaries, butterfly effects, coupling and attractors can be used to encourage self-organization.

Manson, F.J. and D.J. Die. 2002. Incorporating commercial fishery information into the design of marine protected areas. Elsevier: Ocean and Coastal Management 0 1-14.

Not seen

Martin, K. 2003. St. Vincent and the Grenadines. Macmillan Caribbean, Oxford, UK.

Not seen.

Martin-Kaye, P. 1958. The geology of Carriacou. Bull. Amer. Paleont., 38:395-405.

Not seen.

Martinez-Soto, A. and R. Gabriel. 1989. The development of a fisheries program and fisheries processing centre in Carriacou. Report prepared for GOG/OAS.

Not seen.

Mason, M. 2002. Tobago Cays Marine Park benthic habitat mapping project: Final report. Coral Cay Conservation Ltd., London, UK. 24 pp.*

This is a report on the mapping project where the objectives of the project were to provide the TCMP with a comprehensive benthic habitat map of the marine park. Three areas: Mayreau gardens, Horseshoe reef and Petit Tobac were given precedence over the others. The maps were stored in a GIS compliant digital format and were hoped to be useful by park management for future management purposes-build foundation for future monitoring.

Mather J. 1971. Report on the ground-water resources of Carriacou, Grenadines. Inst. Geol. Sci., London.

Not seen.

Matthes, H. 1984. St. Vincent and the Grenadines: Formation of a fisheries development programme. FAO, Rome.

Not seen.

Mayreau Environmental Development Organisation. 2003a. A management proposal for the Tobago Cays Marine Park, St. Vincent and the Grenadines. Mayreau Environmental Development Organisation. Mayreau Island, Southern Grenadines. 19th September 2003. 23 pp.*

This proposal provides all the necessary and relevant historical background to the Tobago Cays, MEDO's complete biographical data, the modern developments in the TCMP, and MEDO's detailed proposed plans for the complete protection and the efficient and sustainable management of the Tobago Cays Marine Park.

Mayreau Environmental Development Organisation. 2003b. Marine Island Tour Guide Workshop: A Manual/handbook for Tour Guiding on Mayreau Mayreau Environmental Development Organisation. Mayreau Island, Southern Grenadines . 6th – 9th Nov. 2003. 30 pp.*

This manual designed tour guides about the island of Mayreau provides tips for the guide in relating to their audience. Moreover the handbook is a good source of information on geological, social-cultural and historical details and also the biodiversity on the Mayreau. Maps are provided illustrating the village of Waterloo, Maps of the Tobago Cays and Mayreau Gardens with their specified zones for anchorage, snorkelling and scuba diving. At the end of the document is a series of plates displaying the plant and animal diversity on Mayreau

McMillan, H. 1985. Integrated Development Project – Carriacou, OAS, Washington, D.C.

Not seen.

Mente, A. 1985. Assessment of the development potential of the water resources of Carriacou. Unpublished, prepared by the OAS, Dept of Reg. Dev., Washington, DC.

Not seen.

Mills, A. P. 2001. Reports : St. Vincent and the Grenadines. Marine Pollution Bulletin. Vol. 42, No. 12, pp 1208-1220. *

Article provides an overview on the coastal resources of St. Vincent and the Grenadines and emphasises that their livelihoods depend primarily on those resources. The document provides evidence of the various economic, environmental and political factors which threaten those very resources and discusses the activities currently being conducted to deal with these issues.

Ministry of Agriculture, Industry and Labour. 1994. St. Vincent and the Grenadines national forest resource conservation plan 1994-2003. Reid Collins Forest Consultants. 42 pp.

Not seen.

Ministry of Carriacou and Petit Martinique Affairs. (June 1997). Project document: Sustainable environmental management and development of eco-tourism opportunities for Sandy Island and Tyrell Bay, Carriacou.

Not seen.

Ministry of Foreign Affairs and Tourism & French Mission for Cooperation. 1995. Survey on the yachting activity in the Tobago Cays and the Grenadines. 19 pp.*

A recent survey of yachters by the Ministry of Foreign Affairs and the French Mission for Cooperation (1995) focused on yachters' island preferences and their willingness to pay fees. It revealed that Union Island and the Tobago Cays are favoured areas, and the survey respondents indicated a high degree of satisfaction with the conditions in those locations. However, the study also identified a variety of problems, many of which are addressed by the TCMP management plan (Anon. 1996).

Mitchell, C. 1966. Isles of the Caribbees. National Geographic Society, Washington DC, USA.

A narration by Mitchell of his journey at sea through the Caribbean Islands with *Finisterre*. He highlights the lifestyles, history and culture of Grenada, the Grenadines, St. Vincent and the other neighbouring islands of the Eastern Caribbean. The pages twenty-eight to thirty-nine focus primarily on the Grenadines Islands.

Mitchell, J.F. 2001. A season of light: A series of messages on development in St. Vincent and the Grenadines. Concepts Publishing Inc. Vermont, USA. 179 pp.

A series of speeches from the late 1990s to 2000 which is a useful guide to the delicate development process.

Mitchell, P. 1994. Bequia Sweet, Sweet. Macmillan Caribbean, London, UK. 102 pp.

This book covers the history of the island and other topics such as flora and fauna, fishing activities, whale hunting, beaches, recipes, food, music, sports, Easter Regatta, places of interest and accommodation.

Mofatt and Nichol. 2004. L'Ansecoy Bay shoreline assessment. Report prepared for the Mustique Company. 17 pp.*

This report is an account of the assessment of the L'Ansecoy Bay shoreline which has been retreating and causing some estate homes to be more susceptible to damage especially during extreme storm events. The report reviews previous studies, assess the shoreline processes and evaluate alternative solutions to reduce erosion and provide protection to the estate homes.

Mohammed, E. 2003. A Preliminary marine Ecosystem Model for the EEZ of a Small Island State. A Case Study for Grenada and the Grenadines. Pp 117-133. In: CRFM (eds.) Report Of The 2002 Joint Meeting Of The CRFM Large Pelagic Fisheries Working Group (CRFM LPWG), The CRFM Reef And Slope Fisheries Working Group (CRFM RSWG), And The CRFM Small Coastal Pelagic Fisheries Working Group (CRFM SCPWG). CARICOM Fishery Report No. 10.*

This paper describes the construction, parameterisation and balancing of a preliminary marine ecosystem model for the south eastern Caribbean using Ecopath with Ecoism software. It integrates available ecological and biological information for the region, and fisheries related information specific to Grenada and the Grenadines. The main objectives are to better understand the structure and functions of components of the ecosystem, to examine the impacts of fishing on the living marine resources and to explore fisheries management policy options. Hypothetical policy exploration scenarios are investigated and adapt limitations and suggestions for further refinement of the model are highlighted.

Mohammed, E., Rennie, J. 2003. Grenada and the Grenadines: Reconstructed fisheries catches and fishing effort, 1942- 2001. In: Zeller, D., Booth, S., Mohammed, E., Pauly, D. (Eds.), From Mexico to Brazil: Central Atlantic fisheries catch trends and ecosystem models. FCRR 11(6), pp. 67-94.*

The trends in the fishery were determined by investigating the estimates of the total fisheries catch, total catch of onshore, offshore fisheries, fishing effort and the annual trends in catch per unit areas and catch per unit effort. This reconstructed data was compared to the data in the FAO FISHSTAT and discussed. This article is an excellent source for the history of fisheries development and policy within Grenada and the Grenadines.

Mohammed, E., J. Finlay, J. Rennie. 2003a. Quantifying the Impacts of Fishing on Marine resources by Analysis of reconstructed Fisheries Time Series Data: A Case Study for Grenada and the Grenadines. Pp 134-144. In: CRFM (eds.) Report Of The 2002 Joint Meeting Of The CRFM Large Pelagic Fisheries Working Group (CRFM LPWG), The CRFM Reef And Slope Fisheries Working Group (CRFM RSWG), And The CRFM Small Coastal Pelagic Fisheries Working Group (CRFM SCPWG). CARICOM Fishery Report No. 10.*

Using past literature, the time series of catch and effort data was reconstructed for fisheries of Grenada and the Grenadines for the period from 1942- 2001. Through examination of fisheries characteristics, biological and ecological indicators, the impacts of fishing on the marine resources between 1978 and 2001 are quantified. Results are consistent with development of the offshore fishery and a decline in the inshore fishery. Declining catch per unit effort in the offshore fishery and declining mean length and fishing-in-balance index in the inshore fishery are the major areas of ecological concern. Data limitations affecting the utility of reconstructed data for quantifying the impacts of fisheries are discussed and suggestions for improvement of fisheries statistics provided.

Mohammed, E., Straker, L.E., Jardine, C. 2003b. St Vincent and the Grenadines: Reconstructed fisheries catches and fishing effort, 1942-2001. In: Zeller, D., Booth, S., Mohammed, E., Pauly, D. (Eds.), From Mexico to Brazil: Central Atlantic fisheries catch trends and ecosystem models. FCRR 11(6), pp. 95-116.*

Using past literature, the time series of catch and effort data was reconstructed for fisheries of St. Vincent and the Grenadines for the period from 1942- 1999. The trends in the fishery were determined by investigating the estimates of the total fisheries catch, total catch of onshore, offshore fisheries, fishing effort and the annual trends in catch per unit areas and catch per unit effort. This reconstructed data was compared to the data in the FAO FISHSTAT and discussed. This article is an excellent source for the history of fisheries development and policy within St. Vincent and the Grenadines.

Moore, G. 2004a. Response of a Storm-Damaged Mangrove System to Restoration Planting Carriacou (Grenada), West Indies. Prepared for the Nature Conservancy, St. Croix. 12 pp.*

This report was prepared to characterize the restoration planting site and to provide an interim survivorship assessment. The assessment examines a description of the methods used for pore water biogeochemistry and determination of planting survivorship, schematic map of the past and future restoration planting areas and associated mangrove habitat zones, an evaluation of previous restoration efforts and associated findings and conclusions.

Moore, G. E. 2004b. Assessment of the mangrove ecosystem, Tyrrel Bay, Carriacou (Grenada) West Indies. The Nature Conservancy. Center for Coastal Studies. May 24th, 2004. 11 pp.*

The report provides a brief assessment of the mangrove ecosystem of Tyrrel Bay on the island of Carriacou (Grenada) West Indies. The report is based on the qualitative observations of the mangrove ecosystem by the author Gregg Moore from 1997 to 2004. The overall report provides a description of the of the mangrove ecosystem. It further examines wildlife habitat potential, historical perspectives, the current threats to the ecosystem and the conservation and management considerations in light of present development activities.

Moore, G. E. 2005. Community-Based Mangrove Restoration in Carriacou, West Indies. The Nature Conservancy. Center for Coastal Studies. January 31st, 2005. 9 pp.*

This brief report gives details of Dr. Moore's effort to establish additional mangrove restoration planting sites involving direct community participation. Restoration and outreach strategies, planting/survivorship success and recommendations for the future, continued restoration work within Carriacou.

Moore, G. E. undated. A Site-Specific Approach for Community Based Mangrove Restoration within the Eastern Caribbean. 5 pp.*

This report focuses on site-specific restoration strategies for restoring the mangrove forest in Carriacou. It gives the suitable species and planting locations for significant mangrove forests reestablishment within the primary study area of Windward, Carriacou. The information provided in this document will also provide valuable information to guide additional community-based restoration and planting efforts within this system and nearby mangrove areas on the island.

Morris, K. 1983. Artisanal Fisheries in St. Vincent and the Grenadines. Proceedings of the Gulf and Caribbean Fisheries Institute. 36: 15-20. *

The article provides a concise overview of the Artisanal fishery in St. Vincent and the Grenadines. It identifies the type of species caught, landings data, list of landing beaches and status of the fish resources. Morris later identifies the problems in the fisheries such as the fisheries administration, inadequate knowledge of potential resources, craft limitations, gear limitations, landing facilities/storage and marketing distribution.

Morris, K. 1989. Fisheries country profile, St. Vincent and the Grenadines. GSVG Fisheries Div., Kingstown, St. Vincent.

Not seen.

Morris, K. 1991. Fisheries country profile: St. Vincent and the Grenadines. Unpublished MS, Fisheries Division, Ministry of Agriculture, Industry and Labour, Kingstown, St. Vincent. 56pp.

Not seen.

Morris, K. 1993. The flyingfish fishery of St Vincent and the Grenadines, p. 160. In: H.A. Oxenford, R. Mahon and W. Hunte (eds.) The Eastern Caribbean Flyingfish Project. OECS Fishery Report No. 9.

The flying fish industry does not constitute an important or significant component of the migratory pelagic fishery of St. Vincent and the Grenadines. Less than 1mt is landed annually and this accounts for less than 1% of the total pelagic landings. The estimated annual value of the catch is not in excess of EC\$5,000. The pelagic fleet comprises approximately 300 open boats which target large ocean pelagic species from December to suggest and the schooling inshore small coastal pelagics all year round. Approximately 1000 full and 500 part-time fishermen are involved in the fishery. Catch and effort data are not recorded and the fishery remains unmanaged.

Morris, K., Cruikshank, J. and Mahon, R. 1988. A fishery data collection system for St Vincent and the Grenadines, pp. 150-163. In: R. Mahon and A.A. Rosenberg (eds.) Fishery data collection systems for eastern Caribbean islands. OECS Fishery Report No. 2.

Not seen.

Morris, K. 1995. Exploitation of large pelagics in St Vincent and the Grenadines. Ministry of Agriculture and Labour, Fisheries Division, Kingstown, St Vincent, 39 pp.

Not seen.

Morse. S.V. 1778. Report on the Grenadines to Lord MacCartney. 12 pp.*

This ancient article written on 22nd July, 1778 was written by the Commanding Engineer, S.V. Morse. He made a report to Lord McCartney on the Grenadines from Bequia to Isle Ronde providing information about the island and with a plan to show how the islands may be considered objects worthy of defence. The report gives a descriptive and historical account of the islands such as geographical location, topography, population, and agriculture and land availability. The article is perfect for anyone who is interested in the history of the Grenadines.

Mustique Company Limited. 1992. Mustique. McLaren Press Limited, Bracebridge, Canada.

Not seen.

Mustique Environmental Committee. 2004. Mustique environmental information. Pamphlet.

Not seen.

Mustique Island Times. 2004. Edition 5.

Not seen.

Nichols H. A. (May 3- 18 1891). Diary of a trip through Grenada, the Grenadines and St. Vincent. 127 pp.

A trip through the Grenadines through the eyes of H.A. Nichols as he travels from Tobago to St. Vincent. He provides his description of the geography, history, society and biodiversity of the islands.

Organisation of American States. 1987. Tourism development in the Grenadines. Immediate action programme and investment estimates for private and public sector activities. Organisation of American States, Washington, DC.

Not seen.

Organisation of American States. 1988a. Carriacou: Integrated Development Programme. Government of Grenada. 28 pp.

This document examines development on the island of Carriacou. It provides details on population and settlement structure, natural environment, economy of Carriacou, constraints and opportunities for development. The second chapter focuses on the Integrated Development Programme in terms of the relevant policies, programme objectives, financial arrangements and management.

Organisation of American States. 1988b. Plan and policy for a system of national parks and protected areas in Grenada and Carriacou. Grenada Forestry Department.

Not seen.

Organisation of American States. 1990. Development of the Tobago Cays National Marine Park and the Mayreau Environmental Development Organisation. Washington, D.C., June 1990.

Not seen.

Organisation of American States. 2000. Plan and policy for a system of national parks and protected areas in Grenada and Carriacou. Grenada Forestry Department. 144 pp.*

Grenada is an island famous for its natural beauty and cultural resources. But ever-increasing pressures have been placed on the country's natural resource base and there is an increasing demand for recreational opportunities and education programs for Grenada's population. In response to this, the Government of Grenada placed the establishment of a national park and protected areas program as a priority in the development plan for 1986 and requested technical assistance from the Organization of American States, Department of Regional Development. The currently developed systems plan (2000) identifies and provides a course of action for the protection and use of the Country's outstanding natural and cultural heritage. The plan is expected to encourage public understanding, appreciation and use of that heritage in ways which leave it unimpaired for future generations.

OECS. No date. OECS Regional Fisheries Management/ Development Grenada Profile. 54 pp.

This profile documents many aspects of Grenada fishing. It looks at the role of fisheries in the economy, its resources, the technological profile, aspects of the industry market profile, the human profile and fisheries management. In its conclusion many tables are provided to supplement the chapters. Also a useful summary of a SWOT analysis is provided.

OECS. 2001. OECS Environmental Review 2001. OECS Natural Resources Management Unit. Castries, St. Lucia. 32 pp.

This publication contains the St. George's Declaration. In its other sections a Portfolio review is done which examines; the Small Projects Facility; Coastal and Marine Resources; Watershed Management; Environmental Planning; Sustainable Tourism.

The remainder of the document examines many issues pertinent to the Grenadines. These range from biodiversity, valuing natural resources, energy, developing meaningful participation, legal and institutional arrangements for environmental management, to multi-lateral agreements.

OECS. 2005. Grenada: Macro-Socio-Economic Assessment of the Damage caused by Hurricane Emily. July 14th, 2005. 98 pp.*

A macro-economic and social assessment of the effects of Hurricane Emily on the performance of the Grenadian economy ten months after the passage of Hurricane Ivan. The assessment is based on a methodological approach formulated by UN-ECLAC and refined to suit the needs of Small Island Developing States. The report undertakes a sector-by-sector analysis of the impact of Hurricane Emily; an assessment of overall damages (direct and indirect). The report concludes with a presentation of guidelines for a rehabilitation programme that builds on the recommendations that had been provided by the OECS Secretariat after it undertook the assessment of damages caused by Hurricane Ivan.

Overing J.A. 1995. Mustique environmental inventory-data analysis of fish surveys. REEF Environmental Education Foundation. 14 pp.*

The report has been prepared by the Reef Environmental Education Foundation based on data collected and submitted to Ms. Julie Overing between the dates of June 12-22, 1995. Included in the report is a description of the methodology used to collect data in the field, as well as those methods used for data analysis and interpretation of the data.

Overing, J. 1997. Exploring the flora and fauna of Mustique. Prepared for The Mustique Company. 27 pp.

This small guide to the island is by Julie Overing, who has highlighted it with many clear and colorful photos of the island's flora and fauna. It was created to help visitors explore the attractions of Mustique and achieves this goal quite well, since it is very informative and easily read. It begins with a description of the island, its geography and climate. A brief description of the local reptiles, birds, cacti are provided, there is also a relatively large section on plants. It gives information on the various trails which includes 'Watchable Wildlife' and 'Photo Opportunities'. The booklet concludes with a section titled 'Preserving the Resources of Mustique', a brief statement about the goals and role of the Mustique Company in protecting the environment. Several references are also provided which would be of interest to readers.

Overing, J.A. 2004. Potential options for the protection of L'Ansecoy Bay beach. Report prepared for the Mustique Company.

Not seen.

Overing, J. and G. Cambers. 1995. Mustique environmental inventory. Volume 1: Report. Report prepared for The Mustique Company. August 1995. 50 pp.*

Mustique, a small private island in St. Vincent and the Grenadines, is renowned for its beauty, privacy and tranquillity. Now that the major residential development phase is nearing completion, the Mustique Company is concentrating on other aspects of development such as conservation and environmental management. The first stage of this strategy is to prepare an environmental inventory of Mustique. This present study which comprises two volumes (Volume 1: the report; Volume 2: the appendices), presents an environmental audit of the island and its surroundings. Following a scientific description of the island's marine and terrestrial environment together with its flora and fauna, the report discusses the impacts of development on Mustique's environment. The major impacts include loss of wetlands; soil erosion and the loss of native vegetation; beach erosion, pollution; illegal hunting and anchor damage to coral reefs. These problems are discussed and the ways to alleviate their future extent and impact are outlined. This inventory and the assessment provide the framework for a future environment management strategy for Mustique.

Overing, J. and G. Chambers. 2004. 2004 update on environmental management in Mustique. Draft. November 2004. 55 pp.*

In 1995 a study was commissioned by the Mustique Company to prepare an environmental inventory of Mustique. The purpose of that inventory was to prepare a quantitative baseline against which future changes could be measured and compared, and to make recommendations for mitigating impacts caused by development. In this 2004 report, the environmental inventory has been revisited to assess the changes that have occurred both environmentally and developmentally in nine years, to evaluate the progress that has been made with respect to the recommendations of the 1995 report, to provide further direction and to address emerging issues that have arisen in this time. An index has been developed to assess the health of the environment and a report card has been created to evaluate how the island has fared. Based on these results, recommendations have been made to address the issues that arisen in the last nine years. The recommendations provided to address these issues will assist the Mustique Company and the Environmental Committee in formulating an action plan to move forward for the next ten years to continue protecting and managing the valuable natural resources that make Mustique such a unique island.

Oxenford, H. 1986. A Preliminary Population Survey of the West Indian Sea Egg (*Tripneustes ventricosus*) in St. Lucia, St. Vincent, Grenada and the Grenadines Islands. Ocean Research and Conservation association (ORCA) Inc. Victoria, B.C., Canada. Unpublished. 14 pp.*

This 1986 report provided an approximate idea of the state and extent of sea egg populations in the island chain from St. Lucia to Grenada. The survey indicated the suitable study location for detailed population work in the future. Pages four to five provided the results gathered on the Grenadine Islands (Bequia, Canouan, Union Island and Rhonde Island).

Paice, M.R. 2004a. The Cane Toad (*Bufo marinus*) on Mustique. Report prepared for the Mustique Company. 8 pp.

Not seen.

Paice, M.R. 2004b. A little lizard of the leaf litter – *Gymnophthalmus underwood*. A new species record for Mustique. 2 pp.

Not seen.

Palm Island Resorts Limited. 2003. St. Vincent and the Grenadines. Tobago Cays National Marine Park management proposal.

A proposal from Palm Island Resorts Limited for the development and management of the Tobago Cays National Marine Park.

Parsler, J.R. 1989. Coastal and Marine Environmental Stress in the St. Vincent Grenadines Environmental Education & Information EEDIEF Vol. 8, No. 3, 14 pp.

Not seen.

Parris, D. 1986. Tourism development plan for the Grenadines: Socio-cultural considerations. Organisation of American States, Washington , DC.

Not seen.

Patriquin D. and W. Hunte. 1996a. Preliminary observations of Anse La Roche Beach, June 20, 1996, and comments on the status of the beach as a site for eco-tourism. Unpublished report.

Not seen.

Patriquin, D.G. 1975. Migration Of Blowouts In Seagrass Beds At Barbados And Carriacou, West Indies, And Its Ecological And Geological Implications. Aquatic Botany, Vol 1, (2): 163-189.

Blowouts (grass-free depressions within seagrass beds) were described in detail. The seaward edges were steep and exposed rhizomes of *Thalassia* while the leeward edges sloped gently upward onto the seagrass plateau and were usually colonized by *Syringodium*. Evidence was given to suggest the migration of blowouts seaward.

People Revolutionary Government. People's Law No. 67 of 1979. Beach Protection Law.*

A law to control the removal of sand, stone, shingle or gravel from beaches.

People's Revolutionary Government. People's Law No. 21 of 1981. Land Development and Utilization Law.*

A law to ensure the development and utilization of agricultural land on the island.

People's Revolutionary Government. People's Law No. 7 of 1983. Land Development and Utilization Law.*

A law to ensure the development and utilization of agricultural land on the island.

Peters, M. 1989. A brief overview of tourism in St. Vincent and the Grenadines. Dept. of Tourism, Kingstown, St. Vincent.

Not seen.

Petitjean R. B. 1975. Histoire de l'île de Grenade 1649-1659. Montreal, University Press, Canada.

This book which is written in French, focuses on the history of the island of Grenada in the 17th century. (1649 – 1659).

Petitjean R. B. 2002. Socio-economic and political aspects of the aid provided by Japan to the fishing industry in the small independent islands in the eastern Caribbean. ECCEA, Fort de France, Martinique. 21 pp. *

Petitjean examines the different islands in the Eastern Caribbean who are given aid by the Japanese to their respective fishing industries including St. Vincent and the Grenadines and Grenada. Table VI shows Japanese aid to the various fisheries sectors in St. Vincent and the Grenadines. The report focuses on, the effects of the aid from the point of view of the fishing industry, government and politicians of the islands and also from the donor country. It gives reference to other reports such as the Caribbean development Bank Annual Report 2001 which indicate economic growth of each island

The Appendix further examines fisheries complexes in St. Vincent and the Grenadines and Grenada. Table XIV shows some type of aid provided for the four complexes in St. Vincent and the Grenadines, three of which are on the Grenadines islands of Bequia, Canouan and Union.

Phillip, P.E. and Rennie, J. 1993. The flying fish fishery of Grenada p. 159. In: H.A. Oxenford, R. Mahon and W. Hunte (eds.) The Eastern Caribbean Flyingfish Project. OECS Fishery Report No. 9.

Flyingfish, primarily *Hirundichthys affinis*, landings have declines sharply over the last 12 years from around 866.7 mt per year in 1978 to 11.5 mt in 1990. the importance of flyingfish as a component of the total food fish landings in Grenada has also declines from representing 42% of the total landings in 1978 to just 0.64% in 1990. Whilst flying fish has declined in importance as a food fish, it has increased its importance as a “baitfish”, being the primary bait used in the developing longline fishery. There is a strong possibility that the flying fish fishery will now develop entirely as a bait fishery. With flying fish being landed and stored for use as bait year round in the longline fishery, which is presently constrained by the lack of bait in the flyingfish “off season”. The traditional fishing technique (hook and line and dipnet) have now been replaced by the surface gillnet. There is no fishery management for the flyingfish in Grenada.

Pickerill, R.K., S.K. Donavan, and R.W. Portell. 2002. Bioerosional Trace Fossils from the Miocene of Carriacou, Lesser Antilles Caribbean Journal of Science. Vol. 38, No. 1-2, 106-117 pp.

This paper documents a relatively diverse assemblage of macroborings from the Miocene of Carriacou in the Grenadines, Lesser Antilles. The borings occurs in molluscan and scleractinian coral substances associated mainly with the Middle Miocene Grand Bay Formation. The document provides evidence that suggest that the Grand Bay Formation is a deep-water turbiditic sequence.

Potter, R.B. 1992. St. Vincent and the Grenadines. World Bibliographic Series. Vol 143. CLIO Press Ltd. Oxford, England. 212 pp.

A bibliography of various documents written on St. Vincent and the Grenadines.

Powell, R. and R.W. Henderson. 2005. A New Species of Gonatodes (*Squamata: Gekkonidae*) from the West Indies. Caribbean Journal of Science, Vol. 41, No. 4, pp 709-715.*

In this article Powell and Henderson provided a description of a new species of Gonatodes from remnant dry forest on Union Island, St. Vincent and the Grenadines. The new species was distinguished from all congeners by its small size, large body scales (39-44 around midbody; >70 in all congeners), a bright red-orange iris, and a unique pattern of three pairs of prominent dorsolateral ocelli on the body. They discussed the biogeographical implications of the new species' Lesser Antillean distribution and its conservation status.

Price, N. 1988. Behind the Planters Back: Lower class responses to marginality in Bequia island, Macmillan, St. Vincent, Macmillan Caribbean (Basingstoke). 274 pp.

Detailed ethnography of a small, lower class Afro-Caribbean community on the island of Bequia in the St Vincent Grenadines.

Price W.S. 1985. Whaling in the Caribbean: Historical perspective and update. Rept. Int. Whal. Comm. 35: 413-420.

Not seen.

Price W.S. and P.G. Price. 1994a. Ashton Marina Project: Potential ecological impact on Union, St. Vincent and the Grenadines. 19 pp.*

The possible ecological impacts that could occur in the Ashton Lagoon in Union Island due to the proposed construction of the Ashton Marina. The lagoon/coral reef ecosystem is one of the few remaining healthy lagoon systems in the Lesser Antilles. The development of the marina is expected to cause a number of environmental impacts on the ecosystem during construction and after operation of the marina. One important recommendation made is to respect the area as a marine conservation area and to preserve its environmental integrity.

Price, W.S. and P.G. Price. 1994b. A survey of the nearshore marine environment of Union Island, St. Vincent and the Grenadines. Union Island Association for Ecological Preservation (UIAP). 41 pp.*

This study is focused on reef building corals due to their role as in attracting abundant and diverse fish communities and provides gives useful information on near-shore marine habitats around Union Island.

Special attention is also given to the South Coast and Ashton Lagoon, the East Coast and Clifton Lagoon, the North Coast-Richmond and Belmont bays and Chatham Bay, and Full- moon Rock on the West Coast. The report is accompanied by a large number of tables, maps and pictures, and in the results and discussion section, current patterns around Union Island and descriptions of the near- shore habitats are given.

A short section describes the methodology used in the research but this excludes the methodology involved in transect selection and the choice of parameters to be monitored. This was not discussed in the report by, so it is unclear exactly how their sites were selected, and whether their data collection procedures were appropriate.

This can be described as a semi-quantitative approach, especially for the nearshore habitats of Union Island. The authors mapped the major marine habitats using aerial photos taken with a hand held camera. While this would indicate the general distribution and location of the various habitats, it is not very accurate. Aerial photos tend to be distorted due to the angle at which they may be taken, and there is no indication that this was compensated for in the study.

The authors surveyed thirty 30m transects and estimated the percent live coral cover on each one. This information, however, is not provided in the document. And although the authors, established permanent transect markers, the document does not address monitoring, although this implies the intent to monitor sites,

Price W.S. and P.G. Price. 1994c. An environmental impact assessment of the airport runway extension Union Island, St. Vincent and the Grenadines. Union Island Association for Ecological Preservation (UIAP). 26 pp.*

Two EIAs have been done in the vicinity of the TCMP, the first EIA by the authors is concerned with the Airport Runway extension Project in Union Island. The environmental impacts include the filling of a swamp, destruction of Red Island, increased nutrient and sediment loads and disruption of currents and decreased flushing rates. Recommendations are provided as well as several maps and figures including a comparison of the physical and hydrological features of the Clifton lagoon before and after the project.

The second, by Stewart's Engineering, and associated with the Frigate Bay Marina is not available. It included an assessment of the marine habitats and the estimated impacts of runoff on them if the Ashton Bay mangroves were removed.

Price W.S. and P.Govindarajulu. 1998. Near-shore marine resources of Carriacou, Petit Martinique and outlying Islands: Status, concerns, and recommendations. Government of Grenada, Physical Planning Unit. United Nations Development Program (UNDP)/United Nations Centre for Human Settlements (UNCHS)/Caribbean Development Bank (CDB). February 1998. 113 pp.*

The islands in this study area have over 60km of coastline, 100 acres of mangrove, 3 major lagoons and many hundred acres of seagrass beds and coral reefs. The principle marine ecosystems were mapped primarily from an aerial survey and altitude and depth derived from charts. In conjunction with aerial photographs of the islands, each offshore island and key sections of the coastline were ground-truthed by skin diving. A relatively rapid manta tow survey of the inshore communities was conducted to a depth of approximately 10 metres. Species lists were compiled from surveys of major groups of nearshore marine organisms. Current levels of use of resources were accessed from official records, discussions with individuals and from the authors' observations.

Price W.S. and P.G. Price. 1998. Paradise lost. A post-mortem of the Ashton Marina project ecological impact on Ashton Lagoon, Union Island, St. Vincent and the Grenadines. 30 pp.*

This paper describes the impact of the Ashton Marina Project on the ecological and cultural systems of Union Island and then provides details of an environmental survey undertaken to assess the condition of Ashton Lagoon with suggested remedial measures to restore the ecosystem. This “post-mortem” assessment of the Ashton Marina Project was requested by Mr. Jaques Daudin, Honorary Chairman of the Eastern Caribbean Coalition for Environmental Awareness (ECCEA) and the President of the Union Island Association for Ecological Preservation (UIAP).

Project Document: Carriacou Integrated Land Use and Forest Development Project. ECU92, 289 pp.

Not seen.

Pyle, D.C. 1981. Clean sweet wind: Sailing craft of the Lesser Antilles. Easy Reach Press. MD, USA.

A narration by Douglas Pyle about his sailing adventure across the islands of the Lesser Antilles including the Grenadines. He provides his description on It gives details of the types of vessels used, the builders, the people’s traditions and cultures and his observations.

Quamina-Aiyejina,L. 2003. Education and training in St. Vincent and the Grenadines: A Partial Annotated Bibliography. Caribbean educational Research Information Service (CERIS). School of education. University of the West Indies. St. Augustine. 91 pp.

A comprehensive annotated bibliography on education and training in St. Vincent and the Grenadines has been prepared for the School of Continuing Studies’ St. Vincent and the Grenadines Conference.

Rack, R.S. 1952. Black-fish hunting off St Vincent. Caribbean Commission Central Secretariat, Port of Spain, Trinidad, pp. 80-83.

Not seen.

RARE (no date). Assessing the potential for small-scale tourism development in Grenada and Carriacou. 60pp.*

This is an analysis of the potential for new ecotourism enterprise opportunities in tri-islands state of Grenada. The report analyses industries, stakeholders and visitors. At the end of the report, a summary of products and services to be developed, their geographic location and required local partners were recommended

Ramussen, G. 1986. Tourism and the Grenadines. OAS, Washington, DC.

Not seen.

Richardson, B. 1974. Labour immigrants from the island of Carriacou: Workers on the margins of the developed world. Proc. Assoc. Geog., 6:149-152.

Not seen.

Richardson, B. 1975. The over-development of Carriacou. Geographical Review, 65:390-399.*

A review of Carriacou’s development from pre-Columbian times to the twentieth century. Richardson provides a historical background of the island where Caribs and Arawaks depended on subsistence farming with minor impact on natural forests until British took control in 1784 where most of the island was deforested to be taken over by plantation crops. The journal portrays how the island has therefore suffered in the twentieth century as most of the land has eroded, most of the food is imported and survival of the island depended on labour migration and remittances. In conclusion, the paper presents the various prospects for Carriacou to be considered an over developed island.

Riegert, T. 1985. Development of tourism attractions of Saint Vincent. OAS, Washington , DC.

Not seen.

Romero, A. and Hayford, K. 2000. Past and present utilisation of marine mammals in Grenada, West Indies. J. Cetacean Res. Manage. 2(3):223-226.*

The exploitation of marine mammals in Grenada dates back to pre-Columbian times. Whaling ships visited Grenadian waters in the 19th century and during the 1920s there was a short-lived attempt to develop a local, modern whaling industry. Since then no exploitative interactions between Grenadians and marine mammals had taken place, until the 1990s when two whalewatching operations were established.

Romero, A., K.T. Hayford, A. Romero, and J. Romero. 2002. The marine mammals of Grenada, W.I., and their conservation status. Mammalia, Vol. 66, no 4, pp 479-494.

Not seen.

Rovati, C. and I. Gerbert. 1999. Canouan: History and emotion. Milan, Italy. 143 pp.

Description of the Grenadines from the prehistory to Columbus discovery. It gives one the idea of the history, flora and fauna of Canouan. It is written in Italian and English

Ruitenbeek, H.J. and C. Cartier. 2001. Case studies in Environmental Economics in the Member States of the Organisation of Eastern Caribbean States (OECS): Valuation of Sand Resources in Grenada. Natural Resource Management Unit. 21 pp.*

This paper is one of the two background case studies prepared in support of a training workshop held in St. Lucia in June 2001. This case study seeks to provide a basis for comparing the economic value of beaches under current "beach mining" scenario with their value under a scenario in which mining the beaches is ended.

Ryan, J. R. 1999. The beach seine fishery of St. Vincent and the Grenadines: Fishing practices, socio-economic importance and biological characteristics. MSc thesis. University of the West Indies. 144 pp.

This study promises to examine aspects of the beach seine fishery, which also include the traditional system of rules which determine access to fish hauls. Data for the study was obtained by interviews of seine net captains, fishery records, sampling and direct observation.

Salmon, F. and Cassel, G. 2003. St. Vincent and the Grenadines Bibliography 1990-2002: An Annotated List. University of the West Indies. School of Continuing studies. Beyond Walls: Multi-Disciplinary Perspectives. Saint Vincent and the Grenadines Conference. Methodist Church Hall. Kingstown, Saint Vincent. May 22-24, 2003. 44 pp.

This bibliography on St. Vincent and the Grenadines was prepared for the sixth in a series of Country Conferences planned for the Non-campus Territories by the University of the West Indies of Continuing Studies. The bibliography includes journal articles, government publications, and chapters in books, conference papers and published works providing information on St. Vincent and the Grenadines for the period 1990 to 2002.

Samalalsingh, S., H. Oxenford, and J. Rennie. 1994. A successful small-scale longline fishery in Grenada. Proc. Gulf Carib. Fish. Inst. 46: in press.

A concise description of the small scale longline fishery in Grenada. The report examines the development of the industry from the early 1980's, fishing techniques, the value to the fishery, as well as catch rates, species composition and seasonal variation in availability of the target species.

Samuel, V.G. 2002. The life and times of Dr. J. Parmenas Eustace. Hairoun publishers International. Princeton, New Jersey, USA. 220 pp.

The book examines the life of Dr. J. Parmenas Eustace who was born on Mayreau. It is in the context of Christianity with the 20th century history, third world struggles against colonialism and imperialism, world wars, the communist-capitalist

cold war, international banana war, Rastafarianism, West Indies Cricket, and Caribbean Music. All of which illustrates the time which he had lived.

Sandy, E.J. 1996. Handbook of Canouan. Thesis, Teachers College, St. Vincent and the Grenadines.

Not seen.

Scoffin, T. P. and A.W. Tudhope. 1992. The Nature of Sedimentary record Within Quaternary Reefs of Barbados, St. Vincent and the Grenadines. Proceedings of the Seventh International Coral Reef Symposium, Guam, 1992, Vol. 1: 427-436.*

Particulate sediments within the interstices of living and raised reefs were collected and examined to elucidate the history of sedimentation events of the reefs. The relationship between framework type, cavity geometry and sediment type were recorded for *Acropora palmata*, *A. cervicornis*, *Porites porites* and *Montastrea annularis* frameworks. Fluorescent tracer sediments were used to compare the physical stability of deposits in internal and off-framework settings. Surface and subsurface samples revealed that open interstices, such as amongst *Acropora cervicornis* rubble, were thoroughly re-worked, whereas the smaller, more enclosed, cavities within the encrusted framework of in-situ upright colonies, such as *Montastrea annularis* showed incremental sedimentary records that were undisturbed.

Scott, N. and J. A. Horrocks. 1993. Sea Turtle Recovery Action Plan for St. Vincent and the Grenadines. CEP Tech. Rep. No. 27. 85 pp.

The Sea Turtle Recovery Action Plan (STRAP) prepared through Wider Caribbean Sea Turtle Conservation Network (WIDECAST), has given a boost to sea turtle conservation in the Grenadines.

SENJAN Associates and Consultants. 1990. Community and fishing profiles of Canouan, Paget Farm, Ashton, Clifton and Kingstown Beach: Report of baseline data studies. Volume 1: Overview of results and community development issues.

In 1989, the Canadian and St. Vincent governments signed an agreement to implement a program to help develop the country's fishing industry. As part of the Canada-St. Vincent project, and to assist those implementing the project, a set of baseline studies were carried out in five communities targeted to receive assistance under the Project. The field work for the baseline was carried out between December 1990 and June 1991. This report is part of a series of reports in five volumes, resulting from the baseline research. This report presents summary results of studies carried out during 1991, on the socio-economics of communities in the St. Vincent and the Grenadines. Conclusions and recommendations with respect to key issues for the Fisheries Project, or for anyone working in Grenadines communities are provided. More detailed results are included in the full set of reports on baseline studies carried out, as provided under separate cover in five separate volumes.

SENJAN Associates and Consultants. 1992a. Community and fishing profiles of Canouan, Paget Farm, Ashton, Clifton and Kingstown Beach: Report of baseline data studies. Volume II: Summary and comparative results from fishing studies. 39 pp.

The fisheries information summarised in this volume was based, in large part, on a in-depth interview survey carried out with a large sample of fishing enterprise owners. In some cases, useful information about the fishing activity was also provided through the household survey, based on responses to a special subset of questions. Casual conversations with local residents, observations of researchers and review of available records and documents on the fishing sector of these islands, all form the information base of this report. This report provides (in much greater detail than in the community profiles) the results of the fishing enterprise surveys and other supportive fisheries data.

SENJAN Associates and Consultants. 1992b. Community and fishing profiles of Canouan, Paget Farm, Ashton, Clifton, and Kingstown Beach: Report of baseline data studies. Volume III: St. Vincent and the Grenadines community profiles. Fisheries Division. 130 pp.

In this volume, the aims of the project are stated as the 'promotion and support of 'sustainable development of St. Vincent and the Grenadines fishing sector', specifically (1) the expansion and strengthening of the fisheries division within the St. Vincent and the Grenadines Government and (2) the provision of support to fishing community activities and organizations.

The profiles themselves are of Bequia- Paget Farm, Canouan, Ashton, Clifton and Kingstown Beach. As an example, the Bequia profile offers (1) a brief history of Bequia, which looks at the early settlement and whaling and commercial fishing. (2) Services and Development in Bequia- Tourism, Government Services and Paget Farm Village, (3) Population Characteristics- Age Profile, Education and Training, and Occupation (4) the Local Economy (5) Family/ Gender Roles (6) Local Opinion and Perceptions about Development (7) Brief Profiles of Fishing in Paget Farm- fishing boats and engines, types of fisheries, frequency of fishing, species/ amounts landed, crew structure and catch division.

While it covers a variety of areas, perhaps, information is lacking on the spatial aspects of the interaction between fishers and fishing: namely, where fishers fish for the various species. This information is useful for planning purposes. For example, where proposed developments will be impacting or using coastal habitats, potential conflicts can be predicted. It is normally very difficult to acquire accurate information from fishers on the above topics simply using a short-term study.

SENJAN Associates and Consultants. 1992c. Community and fishing profiles of Canouan, Paget Farm, Ashton, Clifton and Kingstown Beach: Report of baseline data studies. Volume IV: Profile of fishing in St. Vincent and the Grenadines. Canada-St. Vincent and the Grenadines Fisheries Development Project. 120 pp.

In 1989, the Canadian and St. Vincent governments signed an agreement to implement a program to help develop the country's fishing industry. As part of the Canada-St. Vincent project, and to assist those implementing the project, a set of baseline studies were carried out in five communities targeted to receive assistance under the Project. The field work for the baseline was carried out between December 1990 and June 1991. This report is part of a series of reports in five volumes, resulting from the baseline research. This report contains profiles of fisheries in three communities (Paget Farm, Union Island and Canouan) in St. Vincent and the Grenadines. This report is the output of a fishing enterprise study conducted as part of the community studies carried out in the communities of Paget Farm in Bequia, Ashton and Clifton on Union Island and the whole community of the island of Canouan. In addition to the Grenadines communities studies, the fishing boat owners operating from Fishermen's Beach near Kingstown were also surveyed and these results were included in this report. This report provides the results of the fishing enterprise surveys and other supportive fisheries data. The report comprises types of fishing; fishing base, location and frequency of fishing; species and amounts landed; fish markets and marketing; volume landed and value of landings; fishing inputs (gear, engines, gasoline, bait); crew structure and sharing in catch; returns from fishing; and fisheries development issues in each of the communities surveyed.

SENJAN Associates and Consultants. 1992d. Community and fishing profiles of Canouan, Paget Farm, Ashton, Clifton and Kingstown Beach: Report of baseline data studies. Volume V: Methodology and questionnaires. Canada-St. Vincent and the Grenadines Fisheries Development Project. 24 pp.

In 1989, the Canadian and St. Vincent governments signed an agreement to implement a program to help develop the country's fishing industry. As part of the Canada-St. Vincent project, and to assist those implementing the project, a set of baseline studies were carried out in five communities targeted to receive assistance under the Project. The field work for the baseline was carried out between December 1990 and June 1991. This report is part of a series of reports in five volumes, resulting from the baseline research. This volume provides details on the overall methodology employed for the baseline studies, along with sample questionnaires (household, population and fishing) and other data instruments used in the target Grenadines communities where fisheries centres were slated to be constructed.

Shepard, C. 1997. A historical account of the island of Saint Vincent and the Grenadines. Glasgow. 216pp.

Shepard gives a historical narrative on St. Vincent and the Grenadines up to 1828. The main text has ten sections. The Grenadines is accounted for in section 10.

Sherwood, C. 2004. A report on the driving habits and vehicles on Mustique. Report prepared for the Mustique Company. 17 pp.*

This report was initiated due to the concerns relating to driving habits, vehicle numbers and size, and vehicle noise. The purpose of the study was to propose actions and standards to improve the overall driving environment which were limited and practical as possible.

Simmons, B. 2005. Tobago cays Marine Park: Are the conditions for successful co-management likely to be met? MSc Research Paper. Center of Resource Management and Environmental Studies. University of West Indies. 57 pp.

This case study seeks to identify conditions that would optimize the chances for successful co-management of the Tobago cays Marine Park. In order to determine this, interview and focus groups were conducted with user groups and members of the management board. Secondary analysis was also undertaken. The TCMP is seen by some as a "paper park", with no real implementation. Local communities are aware of this situation and are attempting to have their voices heard by insisting that they play a role in the management decision-making process in order to make the Park more successful. Despite this initiative, co-management may have little chance of success unless State authorities facilitate more meaningful stakeholder involvement.

Simmons, G. 1988. A call for organisation and control. Prepared for the Bequia Tourism Committee.

Not seen.

Simmons and Associates Inc. 2000. National Biodiversity Strategy and Action Plan for St. Vincent and the Grenadines. Environmental Unit of the Ministry of Health and the Environment. 41 pp.*

St. Vincent and the Grenadines ratified the Convention on Biological Diversity (CBD) and therefore became responsible for implementing the provisions of that Convention. This project is an enabling activity to formulate a strategy for the protection and sustainable use of St. Vincent and the Grenadines' biodiversity in accordance with Article 6, "General Measures for Conservation and Sustainable Use" of the CBD. The project also aims to prepare a plan of action for the implementation of the Strategy. Therefore the primary output of this project will be the National Biodiversity Strategy and Action Plan (NBSAP). This report was compiled by the international consultant, Simmons and Associates Inc. and reflects the findings as presented in the various country study reports prepared by the national consultants. These reports included the following assessments: an assessment of marine and freshwater species; forestry, terrestrial flora and fauna; agriculture resources; land use development and the establishment of a GIS and a legal assessment.

Smith, M.G. 1962. Kinship and Community in Carriacou. Yale University Press, New Haven, Conn. 347 pp

Not seen.

Smith, A., H. Oxenford, S. Price. 1986. A preliminary survey of Frigate Island and Frigate Bay, Union Island, St. Vincent. ORCA. Victoria, BC. 15 pp.*

Smith *et al.* (1986) conducted a limited survey of habitats around Frigate Island and Frigate Bay (CCA 1991), though a copy of this report could not be located. In addition, a variety of general descriptive information for the Ashton Bay/Frigate Island area is available in support of a proposal to create a marine reserve in this location.

Smith Warner International Ltd. 1996. Shoreline protection and enhancement of the Great House, Plantain Bay, Mustique. Report prepared for Patterson, Fenton-Jones Ltd. 28 pp.

Not seen.

St. Helene, L. 1986. Implementation program for the repair of twelve cisterns/tanks in Carriacou. Water Resources Management in Carriacou. OECS/ Nat. Res. Mgt. Prog., Castries, St. Lucia.

Not seen.

Starks, J., et al. 1966. Soil and land use surveys, No. 20, St. Lucia. Imp. Coll. Trop. Agri., Reg. Res. Cent., St. Augustine, Trinidad.

Not seen.

Steele B.A. 1983. Bibliography of Grenada. Marrayshow House Publications No. 2. St George's, Grenada: UWI Department of Extra Mural Studies. 119 pp.

This bibliography lists publications published before 1950. It includes works first published before 1950, but which were subsequently reprinted. It does not include works published after 1950 which cover the early historical period. The bibliography does not include listings of newspapers or newspaper articles, newsletters or news-magazines, personal correspondence, programme of events, maps, sheet music, single copies of laws, book reviews, or archival material.

Stephen, J.K. 1983. Social organization of fishing communities with reference to fishing development in St. Vincent and the Grenadines. Kingstown, St. Vincent. FAO. 14 pp.

Describes the socio-economic characteristics of fishing communities in St. Vincent and the Grenadines. This is done with specific reference to fishing village of Paget Farm, Bequia. In conclusion, the means by which the industry can be developed and managed in the future are considered.

Stephens, V.D. 1991. Canouan: A critical description of selected features of its social history. BA Thesis. University of the West Indies, Trinidad.

Mayreau collection.

Stewart-Morgan, G. 1997. No Ordinary Man: Memoirs of My Father. G & L Morgan Publishing. Montreal, Quebec, Canada. 111 pp.

Gloria tells the story of her father in Union, their family heritage, early years and their African connection, reflections on the culture of Union Island, Places of interests and his new life in Trinidad until his death.

Stewart, M. 1984. Roman Catholic Missionary activity in the St. Vincent Grenadines up to the 20th Century (1889-1979). BA Thesis. University of the West Indies, Trinidad.

Paper highlights the work of the Roman Catholic Missionaries in St. Vincent Grenadines and is a stimulus for future historical work. It is not only about the church but also the people of St. Vincent and the Grenadines.

Straker, L. 1991. Commercial Marine Species: St. Vincent and the Grenadines: Field Manual. 31 pp.*

A guide to the identification of the more common commercially important species landed by fishermen of St. Vincent and the Grenadines. The species included offshore and in-shore pelagics, demersals, shellfish and sharks and also other marine species such as turtle and marine mammals. The biological and physical characteristics of the species, harvesting methods, utilization and annual weights of landings for each species are described. According to the author, the manual is developed primarily for the use by fisheries field enumerators.

Straker, L.E. 2001. The assessment of the reef fishery of St. Vincent and the Grenadines using red hind (*Epinephelus guttatus* L) and coney (*Cephalopholis fulva*) as an indicator species. MSc Thesis University of Hull, Hull. 102 pp.

Not seen.

Straker, L. and C. Jardine. 2001. National Report of St. Vincent and the Grenadines- Dolphinfish (*Coryphaena hippurus*), Wahoo (*Acanthocybium solandri*), Red hind (*Epinephelus guttatus*) and Coney (*Cephalopholis fulva*). pp 115-121. In: CFRAMP (eds.) Report Of The 2000 Caribbean Pelagic and Reef Fisheries Assessment and Management Workshop. CARICOM Fishery Report No. 9.*

This report provides a description of four fisheries in St. Vincent and the Grenadines such as the sociological data (e.g. vessels type and gear specifications), economical data (e.g. annual landings and exports/ imports) and the policy and regulations implemented if any. Figure 2 in the report identifies the landing sites in the Grenadines.

Sustainable Grenadines Project. 2005a. Sustainable Integrated Development and Biodiversity Conservation in the

Grenadine Islands - Annual Report For 2005. Clifton, Union Island, St. Vincent and the Grenadines. 42 pp.*

This is a report on all the activities undertaken by the Sustainable Grenadines Project such as training courses, workshops, attachment and exchanges, mini-projects and other associated projects, among other things. The appendix contains the concept papers for various projects, brief reports of workshops and mini-projects.

Sustainable Grenadines Project. 2005b. Sustainable Integrated Development and Biodiversity Conservation in the Grenadine Islands - Annual Report for 2005. Clifton, Union Island, St. Vincent and the Grenadines. 20 pp.*

This work plan covers the period January 1st, 2006 to December 31st, 2006. It is based on activities identified during Phase 1 of the project that were documented in the strategic plan, continuation and further development of activities carried out during the first year of Phase 2 of the project as described in the Annual Report for 2004-2005.

Sutty, L. 1990 A Listing of Amerindian Settlements on the Island of Carriacou in the Southern Grenadines and a Report on the Most Important of These, Grand Bay. In Proceedings of the 11th Congress of the International Association for Caribbean Archaeology, Puerto Rico 1985:242-259.

Not seen

Sutty, L. 1993. St. Vincent and the Grenadines. Macmillan Press Ltd. London. 108 pp.

A brief overview of the first migrants, the Ciboneys, Arawaks, Caliginies and Caribs, describes the flora and fauna, architecture, folklore and music of the islands. Details are provided for each of the Grenadines islands and travel, banking and accommodation information of importance to the visitors is appended.

Sutty, L. 1998. A regional initiative to promote community based nature and heritage tourism, environmental education and conservation of island ecosystems in the eastern Caribbean. Eastern Caribbean Coalition for Environmental Awareness. 12 pp.

This document introduces the ECCEA which promotes programmes that aid ecosystems, local economies, productivity and national conservation policies. It achieves this through consultations with Governments, sustainable actions, international conventions, environmental surveys, environmental education and awareness. The document also provides a summary description of the project including its rationale, specific objectives and summaries of eight sub-programmes that will be undertaken on various islands.

Taylor, L and T. Thompson. No date. The Regional Training Workshop on Methodologies for Coastal Inventories & Information Management Appendix XV: Grenada's Coastal Inventory. 9 pp.*

This brief document looks at the land use and coastal resources of the tri-island state of Grenada. This includes the beaches, mangroves, swamps and saline areas. It also describes the distribution of the various habitats around the island such as the coral reefs, mangroves, seagrass beds, fisheries resources and sites of mariculture practice. The three main problems and issues faced by these habitats have been stated. At the end of the document, the author provided five maps which showed the various resources of Grenada including areas to be conserved, marine resource use, reefs status around Grand Anse Bay and a map of the various threats to resources such as erosion.

The Nature Conservancy. 2005. Institutional Self Assessment: Carriacou Environmental Committee. 25 pp.*

CEC is a non-profit, non-government, community based organization, which has been functioning since 1991 and legally incorporated in 2001. Over the years progress has been seen in improved solid waste management, working towards establishment of the Sandy Island MPA, and designation as the NGO co-manager of the MPA. At this point CEC is obviously in the midst of an institutional crisis, one that has been building over many months, if not years. This document reports on the major findings under each of the eight assessed institutional development areas: Strategic Vision and Planning, Leadership, Organizational Management, Human Resource Management, Resource Development, Financial Management, External Relations and Program Management.

Thomas, A. 2000. Grenada, Carriacou & Petit Martinique National Report on the Implementation of the United Nations Convention to combat desertification and/or drought (UNCCD). Prepared for the Forestry Department, Ministry of Agriculture Lands forestry and Fisheries. Queen's Park, St. George's, Grenada. 43 pp.*

This report was written to inform the Conference of the Parties on the situation of the country with regard to measures taken to implement the United Nations Convention to Combat Desertification (UNCCD) at the national level. The report is divided into five chapters. The first chapter provides a brief information on Grenada in terms of its physical features, population, land use, its economy and the land degradation issues affecting the country. The policies, plans and strategies established within the framework of sustainable development in Grenada are outlined, along with some of the major activities being implemented by government and non-governmental organizations in the area of sustainable development and the environment. The report current measures being taken to implement the UNCCD and the institutional and legal framework relevant to land degradation. The final chapter looks at the planned strategies for the development of an action programme for implementation of the UNCCD and financial requirements.

Thomsen, T.C. 1988. Tales of Bequia. Cross River Press, NY., USA.

This narrative is about Bequia told by Thomsen, one of the earliest residents of the island. Each chapter provides varying accounts and anecdotes about Bequia and its people such as the Wallachs, Armstrong, Bulu, Nobleman, Sanford Meisner and Jimmy Carville. Furthermore, the legacy of whale hunting is portrayed through the eyes of Athneal Olliverre.

UIEAC. 1996. Community management of natural resources in the southern Grenadines. Project proposal for Union Island Environmental Action Committee, Canouan Youth in Action and Union Island Basketballer's Association. 11 pp.

Not seen.

UNECLAC. 1998, Tourism development and the land market in St. Vincent and the Grenadines. Implications for land policy and management.

Not seen.

UNECLAC. 2002a. St. Vincent and the Grenadines: Evaluation of the Tobago Cays Marine Park. General WP/2002/4, May 2002. 49 pp.*

This evaluation was conducted in response to a request from the Prime Minister of St. Vincent and the Grenadines to ECLAC. The purpose of the evaluation is to identify the main factors that are responsible for the lack of implementation of management and to make recommendations for improvement. The approach to the evaluation was to conduct interviews with key players on the mainland and in the Grenadines, in Union Island in particular, and to provide an expert opinion on the implementation of management. An unfortunate circumstance was that no functioning Marine Parks Board was in place at the time of evaluation, so that the Board could not be consulted. However, some members of the former Board were consulted.

UNECLAC. 2002b. St. Vincent And The Grenadines: The Yachting Sector General: LC/CAR/G.707, 8 November 2002. ECLAC, Port of Spain, Trinidad and Tobago. 66 pp.*

The yachting sector is described. Three major charter companies offering bareboat and crewed yacht charters are located on the mainland St. Vincent. Two small companies are located in Bequia. The size of the fleet based in the State is about 85 sailing yachts, 12 of which are catamarans. There are two boatyards based on the mainland, one of which also has a marina. St. Vincent and the Grenadines has some 19 good anchorages. Kingstown and Wallilabou are ports of entry on the mainland; in the Grenadines, Bequia, Mustique and Union Island are ports of entry. The three main yachting centres are Admiralty Bay in Bequia, Clifton Harbour in Union Island and Villa/Calliaqua on the mainland. A wide range of services and facilities is available at these centres. The main gaps in services and facilities include are identified. The yachting sector provides direct employment (i.e. through the charter companies and boatyards) to 110 permanent employees and 42 part-time or temporary employees. Indirect employment in the service, supply and repair sectors is unknown, but is estimated to be at least twice as high as direct employment. The communities in Union Island and Bequia are, to a very large extent, dependent on yachting tourism. It is estimated that the charter companies collect about US\$3.3 million in gross income annually from charter fees. Local expenditure by yacht visitors is estimated to amount to US\$8.8 million. Corrected for

non-clearing yachts, the revenue from local expenditure would be about US\$10.2 million. The sector's contribution to Government from Custom's fees and departure tax, corrected for non-clearing yachts, is estimated at US\$500,000. The actual contribution to Government is larger, as the charter companies also pay wage tax, profit tax and national insurance. Environmental implications of yachting include primarily liquid and solid waste disposal, anchoring, boat groundings, and illegal fishing and collecting of marine life. The development of the yachting sector is suffering from poor organization and from a lack of public and private sector policy with respect to the sector. It has also suffered from the fact that –despite the attractive force of the Grenadines as a yachting destination- St. Vincent and the Grenadines is not considered a yachting friendly country. Safety and harassment continue to be a major problem in developing the sector. This report recommends a series of actions that should lead to improving the sector and strengthening its economic contribution to the State. The report also provides suggestions for a framework for a yachting policy, including the identification of stakeholders who need to be involved in developing such a policy.

UNECLAC. 2003. The Contribution of Yachting to Development in the Eastern Caribbean. Grenada, Carriacou and Petit Martinique: The Yachting Sector. ECLAC, Port of Spain, Trinidad and Tobago. 46 pp.*

Detailed description of the yachting sector in tri-island state of Grenada, Carriacou and Petit Martinique and examines the sector within the national sustainable development framework. The document looks at the employment aspects of the industry, the socio-economic impacts (e.g. economic impact and the direct revenue components of yachting) and environmental aspects of the industry (e.g. waste management and operating practices) and private policies. The berthing infrastructure, data management and institutional capacity to manage the yachting industry *inter alia*, account for the weakness within the industry.

UNECLAC. 2004. Yachting in the Eastern Caribbean: A Regional Overview. ECLAC, Port of Spain, Trinidad and Tobago. 29 pp.*

A review of the yachting sector in the Eastern Caribbean which focuses on economic distribution, human and social dimension, social impacts and managing impacts on natural resources, environmental issues (e.g. waste disposal, illegal fishing and anchoring) in the various islands. A number of challenges has been identified including the lack of awareness, safety and security, lack of data, institutional development and marketing of the product.

UNEP. 1999. Integrated coastal planning and management in the wider Caribbean region. UNEP Caribbean. Pilot Projects of the Caribbean Environmental Programme with the Support of the Swedish International Development Agency. Environmental Programme Regional co-coordinating Unit, Kingston, Jamaica. August 1999. 46 pp.

This report documents the results of 12 national pilot projects aimed at improving the coastal environment in the Caribbean. They followed two main approaches, Integrated Planning and Management of Coastal and Marine Areas (ICAM) and Heavily Contaminated Bays.

The St. Vincent and the Grenadines project falls under the ICAM Heading, and its objective was stated as 'to assist the Government of St. Vincent and the Grenadines in developing an integrated management plan for Union Island, Mayreau, and the Tobago Cays,(an Area Development and Environment Management Program for the islands). The write up also details the Economics and Environmental threats, the Project Implementation Benefits and Lessons Learned.

UNESCO. 1997. Integrated framework for the management of beach resources within the smaller Caribbean islands. Report from a UNESCO – University of Puerto Rico Workshop, 21-25 October 1996, Mayaguez, Puerto Rico. CSI infor. 1. UNESCO, Paris. 31 pp.*

This volume represents the output of the workshop. It begins with a short introduction and a brief description of the opening ceremony. This is followed by a section called 'Technical Presentations' which include work pertaining to Beach Management, Beaches and Tourism, and Hurricane Impacts.

Another area that is covered is Planning for Sustainable Beach Management. Under this heading, are several topics, which range from Information Needs and Institutional Strengthening to Planning, Legislation and Enforcement Needs. It concludes with a description of an excursion to the North coast of Puerto Rico, Bajuras, Isabella.

UNESCO. 1998a. Wise practices for coping with beach erosion: Grenada. 10 pp.*

This is an illustrated coloured booklet on shoreline change in Grenada. The booklet looks at generic and island-specific information, on such issues as natural and human forces that affect beach areas, national initiatives to monitor and manage changes, recommendations on wise practices for a healthy beach. A closing checklist of wise practices proposes such actions as positioning all new developments a 'safe' distance landward of the vegetation line, ensuring that the physical planning process is fair, equitable and transparent, and promoting the concept of coastal stewardship and civic pride.

UNESCO. 1998b. Wise practices for coping with beach erosion: St. Vincent and the Grenadines. 10 pp.*

This is an illustrated coloured booklet on shoreline change in St. Vincent and the Grenadines. The booklet looks at generic and island-specific information, on such issues as natural and human forces that affect beach areas, national initiatives to monitor and manage changes, recommendations on wise practices for a healthy beach. A closing checklist of wise practices proposes such actions as positioning all new developments a 'safe' distance landward of the vegetation line, ensuring that the physical planning process is fair, equitable and transparent, and promoting the concept of coastal stewardship and civic pride.

Union Island Eco-tourism Movement. No date. Constitution of the Union Island Eco-Tourism Movement. 3 pp.

The constitution of the Union Island eco-tourism movement lists the aim of and objectives of the group, presents the officers, describes their responsibilities and duties, and gives other information on membership in general.

Vaughn, R. 1994. Mustique. Arne Hasselquist and Alfred Schweitzman, NY, USA. 291 pp.

A story about the Hasselqvists trip to Mustique. It provides info about the human history and highlights the visit of many prominent figures such as Princess Margaret. It goes further into the interior designs and development of the homes in Mustique.

Velez Ortiz, M. 1988. Solid waste management program for the southern Grenadines. OAS, St. Vincent and the Grenadines.

Not seen.

Vidaeus, L. 1969a. An inventory of the St. Vincent fishing industry. Report of the UNDP/FAO Caribbean Fishery Development Project, SF/CAR/REG/16 M5. 35 pp.

Not seen.

Vidaeus, L. 1969b. An inventory of the Grenada fishing industry. Report of the UNDP/FAO Caribbean Fishery Development project. SF/CAR/REG/16 M6. 34 pp.

Not seen.

Ward, N. 1985. Blows, Mon, Blows! Gecko Productions Woods Hole, USA. Adams. 55 pp.

Blows Mon Blows records for posterity, the knowledge and techniques of Bequia whalers over the past 100 years including the exciting chase and capture of these whales. This book gives an account of the historical background of Bequia, its whaling origins, development of its whaling industry, whaleboat construction, duties of the whaleboat crew, processing of the catch and folklore of whaling in Bequia.

Ward, N. 1987. The Whalers of Bequia. Oceanus, 30 (4): 89- 93.*

Bequia has been known for its history of whaling activities. In this journal, Nathalie Ward provides a concise account of whaling from its origination, whaling methods and the uncertainty of the whaling livelihood due to age of the majority of the whalers. She also provides a brief account on the International Whaling Commission who established a quota for whaling in the Grenadines in 1988 in attempt to protect the whale population.

Weekes, N. 1996. Assessment of Union Island mangrove areas. Unpublished MS, Forestry Division, St. Vincent and the Grenadines. 18 pp.*

The Forestry Division has prepared a review of mangrove habitats on Union Island. This report identifies mangrove stands at seven locations on the island, and indicates their area and zonation at three sites: Ashton Bay (about 48 acres), Richmond Bay (about 14 acres), and Clifton Bay Reserve (about 3 acres). The report highlights the importance of mangroves for coastal conservation, including lists of birds found in them, and recommends that they be protected.

Westercamp, D. P. Andreiff, P. Bouysse, A. Mascle and J. Baubon. 1985. Géologie De l'Archipel des Grenadines (Petites Antilles meridionales) Étude Monographique. Service Géologique National, B.R.G.M. 198 pp. *

This is a scientific document on the geology of the inhabited and some of the uninhabited islands of the Grenadines. It is written in French.

Whale and Dolphin Conservation Society. No date. Humpback whaling in St. Vincent and the Grenadines. 3 pp. Cordice, K. 2001. Use of the application process of the World Heritage Convention to facilitate the development of the Tobago Cays Marine Park

WDCS paper discussing the permitted take of two humpback whales each season by the Bequians of St Vincent and the Grenadines.

Wilkinson, A.C. 1988. Grenada: A Select Bibliography. A guide to materials in Barbados. Occasional Bibliography No. 11. Institute of Social and Economic Research (Eastern Caribbean) University of the West Indies, Cave Hill, Barbados.101 pp.

A reflection of the growth of a body of literature dealing with varying subjects including books and monographs and lists works over 400 authors.

Woodruff, R.E., M. Beck, P.E. Skelley, C.Y. Schotman and M.C. Thomas. 1998. Checklist and bibliography of the insects of Grenada and the Grenadines. Centre for systematic entomology, Gainesville, Florida, USA.

Provides a list of insects in an annotated bibliographic citations are given. It introduces the history of articles written on insects in Grenada and the Grenadines.

Internet References

Barnes, M.J. 2001. Moths of the Grenadines. Oxon, UK.

<http://www.mbarnes.force9.co.uk/grenadinesmoths/grenadineshome.htm>

Matthew Barnes designs a preliminary illustrated catalogue to identify species of moths found throughout the islands of the Grenadines.

Cordice, K. 2001. Use of the application process of the World Heritage Convention to facilitate the development of the Tobago Cays Marine Park. Tobago Cays Marine Park, St. Vincent and the Grenadines, WI. Presented at the Marine Eco-Tourism for the Atlantic area (META) workshop, part of the international ATLAS conference in Dublin, Ireland, October 3rd to 6th, 2001.

<http://www.tobagocays.org/Archives/WHSpaper.htm>

This is the abstract to his paper which introduces the difficulty in establishing the park system and also presents the solution of submitting an application World Heritage Convention for the Tobago Cays to become a World Heritage Site.

Doyle, C. 2004. The Tobago Cays in crisis. January 2004. Caribbean Compass.

www.caribbeancompass.com/cayscrisis.htm

Article on the management crisis of the Tobago Cays. Doyle discusses and critiques PIRL's proposal to manage the Tobago Cays. PIRL's proposal to manage the Tobago Cays is compared to MEDO's proposal for management, with Doyle being in favour of MEDO managing the Park.

FAO. 2000. Information On Fisheries Management In Grenada. *

<http://www.fao.org/fi/fcp/en/GRD/body.htm>

The article provides a brief overview of Grenada Fisheries primarily highlighting the area of fisheries policies and plans. The management objective measures and institutional arrangements for the major fisheries - oceanic pelagic fishery, demersal fishery and the beach seine inshore pelagic fishery are discussed. The articles also includes details on investment of fisheries, supply and demand, main fishery regulations and the organisational structure of the National Fisheries Authority.

FAO. 2002. Information On Fisheries Management In St. Vincent And The Grenadines. *

<http://www.fao.org/fi/fcp/en/GRD/body.htm>

This is an overview of the fishing sector of St. Vincent and the Grenadines. The article identifies the specific fisheries management objectives and the main management systems for major fisheries such as the shallow shelf and reef fish, deep slope, coastal pelagics, large pelagics, lobster and conch fisheries. Details on the institutional arrangements, fisheries regulations, investments, supply and demand projections and organisational structure of the National Fisheries Authority are included.

Goreau, J.T and & N. Sammons. 2003. Water Quality in Ashton Harbour, Union Island, St. Vincent & the Grenadines: Environmental Impacts of Marina and Recommendations for Ecosystem and Fisheries Restoration. July 14, 2003 . Global Coral Reef Alliance. *

<http://globalcoral.org/Water%20Quality%20in%20Ashton%20Harbour.htm>

In order to assess the environmental impact of the Ashton Marina Project, corals and algae were examined, and 273 water quality measurements were made at sites in and around Ashton Harbour, Union Island. Blockage of natural water circulation in the harbour by the causeway has resulted in waters in the western half being very significantly higher in temperature and salinity and lower in oxygen than the eastern half. Coral reefs, seagrasses, lobsters, conch, and fishes have already largely disappeared. If the Marina were to be completed, inputs of petroleum hydrocarbons, sewage nutrients, and oxygen-consuming wastes would turn the western harbour into an oxygen-deficient, polluted, and foul smelling pond. Action is needed promptly to reverse the damage to reefs, seagrasses, and fisheries caused by blocked circulation. A community-based strategy is outlined for restoration of the lagoon and its natural flushing rate, by removing the causeway and fingers, to reestablish the coral reefs, seagrasses, and fisheries.

Goreau, T.J. 2003. A Strategy for Restoration of Damaged Coral Reefs and Fisheries at Ashton Harbour, Union Island, the Grenadines. Global Coral Reef Alliance. *

<http://globalcoral.org/Restoration%20of%20Damaged%20Coral%20Reefs%20and%20Fisheries.htm>

Goreau provides a brief outline towards possible restoration strategies for the Ashton Harbour which was damaged by a failed marine development in a protected area.

Morris, K. 1990. Traditional Humpback Whaling in St. Vincent and the Grenadines. Ministry of Agriculture & Labour St. Vincent & the Grenadines. *

http://www.worldcouncilofwhalers.com/whaling_around_the_world/Traditional%20Humpback%20Whaling%20in%20St.%20Vincent.htm

Morris briefly describes the traditional humpback whaling in St. Vincent and the Grenadines from its origination to its decline.

Patriquin, D. and W. Hunte. 1996a. Preliminary observations on the status of shallow reefs at Sandy Island, Carriacou, Grenada. A report to the Grenada Board of Tourism and KIDO Project Environmental Station, Carriacou. Unpublished report. *

<http://dp.biology.dal.ca/sandy/SIreport/SIreport.html>

The report of a preliminary survey on the nature and health of the shallow water (0-4 m) coral communities, which are the most important in relation to erosion of the island, which was conducted on June 20, 1996 .

3 SUBJECT INDEX

3.1 Environment & Physical

Marine Surveys: Bellairs Research Institute (1993), Comely *et al.*, (2002), D'Anglejean and Mountjoy (1973), Deschamps *et al.*, (2003), French Mission for Cooperation (1995), Heyman *et al.*, (1988), LaPointe (1994), Lewis (1975), Mason (2002), Patriquin (1975), Patriquin (1996), Patriquin and Hunte (1996b), Price and Price (1994b), Price and Govindarajulu (1998), Smith *et al.* (1986).

Habitat Monitoring: Bailey (1994), deSilva and Wilson (2005), French Mission for Cooperation (1995c), Ginsburg (1994), Goreau and Sammons (2003), Goreau (2003), John Whittingham Consulting Services (2004), Kuczera (2003), LEC Environmental Consultants Inc. (2000), Lapointe (1994), LEC Environmental Consultants (2000), Manson and Die (2002), Moore (2004), Overing and Cambers (1995), Overing and Cambers (2004), Parsler (1989), Patriquin (1975), Patriquin and Hunte (1996), Price and Price (1994a), Price and Price (1994b), Price and Price (1997), Price and Price (1998), Smith *et al.*, (1986), Taylor and Thompson (no date), Weekes (1996).

3.2 Land-based & Coastal

Biodiversity: Anon (1893), Avian Eyes (1999), Barnes (2001), Beard (1949), Cherrington *et al.*, (1985), Daudin (no date), Daudin (2003), deSilva *et al.*, (2006), deSilva and Wilson (2006), Devas (1970), Eastern Caribbean Natural Area Management Program (1980), Eastern Caribbean Natural Area Management Program (1980b), Forestry Division-Ministry of Trade and Agriculture (no date), Gravesande (1999), Hooper (1887), Hawthorne *et al.*, (2004), Hooper (1887), Howard (1952), Mills (2001), Overing (1997), Paice (2004a), Paice (2004b), Powell and Henderson (2005), Overing (1995), Overing (1997), Overing and Cambers (1995), Scott and Horrocks (1993), Patriquin (1975), Price and Govindarajulu (1998).

Shoreline & Beaches: Bellairs Research Institute (1993), Cambers (1981a), Cambers (1981b), Cambers (1985), Cambers (1991), Cambers (1992), Cambers (1994), Cambers (1995a), Cambers (1995b), Cambers (1997), Cambers (1998), Cambers (2000), Cambers (2003a), Cambers (2003b), Cambers (2003c), Deanne (1978), Deanne (no date), Dey (1985), Government of St. Vincent and the Grenadines (1983), Heyman *et al.*, (1988), Jackson (1986), Mahon (1994b), Mofatt and Nichol (2004), Overing (2004), Smith Warner International Limited (1996), Taylor and Thompson (no date), UNESCO (1997), UNESCO (1998a), UNESCO (1998b).

Terrestrial Habitats/Coastal Wetlands: Ahmad (1987), Alexis (1976), Anon. (1893), Beard (1949), Caribbean Conservation Association (1991), D'Anglejean and Mountjoy (1973), Dunn (1999), Eastern Caribbean Natural Area Management Program (1980a), Eastern Caribbean Natural Area Management Program (1980b), Eschweiler (1982), Francis (197?), Hooper (1887), Howard (1952), Jackson (1970), Jackson *et al.*, (1986), Martin-Kaye (1958), Ministry of Agriculture, Industry and Labour (1994), Moore (2004a), Moore (2004b), Moore (2005), Moore (no date), Overing and Cambers (1995), Patriquin (1975), Price and Price (1994a), Smith *et al.*, (1986), Starks *et al.*, (1966), Taylor and Thompson (no date), Weekes (1996).

Waste disposal: Anon. (1996), Anon. (1997), Canadian Marine Waste Management Collaborative (1993), Capital Environmental and Engineering Inc (1991), French Mission for Cooperation (1997), Godeau (1993), Velez-Ortiz (1988).

Water Resources, Watersheds and Run-off: Bigot (1987), Humphreys and Sons (1960), Mather (1971), Mente (1985), St. Helene (1986).

Wildlife Conservation: Anon. (1893), Caribbean Conservation Association (1991a), Caribbean Conservation Association (1991b), Daudin (no date), OAS (1988), Overing and Cambers (1995), Scott and Horrocks (1993), Weekes (1996).

Environmental Impact Assessments: Cordice (2004), Price and Price (1994a), Price and Price (1994c).

3.3 Economic

General: Alexis (1976), Charuk (2003), Cooke (1980), Cooke (2005), Buckmire *et al.*, (1985), Caribbean Development Bank (Barbados) (1996), Eastern Caribbean Central Bank (2003), Espeut (2006), Kingsbury (1960), Laukaran (1987), McMillan (1985), OECS (2005), Ruitenbeek and Cartier (2001).

Fisheries: Adams (1970a), Adams (1970b) Adams (1971), Adams (1972a), Adams (1972b), Adams (1972c), Adams (1977), Adams (1980a), Adams (1980b), Babb *et al.*, (2004), Balcomb (1981), Beck (1987), Beebe and Hollister (no date), Caldwell and Caldwell (1971), Caldwell and Caldwell (1975), Calinski *et al.*, (1971), Calinski and Lyons (1983), CERMES (2006), Chakalall (1982), Chakalall *et al.*, (1995), Chislett and Yesaki (1974), Constantine *et al.*, (2003), Delves (1981), deSilva and Wilson (2005), FAO Western Central Atlantic Fishery Commission. (2001), Fenger (1913), Fenger (1917), Finlay (1998), Finlay (1999), Goodwin (1981), Government of St. Vincent and the Grenadines (2000), Government of St. Vincent and the Grenadines (2001a), Government of St. Vincent and the Grenadines (2001b), Hess (1961), Issac and Singh-Renton (2004), Jardine and Straker (2003), Lacroix and Lemercier (1986), Manson and Die (2002), Martinez- Soto and Gabriel (1989), Matthes (1984), Mills (2001), Mohammed (2002), Mohammed (2003), Mohammed *et al.*, (2003a), Mohammed *et al.*, (2003b), Mohammed and Rennie (2003), Morris (1983), Morris *et al.*, (1988), Morris (1989), Morris (1990), Morris (1991), Morris (1993), Morris (1995), OECS (undated), Overing (1995), Oxenford (1986), Petitjean (2002), Phillip and Rennie (1993), Price (1985), Price and Price (1994b), Rack, (1952), Roget (2002), Romero and Hayford (2000), Ryan (1999), Samalalsingh *et al.*, (1994), SENJAN (1990), SENJAN (1992a), SENJAN (1992b), SENJAN (1992c), SENJAN (1992d), Stephen (1983), Straker (1991), Straker (2001), Straker and Jardine (2001), Viadaeus (1969a), Viadaeus (1969b), Ward (1985), Ward (1987), Whale and Dolphin Conservation Society (no date).

3.4 Tourism

General: Berwick (1986), Grenada Board of Tourism (2004), Government of Grenada and OAS (1997), Gravesande (1999), St. Vincent and the Grenadines, (1999), Government of St. Vincent and the Grenadines (2001a), Government of St. Vincent and the Grenadines (2002), Government of St. Vincent and the Grenadines (2003a), Government of St. Vincent and the Grenadines (2003b), Huber *et al.*, (1987), Jackson (2003), Jackson *et al.*, (1986), Llewelyn-Davis *et al.*, (1971), Llewelyn-Davies *et al.*, (1972), Ministry of Carriacou and Petit Martinique Affairs (June 1997), OAS (1987), OECS (undated), Organisation of American States (1987), Parris (1986), Peters (1989), Ramussen (1986), RARE (undated), Riegert (1985), Simmons (1988), Suttly (1998), UNELAC (1998).

Ecotourism: Patriquin and Hunte (1996a), Union Island Ecotourism Movement (undated).

Yachting: French Mission for Cooperation (1995b), Knox-Johnston, (1981), Ministry of Foreign Affairs and Tourism & French Mission for Cooperation (1995), UNECLAC (2002b), UNECLAC (2003).

Diving & snorkeling: TCMP management plan (Anon. 1996), Price and Price (1994a).

3.5 Management

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Goreau (2003), Government of Grenada (no date), Government of Grenada (2001), Government of Grenada (2002), Government of Grenada (2005), Government of Grenada and OAS (1988a), Government of St. Vincent and the Grenadines (1994), Government of St. Vincent and the Grenadines (2001), Gravesande (1999), Homer and Shim (2004), Jackson *et al.*, (1986, Annex 2, 5, 6), Jessamy (1999), Laukaran (1987), Lizama (2005), Lizama and Mahon (2006), Llewelyn-Davies *et al.* (1971), Mahon (1994a), Mahon (1994b), Mahon (1996), Mahon *et al.*, (2002), Mahon *et al.*, (2004), Matthes (1984), Mayreau Environmental Development Organisation (2003b), McMillan (1985), Mente (1985), Mills (2001), Ministry of Carriacou and Petit Martinique Affairs (1997), Ministry of Foreign Affairs and Tourism & French Mission for Cooperation (1995), OAS (1985), OAS (1988a), OAS (1988b), OAS (2000), OECS (2001), OECS (2005), Overing and Cambers (1995), Overing and Cambers (2004), Palm Island Resort Limited (2003), Scott and Horrocks (1993), Sherwood (2004), Simmons and Associates (2000), Sustainable Grenadines Project (2005a), Sustainable Grenadines Project (2005b), Taylor and Thompson (no date), The Nature Conservancy (2005), Thomas (2000), UIEAC (1996), UNEP (1999), UNESCO (1997).

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3.6 Laws & Regulations:

Legislation for Grenada:

- The 1934 Oyster Fishery Ordinance of Grenada.
- The 1946 Birds and Fish Ordinance of Grenada.
- The 1949 Forest, Soil and Water Conservation Ordinance of Grenada.
- The 1954 Birds and Fish Protection Ordinance of Grenada.
- The 1956 Forest, Soil and Water Conservation Ordinance of Grenada.
- The 1956 Birds and other Wildlife (Protection Of) Ordinance of Grenada.
- The 1964 Birds and other Wildlife (Protection Of) Ordinance of Grenada
- The 1967 National Trust of Grenada.
- The 1968 Land Development (Control) Act of Grenada.
- The 1969 Water Supply Act of Grenada.
- The 1973 Abatement of Litter of Grenada.
- The 1979 Beach Protection Act of Grenada.
- The 1979 Beach Protection Law of Grenada.
- The 1981 Land Development and Utilization Law.
- The 1983 Land Development of Utilization Law.
- The 1984 Forest, Soil and Water Conservation Ordinance of Grenada.
- The 1986 Grenada Fisheries Act of Grenada.

The 1986 Plant Protection Act of Grenada.
 The 1987 Fisheries Regulations of Grenada.
 The 1988 Physical Planning and Development Control Act, Land development regulations of Grenada.
 The 1990 Abatement of Litter Act of Grenada.
 The 1990 Fisheries (Fishing Vessels Safety) Regulations, Statutory Rules and Orders of Grenada.
 The 1990 National Heritage Protection of Grenada.
 The 1991 Grenada Ports Authority of Grenada.
 The 1991 National Parks and Protected Areas Act of Grenada.
 The 1994 Shipping Act of Grenada.
 The 1996 Fisheries (Amendment) Regulations of Grenada.
 The 1998 Civil liability for oil pollution damage of Grenada.
 The 2000 Yachting Act of Grenada.
 The 2000 Yachting Act (Amendment) of Grenada.
 The 2000 Yachting (Forms and Fees) Regulations of Grenada.

Legislation for St. Vincent:

The 1946 Birds and Fish Protection Ordinance of St. Vincent and the Grenadines.
 The 1954 Birds and Fish Protection Ordinance of St. Vincent and the Grenadines.
 The 1969 Saint Vincent National Trust Act of St. Vincent and the Grenadines.
 The 1974 Birds and Fish Protection Act of St. Vincent and the Grenadines.
 The 1976 Town and Country Planning Act of St. Vincent and the Grenadines.
 The 1981 Beach Protection Act of St. Vincent and the Grenadines.
 The 1983 Maritime Areas Act of St. Vincent and the Grenadines.
 The 1986 Fisheries Act of St. Vincent and the Grenadines.
 The 1987 Fisheries Regulations of St. Vincent and the Grenadines.
 The 1987 St. Vincent and the Grenadines Port Authority Act of St. Vincent and the Grenadines.
 The 1991 Environmental Health Services Act of St. Vincent and the Grenadines.
 The 1991 Litter Act of St. Vincent and the Grenadines.
 The 1991 Wildlife Protection Act of St. Vincent and the Grenadines.
 The 1992 Forest Resource Conservation Act of St. Vincent and the Grenadines.
 The 1997 Marine Parks Act of St. Vincent and the Grenadines.
 The 1998 Statutory rules and orders- Marine Parks (Tobago Cays) regulations of St. Vincent and the Grenadines.
 The 2000 Waste Management Act of St. Vincent and the Grenadines.
 The 2001 National Parks, Rivers and Beaches Act (draft) of St. Vincent and the Grenadines.

3.7 Social

Society & Culture: Adams (2002), Arnoux and Prat (1998), Blencowe (1995), Bouvier (1984), Brinkley (1971), Buckmire (1985), Burke (1996), Canada/ SVG Fisheries Development Project (1992), Clement (2000), Jenkins and Bobrow (no date), Caribbean Development Bank (Barbados) (Dec 1996), Daudin (2000), Daudin (2003), Dey (1989), Duncan (1999), Duncan (2001), Duncan (2003), Fenger (1917), Fischer (1997), Fraser (1980), Fraser and Joseph (1999), Government of St. Vincent and the Grenadines (2001b), Government of St. Vincent and the Grenadines (2001c), Groome (1970), Jenkins and Bobrow (1985), Jinkins and Bobrow (1985), KAIRI Consultant Lt (undated), Kay (1971), Kroll and Kroll (1998), Logan (2001), Lynn (1968), Martin (2003), Mitchel (1966), Mitchel (1994), Mitchel (2004), Morse (1778), Mustique Environmental

Committee (2004), Mustique Island times (no date), Mustique Company limited (1992), Petitjean (2002), Potter (1989), Price (1988), Pyle (1981), Quamina-Aiyejina (2003), Richardson (1974), Richardson (1975), Rovati and Gerbert (1999), Salmon and Cassel (2003), Samuel (2002), Sandy (1996), Smith (1962), Steele (1983), Stephens (1991), Stewart (1984), Stewart-Morgan (1997), Thomsen (1988), Vaughn (1994), Ward (1985), Ward (1987).

History and Geography: Adams (1978/79), Adams (1996), Adams (2002), Bouvier (1984), Bullen (1972), Clement (2000), Clive (1976), D'Anglejean and Mountjoy (1973), Daudin (2000), Daudin (2003), deSilva and Wilson (2006), Devas (1974), Dey (1989), Fitzpatrick *et al.*, (2004), Frank (1970), Frank (1976), Great Britain Colonial Office (1903), Groome (1970), Hazel (1945), Jackson (1970), Kay (1971), Kaye *et al.*, (2004), Kingsbury (1960), Kroll and Kroll (1998), Martin-Kaye (1958), Jackson (1970), MEDO (2003), Morse (1778), Nichols (1891), Petitjean (1975), Pickeril *et al.*, (2002), Price (1985), Rovati and Costanzo (1999), Sandy (1996), Scoffin and Tudhope (1992), Shepard (1997), Stephens (1991), Suttly (1990), Suttly (1993), Ward (1985), Ward (1987), Westercamp *et al.*, (1985), Wilkinson (1988), Woodruff *et al.*, (1998).