Marine Managed Areas in the Human Cultural Context:
An assessment of the 'socio-cultural reality' associated with MMA establishment in Belize

by
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ABSTRACT

Across the globe, marine managed area (MMA) designation has been traditionally justified primarily from a biological perspective, the goals of which have focused on conserving species and habitats critical for maintaining the ecological integrity of marine ecosystems. As such, MMAs have evolved over time to become “bio-ecological” tools for marine conservation that lack social and/or cultural meaning. In the Belizean context, the situation is no different. MMAs have been fully embraced by Belize as tools for improving its strategy towards coastal and marine resources management. While MMA processes in Belize now incorporate socio-economic factors, the fundamental human cultural values and belief systems that drive behavior with respect to MMA resources use have not been formally considered.

I conducted this Master’s project in conjunction with Conservation International’s MMA Cultural Roles Study in Belize, the main goal of which was to describe and assess cultural values and perceived cultural impacts associated with the establishment of Laughing Bird Caye and Gladden Spit as MMAs on Seine Bight and Hopkins, two coastal communities along Belize’s southern coast. I investigated this issue by conducting a total of 37 in-depth, semi-structured interviews with key informants from the two communities, in addition to undertaking observational ethnographies. In order to gain a holistic perspective for my research, I interviewed informants on the following topics: 1) history of involvement with MMAs; 2) community characteristics; 3) perceptions of “the environment”; 4) cultural impacts resulting from MMA establishment and other factors; and 5) gender roles and marine activities.

My findings suggest that due to an almost non-existent involvement of Seine Bight with the two MMAs, this village suffered no identifiable cultural impacts from the establishment of either MMA. Hopkins Village, like Seine Bight, has also had a relatively low involvement with Laughing Bird Caye and as such, did not suffer any cultural impacts from its establishment. The establishment of Gladden Spit as an MMA seems to have had little impact on the habitual fishing activities of Hopkins residents since they continue to use this MMA as they usually would. In spite of these findings, cultural data can have important implications for understanding how coastal communities adapt their cultural attitudes and behaviors in response to the imposition of conservation codes, such as MMAs, that affect their usage of the marine commons. This basic understanding can be an invaluable first step towards predicting the long-term biological, socio-economic and cultural “successes” of MMA establishment not only in Belize but in countries in the wider Caribbean region and around the globe.
I would like to thank my advisor, Dr. Michael Orbach, for his guidance and support that helped to make it possible for me to successfully complete my degree. I would especially like to thank him for suggesting the CI MMA Cultural Roles Study for my summer internship. Not only did this internship experience lead directly to my Master’s Project (MP), but it also provided me a unique opportunity to make a valuable contribution to the developing ethnographic knowledge base on MMA processes as they relate to coastal communities in Belize. My summer internship would not have been possible without financial support from Conservation International and the Oak Foundation. To the Oak Foundation, I am deeply grateful for the privilege to have advanced my academic training under the Marine Conservation Professionals for Belize Program. Larry Crowder, thank you for calling my attention to the existence of this program.

I extend much thanks to Noella Gray, Greg Moretti, the Belize Fisheries Department, Lindsay Garbutt and his staff at Friends of Nature for their expert advice, support and guidance before, during and after I conducted my field work. Thanks to Rhema Bjorkland and Jenny Burgman for their editorial assistance. My heartfelt gratitude goes out to all those people in the villages of Hopkins, Placencia and Seine Bight who took time out of their busy schedules and who willingly invited me, a virtual stranger, into their homes to share their candid stories. I appreciated and valued the hospitality, honesty, respect and trust you exhibited towards myself and my family. I owe much appreciation to Kirk Rodriguez, a long time friend and a resident of Hopkins Village, for helping me to network and partner with fishers and residents in this village.

Finally, to my future husband Delvitt and our son Carlisle: what words can I use to express how lucky I am to have you both in my life? I would probably not have been able to successfully complete my internship and my MP had you not been by my side each and every second as I dealt with the pangs of fieldwork frustration and the feelings of triumph after “a job well done” at the end of the day. Thank you for your unconditional love, inspiration, patience and tolerance of my absence from your lives during the past few years. I look forward to our future with great anticipation.
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LIST OF ACRONYMS

BAS  Belize Audubon Society
BBR  Belize Barrier Reef
BTIA  Belize Tourism Industry Association
CABS  Center for Applied Biodiversity Science
CEP  Caribbean Environment Programme
CI  Conservation International
CIA  Central Intelligence Agency
CNGO  Conservation Non-Governmental Organization
COMPACT  Community Management of Protected Areas Conservation Project
ETPS  Eastern Tropical Pacific Seascape
FoN  Friends of Nature
GEF  Global Environment Facility
GOB  Government of Belize
GS  Gladden Spit
GSMR  Gladden Spit Marine Reserve
GSSCMR  Gladden Spit and Silk Cayes Marine Reserve
HFCS  Hopkins Fishermen Co-operative Society
IUCN  International Union for Conservation of Nature
LBC  Laughing Bird Caye
LBCNP  Laughing Bird Caye National Park
MMA  Marine Managed Area
MMAS  Marine Management Area Science Program
NGO  Non-Governmental Organization
PUP  People’s United Party
SEA-Belize  Southern Environmental Association of Belize
TASTE  Toledo Association for Sustainable Tourism and Environment
TNC  The Nature Conservancy
UDP  United Democratic Party
UNDP  United Nations Development Programme
UNEP  United Nations Environment Programme
UNESCO  United Nations Educational, Scientific and Cultural Organization
WRI  World Resources Institute
WWF  World Wildlife Foundation

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I) Introduction

*MMA Development in Global and Regional Contexts*

Marine Managed Areas, hereinafter referred to as MMAs, are discrete geographic areas in marine and coastal environments that are designated by law and designed to protect and manage resources and their uses by humans (Bass et al. 2006). They are typically characterized as having multiple management zones that facilitate a wide range of uses and users (Green and Paine 1997), although some are strict “no-take” areas that prohibit all human extractive activities (Guarderas 2007). MMAs have been adopted globally as a popular tool in fisheries management and for advancing marine conservation goals (Christie et al. 2003). The explosion in MMA popularity has been attributed to the fact that in addition to being “tools for conservation of ecosystems and fishery stocks”, they are also “valuable centers for tourism, research and education” (McField 2000).

The International Union for Conservation of Nature (IUCN) identifies six protected areas management categories that include the following designations: Ia **Strict Nature Reserve** and Ib **Wilderness Reserve** (scientific research and wilderness protection); II **National Park** (ecosystem protection and recreation); III **Natural Monument** (conservation of specific natural features); IV **Habitat/Species Management Area** (conservation through management intervention); V **Protected Landscape/Seascape** (landscape/seascape conservation & recreation); and VI **Managed Resource Protected Area** (sustainable use of natural ecosystems) (IUCN 1994; Chape et al. 2003).

According to the World Conservation Monitoring Center of the United Nations Environment Programme (UNEP), MMA establishment around the world has been steadily increasing ever since the turn of the 20th century (Green and Paine 1997). A notable increase in the total number
of MMAs occurred during the 1970’s, and is believed to be linked to the establishment of Greenland National Park in 1974, the largest MMA in the world (Green and Paine 1997). As of 2006, there were 4500 MMAs across the globe, covering a total area of 2.2 million km\(^2\) that contained coastal and ocean ecosystems (Lubencho et al. 2007). This area, however, accounts for less than 1% of the world’s oceans (Chape et al. 2003; Lubencho et al. 2007). Furthermore, it was estimated that only 36,000km\(^2\), or 0.01%, of these existing global MMAs were “no-take” (Lubencho et al. 2007). International conservation NGOs (CNGOs) such as IUCN and The Nature Conservancy (TNC) have sounded a strong call which urges the need to place a greater percentage of the world’s oceans, marine habitats and ecosystems under protective status by 2012 (IUCN 2007; TNC 2008).

The rate of new MMA establishment has declined in the global arena since the 1990’s (Green and Paine 1997), but there has been significant MMA activity in developing countries of the tropics (McField 2000). Most Latin American and Caribbean countries have embraced MMAs as a management tool for ameliorating deleterious impacts to their coastal resources and marine ecosystems. Guarderas’ (2007) assessment of MMA proliferation and utilization in these regions reveals the existence of over 800 MMAs in 42 countries that comprise a total area of more than 300,000 km\(^2\). It is estimated that 1.5% of coastal and marine resources in this region are accounted for within MMAs (Guarderas 2007).

While the increase in MMAs throughout Latin America and the Wider Caribbean has been spurred by the government agencies of these countries as a management strategy for marine and coastal ecosystems, it is undeniable that the international conservation community has had significant influence on initiating MMA establishment. Several of the larger international CNGOs have invested in the creation of new MMAs and have established research stations and
on-going conservation programs (McField 2000; Pomeroy & Goetze 2003). For instance, Conservation International (CI), The Nature Conservancy (TNC), World Resources Institute (WRI), World Wildlife Foundation (WWF) and UNEP’s Caribbean Environment Programme (UNEP-CEP) currently invest in programs that place high priority on protecting marine resources within Latin America and/or the Caribbean (CI 2009; TNC 2008; WRI 2009; WWF 2009; UNEP-CEP 2008). In a few cases, some of these international CNGOs have partnered with other CNGOs and government agencies throughout Latin America and/or the Caribbean as a step towards integrating their conservation efforts. The Meso-American Barrier Reef System project is an example of one such venture that includes the countries of Belize, Guatemala, Honduras and Mexico (Pomeroy & Goetze 2003).

**History and Proliferation of MMAs in Belize**

Belize embraced the concept of MMAs as a management strategy for the protection of its important and biologically unique marine habitats and resources in 1982 with the designation of Half Moon Caye Natural Monument (Cho 2005). This MMA was established as a natural heritage site, in part to protect habitat for the Red-footed Booby (*Sula sula*) but also to reduce the risk of overexploitation of the commercially important fishing area it contained (Cho 2005; BAS 2007). The Belize Audubon Society (BAS), a local chapter of the United States-based National Audubon Society, manages this MMA. BAS was influential in not only the designation of Half Moon Caye Natural Monument, but also in increasing awareness about the benefits of MMAs by lobbying with local community groups to garner support from the government of Belize (Young and Horwich 2007).

Subsequent to the designation of Half Moon Caye Natural Monument in 1982, the Belizean Government established a cascade of new MMAs. J. Palacio (2007) points to the year 1996 as...
symbolizing the launch of the marine conservation era in Belize, largely spurred by the United Nations Educational, Scientific and Cultural Organization’s (UNESCO) recognition of the Belize Barrier Reef (BBR) as a World Heritage Site. UNESCO’s recognition of the importance of marine and coastal resources within the BBR catalyzed a paradigm shift regarding the purpose of MMAs in Belize (J. Palacio 2007). As such, while MMAs once served to protect and conserve single species or fishery habitats, today they are highly respected tools for ecosystem management (Cho 2005; Personal Communication, Belize Fisheries Department Staff, July 2008).

There are a total of 23 MMAs in Belize today, each of which has been established under varying circumstances and with varying conservation goals (Figure1). There are 5 existing MMA types based on the IUCN classification for protected areas: *Wildlife Sanctuary, National Monument, National Park, Nature Reserve and Marine Reserve* (Table 1). Wildlife Sanctuaries, Natural Monuments, National Parks and Nature Reserves are established through the National Parks Systems Act under the Forestry Department (Government of Belize 2000a). Marine Reserves are established through the Fisheries Act under the Fisheries Department (Government of Belize 2000b).
Figure 1: Map of Marine Managed Areas of Belize. Source: World Resources Institute 2005
Table 1: Marine Managed Areas of Belize. Sources: World Resources Institute 2005; Wood 2007

<table>
<thead>
<tr>
<th>Marine Managed Areas</th>
<th>Date Established</th>
<th>Total Area (ha)</th>
<th>Marine Area (ha)</th>
<th>No-take area (ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Marine Reserves (17):</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hol Chan</td>
<td>1987</td>
<td>1,543</td>
<td>1,389</td>
<td>401</td>
</tr>
<tr>
<td>Glover’s Reef</td>
<td>1993</td>
<td>35,070</td>
<td>35,070</td>
<td>892</td>
</tr>
<tr>
<td>▲ Bacalar Chico</td>
<td>1996</td>
<td>6,546</td>
<td>6,546</td>
<td>1,853</td>
</tr>
<tr>
<td>▲ Sapodilla Cayes</td>
<td>1996</td>
<td>17,220</td>
<td>17,220</td>
<td>3,042</td>
</tr>
<tr>
<td>▲ South Water Caye</td>
<td>1996</td>
<td>47,702</td>
<td>47,702</td>
<td>u</td>
</tr>
<tr>
<td>Caye Caulker</td>
<td>1998</td>
<td>3,913</td>
<td>3,913</td>
<td>3,913</td>
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<tr>
<td>Gladden Spit and Silk Cayes</td>
<td>2000</td>
<td>10,510</td>
<td>10,510</td>
<td>1,618</td>
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<tr>
<td>Port Honduras</td>
<td>2002</td>
<td>40,470</td>
<td>40,470</td>
<td>1,323</td>
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<tr>
<td>*Caye Bokel (South Point Turneffe)</td>
<td>2003</td>
<td>558</td>
<td>558</td>
<td>558</td>
</tr>
<tr>
<td>*Caye Glory/Emily</td>
<td>2003</td>
<td>547</td>
<td>547</td>
<td>547</td>
</tr>
<tr>
<td>*Dog Flea Caye</td>
<td>2003</td>
<td>576</td>
<td>576</td>
<td>576</td>
</tr>
<tr>
<td>*Nicholas Caye</td>
<td>2003</td>
<td>673</td>
<td>673</td>
<td>673</td>
</tr>
<tr>
<td>*Rise and Fall Bank</td>
<td>2003</td>
<td>1,721</td>
<td>1,721</td>
<td>1,721</td>
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<tr>
<td>*Rocky Point</td>
<td>2003</td>
<td>570</td>
<td>570</td>
<td>570</td>
</tr>
<tr>
<td>*Sandbore Caye</td>
<td>2003</td>
<td>521</td>
<td>521</td>
<td>521</td>
</tr>
<tr>
<td>*Seal Caye</td>
<td>2003</td>
<td>648</td>
<td>648</td>
<td>648</td>
</tr>
<tr>
<td>*South Point Lighthouse</td>
<td>2003</td>
<td>533</td>
<td>533</td>
<td>533</td>
</tr>
<tr>
<td><strong>National Parks (1):</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>▲ Laughing Bird Caye</td>
<td>1996</td>
<td>4,095</td>
<td>4,095</td>
<td>4,095</td>
</tr>
<tr>
<td><strong>Natural Monuments (2):</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>▲ Half Moon Caye</td>
<td>1982</td>
<td>3,954</td>
<td>3,756</td>
<td>3,907</td>
</tr>
<tr>
<td>▲ Blue Hole</td>
<td>1996</td>
<td>414</td>
<td>414</td>
<td>414</td>
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<tr>
<td><strong>Wildlife Sanctuaries (3):</strong></td>
<td></td>
<td></td>
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<tr>
<td>Corozal Bay</td>
<td>1998</td>
<td>73,050</td>
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<td>0</td>
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<tr>
<td>Gales Point</td>
<td>1998</td>
<td>3,681</td>
<td>3,681</td>
<td>3,681</td>
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<tr>
<td>Swallow Caye</td>
<td>2002</td>
<td>3,631</td>
<td>3,231</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Area (ha)</strong></td>
<td>------</td>
<td>258,146</td>
<td>257,394</td>
<td>31,486</td>
</tr>
</tbody>
</table>

* Spawning Aggregation Sites  ▲ World Heritage Sites  u=unknown

Even though the government of Belize (GOB) has legislative authority and responsibility for MMAs through the Fisheries and Forestry Departments, it has signed co-management agreements with some local CGNOs to enhance its management efforts and commitment to the public trust. In most situations, these MMA co-management agreements allow CNGOs to provide necessary financial and human resource support to the GOB-run departments in order to effectively implement MMA management plans. McField (2000) suggests that future co-management agreements, which engage and mobilize key stakeholders in civil society, could be a first step towards improving MMA management to better ensure marine conservation goals are met.
II) Project Description and Research Objectives

MMA designation has traditionally been justified primarily from a biological perspective, the goals of which focus on a need to conserve and protect species and habitats that are critical to maintaining the ecological integrity of marine ecosystems (Fiske 1992; Christie et al. 2003). Even though the nature of marine resources conservation issues is complex, often requiring a multidisciplinary approach, MMA design and implementation rarely ever includes the total ecology of the issue, i.e. the combined biological, institutional and human contexts that impact and are impacted by MMAs (Orbach 2008). Both Fiske (1992) and Christie et al. (2003) point out that treating MMA design and management as a “bioecological process” and neglecting the socio-cultural factors with which MMAs are intimately intertwined could result in “short-term biological gains” but a myriad of “social failures”.

Most of the existing literature on MMAs has a strong focus on the biological and economic aspects of conservation decisions, but often neglects the human component (Conservation International 2006a). Some marine resources managers would argue that efforts are being made to include resource users into the process, such as fishers, through consultation meetings at the MMA conception phase or through community-based management as a part of the MMA implementation process (Cho 2005). While both of these instances provide unique opportunities for stakeholder participatory involvement in MMA processes, they do not address how to understand the fundamental human cultural values and attitudes that drive behavior with respect to the use of MMA resources (Conservation International 2006a). Data on human behavior, attitudes and culture in regards to with respect to the MMA use can have important implications for guiding MMA policy that is in line with the interests of conservation goals, economic development and livelihood portfolios.
A deficiency of data on human behavior, attitudes and culture with respect to the MMAs is one of the major reasons for the exclusion of socio-cultural factors from MMA policies and management plans. This fact has been recognized and acknowledged (Conservation International 2006a; Fiske 1992; Christie et al. 2003). In the Belizean context, J. Palacio (2007, 176) has noted that “there is a dearth of ethnographic information, especially in the use of marine and coastal resources, the values associated with such use, the traditional knowledge available and the belief systems that guide overall coastal behavior”. It is not surprising, then, that existing policies for MMA design and implementation in Belize do not have provisions for the consideration or inclusion of cultural values, attitudes and perceived impacts of key stakeholders that comprise the human ecology. The consideration and inclusion of socio-cultural factors in MMA polices are critical for the long-term success of MMAs.

**Project Description: CI MMA Science Program**

Through the Center for Applied Biodiversity Science (CABS), Conservation International strives to guide global conservation efforts by improving the scientific knowledge base to inform conservation actions (Conservation International 2006b). Founded in 1999, the CABS has established 12 programmatic areas that focus on understanding human-ecological relations and their implications for conservation strategies (Conservation International 2006c). One such program area is the Marine Management Area Science (MMAS) Program. Conceived at the 2003 Defying Ocean’s End conference and formally established in 2005, the MMAS Program “combines social and biological science to study management of multiple-use and protected marine areas” (Conservation International 2006d).

Since 2006, the MMAS Program has been working in four selected sites or “nodes” within the global marine ecosystem on six thematic areas as they relate to MMA use. Belize, Brazil,
Fiji and the Eastern Tropical Pacific Seascape (ETPS) are the selected nodes in which the MMAS Program implemented several projects in the following MMA-related theme areas: 1) management effectiveness, 2) connectivity, 3) resiliency, 4) economic and cultural valuations, 5) conservation and economic development, and 6) enforcement (Conservation International 2006e).

In Belize, there are four CI MMAS projects that include Core Ecological Monitoring, Economic Valuation, Socio-economic Assessments and Cultural Roles. This report was done in conjunction with the Cultural Roles Study that describes the cultural values and cultural impacts related to two established MMAs along Belize’s southern coast: Laughing Bird Caye National Park (LBCNP) and Gladden Spit Marine Reserve (GSMR). These two MMAs were selected for the study in part to compare whether cultural impacts of MMA establishment differed if an MMA was “no-take” versus “multiple use”, as is the case with LBCNP and GSMR respectively. Additionally, the relatively recent establishment of the two study MMAs suggests that it would be more possible for informants to recall short-term cultural impacts. Cultural data were sought from four coastal communities, Sarteneja, Placencia, Seine Bight and Hopkins, which have been identified as the primary resource users of the two MMAs. The results presented in this report, however, are based only on data collected from 2 of the 4 coastal communities: Seine Bight and Hopkins Villages.

**Research Objectives**

Through the MMAS Cultural Roles Study, Conservation International’s aimed to contribute to the ethnology of Belize’s coastal communities and to shed light on the reality of impacts associated with MMA establishment on the cultural identities of fishing communities in Belize. Specific to the above, my research sought to address the extent to which the establishment of
Laughing Bird Caye National Park (LBCNP) and Gladden Spit Marine Reserve (GSMR) impacted the lives and culture of individuals in the traditional fishing communities of Seine Bight and Hopkins. In anticipation of a holistic perspective for my research, I assessed five variables below that were identified in the Belize Cultural Roles Related to MMAs Workplan (Conservation International 2006a):

1) History of involvement and use of LBCNP and GSMR by communities;
2) Community characteristics, structure and organization;
3) Community relationship with and perception of “the environment”;
4) Cultural impacts and cultural changes in community accompanying the establishment of LBCNP and GSMR and other factors (such as tourism, aquaculture, etc); and
5) Gender roles in the community, as they relate to marine activities

I hypothesized that the establishment of “no-take” MMAs, as in the case of LBCNP, is more detrimental to the livelihoods of fishers in the two study communities compared to multiple-use zoning that accompanied the establishment of the Gladden Spit MMA. In addition, I hypothesized that the rise of leisure tourism, rapid coastal development and aquaculture projects created new income-generating opportunities for both the study communities. These economic developments might have supported fishers’ willingness to trade fishing and farming, two traditional means of sustenance, for non-traditional, yet more financially promising employment opportunities. Finally, I hypothesized that the development of new local economies within these communities entailed cultural tradeoffs, such that the people of the study communities reduced their cultural practices associated with the use of the marine commons within the study MMAs.

I used qualitative interviews to test my hypotheses, which yielded rich, primary data. The results of my study will contribute to the management of MMAs in Belize, and both regionally
and internationally. More importantly, my data will allow MMA managers and other key stakeholders to have a better understanding of the cultural impacts of LBCNP and GSMR on the coastal communities of Seine Bight and Hopkins.

III) Methods and Approach

In order to obtain a detailed, holistic perspective on the impacts of the establishment of Laughing Bird Caye National Park and Gladden Spit Marine Reserve on the Seine Bight and Hopkins communities, observational ethnographies were undertaken and in-depth, semi-structured interviews were conducted. A key informant/network approach using the snowball, non-probability sampling method was used to identify respondents for interviews (Rea and Parker 2005). Specifically, key individuals in each community were initially identified and consulted, who in turn referred me to potential interviewees. At the end of subsequent interviews with community members recommended by key informants, respondents were asked to recommend other potential informants. The snowball sampling method thus allowed for the development and expansion of the sampling frame.

A combination of informal and formal interviews was conducted, and in a few cases multiple interviews were conducted with a single respondent until the range of topics of investigation for the study was covered (Appendix A: Semi-Structured Interview Guide). Interviews were conducted only after the informed consent process was implemented and after respondents indicated their willingness to participate in the study via verbal consent. Data were recorded using handwritten notes during and after each interview. Belizean Kriol, an English-based creole language, was the main language used to interview respondents.

Interviews were conducted during the months of May, June and July 2008 in Seine Bight, Hopkins, Placencia, Belmopan City and Belize City. A total of 37 individuals were consulted.
and interviewed during the interview process that ranged in length from 30 minutes to 3 ½ hours. The average interview length was 2 ½ hours. In Seine Bight Village 12 individuals, specifically 10 men and 2 women, were interviewed in June 2008. All informants belonged to the local Garifuna ethnic group and were Belizeans, with the exception of one that possessed dual Belizean-Honduran citizenship. Informants were all fishers, some of whom had retired from the profession and others that were still fishing on either a full-time or part-time basis. Part-time fishers included members of the village council, entrepreneurs, housewives, carpenters and masons. Of the recommended informants, only 1 individual refused to be interviewed. Three key informants could not be located during the study period.

During the month of July 2008, 21 community members of Hopkins Village were interviewed, 17 of whom were men and 4 of whom were women. All informants were Belizean and identified themselves as belonging to the Garifuna ethnic group, with the exception of one informant that identified with being Creole. Of the 21 informants, 9 of them were full-time fishers, while 10 of them were either former fishers or fished part-time to complement their main livelihoods as tour guides, farmers and entrepreneurs. As in the case of Seine Bight Village, members of the village council were also interviewed. One individual declined to be interviewed and two could not be located. Other than the informants from the Seine Bight and Hopkins communities, additional informal interviews were also conducted with members of Placencia Village, personnel of the Belize Fisheries Department and Friends of Nature (FoN), and a project consultant for the MMAS Socio-Economic and Governance Study.

Interview data were analyzed by using topic coding. Codes were developed using the interview questions as a guide, but a “data to theory approach” (Campbell 2008) was also used to extract deeper meaning from the data beyond the scope of questions in the semi-structured
interview guide (Appendix B: Coding Scheme). In order to protect the identities of the respondents, a labeling system was devised for the purposes of organizing the interview data by study site and type of respondent. Each interview was labeled with the letter “I” to indicate that the data type as an interview, “SB” or “HP” to indicate the study site as Seine Bight Village and Hopkins Village respectively, and interview number based on the chronological dates on which interviews were conducted. Even though respondents included tour guides and a wide range of fisherfolk (i.e. full-time, part-time, retired, female, commercial, subsistence), I will refer to them as “fishers” throughout the document for the purpose of simplicity.

IV) Background

Southern Belize and Coastal/Marine Resources Use

Belize’s coastline is bounded by the Caribbean Sea and extends for roughly 386 km from the northern most tip to southern most end of the country (CIA-The World Factbook 2009). There are 22 communities dotted along the coast, with the highest concentration in the Stann Creek and Toledo districts (Figure 2). The Stann Creek district contains more coastal communities than the Toledo district, and as such its population is larger. Based on a census conducted in 2008, the Statistical Institute of Belize estimated a population of 33,300 and 30,100 people living along the coasts of Stann Creek and Toledo respectively (Statistical Institute of Belize 2008).
Coastal Communities of Belize

Figure 2: Map of Coastal Communities in Belize. Source: World Resources Institute 2005
Stann Creek, which is considered to fall within the “Southern” sub region of Belize’s coast, consists of one town, Dangriga, and six villages including Mullins River, Hopkins, Sittee, Riversdale, Seine Bight and Independence. On the other hand, Toledo is the “Extreme South” sub region containing Punta Gorda town and four villages: Money River, Punta Negra, Cattle Landing and Barranco (J. Palacio 2007). According to J. Palacio (2007), the “Southern” coastal sub region can be generally characterized as a fishing and agricultural hub, with a promising tourism industry, Placencia being a notable example. The “Extreme South” coastal region is the exact opposite of the southern subregion as they do not have quite as strong fishing, agriculture or tourism economies and the community is believed to rely on “remittances” i.e. monies forwarded to residents by Belizean family members in other parts of the country or overseas (J. Palacio 2007).

The communities found in southern Belize have a long history of exploiting coastal and marine resources for two principal uses that have traditionally supported their livelihoods: 1) agriculture and 2) fishery. Each coastal community was also well known for specializing in the use of certain aspects of coastal and/or marine resources as they related to agriculture or fishery. For instance, the Seine Bight community was well known for its farmlands and active fishermen, Placencia for being a fishing village and Punta Negra for its “ample supply of hardwoods” (J. Palacio 2007).

Ever since the turn of the 1960s, the use of coastal and marine resources by coastal communities in southern Belize has significantly increased. In the 1980s, the communities’ use of coastal and marine resources also became diversified. Also, by the 1980’s, agriculture was no longer only for subsistence. Instead, it became commercialized and was accompanied by huge foreign investments in citrus orchards and banana plantations. This period also included an
explosion of aquaculture development, primarily shrimp farms concentrated along the coast of the Stann Creek district. The rise of the tourism industry also created a new and economically attractive marine economy for coastal residents. Many people shifted their livelihood portfolios to tourism-related jobs that strongly relied on coastal and marine resources, such as catch and release fishing tours, snorkeling, etc (J. Palacio 2007).

**History, Structure and Management of Study MMAs**

Friends of Nature (FoN) is a conservation non-governmental organization (CNGO) based in Placencia, Belize that co-manages Laughing Bird Caye National Park (LBCNP) and Gladden Spit Marine Reserve (GSMR) along with the Forest and Fisheries Departments of Belize respectively (Pomeroy & Goetze 2003). FoN was formed in March 2002, the result of an amalgamation of two community-based groups, Friends of Laughing Bird Caye which was formed in the 1980s and Friends of the Placencia Lagoon which was formed in 1998 (Goetze 2005). Both groups formed as a result of environmental activism by residents of Placencia who were genuinely concerned about protecting the ecological integrity of the ecosystems at Laughing Bird Caye and the Placencia Lagoon from the threats of tourism development (Pomeroy & Goetze 2003). These residents included fishers, dive and tour guides and business owners (Goetze 2005).

With time, FoN grew from being a Placencia-based organization to a well-known and respected local CNGO of southern Belize. This development was accomplished primarily through building partnerships with other community stakeholders, such as Seine Bight, Independence, Hopkins and Monkey River villages. A member from each of these villages, usually the Village Chairperson, sits on FoN’s advisory committee (Pomeroy & Goetze 2003).
The staff of FoN consists of a managing director, administrative personnel and a team of research scientists and enforcement officers, the latter often referred to as “rangers” (Personal Communication, Friends of Nature Staff, June 2008). Rangers are trained as Fisheries Officers and thus have authority to enforce relevant sections of the Belize Fisheries Act (Personal Communication, Belize Fisheries Department Staff, July 2008). These rangers also coordinate with other agencies such as international and local CNGOs and the government departments responsible for natural resource management. Village council chairpersons from each stakeholder community that sit on the advisory committee are expected to serve as liaison between FoN and users of LBCNP and GSMR from their respective communities (Personal Communication, Friends of Nature Staff, June 2008).

In addition to protecting and managing the MMAs, FoN also carries out community education and outreach projects in six neighboring coastal communities: Hopkins, Independence, Monkey River, Placencia, Seine Bight and Sittee River (Personal Communication, Friends of Nature Staff, June 2008). A map of the MMAs in relation to these communities is depicted in Figure 3 below. Some of their community outreach activities include establishing and maintaining environmental youth groups in the six communities and implementing the Community Field Studies at Laughing Bird Caye National Park Project (Friends of Nature 2008). Informants from both Seine Bight and Hopkins said that several children have benefited from summer programs and scholarships to attend high school through FoN.
In order to meet its basic operational expenses, FoN relies heavily on grant funding from large, international CNGOs, and to a lesser extent on user fees and donations from its members (Personal Communication, Friends of Nature Staff, May 2008). In an effort to maximize use of its personnel and limited financial resources, FoN recently teamed up with another Belizean CNGO, Toledo Association of Sustainable Tourism and Environment (TASTE), at the beginning of September 2008. The result of this amalgamation is a new CNGO known as SEA-Belize, the Southern Environmental Association of Belize.
History of Study MMAs

(i) Laughing Bird Caye National Park (LBCNP)

Laughing Bird Caye was designated as a National Park under Statutory Instrument 94 of 1996 under the Belize National Parks System Act (Government of Belize 1996). As previously mentioned, management of LBCNP is under a co-management agreement with the Belize Forestry Department and FoN. Under the Belize National Parks System Act, however, the Conservation Division of the Forestry has formal responsibility for LBCNP. It is also a World Heritage Site, designated by UNESCO in 1998 (Pomeroy & Goetze 2003). Its name sake is the Laughing Gull, *Larus articilla*, the only bird found within the park during initial biological surveys, and whose calls sounds like laughter (Friends of Nature 2008). In addition to the Laughing Gull, this MMA protects habitat for at least 5 other bird species and several marine species, and is also a nesting site for sea turtles (Friend of Nature 2008). This National Park is almost 4100 hectares in size and is located 12 miles south of Placencia Village, the closest mainland community (Goetze 2005).

The first documented use of the LBCNP was in 1979 by fishers and tourists (Friends of Nature 2008). Fishers, in particular, used the caye as a fishing campsite and harvested fish from its faro, a rhomboid-shaped reef depicted in Figure 4 (Friends of Nature 2008). In 1988, the caye was surveyed for proposed development, which sparked strong opposition from local stakeholders. These stakeholders, Placencia residents in particular, sponsored a petition for designating the caye as a reserve (Friends of Nature 2008). According to the managing director of Friends of Nature (FoN), “it was vital to the people of Placencia that the area would not go into private hands because of its nearness to the peninsula community” (Personal Communication, May 2008). FoN’s managing director also mentioned in that in addition to
preserving the natural beauty of the caye, the emergence of eco-tourism and its potential for negative impacts on the fragile ecosystem, due to the anticipation of high tourist visitation, strengthened the case for preserving Laughing Bird Caye.

In 1990 five communities, Hopkins, Independence, Seine Bight, Monkey River and Placencia, were consulted regarding protecting LBC and within six years, the Government of Belize declared it a National Park. It is a strict “no-take” MMA with three management zones: (i) preservation; (ii) buffer and (iii) recreational. Since LBC became a no-take protected area, Garbutt notes that the number of traditional users has dropped precipitously (Goetze 2005).

Figure 4: Map of Laughing Bird Caye National Park. Source: Naturalight Productions Limited 1999
Gladden Spit and Silk Cayes, due to their close proximity, were jointly declared the Gladden Spit and Silk Cayes Marine Reserve (GSSCMR) in 2000 (Government of Belize 2000c) but it was not until 2003 that it was legally established by Statutory Instrument 95 under the Belize Fisheries Act (Government of Belize 2003; Goetze 2005). Gladden Spit Marine Reserve (GSMR) is an important spawning aggregation site for several commercially important fish, such as mutton snapper, whose spawn attracts whale sharks at specific times of the year (Friends of Nature 2008). Several coastal communities have capitalized on this biological event by arranging limited whale shark (*Rhincodon typus*) tours for local, regional and international tourists to the site (Personal Communication, Friends of Nature Staff, May 2008).

GSMR is believed to have been used by fishers ever since the 1920’s to harvest mutton snapper. Today, that tradition still occurs as fishers congregate each year at Gladden Spit during mutton snapper spawning season, a ten-day period on full moon days beginning in March and ending in June (Goetze 2005). The use of scuba gear and gill nets for extractive purposes is strictly prohibited in this MMA (Personal Communication, Friends of Nature Staff, May 2008). It is the opinion of FoN’s managing director that since GSMR’s designation, the number of fishers that visit the site has become less overall. The number fluctuates from year to year. Fishers from Sarteneja, a tiny fishing village in the northern most tip of the country have been identified as the primary users of marine resources within GSMR (Personal Communication, May 2008).

Gladden Spit is a multiple use protected areas with four management zones. As depicted in Figure 5 below, these zones include: (i) General Use Zone; (ii) Conservation Zone; (iii) Restoration Zone and (iv) Special Use Management Zone (Government of Belize 2003; Cohon
As the name implies, a range of extractive activities are allowed within the General Use Zone. These activities are nevertheless managed. Fishing gear is restricted to hook and lines and free-diving techniques. The Conservation Zone includes three small cayes known as the Silk Cayes, and only non-extractive and moderate recreational activity permitted. The Restoration Zone was set-up specifically to support the reestablishment of Queen conch (*Strombus gigas*) population, while the Special Management Zone is a dedicated area to protect spawning reef fish and whale sharks (Government of Belize 2003; Cohun 2005).

![Management Structure of GSSCMR](image)

**Figure 5: Management Structure of GSSCMR.** Source: Florida Museum of Natural History 2009
According to FoN’s managing director:

“\textit{The emergence of science, particularly the existence of spawning aggregation sites led to its protection. Scientists from TNC drove its demarcation and that’s how the specific area of protection was chosen}” (Personal Communication, June 2008).

The director also claims that FoN did its best to include all stakeholder villages during the consultation process, but not every one supported the idea of declaring the area as protected:

“\textit{A lot of meetings were held in fishing communities. There was not a lot of resistance to the idea of GS being protected but there was not 100\% support for it either. We had consensus and most of the individual communities supported it}” (Personal Communication, June 2008).

FoN is confident that regular patrols and enforcement of the law has resulted in effective management of the area, with low recorded instances of poaching.

V) The Garinagu of Belize

\textit{History}

The Garinagu is the resulting mixture of Arawak Indians, Caribs and people of African decent, which occurred as early as the 16\textsuperscript{th} century on the Lesser Antillean island of St. Vincent (S. Cayetano 1997, Izard 2005). Before migrating to St. Vincent, the Caribs inhabited an area in South America that they referred to as \textit{Kallinagu}, and considered themselves \textit{Calinagu}, which refers to their staple food of manioc or cassava (S. Cayetano 1997, Izard 2005). It is from these terms that \textit{Garinagu} (the people) and \textit{Garifuna} (the language, culture) were derived, and which are used as a form of identity for the resulting Carib-Arawak society that presently exists (S. Cayetano 1997).

The first Garinagu arrived in Belize from St. Vincent on November 19, 1802 (National Garifuna Council of Belize 2009). According to one informant, at the time of the Garinagu’s arrival, the resident British colonists in Belize at the time of the Garinagu’s arrival instructed
them to settle south of the Sibun River, which was outside the boundary of Belize at time. It was not until after 1932 that Belize extended its borders south of the Sibun to the Sarstoon River, and included settlements of the Garifuna (Fisher ISB3, Personal Interview, 19 June 2008). Today, there are six established Garifuna villages: Hopkins, Seine Bight, Barranco, Georgetown, and Dangriga and Punta Gorda, the latter two being more culturally heterogeneous than the former four villages (Ravindranath 2008).

**Culture**

S. Cayetano (1997) defines culture as “the way of life of society and its members, the collection of ideas and habits which they learn, share and transmit from generation to generation” (p.126). Furthermore, S. Cayetano (1997) explains that culture is founded on the five basic elements of 1) beliefs; 2) values; 3) norms and sanctions; 4) expressive symbols; and 5) language, all of which are learned and shared. Garifuna culture embodies these five basic elements and is enriched as a result of the hybridization of the Arawak, Carib and African heritages (S. Cayetano 1997). This cultural heritage of the Garinagu is manifested in language, dance, music and belief systems and is important for defining Garifuna cultural identity (M. Cayetano and R. Cayetano 2005). In Belize, the Garinagu is the only ethnic group with a national holiday that celebrates their culture. This national holiday is called *Garifuna Settlement Day* and is celebrated on November 19th each year to commemorate the arrival of the first Garinagu to Belizean shore. In 2001, UNESCO declared the Garifuna language, culture, and dance “a masterpiece of oral and intangible heritage of humans” (M. Cayetano and R. Cayetano 2005).
Spirituality and Belief Systems

Spirituality

Spiritualism is an integral part of being Garifuna (B. Palacio. 2008a). From their days under British colonial rule in St. Vincent to present day Belize, the Garinagu have always believed in and relied heavily on the power of the spirits of their deceased ancestors (N. Gonzalez 1988). So strong is this belief that everyday activities of the Garinagu revolve around spiritual guidance (B. Palacio 2008a). The Garinagu are devout Roman Catholics and they combine their religious beliefs associated with Catholicism with several African traditions including dance, music, ceremonies and rituals (Taylor 1951). They also celebrate rites of passage such as birth, the arrival of puberty, the transition to adulthood and death (Taylor 1951; B. Palacio 2008a).

One informant explained, “Our spirituality is definitely associated with the sea” (Fisher ISB3, Personal Interview, 19 June 2008). One instance of this link between the Garifuna’s spirituality and the sea is the Dügü ritual, which requires them to harvest fish and other marine animals, a fishing ritual referred to as the adougahani (J. Palacio 2007). For this reason, the Garifuna informants that participated in this study expressed strong comments that if they are to maintain this tradition throughout generations to come, they should not be denied access to the sea. One of the younger Garinagu informants compared the wisdom of the village elders to that of fishermen in the Bible, such as Peter and John (Fisher ISB3, Personal Interview, 19 June 2008). This informant also mentioned that just as fishers in the Bible would throw their nets and not catch any fish until after Jesus taught them how to fish, so too have the elders’ guidance and teachings allowed them to continue to feel confident that they will catch fish too.
Belief Systems

(i) Beluria (9th Night)

The Beluria is a burial feast, also called 9th Night since it comprises a nine-day devotional ceremony to the dead, which culminates in drumming, dancing and feasting (B. Palacio 2008a). Once a member of the Garifuna community dies, he or she never really departs. Surviving members always maintain the lines of communication with their departed ancestors, who enter the spirit world. Ancestral spirits may contact family members in dreams or they may be summoned during special ritualistic ceremonies, like the Dügü. In both instances, contact by ancestral spirits or living descendants is usually because either party is requesting assistance from each other (B. Palacio 2008a).

One ritual that is typically performed during the Beluria is the “bathing of the dead”. Family members of the departed ancestor that are contacted usually perform the ritual. According to informant, during the Beluria a hole would be dug in the ground and the family member would simulate washing a body by washing a calabash gourd—a symbolic representation of the deceased. The body is washed with a mixture of water from the sea, fresh water, various herbs and ereba (cassava). Once this is done, the family member would then address the ancestor to find out if his/her spirit is appeased. A church mass would also be held where family members and friends attend. After the mass is held family members and community elders would hold hands together and move body forward and backward, as if in a trance, with a slow movement. This ritual is called abaimahani in Garifuna (Taylor 1951). Food is offered to the deceased ancestor, as well as drumming performances and gender-specific dances (Fisher ISB3, Personal Interview, 19 June 2008).
(ii) Dügü

The Dügü is a ritual feast observed by the Garifuna that also serves as a form of communication with ancestral spirits. It is slightly different from the Beluria in that the purpose of contacting ancestral spirits may be to seek help with resolving family problems or to help heal a very ill family member (Izard 2005). Some Garinagu believe that if ancestral spirits are unhappy they may cause bad things to happen to people, such as making them become ill, in an attempt to get their attention (B. Palacio 2008a).

A few informants claimed that the Dügü is also as a means by which departed ancestors can ensure that certain cultural values are being maintained by the younger generations. During the Dügü, ancestral spirits may call out any serious social infringements and may specifically confront the guilty community member (B. Palacio 2008a). The Dügü is also regarded as a “solidarity” ceremony by the Garifuna (S. Cayetano 1997). On a superficial level, the Dügü unites the Garifuna since the entire village would come together to celebrate. On a deeper level, it serves to strengthens cultural practices and reinforce spiritual beliefs (S. Cayetano 1997).

Unlike the strict 9-day observance of the Beluria, the Dügü can last anywhere between two to four days and up to one week, depending on the needs of the family that summons the spirits (Foster 1986). As informants from both Seine Bight and Hopkins communities revealed, the Dügü feast consists of a wide variety of food that depends on the requests of the ancestral spirit. It often includes rice, plantains, cassava and even the meat of pigs, goats, cows, fish and sea crabs. Many days of preparation are often required.

The ceremony is led by the buyei, a high priest that is specifically chosen by the ancestral spirit (Izard 2005). The buyei will perform a Dügü only if, after contact with the spirit world, the spirits tell him whether or not a Dügü is necessary. During each day of the ceremony, there are
drummers, singers and dancers. Those that dance do so to particular beats that often hypnotize them and send them into trance-like states (Foster 1986). The Dügü eventually ends with an offering of alcoholic spirits (i.e. rum) to the ancestors and a symbolic burial of the ancestor at sea (Fisher ISB3, Personal Interview, 19 June 2008).

**Cultural Activities and Events**

There are three main cultural events that are celebrated by all Garinagu and other ethnic groups in Belize. One is Garifuna Settlement Day, observed on November 19th each year. This day was founded by the late Thomas Vincent Ramos in 1941 and was originally referred to as Carib Disembarkation Day (S. Cayetano 1997). It was not until 36 years later that the government established it as a national public and bank holiday and the name officially changed to Garifuna Settlement Day (Izard 2005).

The other two cultural events celebrated nationally are Seine Bight Day and Hopkins Day. I became aware of these cultural events during my time spent in both of these villages. Based on my conversations with informants, Seine Bight Day is typically a three-day long event observed as a tribute to the Garinagu and the village of Seine Bight. Seine Bight Day is observed yearly during the weekend that falls around mid July. It is typically a fun-filled family affair that aims to bring Seine Bight villagers together along with Garinagu from other villages under a united front to celebrate their cultural heritage. Hopkins Day events are celebrated under a premise similar to Seine Bight Day. It is observed at end of July through the beginning of August each year.
VI) Case Studies

A. Seine Bight Village

History

Seine Bight is a small fishing village situated along the southern coast of Belize. With an estimated population of less than 1000 people, this village is located in the Stann Creek District and stretches about 4 miles along the Placencia Peninsula (Lash & Austin 2003; B. Palacio 2008b). It is bounded on the north by Maya Beach, south by the village of Placencia, east by the Caribbean Sea and west by the Placencia Lagoon. It is comprised of primarily Garinagu people and it is also one of six Garifuna communities that currently exist in Belize (S. Cayetano 1997).

The village of Seine Bight was established around 1869 and was first inhabited by the Garinagu, led by Emmanuel “Walpy” Moreira. He is believed to have led this first group from Riversdale, which is approximately 20 miles north of Seine Bight (Arrivillaga 2005; B. Palacio 2008c). In addition to Emmanuel Moreira, John Martinez and Mateo Augustine also led groups that settled in areas north and south of present day Seine Bight known today as Augustine Ville and Santuario respectively (Arrivillaga 2005; B. Palacio 2008c).

Prior to establishing the Seine Bight settlement under the leadership of Emmanuel Moreira, the Garinagu settled at Jonathan Point, also known as All Pines. According to B. Palacio (2008d), in a 1989 interview conducted with a long time resident of Seine Bight, Balbino Palacio, there was a point in time when the British Honduran government suggested that all Garinagu settlers must purchase the individual parcels of land on which they lived. The Garifuna were unsupportive of this idea because they felt that it was both “stupid” and “ridiculous” to pay for “God’s land” (B. Palacio 2008 d,e).
Based on Balbino Palacio’s account a white settler known only as “Mr. Downner” purchased the entire area around Jonathon Point and offered to sell pieces of land back to the Garinagu. Refusing to pay for the land, the Garinagu travelled south of the Sibun River at Caribbal, an area south of Seine Bight (B. Palacio 2008 d,e). After a while, the Garinagu tried to declare the Caribbal areas as a Garifuna settlement but had to desist when the British government approached them once more with the idea of purchasing the land on which they resided. The Garinagu rejected the idea again and were driven off the land as a result. They then travelled 3 miles north of Caribbal and settled for good in 1869 at what is present day Seine Bight (B. Palacio 2008d; Fisher ISB3, Personal Interview, 19 June 2008).

One informant explained, Seine Bight is “literally a fishing community by name” (Fisher ISB3, Personal Interview, 19 June 2008). The word “seine” refers to the type of net that once served as a common fishing gear while the word “bight” refers to the depression or cove in the coastline near to the village. According to the same informant, residents of Seine Bight believe that Scottish pirates are the first fishermen to use seines in the village and the first to refer to the village as Seine Bight (Fisher ISB3, Personal Interview, 19 June 2008).

Seine Bight was virtually isolated and only accessible by sea until the early 1980’s when a main road was constructed to run through the Placencia peninsula (Lash & Austin 2003; Fisher ISB3, Personal Interview, 19 June 2008). Road access spurred development in the village and the peninsula. The dynamics of Seine Bight changed with this new development (Fisher ISB3, Personal Interview, 19 June 2008). The main road that passes through Seine Bight and the peninsula for that matter has since been neglected over the years, making travel to the village difficult and trying. During the annual budget debate in July 2008, the Government of Belize
announced that it had earmarked funds to be used for upgrading and paving the peninsula road during the beginning of the next fiscal year (Government of Belize 2008a).

Approximately seven years ago, several villages along the southern coast of Belize including Seine Bight, were battered by Hurricane Iris, a Category 4 hurricane that made landfall on the night of October 8, 2001. The 145 mph winds of Iris blew off many roofs and ripped apart many humble wooden dwellings, leaving hundreds of people homeless in Seine Bight. Residents were not prepared to deal with the impacts of Iris but were able to cope with the devastation and eventually rebuild their community with generous local, regional and international relief efforts. Some villagers undoubtedly wish they could change the fate of that gloomy October night. Yet, others feel that it forced a necessary physical restructuring of the village.

Community Characteristics, Structure and Organization

(i) Governance

Seine Bight, like most villages in Belize, is governed by an elected village council that serves for a maximum three-year term. Village councils have existed in Belize since the 1950’s but it was not until the Village Councils Act of 1999 that the roles and powers of village councils were defined and legalized (M. Palacio 2004). Elections are held once every 3 years, whereby a chairperson and six councilors are directly elected by eligible village residents. The current village council was elected in March 2007 (Personal Communication, Chairman of Seine Bight Village, June 2008). Village councils are responsible for providing basic services to the communities they serve, including garbage and sanitation services, street maintenance, etc. They may also oversee the provision of infrastructural improvements, public libraries and playgrounds (Government of Belize 2008b). The 1999 Village Council Act also mandates that village
councils hold regular meetings with their respective municipalities and that these deliberations must be open to the public (M. Palacio 2004).

Village councils are funded by the central government. The Ministry of Local Government facilitates access to central government grants and subventions. However, the area representative of each municipality also serves as a link to these financial sources. One informant summed up the relationship between the village council and area representative:

“There is a chain of command in terms of how things work here. One would go to the Chairman first, who would then take our concerns to the area representative.” (Fisher ISB7, Personal Interview, 23 June 2008)

Seine Bight’s village council (2007-2010) is unique in that it is made up primarily of members from one family (Fisher ISB3, Personal Interview, 19 June 2008). Some informants pointed out that this situation may be affecting the productivity of the council. With people of one family making most of the important decisions, some villagers commented that the council has no one to challenge these decisions and as a consequence, it might lack transparency. One member of the village council addressed this concern by saying that even though his family runs the council, they all have different views as how to approach decision making and problem-solving, which serves as a check and balance system (Fisher ISB3, Personal Interview, 19 June 2008).

Of the community members interviewed, there seemed to be a general consensus regarding what they thought the role of the village council ought to be in the community. All informants explained that the village council, led by the village chairman, is responsible for governing their village. When asked for specifics of how the village council governs, some typical responses were, “the Chairman runs the village and looks after the needs of the people” (Fisher ISB11,
As far as the whether the current village council is fulfilling its role and meeting the expectations of community members, there was a divergence of opinions on this issue among the informants. A couple of informants felt that the village council is “somewhat active” and they make an effort to hold seminars and regular meetings with the community (Fisher ISB7, Personal Interview, 23 June 2008; Fisher ISB8, Personal Interview, 23 June 2008). An overwhelming majority of the informants, however, complained of a village council that they feel is not doing much to improve the lives and welfare of the people of Seine Bight. Among the complaints from informants was the apparent neglect of roads, lack of job opportunities and failure to hold regular meetings to consult with the community about their concerns or issues that are affecting them.

Even though community members, in their interviews, seemed to be disappointed with the work of the current village council, they singled out the role of politics as the main underlying force that is crippling the council’s functionality. One informant summed up the issue in the following quote:

“A lot of things are hurting the village like politics. Politicians want to overrun the chairman of the village. The village chairman and village council are the only ones that can voice opinions to the politicians on behalf of Seine Bight but the politicians do not want to listen to them. The chairman and the area representative are not working together so the entire village is suffering and the village is becoming divided. The division of the community is too much for this small village to handle. Seine Bight is one big family.” (Fisher ISB2, Personal Interview, 26 June 2008)

In probing informants more about this issue, it was alleged that the village chairman and area representative cannot work together and have conflicts because they support different political
parties. The current area representative belongs to the ruling United Democratic Party (UDP). Informants claimed that the mayor is a supporter of the opposition People’s United Party (PUP). If this situation is indeed the case, this may have important implications for the council’s ability to carry out its functions until the end of its term in 2010. The area representative is the main link between the village council and access to funds from the central government. If the working relationship between the chairman and area representative is strained, this tension can limit the work of both the village council and area representative.

(ii) Community Organizations

The Church is one of the most important social institutions in Seine Bight. There are two churches in the village, the Seine Bight Catholic Church and the Church of God, also of the Roman Catholic denomination. The Seine Bight Catholic Church is run by Garifuna residents, while Church of God reportedly has a non-native, visiting priest that is only present for during special occasions, such as Christmas, and to deliver funeral services. According to one informant, in the absence of the priest, women from the village take over the services. There are also two temples in the village that facilitate Dügü ceremonies, one of which an informant referred to as the Dahbuyeba (Fisher ISB9, Personal Interview, 23 June 2008).

Most church-going residents of Seine Bight, namely women and children, attend services at the Seine Bight Catholic Church. There are a few members of the community who prefer to engage in worship at the Church of God. Both churches are active in the village and give back to the community in different ways. One informant commented that the Church of God has toy drives for children during Christmas time and also provides financial assistance to high school students in the village (Fisher ISB11, Personal Interview, 24 June 2008). The Seine Bight
Church, according to another informant, assists families with funeral expenses (Fisher ISB12, Personal Interview, 25 June 2008).

There are differing views on the role of the Church in Seine Bight. A few informants felt that the village is too small to have more than one church and that this situation serves to divide the people in the community. Other informants felt that the Church plays an important role in bringing people together in the community and providing spiritual guidance and moral support. One informant explained:

“The church plays a big role in the community. They change the lives of women, men, alcoholics, drug-addicts. I used to see girls that used to drink and who would stagger about the place but now they have stopped.” (Fisher ISB7, Personal Interview, 23 June 2008)

In addition to the Church, youth and cultural groups have an integral role in Seine Bight. There are two cultural groups that consist mostly of young people that perform dances, singing and drumming pieces within the community and neighboring villages. There are a few youth groups as well but it could not be ascertained whether or not they are still active. In the past, one of the youth groups would plan and host activities during the summer months for primary school children. A local chapter of the Boy Scouts Association of Belize is also present in Seine Bight. Some of the youths, who enjoy playing basketball and soccer, have also formed their own informal sports groups. There is one primary school and a community center. In summer of 2008, the Government of Belize pledged to construct a new community center in Seine Bight to replace the one that currently exists (Government of Belize 2008a).

Some of the women have also formed a women’s group but little information could be obtained about their activities other than that they sew and engage in arts and crafts. A few of those interviewed claimed that there is also an environmental group in the village managed by local villagers. One former organizer of the environmental group mentioned that “villagers can

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report cases [to the environmental group] when they see fishermen catching turtle...if the fisherman does not release the turtle the villagers can report it” (Fisher ISB8, Personal Interview, 23 June 2008). The exact roles and functions of this group are not well-known. Furthermore, some villagers feel that since it is now defunct, it is more difficult to know what the initial objectives of this group were.

Despite being a traditional fishing village, Seine Bight does not have even one fishing co-operative. In fact, this village has never had one. Proposals have been made in the past to establish one, but never came to pass. An older fisher shared that “We tried to start a co-op some years ago but lacked the finances to buy machines, skiffs, etc, so we did not continue to pursue the issue” (Fisher ISB2, Personal Interview, 26 June 2008). The non-existence of a fishing co-operative in Seine Bight is in contrast to its closest neighbor on the peninsula, Placencia Village, which currently has its own fishing co-operative, originally founded in 1962 (Espeut 1992). Additionally, the lack of a formal fishing co-operative in Seine Bight could be attributed to the fact that fishing in the village has not been commercialized as in other traditional fishing villages. Instead, Seine Bight fishers practice subsistence fishing and have always been able to supply fish to the local market without having a fishing co-operative in the village.

As far as one informant can recall, even though Seine Bight has never had a formal fishing co-operative society, an informal one used to exist prior to the 1980’s. Specifically, the village has had small entrepreneurial business enterprises owned by a single individual that would also serve to micromanage the local fish market. It is important to note here that informants, however, used the term “co-op” interchangeably to refer to co-operatives in the traditional sense as well as to small, individual-owned businesses. For example, an individual known as Mr. Nicholas, also referred to as “Game and Gone”, used to maintain a couple of freezers where
fishers could stock their catch and sell it later (Fisher ISB9, Personal Interview, 23 June 2008). After the 1980’s, however, commercial fishers would sell their catch at local markets in Hopkins Village and Dangriga, and at fishing co-ops in Placencia and the Northern Fishermen’s Cooperative branch at Mango Creek.

Another account is of a young United States citizen, Mr. McGinnis, believed to have initiated the village’s first informal fishing co-op. According to one fisher, McGinnis was based at Laughing Bird Caye and owned two boats and diving equipment. He arranged for the trade of fish and is credited for providing local fishers with an opportunity to learn how to dive. As a result of a run-in with the wrong side of the law, he was deported to the US to serve a jail sentence and the informal fishing co-op initiative consequently collapsed (Fisher ISB12, Personal Interview, 25 June 2008).

Seine Bight, like most coastal villages in Belize, has a Water Board. The Water Board is responsible for managing water supply and consumption in the village. They prepare and issue water bills and use the monies collected to support its small staff in addition to carrying out maintenance work on pipelines. Apart from securing water supply to the village, the Water Board also has a discretionary fund to assist members in dire financial straits in the community. One example often cited by informants whereby the Water Board assists community members is the case of deaths, in which they would help families with the necessary finances to cover funeral costs (Fisher ISB6, Personal Interview, 20 June 2008; Fisher ISB7, Personal Interview, 23 June 2008). It was pointed out, however, that since the Water Board has limited funds, the financial assistance it provides to a villager in need is typically only partial.

Community groups in Seine Bight are all somewhat connected since the community is so small and the people involved with the Church, cultural and women’s groups and Water Board
are the same. Some of the informants claimed that this situation contributes to a sense of unity among these groups.

(iii) Economy

Historically, fishing and farming were the mainstay economic activities in Seine Bight (J. Palacio 2007; B. Palacio 2008f). Today, however, several other activities contribute to the village’s local economy. The community depends on the tourism sector to support household incomes. There are two luxury resorts, and one modest locally-owned guesthouse. Several villagers work as tour guides and at the resorts in Seine Bight and the neighboring Placencia and Maya Beach communities. Other villagers derive economic benefit from the tourism industry through cultural performances, art and gift shops, restaurants and bars, and masonry.

Other than private sector jobs, some Seine Bight residents serve as police officers, soldiers in the Belize Defense Force, and also work as nurses and teachers in government-operated hospitals and schools respectively. The income stream in Seine Bight is not always stable and has undergone significant changes over time. One informant recounts that in the past “household incomes were once largely derived from the sale of fish landings but are now sustained by social security checks, relatives in the U.S. that send ‘a little change’ and daily hustling for ‘ketch and kill’ jobs” (Fisher ISB1, Personal Interview, 19 June 2008). “Ketch and kill” jobs refer to job opportunities that are usually random, short-lived, requiring low-skill, and of low wages that are up for grabs by the unemployed members of society. Most eligible retired and elderly villagers receive monthly stipends from the Social Security Board. In speaking with other informants, there seems to be a significant portion of the village that depends on assistance from family members that have migrated to foreign countries, such as the United States. With a high unemployment rate and given the seasonal nature of tourism and fishing to a certain extent, job
stability often fluctuate leaving some villagers with no other choice than to take up the so-called ‘ketch and kill’ jobs as they become available.

There are no economic or commercial centers in Seine Bight. Specifically, there are no banks or credit unions in the village. Any financial business must be conducted at neighboring Placencia or in Dangriga Town located about 30 miles north of the village. The fact that there aren’t any financial institutions in the village and that villagers have to travel to seek loans or conduct basic transactions may be a limiting factor to the development of the community and the stability of its economy.

(iv) Ethnicity

There are several different ethnic groups that reside in the tiny village of Seine Bight. Throughout history, this village has been predominantly a Garinagu community (J. Palacio 2008). This is still true today. One informant recalled that 30 years ago there was only one non-Garinagu family in the village. This family was of Hispanic decent. Even though this family was not Garinagu, they blended into the village well by learning to cook Garifuna dishes, participating in cultural activities and even learning to speak Garifuna. According to the informant, the family knew the Garifuna language so well that if someone passed a negative comment about them in their presence, they would quickly respond with an insult in Garifuna (Fisher ISB3, Personal Interview, 19 June 2008).

Since that time, there has been a steady influx of Mestizo (of European and Amerindian ancestry) in the village from various districts within the country, as well as immigrants from Central American nations. Most of these people work as masons at tourism-related development sites on the Placencia Peninsula. There is a small population of Creoles (of African and European descent), North Americans, Europeans and Chinese/Taiwanese residents. The North Americans
and Europeans are mostly retirees or the owners of the resorts and other small businesses in the community. The Chinese/Taiwanese own one of the largest grocery stores and restaurant in the village.

While my observations of ethnic relations within Seine Bight during my short term stay appear to be harmonious, the same cannot be said for ethnic relations between the Seine Bight and Placencia communities. Most, if not all, informants alluded to long-standing ethnic tension between the Garinagu of Seine Bight and Creoles of Placencia that have intensified with time. This tension runs along the line of differences in skin color. Informants shared that in their experiences, Creoles with lighter skin pigmentation deem themselves as having more dominant features compared to the dark-skinned Garinagu. Informants believe that the Creole’s notion of dominance has translated into an ethnic stereotype against the Garinagu, whereby some of light-skinned Creoles exhibit behaviors toward the Garinagu in which they insinuate that the Garinagu are an inferior ethnic group.

(v) Gender Roles

One male informant pointed out, “Women are important to the community. They are the backbone of the community. They help to keep families together.” (Fisher ISB8, Personal Interview, 23 June 2008) These statements are consistent with the traditional roles that Seine Bight women have had in the community as mothers and housewives. Even though women took care of the children, it was the men who were the disciplinarians in the household. This is still true today. In addition to keeping the household together, women also took on the role as bread-winners of the family through farming and fishing activities. According to most informants, women primarily planted and harvested cassava (*Manihot esculenta*), also known as manioc or *ereba* in Garifuna. This woody shrub, native to South America, is now widely grown for its
edible starchy root. The harvested product was used to make cassava bread, a rich source of dietary carbohydrate (S. Cayetano 1997; Izard 2005). When their husbands went on long fishing trips, women would fish to feed the family.

A few women sought different ways to earn incomes outside their home so that they could better meet the financial needs of their families. For instance, one informant’s mother used to cut firewood and the travel to Mango Creek Village to sell it (Fisher ISB2, Personal Interview, 26 June 2008). It was not until the late 1970s and early 1980s, however, that women had an opportunity to enter the job market. Women first worked as banana packers in Cowpen Village, one of seven communities that comprise the ‘banana belt’ in the Stann Creek and Toledo districts of Belize (Fisher ISB3, Personal Interview, 19 June 2008; Fisher ISB11, Personal Interview, 24 June 2008).

Later on the 1980s more women entered the work force and worked in one of the country’s first citrus processing plants, Citrus Company of Belize Limited, located in Pomona Village, Stann Creek District (Fisher ISB12, Personal Interview, 25 June 2008). Jobs at both the banana farms and citrus processing plant were short-lived for many women. According to a few informants, women could no longer secure accommodation and transportation to and from their work sites and so had to quit. Yet another account stated that the companies stopped hiring Garifuna workers and instead hired mostly Hispanics (Fisher ISB11, Personal Interview, 24 June 2008). Today, there are at least 6 or 7 women from Seine Bight that reportedly still work at the citrus processing plant (Fisher ISB12, Personal Interview, 25 June 2008).

While the issue of transportation to and from worksites remained unresolved, some of the women refused to leave the Peninsula again to seek jobs. Others, though, migrated to other parts of the country where they sought educational opportunities and became employed as teachers,
nurses, police officers and soldiers. The emergence of the tourism industry on the Peninsula created more job opportunities, which were ideal for women who wanted to earn an income and be able to go home to their families at the end of each work day.

Many women in the village still work at resorts and hotels in Seine Bight or on the Placencia Peninsula. For some of these women, working in the tourism industry provides them with some economic independence from their husbands. Some female informants explained that women’s dependence on the incomes of their fishermen husbands can often be risky and unstable, especially since some of their husbands would waste away more than half of their fishing wages on alcoholic habits. Thus, for some women having a steady job allows them to have a secure income flow for the family, independent of their husbands. Even though women have more job opportunities today, the types of jobs they do still confine them to the traditional domestic roles they have always held in the household. These typical jobs available include waitressing, cooking and housekeeping.

A few of the men interviewed felt that ever since women started to earn an income, there has been a negative impact on the family and the community. One of them said:

“The role of women is changing and this is causing children to be unruly. There are many unattended children and they [women] seem to spend less time with their children.” (Fisher ISB7, Personal Interview, 23 June 2008)

Another informant complained that:

“Nowadays, children are straying too much and have little supervision. Babies are having babies. Now they are more single parents.” (Fisher ISB8, Personal Interview, 23 June 2008)

Some of the men were also concerned about how women’s economic independence might also be affecting the traditional husband-wife relationship. One of them pointed out that “with
women working. it can create problems because the women would stop listening to their husbands since they are making more money” (Fisher ISB8, Personal Interview, 23 June 2008).

While some men interviewed strongly suggested that working women are spending less time in the household with their children, others expressed that working mothers are not negatively affecting the household or the family. In fact, these same male informants strongly supported women’s shift from housewife to career women because it meant that the household would have at least two incomes for maintaining the home. As one male informant articulated,

“Some men disagree with women who work but men alone cannot meet the commitments of the household. If my mom had worked, my father would be concerned that her absence from the home would mean that he would have no food on the table as she would not be there to prepare it for him. The way I see it is that it is better if both me and my wife work because I am concerned about paying bills.” (Fisher ISB7, Personal Interview, 23 June 2008)

Another male informant suggested that there are things that could be done to ensure that children do not go astray while both parents are working. Parents could leave their children under the supervision of an older family member, typically the grandmother, with chores to keep them occupied. He felt that not only would children have something to do that would keep them inside of the home and out of harm’s way but that chores are meaningful and would give children structure and responsibilities (Fisher ISB11, Personal Interview, 24 June 2008).

Despite the lure of financial independence that comes with having a job, not every woman in Seine Bight is willing or able to work. Many of the women that do work today are able to do so because of grandmothers that provide free daycare for their grandchildren. Not every woman of childbearing age is fortunate to have assistance with childcare and so simply remain at home. Others are simply genuinely interested in looking after the needs of their children. One female informant mentioned that she used to work around the clock at one of the resorts on the
Peninsula. Once she gave birth to her daughter, though, she knew that she wanted to be a stay-at-home mother so that she could provide the kind of child care she feels her daughter deserves. In order to ensure that she would still contribute an income to her household and would not have to depend heavily on her husband, she decided to open a business at her residence (Fisher ISB9, Personal Interview, 23 June 2008).

There are a few women in the village that have small businesses that they run out of their homes. Some sell groceries, fast food, snacks and pastries or even offer sewing and basket-weaving services. It was the opinion of most of the informants that more women would venture into owning businesses but they simply do not have the money to make the investment. One male informant felt that women want to help themselves and their families but they sometimes do not get the kind of support they need from their husbands: “Such women need business-minded husbands if they are to make any progress with opening up their own businesses” (Fisher ISB2, Personal Interview, 26 June 2008).

Most men are the primary bread-winners and household heads within nuclear families in Seine Bight. Despite this, some of them do help their wives with taking care of children and the house. I personally observed one husband who made sure his children were properly dressed before leaving for school and who even went on to spend most of the morning preparing meals to be sold at their restaurant.

(vi) Current Issues

Drugs

Many of those interviewed made no mention of the presence of narcotic drugs and any such drug-related problems in the community. One informant talked briefly about the presence of ‘sea lotto’, parcels containing drugs such as cocaine that have been lost or intentionally left for
pick-up at certain areas in the sea. The informant mentioned that ‘sea lotto’ hardly drifts in front of the village. Instead, the informant believes that residents of Placencia, particularly fishers, are the main people on the Peninsula that have been involved with ‘sea lotto’ and who have reaped the benefits from its sale by building upscale resorts or buying expensive skiffs (Fisher ISB2, Personal Interview, 19 June 2008). Although another informant mentioned that drug-addicts are in the village, little was revealed about the type of drug addiction and the kinds of problems that have been consequently introduced into the community.

One drug-related problem that informants identified as negatively inflicting their community was that of excessive alcohol consumption, primarily by male youths and middle-aged men in the village. Some of the older villagers interviewed complained that all the youths wanted to do was drink. Several of my early morning walks (6:30am) in the village confirmed that there were indeed men in the village that would start their morning with a drink or two. Coincidentally, there seemed to be more bars than restaurants and grocery stores in Seine Bight. However, it was difficult to establish the extent to which alcohol consumption was problematic in the village.

Crime

In a village of about 900 residents, a modest police station stands near the beach that deals with any crime that may arise in the village from time to time. For the most part, this police station remains closed and there are no regular patrols by members of the Police Department that would even suggest the presence of law enforcement officers in the village. This low presence of police officers in Seine Bight may probably because the prevalence of criminal acts, such as theft and robberies, is either not reported or not widespread.
Teenage Pregnancy

The occurrence of teenage pregnancy has always existed in Seine Bight but for some villagers, the rate at which it is occurring these days is out of control.

“Teenage pregnancy is plaguing our community. When I was a young boy, teenage pregnancy was taboo. In fact, teenage pregnancy was regarded as a disgrace to the family and the pregnant teen would hardly be seen. They would go into hiding. Today, pregnant teens roam the streets proudly.” (Fisher ISB1, Personal Interview, 19 June 2008)

Some informants blamed this social ill on the shift of women from their traditional roles as stay-at-home mothers to members in the local labor force.

Fishing in Seine Bight: Past and Present

(i) People

To the Garinagu of Seine Bight, being a fisher is a large part of what makes them Garifuna. The art of fishing was mastered by their ancestors on the island of St. Vincent. The consumption of fish is a very important part of the diet of Garifuna and fish is available everyday in the community. As one villager told me:

“We eat fish everyday and would rather eat it than chicken. My children do not eat meats other than fish. If I carry non-fish meats into my home, I will be the only one to eat it.” (Fisher ISB12, Personal Interview, 25 June 2008)

In addition to its role in the diet and cuisine of the Garifuna, the art of fishing has always been important for special rituals and ceremonies, such as the Dügü as was previously mentioned.

There are now less than 25 fishers that engage in regular fishing activity in a village that was once considered a thriving fishing community. There are several reasons why the number of fishers in present day Seine Bight is so little, relative to other traditional fishing villages. One reason that some informants cited was that many of the traditional fishers have died and not
enough young people have picked up the profession. Thus, the handful of traditional fishers that remain are in their 60s and early 70s. It was explained that while some members of the younger generation definitely have no intention of taking up fishing as their profession, those desiring to do so lack gear and access to boats. Other deterrents include the introduction of fishing regulations and fishing license system, the rising cost of fuel, and the cost of fishing gear.

(ii) Gear

Most fishers in Seine Bight use small dugout canoes, also referred to as dories, for fishing trips. The use of dories dates back to when the Garinagu resided in St Vincent. Dories were the medium of travel of the Garifuna from St. Vincent to the southern coast of Belize. There are at least two 3-person fishing groups that use motor-powered boats. These fishing groups consist of men in their late 20s to mid-30s. Dories are used mainly by the older fishermen and by those women that engage in fishing activities. Some fishers interviewed stated that even though they are happy that dories are still being used, they limit fishers to certain spatial and temporal fishing ranges.

The early Garinagu in Seine Bight employed a variety of fishing methods. Some of these methods include the following (the common-names are in English and Garifuna): drop-line fishing (abarihani); trawling (asabuihani); towing (ahiyuhani); line setting (asetiha); casting (atabahani); striking (imirahani); torchlight fishing (aganahani lau igemerì); seine fishing (asenihani) and net casting (asiwirihani) (B. Palacio 2008f). Today, most of the Seine Bight Garifuna use hand lines and gill nets for fishing, with a few of the commercial fishers using fishing rods. Ironically, many informants are against the seine fishing, despite being the village’s name sake, because they feel that it indiscriminately captures too many juveniles.
(iii) Species

With the exception of the handful of commercial fishers in Seine Bight, the majority of fishers land fish species that occur near the shore. These include several species of snappers, a type of fish found in the Lutjanidae family. Some snapper favorites include red snapper (Lutjanus campechanus), black snapper (Apsilus dentatus), yellow-tail snapper (Ocyurus chrysurus) and mutton snapper (Lutjanus analis). Other species typically caught in seas in the peninsula region include barracuda (Sphyraena barracuda), grunt (Pomadasys crocro), jacks (Carangidae family), King mackerel (Scomberomorus cavalla), Spanish mackerel (Scomberomorus maculatus), and mullets (Mugilidae family). Groupers (Serranidae family) were also a favorite catch until it became illegal to catch groupers in Belize. The Nassau grouper (Epinephelus striatus), in particular, used to be one of the more popular grouper species to be landed by fishers because of its high quality meat. Some commercial fishers harvest the Caribbean spiny lobster (Panulirus argus) and Queen conch (Strombus gigas) during legally mandated harvesting seasons, in addition to commercial reef fish mentioned above. A few fishers also harvest blue crabs (Callinectes sapidus), locally known as “rawti”, which occurs on days when they can not make fishing trips because of rough sea conditions. Color images of the above-mentioned marine species can be found in Appendix C.

(iv) Locations/Times

One fisher interviewed was very proud when he shared with me that “the best fishing grounds are in southern Belize” (Fisher ISB3, Personal Interview, 19 June 2008). Most non-commercial fishers in Seine Bight fish within a close distance to fishing grounds near to them. Specifically, they would fish approximately 1-3 miles along the coast of Seine Bight, Riversdale, Maya Beach, and Placencia. Several fishers with access to motor-powered boats claimed to have
fished at Laughing Bird Caye National Park (LBCNP) and Gladden Spit Marine Reserve (GSMR).

Knowledge of fishing grounds, complemented with an intimate familiarity of foraging habits and spawning periods that are timed with moon phases, are the basic rules for any fisher that wants to be successful. As one informant reflected on his grandfather’s fishing skills, he noted that “the elders know the location of the best fishing grounds. I am fascinated with the fact that the elders know exactly where to fish.” (Fisher ISB3, Personal Interview, 19 June 2008). Most of the elder fishers interviewed expressed that if approached by a young fisher, they would be more than willing to pass on their knowledge about selecting the perfect fishing spot.

In an ideal fishing world, most fishers in Seine Bight would prefer to fish during the nighttime because some kinds of fish, like black snapper, bite more then than during the day. However, because most only have their dories at their disposal, they do not want to take the chance to be on the sea at night in such a small craft. Fishers also seek certain fish species at specific times of the year. For instance, they used to fish for groupers and some snapper species specifically from November to February because during this time groupers and snappers “bite like crazy” (Fisher ISB7, Personal Interview, 23 June 2008). November to January is also the best time to catch mullets in the muddy waters off the Seine Bight coast. Mutton snappers would be sought at LBC during the months of April through to June. Lobster can be harvested during June 15th to February 14th, while the conch open-season runs from October 1st to June 30th (Government of Belize 2000b).

(v) Territoriality/Fishing Rights

During most times of the year, several different fish species are available. Fishers claim that their ancestors used to enjoy the freedom of being able to fish wherever and whenever. This
liberty remained true until the introduction of fisheries management policies and the carving of the sea into marine management areas, both of which fishers claim have caused temporal and spatial limitations to their fishing activities. The following quote from an informant echoes the sentiments of many fishers regarding the apparent restriction on their fishing rights:

“Regulations also make it difficult for the small-scale fisherman. Before fishing laws were in place, a fisherman could fish at anytime and anywhere and catch whatever he wanted. With fishing laws in place and regular enforcement/compliance monitoring, fishing is now a gamble. For instance, if I fish and I catch a big grouper during the closed season, I know I should throw it back in the sea. However, I would think to myself that I could make $5 from the sale of this fish or that I could feed my family...so I would want to keep it. But because fishing regulations are so strict, I would throw back the fish. The cost of keeping that fish and being caught by the authorities would far outweigh the potential benefits. I could lose my fishing license, get summoned to court, pay fines, or even lose my dory.” (Fisher ISB1, Personal Interview, 19 June 2008).

Some fishers even fear fishing near sites in the sea that are under conservation and protective status because they fear that they might be imprisoned. Still, the idea of restricting who can fish in southern waters and the times and places of fishing activity is regarded as beneficial by others since it would mean less foreign fishers to exploit Belizean marine resources.

(vi) Markets/Uses

Most fishers in Seine Bight are subsistence fishers, meaning that their catch is primarily to supply their immediate family members and at times close friends, such as neighbors. However, some of them supply the community as well. Of the fishers interviewed, male fishers tended to sell some of their catch more often than female fishers, who said that they almost never sell their catch. When fishers were asked if they had to make special arrangements for selling their catch within the community, almost all responded with a “no”. For the most part, members in the
community know who the fishers are and the days of the week in which they go on fishing trips, except when the weather is bad. Those seeking fish would go to the fisher’s home after his fishing trip ends. This custom makes the homes of fishers into unofficial market places.

Depending on the type and size of fish caught, fishers may charge BZ$3, $4 or even $5 per pound. Some residents complain that the fishers are charging too much for fish. In response, fishers point out that increasing fuels cost leave them no choice but to increase the selling price per pound:

“It takes many hours to catch one fish and people do not realize this. They do not want to buy the fish but we must factor this in to the price. When we go fishing at the Cayes, we need to buy ice to preserve our fish, food while we are away from home, gas for our boats, and fishing line and hooks. People do not realize that these things need to be factored into the price, in addition to labor.” (Fisher ISB5, Personal Interview, 20 June 2008)

The handful of commercial fishers in the village also sell fish to villagers but most of their catch is sold to the Northern Fishermen’s Co-operative located at Mango Creek village.

(vii) Foreign Fishers/Fishing

From as far back as most fishers in Seine Bight can recall, foreigners have always fished in Belizean territorial sea and created problems for the fishing industry in Belize. Seine Bight fishers have identified three reasons why foreign fishers are problematic. First, foreign fishers harvest fish rather indiscriminately. Many Seine Bight fishers believe that this act has resulted in the decline of the overall fish stocks over time. Second, their fishing techniques (e.g. gill nets) are viewed as destructive. Third, fishing has become dangerous as a result of foreign fishers that take guns and other weapons at sea in order to seize marine products from unsuspecting fishers.

A few Seine Bight fishers interviewed identified fishers from Sarteneja Village as ‘foreign’, since they are originally from northern Belize. Sarteneja fishers are also viewed as problematic
because they have a tendency to harvest fishing grounds intensively until all the fish in the area disappear. Other informants claimed that even though Sarteneja fishers were fishing on their turf, they are still Belizeans and should be entitled to the same fishing rights and use the same fishing grounds as southern Belizeans.

For Seine Bight fishers, the real problematic foreign fishers hail from Guatemala and Honduras. These foreign fishers are believed to fish at night time when fisheries managers are not vigilant. “During Easter, Guatemalans use long line nets and much larger boats than we use and the government does nothing about that. They catch sharks, etc and there’s a lot of wastage associated with the use of long line nets” (Fisher ISB4, Personal Interview, 20 June 2008). One recommendation offered by an informant for managing the poaching problem is a multi-national collaboration that would include teaming together coast guards from Belize, Guatemala and Honduras to expand patrol and monitoring capabilities (Fisher ISB3, Personal Interview, 19 June 2008).

According to most informants, Seine Bight fishers complain that the problem of foreign fishers is perpetuated by the politics of obtaining permits to fish in Belize. For instance, many informants cited the example of corrupt politicians that have endorsed applications for fishing permits, and in some instances Belizean citizenship, in exchange for votes. This claim was somewhat supported by an officer working for the Belize Fisheries Department:

“There are fishermen who come in to the office that have Belizean passports but whom I know are not residents of Belize. They are from these same places, Guatemala and Honduras. How they got the Belizean passports remains a mystery to me. In any case, if someone comes in to the office and applies for a fisherman’s license with a valid Belizean passport, we cannot turn them away.” (Personal Communication, Belize Fisheries Department staff, 30 July 2008).
Seine Bight fishers find this practice not only unethical but unfair since they feel that there are many Belizeans that are denied rights every year because of the high level of corruption possessed by the high-ranking government officials that are involved with the issuance and renewal of fisherfolk licenses.

In response to accusations against Hondurans as illegal fishers in Belizean waters, one Honduran fisher explained that the case being made against Honduran fishers have no basis:

“Honduran fishermen have their licenses to fish in Belizean waters because they cannot cross the water borders without having a license. If they do, they know that they are looking for trouble. I do not think they go against the laws. They have to pay for licenses two ways; they have to get a license in Honduras and then get one to fish in Belize.” (Fisher ISB4, Personal Interview, 25 June 2008)

The Honduran fisher also felt that in light of the fact that Hondurans obtain the necessary licenses to fish in Belize, there is no need for Belizeans to complain. “I do not see anything wrong with Hondurans fishing in Belizean waters. They pay for their licenses...everybody is paying the same money to get their license. They are simply trying to make a better life for themselves.” (Fisher ISB4, Personal Interview, 25 June 2008)

(viii) Role of kinship

Kin relations have always played a very important role in keeping the fishing tradition alive in the Garifuna culture. This role is still true to a very large extent today. In the case of Seine Bight, most fishers claimed to have learnt the “rules of the game” either from their parents, grandparents or in some instances, from their older siblings. Fishing knowledge is typically passed down to future fishers at a very young age. Additionally, traditional fishing knowledge is passed down to both female and male children. One informant remarked that “I used to be excited when I would come home from school and go fishing with my grandfather” (Fisher ISB8,
Personal Interview, 23 June 3008). Typically, children would engage in fishing as an after-school activity or during major breaks from school during the summer, Christmas, and Easter. Some families also tend to take fishing trips together. For instance, one female fisher interviewed, who learnt to fish from her grandmother, aunt and uncle, mentioned that she is often accompanied by her aunt whenever she goes on a fishing trip in her dory (Fisher ISB9, Personal Interview, 23 June 2008).

(ix) Role of Fishing as Recreation

Fishing as a form of recreation is viewed as an activity done by women, children, and tourists. This view is not only held by male fishers but by those female fishers that were interviewed as well. “Women fish not because they are forced to do so but because of a love for fishing. They do it as a leisure activity. They do it for pleasure.” (Fisher ISB4, Personal Interview, 20 June 2008) Even though a few male fishers recall being on fishing trips with their wives or family, their mindset is believed to be totally different. While male fishers claim to think of how many fish they can catch to feed their families and sell, “women take fishing as a sport” (Fisher ISB8, Personal Interview, 23 June 2008).

(x) Recreational fishing as an industry

Recreational, or sport fishing as it is commonly referred to in Belize, is not popular in Seine Bight. There are a few villagers that work at resorts nearby and serve as guides on fly-fishing tours, however.

Community Involvement with Study MMAs

The history of use of Laughing Bird Caye (LBC) and Gladden Spit (GS) by Seine Bight fishers varies. Some informants had fished at either LBC or GS or both but most informants
claimed to have never used any of these sites personally even though they had heard about them. There were quite a few fishers that were interviewed, including the two female fishers, which claimed to have never visited LBC or GS. For those that have used LBC, it served mainly as a camping site during regular fishing trips and special ones, such as the gathering of marine products for the Dügü ceremony. As previously mentioned, GS used to be frequented primarily during the mutton snapper season, which runs from April through June each year. Current fishers feel that the primary users of LBC are fishers from Placencia. As far as informants in Seine Bight were concerned, the users of GS vary but Sarteneja fishers were singled out as the group that uses the fishing grounds the most.

**Relationship with and Perception of “the Environment”**

The word “environment” often means different things to different people. This is especially true in a country like Belize where the introduction of environmental activism in the 1990s ushered in challenges to traditional views of the environment. Prior to the 1990s, human life was viewed as superior to nature. The “environment” was something to manipulate, conquer and control, a view regarded as the vestigial remains of the legacy of British colonists and their treatment of the environment (C. Gonzalez 2007). A majority of people not convinced by the merits of the environmental movement continue to place a relatively low value on the biotic and abiotic factors that comprise the biophysical environment. However, for those that are intimately involved with the environment in their daily activities and whose livelihoods depend on it, the environment is of utmost importance.

In Seine Bight, informants struggled to provide a concise definition for the environment and seemed to feel more comfortable to express their feelings with a description. Most informants referenced abiotic factors when asked to explain what “the environment” meant to them, but
there were some informants that spoke about biological elements of the environment, such as fish. For instance, one informant responded:

“Seine Bight has the best beach in the country of Belize: the sand is clean and beautiful and the beach is in its natural state with no sea walls. The environment in Seine Bight is important to me. I like when my environment is clean.” (Fisher ISB8, Personal Interview, 23 June 2008)

Several other informants echoed this sentiment, explaining that “both [the land and sea] are important to my daily survival”. This sentiment was also shared by both male and female fishers alike.

On one level, taking care of the environment is a matter of ensuring the sustainability of resources for use by the future generations of Seine Bight. But on another level, environmental stewardship is driven by the expression of personal pride in an inheritance from one’s ancestors. From picking up garbage along the beach to throwing back baby fish that get caught on hand lines, each person contributes in his or her own way to protect the biophysical environment in Seine Bight.

There are several threats to the integrity of the environment within and near Seine Bight. A threat of major concern to the Seine Bight community is that of development. For instance, the expansion of the peninsula in recent years, particularly Placencia, has been accompanied by large-scale dredging activities that have included mangrove removal, a very worrisome issue for Seine Bight residents:

“Dredging is a major problem in this area, especially in Placencia. It destroys (and is destroying) the ecology of the Placencia lagoon. Dredging destroys fishing grounds. When areas are dredged, nurseries that serve to protect and nurture for baby fish before they venture into the Placencia lagoon and the open sea are disturbed. I don’t need science to tell
me that! Silt from dredging drives away our fish. The government needs to clamp down on protecting our coast.” (Fisher ISB3, Personal Interview, 19 June 2008).

As the peninsula as a whole continues to expand, concerns about increased dredging activities and the further loss of mangrove forests intensify in Seine Bight.

The introduction of trawlers is often implicated in the decline of once bountiful fish stocks in southern Belize. According to one informant, the first trawlers were introduced in the country about 30 years ago and were owned by Honduran nationals. These trawlers “raked the bottom of the sea and destroyed our fishing industry” (Fisher ISB3, Personal Interview, 19 June 2008). The use of gill nets and other destructive fishing practices, both by those within the community and otherwise, is also another highly contentious issue.

Some members of the Seine Bight community often feel that the government of Belize, regardless of the political party at the helm, is “a major obstacle to protective policies as they relate to the environment” (Fisher ISB3, Personal Interview, 19 June 2008). These community members feel that no matter how much they opposed major developments based on the potential damage to the environment, the government would ignore their concerns and approve such developmental projects anyway. It was suggested by some villagers that the community may need to regroup and rethink new strategies that would allow the government to hear their voices in regard to protecting their environment.

**Women and Marine Activities**

Based on the information received from informants, fishing in Seine Bight has never been an activity limited to men. Women also went out in dories too to catch fish. Unlike their male counterparts, their catch was limited to subsistence use. They would fish with their husbands or next of kin, such as a sister, aunt, or grandmother. Compared to three decades ago, there are
only a handful of women that still fish along the shoreline today mainly because the younger generation of women has shifted from being traditional housewives to active career-seeking females.

Women fished for a variety of reasons. For those that were unmarried or separated from their husbands, they would fish in order to help themselves. “If they wanted to eat fish but did not want to buy it, then they would go out and fish” (Fisher ISB5, Personal Interview, 20 June 2008). Others fished while their husbands worked in the family farm or took up other occupations. As one male fisher explained, “gendered roles for men and women did not exist back then so it wasn’t seen as a problem if women fished and men did not. However, because society is gendered now, men who let their women fish are looked down upon.” (Fisher ISB3, Personal Interview, 19 June 2008)” Despite the reason behind taking a fishing trip, both men and women agree that there is no questioning whether women derived great delight from fishing.

Changes Accompanying the Establishment of Study MMAs

(i) Community Relationship to Reserve/Park Policy and Management Process

Prior to the establishment of Laughing Bird Caye National Park (LBCNP) and Gladden Spit Marine Reserve (GSMR) as marine managed areas, Friends of Nature (FoN) and the Belize Fisheries Department (in the case of GSMR) held consultation meetings in Seine Bight and other stakeholder communities. Meetings were open to fishers, members of the village council and Water Board, as well as all other interested villagers. A few of the informants interviewed claimed that they did not attend the meeting. Those that did attend had mixed feelings about the purpose of the meeting and were very suspicious of the reasons behind converting LBCNP and GSMR to protected sites.
Most informants that attended the consultation meetings felt that FoN’s “gesture to include this village in the consultation process for the establishment of Laughing Bird Caye and Gladden Spit was not really genuine” (Fisher ISB2, Personal Interview, 19 June 2008). Some informants claimed to be under the impression that FoN “already had their own decisions regarding the management of the then proposed MMAs” and that “the consultation process seemed like a necessary formality” (Fisher ISB1, Personal Interview, 19 June 2008).

Informants that participated in the process felt that their role was very minimal compared to members of the Placencia community. The Seine Bight informants felt this way for several reasons. First, since FoN is based in Placencia, villagers of Seine Bight felt that Placencia residents were the first to be informed of FoN’s plans long before other stakeholder communities. Second, several informants claimed that a well-known fisher and businessman from Placencia was speaking to them on behalf of FoN. These informants felt that it was unethical and a conflict of interest on the part of FoN to have a Placencia fisher be the spokesperson for a FoN-GOB fishery management initiative that would affect a variety of stakeholders, other than Placencia fishers. And finally, quite a few fishers felt that Placencia “had more say [influence]” in the establishment of the LBC and GS because “they are the larger community, they have more fishermen, more money, better boats and more equipment” (Fisher ISB7, Personal Interview, 23 June 2008).

Some community members were against designating LBC and GS as protected marine spaces because they felt it meant that they would lose all rights to use these areas. According to one informant that attended consultation meetings, even the wives of some fishers rejected the proposal on the grounds that “their households depend solely on fishing” and that “it did not make any sense for their husbands to have boats and can’t fish” (Fisher ISB3, Personal
Interview, 19 June 2008). There were some informants, however, that were convinced from the start of the consultation process that they would benefit from the protection of these sites. They believed that fish populations would rebound but more importantly, it would help to control the problem of illegal fishers in the area.

(ii) Displacement of Traditional Fishing Activities

The effect of LBCNP and GSMR establishment on fishers in Seine Bight was probably more psychological than anything else. Some fishers felt that they have lost ownership of these fishing grounds. There were indeed commercial fishers that were affected in that they could no longer use LBC as a campsite or had to fish within certain zones at GS. But FoN secured an alternate camping site and they could still carry on the tradition of fishing for mutton snappers at GS. As one informant explained, “MMAs, such as GS and LBC, do not affect the livelihoods of the people of Seine Bight because we don’t go that far to fish. We would normally go to only Long Caye, False Caye, Jonathan Point and Placencia.” (Fisher ISB2, Personal Interview, 26 June 2008) A few informants also shared that “we can get by without fishing at the protected areas because there are many other fishing grounds” (Fisher ISB6, Personal Interview, 20 June 2008; Fisher ISB7, Personal Interview, 23 June 2008; Fisher ISB11, Personal Interview, 24 June 2008; Fisher ISB12, Personal Interview, 25 June 2008).

Several informants, however, complained that they were affected by the introduction of a special licensing system to fish for mutton snapper. These informants explained that licenses are unaffordable and seems like a waste of effort.

“Fishing licenses make it difficult for fishermen to make a living and sometimes, they even seem unnecessary. For example, if I am a helper on a boat, I do not think I should have a license to fish. I am only the helper. The boat captain should be the one to have a license and be responsible for licensing the boat. As a helper, I cannot fish if I do not have a
license...they will lock me up. Not only does each person on the boat need to have a license
but if you want to fish for mutton snapper or grouper, you need to have special licenses to
fish them.” (Fisher ISB5, Personal Interview, 20 June 2008)

(iii) **New Opportunities/Activities**

Even before the establishment of the MMAs, some informants claimed to have noted that
fishing was on a decline and that they would need to find another source of income. People were
shifting their livelihoods towards the local tourism industry, such as working for resorts.
Commercial fishers in particular started to use their boats for sport fishing activities. These
fishers realized that tourists were willing to pay over US $100 to engage in catch and release
fishing. The LBCNP and GSMR marine managed areas provided an opportunity for fishers to
participate in the growing tourism economy as a result of regular tourist (local and international)
visitation at these sites. However, for many Seine Bight fishers with only dories at their
disposal, this economic opportunity is out of reach for them.

(iv) **Cultural Impacts**

It is difficult to ascertain whether the establishment of both LBC and GS has had any impact
on the cultural heritage and fishing tradition of the Garifuna. Some fishers raised concern about
the lack of access to LBCNP may affect the *adougahani*, an integral part fulfilling ancestral
spirits’ request for specific marine products during the Dügü. However, a couple of informants
mentioned that FoN promised to secure another site that they could use as camping grounds. By
all accounts, FoN has kept its promise and fishers can now use nearby Buttonwood Caye to
camp. Cultural impacts and cultural changes seem to be confounded by the introduction of a
tourism economy, the expansion of educational and career opportunities, particularly for youths
and women, and the influence of other cultural groups that have infiltrated into the community.
The Rise of Leisure, Tourism and Retirement

(i) The Tourist Economy

The tourism industry reached the southern communities of Belize around the mid-1990s. Almost all informants spoke positively about the benefits of tourism for the peninsula and the entire country of Belize. However, other informants offered opposing views on how their community was being impacted by tourism. About one-half of the informants shared the sentiment below:

“Tourism is very good for people here; it is really helping the peninsula. People from all over the country come here to look for jobs and to work. There are lots of people that work at the big resorts on the peninsula.” (Fisher ISB2, Personal Interview, 26 June 2008)

The other half of informants stated that while they felt tourism is good, it has not been good to the people of Seine Bight. There are many that are without jobs and there were claims that some resorts do not want to hire them because of alleged prejudices they have against Garinagu people. Furthermore, these informants claimed that wages received by those who work in the tourism sector are too little and do not support a decent quality of life. Some feel that unlike Placencia, a town that is densely packed with large condominiums, Seine Bight still has plenty of traditional spaces left in the community that could help them tap into markets for “traditional tourism”.

(ii) Development

The village elders can attest to the fact that Seine Bight has undergone major changes over time that has contributed to its development. From the construction of a main road to the provision of basic utilities, Seine Bight has undergone significant development that has made the lives of villagers a bit easier. Still, in contrast to its neighbor Placencia, Seine Bight’s
development is minimal, leaving them to rely heavily on economic and other services available in Placencia. This perceived minimal development can be attributed to one single fact—the people of Seine Bight refuse to sell their lands in the name of development, especially tourism development.

Some villagers fear that large-scale tourism development may introduce casinos to the village, which are regarded as being associated with prostitution, gambling, drugs. For others, though, the issue of holding on to prime beachfront property is two-fold. Villagers fear that if their lands become privatized, especially if transferred to non-Belizeans, they will lose access to the beach and the sea. They are also worried that if they sell their lands, the future generation of Seine Bight Garifuna will have no place to call home. The statement below sums up this collective view:

“Placencia is run and owned by foreigners. The few native Belizans that remain have little to no say in their community. Foreigners want to dictate the pace at which our community should function. We don’t have that problem. One of the reasons why development is not as rampant here as it is in Placencia is because of the mere fact that we do not sell our lands to the foreigners. We shall never sell our lands...it is our birthright. If someone sells their land and then comes to the village council to seek another piece of property within the community, the village council will deny the application. (Fisher ISB3, Personal Interview, 19 June 2008)”

The underdevelopment of Seine Bight relative to Placencia, has been a source of tension between the communities. A few Placencia villagers that were interviewed often commented on how “bad” Seine Bight looks. Many Seine Bight villagers confirmed that villagers of Placencia always refer to Seine Bight as “an eyesore” on the peninsula, primarily because Seine Bight does not have “fancy, expensive-looking buildings like theirs”. As a result, many Seine Bight residents feel that there is a stigma in the Belizean society at large: Placencia is superior to Seine
Bight. They often implied that because of this stigma against them, their village has been ignored by the government, investors, international tourists, and even other Belizeans that would choose to vacation at Placencia rather than in their village.

**Other Forces affecting the People and Communities**

The influx of immigrants into Seine Bight has not only impacted the cultural dynamics of the village but has been regarded as a threat to job security and job opportunities. Since these immigrants reportedly work for cheaper wages as masons in the rapidly expanding tourism sector on the Placencia peninsula, many male villagers feel out-competed. Males of Seine Bight have livelihood portfolios that include carpentry and masonry during slow fishing seasons. Many claim to be affected when they cannot find jobs and blame immigrants for taking jobs away from them.

Out-migration is also a very problematic issue for Seine Bight. There are many people that pursue educational opportunities outside the village and rather than return and contribute to its development, they remain in more developed areas of the country, such as Dangriga Town and Belize City. People do not return because the village cannot support jobs for these individuals. One village elder interviewed recalled that in the past if people left the village, they would return, sometimes as teachers or nurses. Emigration today is often a permanent move. With more youths aggressively seeking entry into high school and the University of Belize, this might have important implications for the future development of Seine Bight.
B. Hopkins Village

History

Hopkins is a coastal village located along the southern coast of Belize. It is located halfway between Dangriga Town and Placencia, approximately 4 miles off Belize’s southern highway. Hopkins Village was established in 1942 to relocate villagers from Newtown Village, as it had been devastated by Hurricane Hattie (Fisher IHP1, Personal Interview, 10 July 2008; Fisher IHP6, Personal Interview, 20 July 2008). This village consists of a north side called Baila and a south side referred to as False Sittee. Over time, the south side has experienced more foreign investment relative to the north side, despite the north side being the oldest inhabited part of the village (Fisher IHP5, Personal Interview, 19 July 2008).

Hopkins is one of six Garifuna villages with approximately 1700 residents (Lash & Austin 2003). It prides itself in being one of few Garifuna villages that have retained the use of the Garifuna language and other cultural traditions in their everyday life (Lash & Austin 2003). Residents have been traditionally involved with fishing and farming and some people still do so today (Lash & Austin 2003). Tourism is currently a significant economic earner for the Hopkins community (Lash & Austin 2003). Hopkins Village did not have access to modern conveniences, such as electricity and television sets, until the 1990s (Lash & Austin 2003).

Community Characteristics, Structure and Organization

(i) Governance

Governance of Hopkins Village falls under the Village Councils Act (1999) and as such, it is run by an elected village council led by a chairman (M. Palacio 2004). The current village council in Hopkins was elected in 2007 and is currently serving its 3-year term. All informants mentioned that the village council is responsible for the village but the responses provided rarely
mentioned anything about the administrative role of the council in decision-making and management of the village. Several informants mentioned that the “main role is to help villagers to get land” and “representing the village to the area representative” (Fisher IHP2, Personal Interview, 11 July 2008; Fisher IHP16, Personal Interview, 24 July 2008). Informants commonly pointed out the main roles of the village council include maintenance through provision of sanitation services, painting and the up-keeping of the community center, as well as scheduling recreational activities and functions. Other informants pointed out that the council also assists victims during natural disasters by providing rations.

There are mixed views among informants regarding the effectiveness of the current village council administration. One informant shared that “the village council is active” (Fisher IHP8, Personal Interview, 21 July 2008) and another expressed confidence in the council’s ability to mediate and solve problems and issues within the community, “If there is something in the village that we do not like we complain about it. We would go to the Village Council” (Fisher IHP14, Personal Interview, 23 July 2008), other informants did not express similar sentiments. For example, one villager mentioned that the village council is “inactive” and “working kind of slow right now” and added that the council could improve their service to the community by “helping with school children and the poorer class of people, youths and the elderly” (Fisher IHP2, Personal Interview, 11 July 2008). There was also a call by informants for the village council to have regular community meetings to inform and update villagers of developments within the village.

(ii) Community Organizations

Similar to Seine Bight Village, the Church plays an important role in the structure of Hopkins Village’s community. As devout Roman Catholics, the Garifuna have always been associated
with the Catholic Church (Izard 2005). Presently, there are a total of three churches in the village. In addition to the Catholic Church, there is also an Anglican and a Mennonite Church. The Catholic and Anglican Churches have been present in the village for a longer period of time than the more recently established Mennonite Church. In addition to the two denominational churches there are two Dügü temples in the village, located in the north and south sides of the village.

Informants considered all three Churches as being “somewhat active” in the community because they hold regular church services. However, in terms of giving back to the community, the Catholic and Mennonite churches were cited as being “the most active” in Hopkins. Some informants mentioned that both churches assisted victims of natural disasters, such as the recent Tropical Storm Arthur of May 2008. Informants also singled out the Mennonite church as being the only church that is sincerely invested in youth development, demonstrated though their painting of schools, their regularly maintenance of basketball courts, and by holding annual summer activities. Most informants expressed dissatisfaction with the way the church is presently functioning in the community. These informants felt that the “the role of the church should be to help people” in the community rather than merely holding church services (Fisher IHP16, Personal Interview, 24 July 2008). The church, they believed, should strive towards doing a better job of attaining this role.

One of the oldest and largest organizations in Hopkins was the Hopkins Fishermen Co-operative Society (HFCS). This fishing cooperative was first registered in 1983 (Espeut 1992). Today, it is now defunct having gone out of business during the early 1990’s (Fisher IHP1, Personal Interview, 10 July 2008). It was one of several small fishing co-operative societies in Belize that refused to join the National Fishermen Co-operative Society (Espeut 1992). Like so
many of the small fishing co-ops of the 1980s, it consisted largely of subsistence fishers. Membership of the HFCS was between 80-90 fishers at the time of its closure (Fisher IHP2, Personal Interview, 11 July 2008). It was formed by subsistence fishers cognizant of the imminent commercialization of fisheries. They believed that they could only tap into viable markets via “economic organization”, which the fishing co-operative system readily facilitated (Espeut 1992).

Informants provided different accounts to explain the fate of the co-op, and while these responses varied in terms of the details, they all pointed to financial mismanagement as the main reason for the failure of the co-op. The co-op had a history of financial problems according to one informant who said that “the co-op was in business on and off and actually closed about 3 times before it was finally closed down for good (Fisher IHP9, Personal Interview, 21 July 2008).” Another informant cited that there were “too many people that just pocketed the coop’s money” and that due to “money business”, i.e. stealing, it failed (Fisher IHP16, Personal Interview, 24 July 2009). There was also mention of HFCS’s inability to meet loan commitments and to pay taxes to the Government of Belize.

There was a time when production was booming and the HFCS used to export to regional and international markets, including major companies such as Grace Kennedy in Jamaica and Red Lobster of the United States. Fishers had incentives to go out and fish commercially: “fishermen would go out and catch 500-700 pounds of fish in one night.” (Fisher IHP9, Personal Interview, 21 July 2008). With time, however, declines in production level served to limit the co-op’s overall profitability and benefits to fishers, thus making its closure inevitable. According to one informant, “It closed down because the production fell to a level that was not sufficient for it to function like a business. The cost to ship freight from here to Belize City alone
killed the business. It used to cost at least $1000 to ship shrimp from Hopkins to Belize City (Fisher IHP18, Personal Interview, 25 July 2008).” Fishers also felt the limitations imposed by the international markets on the co-op’s success: “Places in the United States, like Red Lobster, only wanted 1st grade lobster. We would send our lobster only for them to be marked as 2nd grade so we would receive less money for our product. They said it did not meet US standards. Fishermen would also have to wait an extremely long time for their money and they did not like that (Fisher IHP8, Personal Interview, 21 July 2008).”

Since the closure of HFCS, former members and new fishers have joined one of two larger existing co-operative societies in the country, National Fishermen’s Co-operative Society or Northern Fishermen’s Co-operative Society in neighboring Mango Creek Branch. They mostly sell lobster and conch at these co-ops. When asked about their feelings on reviving the fishing co-op, only a couple of fishers thought that it might be a good idea, citing convenience, since “often times when we would go fishing we need ice but don’t have any place from which to get ice (Fisher IHP5, Personal Interview, 19 July 2008).”

The majority of informants with whom I spoke expressed belief that the re-establishment of HFCS would not be feasible since the village has less fishers today than in the 1980’s when the co-op first started. The general consensus from the informants was that “less youth are fishing” and because of this, it is not guaranteed that membership in the co-op can be sustained throughout the future. Also, because the forecast is for a continued decline in the number of fishers, it would also mean that the produce would not be supplied in commercial quantities, unless non-Hopkins fishers are invited to join.

Since all current commercial fishers of Hopkins are already members of other co-ops and they would not want to leave their co-op with which they now feel secure to form a new one with
an uncertain future: “We would need a healthy membership if a co-op were to work here in Hopkins. I will not leave my co-op. If I were to do that it would be just like a dog dropping a bone to chase the bone’s shadow. I would not push to open another co-op in this village right now since there are marine reserves and all. It would be good to have one, though, just for convenience” (Fisher IHP8, Personal Interview, 21 July 2008).” There was also a Hopkins Fishermen Association, but according to informants this group has recently become inactive.

Cultural groups are also important in Hopkins, especially for the youths that make up approximately 40% of the population. In these cultural groups, culture is expressed in the form of dance, songs, and drumming. These groups perform regularly at resorts for tourists. It was suggested by one informant that even though it is a good thing that the youths have an opportunity to share their culture with people that are interested in learning about it, it might be a better idea to have the youths perform within the village rather than having to travel all over the country (Fisher IHP5, Personal Interview, 19 July, 2008). Besides the cultural groups, there are also sports teams that include basketball and soccer. The youths also make up the only environmental group in the village but perhaps due to inactivity, only a few informants were able to attest to its existence with certainty.

In addition to cultural groups for youths, there are also women’s groups in Hopkins. There used to be three women’s groups in the village, Sandy Beach, Belfuna and Yu Gah Dah, but there is discrepancy over which groups are still active in the community. One villager recalls that “the ladies would sing songs while they were doing things together, such as grating cassava. They would also sing when they were together hanging out” (Fisher IHP8, Personal Interview, 21 July 2008). There is also an “old men’s council” where the elder men of the village meet near an old shed in the village. These old men essentially get together and have discussions about what
goes on in the village. This council supposedly has some influence on what happens in the village (Fisher IHP2, Personal Interview, 11 July 2008).

For the most part, community organizations function independently of each other. Some villagers felt that this lack of co-operation is attributed to differences in political views and that the lack of unity will limit the development of the people and village of Hopkins. Villagers did stress, however, that community groups and the village as a whole try to put their differences aside whenever preparations need to be made for special celebrations, such as Hopkins Day.

(iii) Economy

The local economy of Hopkins Village is supported by fishing and tourism. While in the village, I found out that fishing has always been the primary economic activity in Hopkins Village. Although Hopkins Village is not quite a tourist village like Placencia, tourism is fast replacing fishing as the primary income earner (Lash & Austin 2003). For some villagers, fishing and tourism are a part of their livelihood portfolios and they tap into them at optimal times of the respective seasons so as to maximize the benefits from both. Rather than being competitive, fishing and tourism are complementary contributors to the local economy. The presence of both a local chapter of the Belize Tourism Industry Association (BTIA) and a “Welcome Center” in the village helps with the organization of the local tourism economy.

There is a Hopkins Business Association but there are no commercial centers, such as banks or credit unions. Villagers have to travel to neighboring Dangriga Town in order to take care of their financial affairs. The lack of financial centers has been implicated as having some impact on the tourism economy as tourists must have cash to spend. In regard to economic growth, most informants voiced complaints that money is leaking out of their community, which is retarding its growth. This leakage is due to the fact that there reportedly is an increasing number
of non-Hopkins residents that are working in the village and who spend their salaries in their hometowns where their families reside.

(iv) **Ethnicity**

Hopkins Village is one of six Garifuna communities and as such, it is comprised primarily of Garinagu. Other ethnicities that can be found in the village include Mestizos, Mennonites, Creoles, Belizean-Chinese, Belizean-Filipinos and Caucasian expatriates originally from North America and Europe. For the most part, villagers felt that even though the ethnicities differ fundamentally, members of these different ethnic groups live in harmony with each other. One informant attested to this using the example of his extended family. One of his daughter-in-laws is Mestizo and his grandchildren, a mixture of the two ethnic groups. The daughter-in-law and grandchildren are fluent in Garifuna, in addition to being able to speak their Spanish. (Fisher IHP3, Personal Interview, 12 July 2008). This was also an observation I personally made prior to speaking with Fisher IHP3.

Even though one informant was able to speak well of Garifuna-Mestizo relations in the context of his family, other informants did not similarly speak well of their relationship. This discontent is primarily because these informants felt that Mestizos are being given preference for tourism-related jobs, such as constructing new resorts, primarily because of the color of their skin. These informants also felt that Caucasian investors and resort owners in the village were exhibiting prejudice against them along the line of skin color. This ethnic tension is similar to the one mentioned by informants in Seine Bight village that involves Garinagu and light-skinned Creoles.

The majority of Mestizo in the village work as masons in tourism-related construction jobs. Chinese merchants own the majority of the larger grocery stores in the village. There are several
North Americans and Europeans that have chosen Hopkins Village as a place to retire or where to own and manage resorts. Garinagu men and women work primarily in the tourism sector and some of the men are commercial fishers.

(v) Gender Roles

Men and women in Hopkins village have always held distinct roles in the community. “The role of women used to be to attend to children and the household and to cut firewood” (Fisher IHP6, Personal Interview, 20 July 2008). Women primarily took up child care and other domestic duties while men would leave the home to earn an income to support the family. Most informants mentioned, however, that women’s role was not only determined by societal values, such as a women’s place is in the home, but also because there was a general lack of job opportunities for women. Some women baked bread for sale or cut wood and sell to make money for their pockets. Others would attend to farms and sell some of their harvest and keep the rest for the family. Even though some women sought incomes through farming or selling “firewood”, they were still primarily obligated to the home. As one informant told me, “they would leave very early in the morning to go farming but had to be back by 9 am or 10 am so that they could prepare food for the family” (Fisher IHP3, Personal Interview, 12 July 2008). Gargallo (2005) has also documented this traditional practice of early Garinagu women.

In the 1970s, job opportunities opened up and several women took up the opportunity to work. One informant recalled that one of the first jobs for women was at Colony Club, a small business operation, where they cleaned and packaged marine products (Fisher IHP2, Personal Interview, 11 July 2008). Some women reportedly also sought opportunities in neighboring Dangriga Town and the nation’s capital Belmopan City. With the recent development of a local tourism economy in the village during the 1990’s, more women have entered into the labor force
in the service sector of the tourism. Their jobs, however, are consistent with traditional domestic roles as they work as waitresses and in housekeeping. Nevertheless, these jobs provide financial security and less dependence on the wages of their male counterparts.

Some informants in the community regard women in the workplace positively as it means that the household is better off from having two incomes. Women’s ability to enter the workplace has been made possible with the help of babysitters, usually the grandmother or a female relative. However, some of the men do feel that because more women are outside of the home the family is being negatively affected. “Some children get out of control because the women have to work. They get even worse if fathers are not around (Fisher IHP16, Personal Interview, 24 July 2008)”.

There are some women that are still stay-at-home mothers and who sell pastries, take in laundry or have small businesses in front of their homes. Others still work at family-owned farms. A few businesses in the community are actually managed by women.

(vi) Current Issues

Drugs

In Hopkins Village, the use of illicit drugs does not appear to be a problem. Most informants mentioned the issue of drugs at sea, which they also referred to as “sea lotto”, similar to informants from Seine Bight Village. However, informants claimed members of the Hopkins community try to stay away from coming in contact with “sea lotto” as much as possible, fearing deadly repercussions if they should be caught with it. Apart from this issue, informants did not mention any drug-related issues that are affecting their community.
Crime

There are not many reported cases of crime in Hopkins Village. The crimes that are committed and reported primarily include robbery and theft. Informants acknowledge the occurrence of crime in the village. Still, they were of the opinion that compared to more densely populated areas in the country, such as Belize City, crime is not as rampant in their village. They also claimed that crime is associated with non-Hopkins residents. “A lot of people from outside of the village come into the village and commit crime. They steal from the tourists (Fisher IH3P, Personal Interview, 12 July 2008).” It was also made it clear this informant and others that “in cases like these, the villagers stand up and put people out of the village.”

In the past, the North and South sides of the village have been associated with U.S. gangs. The North side “considered itself to be Blood’s territory” while the South side emulated the “Crips” (Fisher IHP5, Personal Interview, 19 July 2008). As for current status of gangs and gang violence in the village, one informant stated that “all that has gone away now” (Fisher IHP16, Personal Interview, 24 July 2008).

Teenage Pregnancy

It was difficult to ascertain the extent to which teenage pregnancy is affecting Hopkins Village. There were a few informants that felt that teenage pregnancy was increasing at an alarming rate but there was not consensus on this issue among the informants. My observations during my time spent in the village did not suggest that teenage pregnancy is rampant or a major social ill.
Fishing in Hopkins: Past and Present

(i) People

As one informant shared, “Fish is important to the community. We would prefer to eat fish instead of chicken. That’s why we have so much strength. In my days, we ate chicken like every six months. We ate fish every day (Fisher IHP3, Personal Interview, 12 July 2008).” This is a sentiment that is shared among most villagers, whether male or female, young or old. Fishing is not just an integral part of the diet but also of the culture of the Hopkins Village Garifuna. So very passionate was one fisher about engaging in fishing that he told me: “I think I would get sick if I were to ever stop fishing. My body is still able to go out fishing. I don’t think I will ever stop fishing (Fisher IHP6, Personal Interview, 20 July 2008)”.

With the scarcity of fish, more people are consuming chicken products than they normally would. This scarcity has also caused some fishers to shift to more secure jobs in the tourism sector and fish only during low points in the tourist season. One informant estimates that there are about 30 fishers that exist today, which represents only a fraction of the number of fishers that used to fish as recent as 20 years ago in a once traditional fishing village. Of this number, 20 are considered to be “active” commercial fishers, while the remaining 10 are “fishers on-the-side” that have tour guiding as their primary income earner.

As one informant explained, “I think the reduction in the number of fishermen has to do with the fact that a lot of the fishermen have become tour guides. They left fishing when resorts developed (Fisher IHP13, Personal Interview, 22 July 2008).” The informant continued to explain that this trend is seen primarily in younger fishers because “the older fishermen will not go into tourism”.
Several informants also pointed to a perceived decline in fish as another reason that helps to explain why they are fewer fishers in the village today: “Fishing and fishermen are scarce in Hopkins. There is hardly anyone fishing here because there are no fish to fish!” Most fishers interviewed learnt to fish as youths, and some as early as 8 or 9 years old. Elder fishers interviewed claimed to have between 35-40 years on of fishing experience on average, with the maximum number of years of fishing experience reported to be 58 years.

(ii) Gear

Traditionally, the Hopkins fisher would go on fishing trips in dug-out canoes or dories equipped with bait, hooks and lines. Today, there are still a few fishers that use dories and hand-lines for fishing but these fishers are primarily subsistence fishers. Commercial fishers often have large skiffs and the gear that they use is often more advanced than hook and line gear. For instance, some informants claimed to use spears or trawling and tow-line techniques on a regular basis. A few informants mentioned using free-diving to harvest conch and/or lobster. Yet still, the use of gill nets is a popular gear for other fishers.

For catching lobsters, some use an innovative and relatively inexpensive gear referred to as a “shade”. Lobster shades are concrete roof-like structures reinforced with steel that are placed at strategic lobster spawning aggregation sites on the sea floor (Figure 6). As the name suggests, this tool creates a shade effect and an artificial refuge that lobsters migrate to. Lobster shades were introduced to Hopkins Village under the Global Environment Facility (GEF) Small Grants Programme of the United Nations Development Programme (UNDP) in 2007.

The main goal of the UNDP-GEF lobster shade program was to introduce a sustainable fishing method to members of the Hopkins Fishermen’s Association that would also better equip them to harvest a resource on which their livelihood depended (UNDP-GEF 2006). This project
was started but never completed, the reason for which is unclear. While a handful of informants claimed to have benefited from the initial allocation of shades under this project, there are many other informants who mentioned the fact that there are many incomplete shades that they could be using during the lobster season. Shades have been introduced to the fishing villages of Placencia and Monkey River under the Community Management of Protected Areas Conservation Project (COMPACT) prior to the GEF-Small Grants Programme for Hopkins Fishermen’s Association (UNDP-GEF 2006).

Figure 6: Lobster shades in an abandoned school building in Hopkins Village. (Photo by Chantalle Clarke 2008)

(iii) Species

Fishers of Hopkins harvest a wide range of species. The most common species harvested include a variety of fin-fish under the Snapper (Lutjanidae) family, including black \((Lutjanus griseus)\), red \((Lutjanus campechanus)\), silk \((Lutjanus synagris)\), yellow-tail \((Ocyurus chrysurus)\) and mutton \((Lutjanus analis)\). Commercial fishers in particular harvest the Caribbean spiny
lobster (*Panulirus argus*) and the Queen conch (*Strombus gigas*). Groupers (*Serranidae* family) were once a popular species, since their meat as fillet was very valuable. However, since 2002 the Belize Fisheries Department amended management policies for the grouper fishery and grouper spawning banks due to noted decline. Harvesting of grouper is limited to a seasonal basis, which runs from December 1\textsuperscript{st} to March 31\textsuperscript{st} each year (Pomeroy and Goetze 2003). Other fin-fish species include jewfish/Goliath grouper (*Epinephelus itajara*), Snook (*Centropomus undecimalis*), jack (*Carangidae* family), barracuda (*Sphyraena barracuda*), grunt (*Pomadasys crocro*), Black Grouper/rock fish (*Mycteroperca bonaci*), King mackerel (*Scomberomorus cavalla*) and Spanish mackerel (*Scomberomorus maculatus*). Some common species used in recreational fishing include: tarpon (*Megalops atlanticus*), permit (*Trachinotus falcatus*) and bonefish (*Albula vulpes Linne*). Color images of these marine species are found in Appendix C.

(iv) Locations/Times

The Hopkins fisher that possesses a dory and hook and line gear or gill nets typically fishes along the shore from Newtown Village to Freshwater Creek Lagoon, located north of the village. The availability of larger crafts powered by motorized engines has allowed more fishers to be able to access fishing grounds outside the southern region and thus tap into commercial fishing. Some fishers prefer Lighthouse Reef, Turneffe Caye, Glover’s Reef while others fish at ‘local’ cayes (i.e. in close proximity to Hopkins) such as South Water Caye, Stann Creek Long Caye, Water Caye, Gladden Spit. Emily Caye/Caye Glory was also a popular fishing ground that attracts many fishers as a spawning aggregation site for groupers. Since its closure and its regulated management by the Belize Fisheries Department, informants claimed that their visits to this area has lessened and is restricted only to the grouper open season.
Fishing trips can last anywhere between a few hours to several days. The subsistence fisher would typically spend a few hours at sea while the commercial fisher would spend at least 2-3 days at sea. The time spent at sea and the location for both the subsistence and commercial fisher depends on the fish that is in season at the time. For instance, fishers would flock to Gladden Spit in the months of April through June, and during full moons. Similarly, Emily Caye/Caye Glory was indentified as once being a prime site for groupers on full moon days in the months of December and January.

Many informants seem to pride themselves in one simple fact: a good fisher is one who knows where the prime fishing spots are. Intimate knowledge of these spots was almost always a guarantee that fishers would “come back loaded” after a fishing trip. One informant commented that “Everyone here has their own area where they fish. A lot of fishermen “drop through” because they buy boats and want to fish in any area. You have to know where the fish are if you are to be successful as a fisherman (Fisher IHP16, Personal Interview, 24 July 2008)”. Several informants claim to feel that fisheries management has caused them to lose their fishing spots that now lie in spaces carved out for marine managed areas.

The months of July through to September is considered to be the “mawga” or slow season for fishers because this is the time period when most commercial fish species do not bite and so it means less money in the pockets of fishers.

(v) **Territoriality/Fishing Rights**

The fishers of Hopkins Village are not limited to a specific territory. With a valid fisherfolk license from the Belize Fisheries Department, fishers have access to fishing grounds almost anywhere within Belize’s territorial sea, unless the area is within a designated protected area. Prior to the implementation of a fisheries management with a more strict licensing system,
fishers felt that they were able to fish wherever and whenever. Now, some informants shared that they felt as if the new regulations for fisheries management “make it harder for people to fish” as it somehow indirectly dictates fishing territory. Other informants felt that the use of MMAs as a fisheries management tool have caused them to lose ownership and territorial space, forcing them to find new fishing spots. Some drawbacks to this loss that informants have identified include more competition for fishing grounds and also new costs, such as fuel as they have to travel further distances. “Fishermen are now going to other spots to fish that are not reserves. Eventually, we will fish out the products at these spots since a lot of fishermen are using the areas. Then the fish in these new areas will become scarce (Fisher IHP16, Personal Interview, 24 July 2008)”.

While some informants were only able to comment on the limitations to fishing territory that fisheries management regulations allegedly impose on fishers in Belize, a few were able to comment on the relative merits of fisheries law. For instance, laws and licensing system were seen as a means to control both illegal and overfishing by both Belizean and foreign fishers. “I think that even though I didn’t have to worry about getting licenses when I first started, it is a good thing that we have licenses now. Without licenses outsiders, like Hondurans, would come to search for their livelihoods here. In days gone by, illegal fishing was a major problem but not anymore since we have a licensing system (Fisher IHP6, Personal Interview, 20 July 2008)”.

One issue that seems to be affecting fishers in Hopkins, both subsistence and commercial, is the privatization of cayes that exist near to fishing grounds. These cayes served as camp sites during fishing expeditions/trips lasting an overnight or several days or to shelter from rough seas. While informants recognized that they have little to no control over the sale and privatization of
the cayes, they could not help but express a sense of loss and inhibition to using locations that were once “no man’s land”:

“I feel as if we have lost ownership of the sea and the cayes. Years ago, you could land on any caye, and do whatever you like. You could make your camp and fish anywhere you wanted to. Now all the cayes have owners. The cayes have become private property; foreigners own the beach and the sea. Our rights to the cayes are finished now (Fisher IHP3, Personal Interview, 12 July 2008)”.

“All the cayes have owners. A lot of foreigners and a few locals own the cayes. Our camp grounds used to be guaranteed. You can’t use the beach on the cayes anymore to camp. They don’t allow you to use their beach (Fisher IHP16, Personal Interview, 24 July 2008)”.

“Fishermen had access to all the cayes but now a lot of the cayes have owners that do not allow us access to sleep when the sea is rough (Fisher IHP8, Personal Interview, 21 July 2008)”.

Despite whether fishers in Hopkins agree or disagree about how fisheries are managed in Belize, it was quite clear from the interviews that fishers in Hopkins Village are, for the most part, very knowledgeable about fisheries regulations, licensing system and the penalties for transgression of/non-compliance with fisheries laws. “In order to fish you have to go to Belize City to get a license. You have to be licensed, license your boat and then you still have to get a special license to fish for particular types of fish, like Mutton Snapper (Fisher IHP3, Personal Interview, 12 July 2008)”.

(vi) Markets/Uses

Prior to the formation of fishing co-operatives and the commercialization of the fishing industry in Belize, fishers would sell their catch within their communities. This custom is no different for Hopkins Village. Community members reportedly knew fishers’ schedules very
Fishers did not need to advertise their product; people would simply track them down at their homes. One informant recalled how the market for fin-fish used to operate in the village: “In those days, that is late 1940s, one string of fish containing 5 or 6 fish would cost only 10 cents. Back then, there was so much fish that those selling fish would have to beg people to buy for 5 cents per string instead of 10 cents” (Fisher IHP2, Personal Interview, 11 July 2008). With rising fuel costs that same amount of fish, according to the informant, could cost almost BZ$15 after fuel costs are factored into the price. Another informant also recalled that fin-fish would sell for BZ$1.50 per pound and fillet fish at BZ$3.00 per pound. Now, the price has more than doubled, and in the case of fillet fish, tripled (Fisher IHP9, Personal Interview, 21 July 2008).

Several informants explained to me that they have a very difficult time in trying to explain to their customers that they are not being crooks by placing higher price tags on their products but that the price of fish today is simply a reflection of rising fuel prices. One informant confided in me that he often feels embarrassed to approach his fellow villagers about buying his marine products with a ridiculously high price tag: “Right now lobster is about $18 or even $24 per pound. I don’t understand why the price of lobster is so expensive. Why is it so expensive? It does not cure cancer, AIDS or any other sickness. If I were not a fisherman I would not eat lobster. Sometimes I feel ashamed to look at people in their faces and sell them lobster for such a high price” (Fisher IHP9, Personal Interview, 21 July 2008).

In addition to opportunities to sell their products within Hopkins, fishers also used to supply residents of neighboring towns and villages such as Silk Grass, Indian and Cowpen, and Dangriga Town. At one point in time, almost every fisher used to sell their products at the Dangriga Town market. Some of the larger commercial fishers also used to sell fin-fish to wholesale to female residents of Dangriga Town, who would then retail it. It did not take too
long, however, for fishers to tap into the Belize City market. This shift was because, as one informant told me, there would be 6 boats from Dangriga and 4 from Hopkins, all of whom would try to sell their product at the Dangriga Town market. It would take fishers between 2 to 3 days before they could sell all of their fish, so they decided to shift to the Belize City market where they were more successful (Fisher IHP2, Personal Interview, 11 July 2008).

According to informants, the Hopkins Fishermen Co-operative Society (HFCS) was one of the main markets for fishers to sell their marine produce. After HFCS became defunct, most of the commercial fishers became members of the Northern Fishermen’s Cooperative at Mango Creek. They now sell their particular lobster and conch products at this fishing cooperative.

(vii) Foreign Fishers/Fishing

Most informants readily acknowledged that the fishing practices of some Belizean fishers have caused and may be causing negative impacts on the Belizean fishing industry. These informants also think that the fishing activities by individuals from neighboring foreign countries that fish illegally in Belizean waters are also having adverse impacts on fish stocks. Informants identified fishers from Honduras and Guatemala specifically for their destructive and indiscriminate harvesting methods, such as the use of gill nets. As a couple informants recalled, Guatemalan and Honduran fishers have been harvesting marine products from Belizean waters since the early 1980s, fishing intensively during the months of November through to March each year (Fisher IHP2, Personal Interview, 11 July 2008; Fisher IHP8, Personal Interview, 12 July 2008). It is the opinion of most informants that Hondurans and Guatemalans fish illegally in Belizean waters because they have depleted their fishing grounds to the extent that it is not worth their effort anymore.
Some informants shared that fisheries management regulations passed during the 1980s by the Belize Fisheries Department have helped to curb instances of reported cases of illegal fishing. However, the lack of manpower and financial resources within the Belize Fisheries Department, along with the increase of fishers (both Belizeans and non-Belizeans), has made fisheries management efforts challenging and not very effective. Informants often referred to the inability of the Belize Fisheries Department to conduct regular monitoring of MMAs as a “loop hole” in fisheries management that both Honduran and Guatemalan fishers have capitalized, much to their own benefit.

The general consensus from informants was that the problem of foreign fishers and their fishing practices in Belize is perpetuated by the fact that some of these fishers are granted valid licenses to fish. In some instances, they seem to have been given preference for fishing licenses compared to fishers with Belizean nationality. According to most of informants, corruption at the highest level of politics in Belize has led to the increase in Guatemalan and Honduran fishers who have “no respect for our laws” (Fisher IHP17, Personal Interview, 24 July 2008). Informants alleged that a former minister responsible for the ministerial portfolio that includes fisheries used to facilitate the entry of non-Belizean fishers into the Belizean fishing industry. The incentive behind this minister’s allegedly corrupt decisions was to boost his support in the form of votes in general elections.

Fishermen from other parts of the country, in particular those from the northern fishing village of Sarteneja, have been referred to as being foreign fishers by informants because they are not originally from southern Belize. Some informants have described their fishing patterns as fishing intensively in one area, moving along only after they have raided the area of its precious resources. Other informants consider Sarteneja fishermen as fellow Belizeans that are
simply trying to make their livings as fishermen. So they are more supportive of them than fishers without Belizean citizenship or the proper licenses needed to fish in Belizean waters.

(viii) Role of kinship

The fishing tradition of the Garinagu in Hopkins Village has been maintained throughout several generations largely because of strong kin relations. Informants, both male and female, claim to have learnt how to fish and the tricks of the trade from a close relative such as a parent, grandparent, cousin, aunt or uncle. During my stay in this village, I realized that most of the remaining fishers are somehow related and include a family of brothers, cousins and fathers and uncles. The existence of what is essentially a family of fishers is somewhat normal for members of the Hopkins Village community. As one informant explained, “If a father is in to commercial fishing, he will take his children with him out to the Cayes so that they can learn a trade” (Fisher IHP2, Personal Communication, 11 July 2008). This trend is likely to continue in the future as several of the informants I interviewed said that they are committed to passing their fishing knowledge down to their children.

(ix) Role of fishing as recreation

Informants, both male and female, were of all of the opinion that fishing as a recreational activity was carried out by women only. One representative comment by a male fisher was that, “I think women fish just for the fun of it and they enjoy their fishing trips” (Fisher IHP13, Personal Interview, 22 July 2008). Even though one female fisher cited that being able to go fishing at any time, provided that the sea was calm, was an important activity for her, she also regarded her activity as a female fisher as a leisure activity (Fisher IHP20, Personal Communication, 26 July 2008).
(x) Recreational fishing as an industry

The recreational or sport fishing industry in Belize is recognized by some of the informants that partake in both the lucrative local commercial and recreational fishing industries. These informants said that they especially liked the fact that the this sector of the fishing industry allows fishers to engage in traditional fishing activities, while using their cultural capital associated with their fishing knowledge for economic benefits. Despite this realization, the general consensus from informants was that it is very difficult for a single fisher to make a decent living from the recreational fishing industry unless that fisher has financial capital to start up his own sport-fishing business and manage huge volumes of clientele, usually from the United States, Europe and other countries within the wider Caribbean region.

According to one informant that owns a modest sport-fishing business most fishers interested in recreational fisheries are limited to contracting their services to large foreign-owned resorts simply because they do not have sufficient start-up capital to venture off on their own. In addition to the lack of financial resources, two full-time recreational fishers suggested that there is a dire need to train current and future recreational fishers so that they can be knowledgeable and able to better market their fishing skills as a service in order to meet the demands of their clientele.

Community Involvement with Study MMAs

Most informants with whom I spoke claimed to have knowledge about Laughing Bird Caye National Park (LBCNP) and Gladden Spit Marine Reserve (GSMR). While a few of them claimed to have only heard about these sites, the majority of informants have either visited or used LBCNP and GSMR at least once in their lifetimes, or on a regular basis. The nature and history of use of LBCNP is distinctly different when compared to GSMR. With the exception of
one informant that claimed to fish at LBCNP for yellow-tail snapper only during lobster and conch season closures, Hopkins fishers do not fish at LBCNP. One informant explained that LBC “is a place for ‘down-South’ men. People from Placencia, Independence and Mango Creek normally fish at LBC” (Fisher IHP16, Personal Interview, 24 July 2008). Another informant suggested that Hopkins fishers probably do not the area at LBCNP because it is too far a trip to make and would require too much gas. The Hopkins villagers that do utilize LBC mostly go there in the capacity of tour guides rather than as fishers.

In contrast to LBCNP, GSMR is used and has been used more frequently by fishers in Hopkins. One informant claimed to have been using the area for the past 17 years while others have been fishing at the area since early childhood:– in one instance, from the age of 8 years. Historically, the primary use of GSMR by Hopkins fishers has been a fishing ground. Every year during full moon phases of the months of April through June, many informants recalled getting into their boats to catch mutton snappers as they spawn. Fishers would land a significant amount of this valuable snapper species.

One informant claimed that when he used to fish at GSMR, he caught 900lbs of mutton snapper on average at daytime and between 1000lbs and 1200lbs during nighttime fishing (Fisher IHP8, Personal Interview, 21 July 2008). This same informant expressed that because there only used to be 6 boats of fishers that would fish in the area, he was able to catch so much fish in a given season. However, with time more boats and more fishers frequented the waters of GSMR and now there are less fish to be caught during the mutton snapper season. Besides being a good fishing ground for mutton snapper, fishers could land other species of fish at GSMR such as jewfish, barracuda, sharks, yellow-tail snapper, hogfish (*Lachnolaimus maximus*), Jimmy Hinds (*Epinephelus guttatus*), cubera snapper (*Lutjanus cyanopterus*) and black snapper.
The designation of GSMR as a multiple use marine managed area that includes a management zone for recreational activities, created a new way in which fishers could use GSMR. Many fishers became trained tour guides and started to take tourists to visit the area. While for some fishers, being a tour operator is a part-time job during “mawga” (i.e. slow) fishing seasons, for others it is their new profession. According to one part-time fisher and tour operator interviewed, “on any given day during the mutton snapper/whale shark season, there would be between 50 and 60 boats that have a total of about 150 fishermen. There may also be 15-30 dive boats that want to use the area but only 6 boats are allowed at a time” (Fisher IHP11, Personal Interview, 22 July 2008). The number of users has increased since use by the oldest traditional fishers alive in the village today.

Most informants recalled attending respective consultation sessions for the establishment of LBCNP and GSMR but the level of details for what transpired at the meetings for each MMA varied, depending on whom I spoke with. For some informants, the events at the consultation meetings for GSMR were easier to recall, probably because they were more recent in comparison to the ones for LBCNP. There were some informants that could not recall if consultations occurred and arrived at the conclusion that they were probably out on a fishing trip at same the times the meetings were being held. The fact that the community was consulted at a time when some informants were out at sea “making their daily bread” angered them because they eagerly wanted to be a part of the process.

One informant who claims to have worked closely with Friends of Nature (FoN) in the past recalled that FoN held three consultation sessions with Hopkins fishers before designating it a marine reserve under the Belize Fisheries Act. According to this informant, FoN provided an explanation for why GSMR had to be protected, citing that “a lot of foreigners were coming into
the area to fish illegally, which was jeopardizing the spawning aggregations” (Fisher IHP9, Personal Interview, 21 July 2008). There were mixed reactions to FoN’s proposal to manage traditional fishing activities at GS and several informants felt that their opinions had little influence on the process compared to those from communities like Placencia and Monkey River.

**Relationship with and Perception of “the Environment”**

When asked about the environment, informants’ initial responses all seemed to refer to the land and the issue of improper solid waste disposal. Among the responses from informants were comments such as, “When I think of the environment, I think about all the plastics and cans that things are being sold in. These are all over the place” (Fisher IHP9, Personal Interview, 21 July, 2008) and “I think our environment is getting kind of messy. There is more junk, like plastic bottles, all over the place” (Fisher IHP20, Personal Interview, 26 July 2008). Having clean physical spaces in which to live in seemed to be a very important issue for Hopkins residents. There was also consensus that the current state of environment is “good” although it was “better in days gone by”.

A more in-depth look at the issue of the environment in the context of Hopkins Village revealed that villagers are aware of threats to the integrity of their environment. Two environmental threats that informants spoke most about were large-scale dredging and mangrove removal. Informants were especially passionate about this issue because they felt for sure that both dredging and mangrove removal have contributed to the decline in the marine products that they used to be able to harvest. About one third of the informants felt that mangrove removal is making their village more susceptible to climate change. For instance, these informants felt that had mangroves remained intact along their coast, the flash flooding they experienced as a result
of Tropical Storm Arthur in May 2008 would have been less severe. Other environmental threats mentioned by some fishers included bottom trawling and agricultural runoff.

Tourism development was often cited as the main contributing factor to environmental degradation not only near Hopkins village but along the entire southern coast of Belize. Most informants mentioned that development was a double-edged sword; it supports economic growth of the village but it is also having deleterious effects on the environment. A couple of informants raised the issue that they often felt that fishers are being blamed for the reduction in fish stocks and that fisheries managers often do not consider how development might be destroying fish habitats and reducing recruitment of juvenile fish. Several informants also passionately felt that the government is too concerned about generating money from the environment and that it needs to make an effort to strike a balance between economic growth and development and protecting natural resources.

The majority of fishers interviewed claimed to have a moral obligation to protecting the environment. They felt that while it is important for them to live in a clean, litter free space where the fish stocks could be replenished, it was more important that the future generation will be able to derive benefits from the environment. “If I help to protect the environment, then I will be able to pass it down to my kids tomorrow. All of us should feel the same way about the environment. If other people love this country and have children then they too should want to protect the environment” (Fisher IHP17, Personal Interview, 24 July 2008). Informants also expressed a wide range of ways in which they expressed environmental activism. There was only extreme case of a fisher who claimed that “the environment has nothing to do with me because I will die and leave it behind” (Fisher IHP16, Personal Interview, 24 July 2008).
Women and Marine Activities

Nearly two decades ago, women in Hopkins used to fish as actively as men, though most would use dories and paddles and thus would only travel as far as 200 yards from the shore to catch fish. In addition, because women still needed to tend to children, their fishing trips typically occurred very early in the morning when their children were still asleep. Two popular times of the year when women historically fished the most included the Lenten season leading up to Easter and also the days before Garifuna Settlement Day celebration that is observed on November 19th each year.

Women were motivated to fish for a variety of reasons. For some, it was a matter of being forced to seek “fish for their pots” either because their husbands were away at a Caye and involved with commercial fishing or because they were head of single-parent households. For others, fishing was a leisure activity and provided a means for family bonding. Women used to initiate fishing trips for fun. For one elderly male fisher interviewed, his now deceased wife “used to be the one to force me to go out fishing just so that she could tag along” (Fisher IHP6, Personal Interview, 20 July 2008). Still, there were a group of women that fished commercially but whose contribution to the local fishing industry is just a distant memory for some.

For two retired female fishers interviewed, fishing was a stable source of income for them. One former commercial female fisher in particular had been fishing ever since she was 11 years old. Due to not having a dory anymore and her children’s fear for her safety, she has stopped fishing commercially. Although this fisher had a husband, who was a fisher himself, she was motivated to make her own income while looking after the needs of her family. She also preferred to fish alone because she feared that if she fished along with a male, such as her husband, that male would receive credit for the catch. Interestingly enough, this fisher claims
that she never actually went around the village to sell her catch. Whenever she had returned from her fishing trips, she would hand over her catch to her father and give him her desired sale price per pound for each type of fish caught.

In present day Hopkins, there are still a few women that fish in dories and fish only to feed their families. The fact that female fishers do not contribute to commercial fishing markets, whether local or national, has caused some male commercial fishers to describe fishing by females as “play-play” or inconsequential fishing. While most male fishers interviewed felt that fishing is definitely not a “man’s job” and that women too are just as good fishers as men, quite a few of them said that they would not encourage females to take up commercial fishing. One reason provided by a male fisher for discouraging women from fishing commercially was because “the sea is too rough for women” (Fisher IHP11, Personal Interview, 22 July 2008). This fisher explained that he felt that not only would women be uncomfortable with the living conditions at sea but that fishing has become too dangerous with fishers taking weapons on fishing trips. Another reason provided for why women should stay away from the commercial fishing industry was because the industry is on a decline at the moment.

Changes Accompanying the Establishment of Study MMAs

(i) Community Relationship to Reserve/Park Policy and Management Process

In speaking with users of Laughing Bird Caye National Park (LBCNP) and Gladden Spit Marine Reserve (GSMR) regarding the establishment of these sites as protected marine areas, there were mixed views about the perceived impacts. Informants did not have anything much to say about LBCNP, and the few comments that were shared with me were positive and from part-time tour guides and operators. From the perspective of the tour guides, the protection of LBCNP is important to their jobs. By protecting this site, these informants felt more confident
that tourists would be able to experience the attractions that they anticipate from advertisements. One reason why informants in general might have not had much to say in regard to LBCNP was because the consultation meetings were probably held in the early 1990s, and they were not as fresh in their memories as consultations held for GSMR.

As far as regulating fishers’ use of GSMR, particularly fishing activities during the mutton snapper season, fishers were supportive, not supportive or apathetic on the issue. Some fishers opposed the idea of Gladden Spit becoming a reserve because they thought that their traditional fishing activities would be restricted. Other fishers with whom I spoke could not understand why fishermen got upset about the establishment of Gladden Spit as a marine reserve because “FoN would open the area for fishing during the same time that fishermen would traditionally be out there anyway, i.e. the mutton snapper season (Fisher IHP9, Personal Interview, 21 July 2008)”. A handful of informants expressed that they were not the least bit concerned about the proposal to place Gladden Spit under protective status because it was not their “fishing spot”. However, if Gladden Spit was a regular fishing ground for them, informants expressed that they could easily find other fishing grounds in place.

Friends of Nature (FoN) and the Belize Fisheries Department jointly instituted a licensing system in which fishers are required to obtain special permits to fish at Gladden Spit during the mutton snapper season. These permits cost BZ$25 per licensed fisher (Personal Communication, Belize Fisheries Department Staff, July 2008). Most of the younger fishers interviewed mentioned that they were initially bothered by this system. They do not mind paying for the permit now, however, because in their opinion the licensing system has significantly reduced the number of foreign fishers in the area. In addition, the $25 fee can be easily recovered from the sale of their catch.
For the elder fishers, they licensing system ushered in a fundamental shift in the way the sea is being treated as territorial space. A couple of elders recalled when they were in their early 20s and were able to fish for mutton snapper at Gladden Spit without anyone telling them that they needed to obtain a special license. Now, these elders said that they have stopped fishing at Gladden Spit because they do not like the idea of having to get a license or being harassed by personnel of the Fisheries Department and FoN if they do not have one.

(ii) Displacement of Traditional Fishing Activities

The establishment of LBCNP as a no-take area did not seem to displace any traditional fishers with whom I spoke because they did not use LBCNP as a fishing ground. With the exception of a few elder fishers that were not supportive of obtaining special licenses to fish at Gladden Spit, Hopkins fishers are still fishing at this site, especially during the mutton snapper season. Some fishers felt, however, that Gladden Spit has become a place “mostly for tourists”, which limits their fishing activities during both the open and closed seasons for mutton snapper. It also seemed that because most informants fished at multiple fishing grounds even before Laughing Bird Caye and Gladden Spit were designated as marine managed areas, the establishment of these sites as “protected” might have had little impact on their habitual fishing activities.

(iii) New Opportunities/Activities

In recognizing the popularity of both Laughing Bird Caye and Gladden Spit as tourist attractions, there were several fishers who became part-time tour guides or who completely left the fishing industry behind and sought a new livelihood in the tourism sector. Many informants claimed that this transition was supported by FoN who provided training as tour guides and recreational fishers. However, a few of the elder fishers I interviewed cautioned that this
apparently smooth transition from fishing to tourism should be taken with a grain of salt because not all fishers are able to make the transition. According to these elder fishers, unless a fisher is between the ages of 20-30 years old that fisher can not realistically make the shift to tourism. The basis for this claim was that most fishers in their 40’s or older possess less than a high school diploma and in order to be a tour guide in Belize, an individual needs to have attained a certain level of education.

A couple of fishers that I interviewed expressed comments that they did not make the shift from fishing to tourism because the benefits of fishing and being a fisher outweighed benefits from the tourism industry by far. The following quote sums up this shared view:

“They are training fishermen to be tour guides but fishermen do not make much money in tourism compared to the money they would make from fishing alone. When you work for these resorts here you become a slave for them. They work you very hard and pay you very little. I will not work for the resorts; I make more from fishing. I do not feel the boss thing at all-it is not in me. I like being my own boss. After I completed primary school, I started to work on my own and I did my own thing. I got up whenever I felt like it. Workers sacrifice for people and at the end of the day they do not own the job. For me it is not worth it to get into tourism. A lot of people work and depend on tips they receive from tourists but not all the tourists have good hearts” (Fisher IHP9, Personal Interview, 21 July 2008).

For those fishers who worked under fishers that owned boats, the story is a bit different:

“Some fishermen have turned to tour guiding because they used to go out with other fishermen as helpers and were not making a lot of money. They do not have their own boats so as tour guides they are actually much better off. Many of them still fish when it is slow season in the tourism industry” (Fisher IHP18, Personal Interview, 25 July 2008).

During the consultation meetings held for GSMR, a couple alternatives to fishing at sea were discussed. Among the alternatives included funding for a project that had to be agreed upon by
the majority of fishers and which had to be community-managed. Informants mentioned potential funding for any alternative that would be communal and from which all fishers would benefit, as well as be responsible. Fishers whom I interviewed claimed that the funds for the project would have been from an international non-profit NGO. After the fishers deliberated on the project, they could not agree on a single project. Some were interested in investing in a shrimp farm project while others preferred to invest in cattle or diving equipment. Since the fishers “had no unity among us” and could not agree on a single project, the community never realized the benefits of this initiative. Although not an alternative to fishing, some fishers claimed to have benefited from an initiative by the UNDP-GEF Small Grants Programme, to discourage the use unsustainable fishing techniques and practices, such as the use of gill nets.

(iv) Cultural Impacts

While people in Hopkins, both young and old, still affirm their cultural heritage, fishing as a cultural tradition is rapidly fading away from the future generations of Garifuna in Hopkins Village. The emergence of tourism is one of the key players in this cultural change. For instance, several fishers have noticed that,

“A lot of the youths who we were depending on to take up fishing have gone into dive tourism. They take scuba diving courses and eventually become certified. The older fishermen are still into fishing. The youths, like my sons, don’t want to be fishermen anymore (Fisher IHP16, Personal Interview, 24 July 2008).”

The existence of relatively more opportunities for pursuing advanced education also seems to be a deterrent to fishing for the youths.

The introduction of MMAs as a tool for marine management and the regulation of fisheries were also factors that some believe have both been crucial to the reduction of commercial fishers in the village. For example, several of the elder fishers with whom I spoke told me that they
reached a point whereby they became so fed up and discouraged by fisheries laws and the proliferation of MMAs that they decided to quit fishing for good. For some, that breaking point was the Belize Fisheries Department’s decision to close grouper spawning banks in 2002 and institute a legally binding grouper season as a means to better manage the fishery (Pomeroy and Goetze 2003). These fishers built their houses and educated their children with the income gained from harvesting grouper alone, which would be well over $10,000 within just two weeks of the grouper season.

Even though these elders no longer depend on fishing for their livelihoods, some of them still paddle in their dories at the break of dawn. Being a fisher is an integral part of their everyday experience. Informants did not single out the Laughing Bird Caye and Gladden Spit MMAs as having specific roles in influencing the fishers’ decision to exit from the fishing industry. Based on the data I collected, the establishment of the two study MMAs also do not seem to have had any cultural impact so far on the communities in regard to the use of the marine environment for their spiritual practices.

**The Rise of Leisure, Tourism and Retirement**

(i) **The Tourist Economy**

The economy of Hopkins is primarily driven by tourism. There are several large-scale resorts and locally-owned guest houses, restaurants, art shops and dive centers in the village. Hopkins is a member of the Belize Tourism Industry Association (BTIA), which has helped it to gain recognition as a “must-see” tourism destination in southern Belize (BTIA 2008).

While local villagers acknowledge that “Tourism is a very big thing here” and that “it is good because it helps our country”, of those interviewed, more than half did not believe that the
benefits of tourism is trickling into everyone’s pockets in the village. Most of the complaints centered on the low wages, which is earned mostly by women:

“Hopkins is not really benefiting from tourism. They are paying slave-driver wages, i.e. $2.50 or $2.75 per hour. Only a few of the resorts here are raising their wages. I think that tourism has the potential to benefit Hopkins but will not if we continue to have slave driver wages (Fisher IHP18, Personal Interview, 25 July 2008)”.

Most informants seemed to believe that the benefits of the tourism industry can only be realized if an individual is self-employed. Many fishers who have been thinking of shifting to tourism have mentioned to me that they would like to secure loans so that they can open their own dive shops within the next couple of years.

(ii) Development

Development in Hopkins Village has come in several forms over the years. It has been the shift from having to dig wells to being able to turn on a faucet and receive potable water. Not having to use kerosene lamps or flash lights anymore in order to travel on “piccado” roads (poorly delineated dirt path) during the night was also another form in which development was experienced in Hopkins village. The constant construction of condominiums on both the northern and southern ends of the village is also a daily reminder for villagers of the development taking place before their eyes.

As previously mentioned, villagers are concerned about the environmental impacts of large scale developmental activities in the village. They are also concerned about the physical and social divide that these projects are creating. For instance, one foreign-owned, tourism-related project located at the northern end of the village has involved the construction of a wall so high, (dubbed “the Berlin Wall”), that villagers both from the north and south sides of the village feel
as if they have been completely shut off from that side of the village. They also fear that as more of their lands get into foreign hands, that they will continue to be excluded from more areas in the village.

**Other Forces affecting the People and Communities**

In general, the establishment of MMAs and the enforcement of fisheries regulations are two marine resource management regimes that informants claim have not only negatively affected their use of the marine commons, but also their livelihoods. Specific to the informants that I spoke with, the closure of spawning aggregation sites for Grouper was a major blow to fishers as many of them earned their living primarily from supplying the Grouper fillet market.

According to informants, the closure of grouper spawning aggregation sites created another problem: intensification of fishing effort on other fisheries already in decline. Some of the fishers displaced from the grouper fishery are accused of tapping into fisheries reserved for catch and release sport fishing, such as the tarpon, permit and bonefish. In addition, informants also alleged that some of the displaced fishers are landing undersized conch, lobster and other commercial reef fish. Some informants are worried that if fishers continue to put a lot of pressure on fish stocks that are notably in decline, they may not have fish for subsistence or to support their careers as commercial fishers.

**VII) Fate of Communities**

**Seine Bight**

The Seine Bight Garinagu are struggling to maintain their cultural tradition of fishing. Based on the data gathered through my interviews with informants, the fishing component of their cultural heritage faces the threat of fading away by the next two new generations. There are only
a handful of fishers remaining in the village, mainly elders, which maintain a modest supply of fish for the village. Compounding this issue is the fact that the large majority of youths seem to be interested in playing sports, such as basketball and football, rather than engaging in fishing as a pastime like their fathers or grandfathers did in their times. Some youths also seem more interested in attaining education that surpasses that of their parents, or to get a job within the tourism industry.

The few youths that are interested in commercial fishing as their profession have encountered major setbacks, such as start-up capital needed to invest boats, fishing gear and even money to pay for fishing licenses and the membership necessary to join fishing co-operative societies. The establishment of MMAs, such as at Gladden Spit or Laughing Bird Caye, may serve to limit the temporal and spatial contexts in which fishers can harvest marine products. It does not seem as if MMAs alone will cause an impact so great that fishers in the Seine Bight community will completely stop fishing.

In speaking with informants, many of them sounded a desperate cry for help and wished for their community to no longer be ignored and overlooked by those with political power. There is a desperate need for jobs, which many feel will serve to revitalize the local economy and general well-being of people in the community. In light of the success achieved by Seine Bight’s peninsular neighbor, Placencia Village, in the tourism industry it would seem only natural for Seine Bight to follow suit and develop its local tourism economy. However, given the fact that the current generation of Seine Bight residents is reluctant to sell their lands for tourism development, I predict that this community may very well remain a low capital, subsistence community in the short-run. In the long-run, the outlook for Seine Bight may be more positive in respect to the sale of land for tourism development. The next generation of Seine Bight
Garinagu have already started to migrate out of the village to seek new economic opportunities, some of whom I predict may have the incentive to sell their inherited lands simply because they will not residing in the village anymore.

Some informants suggested that maybe forces outside the political realm of Belize would help them to spark economic growth in the village by assisting with capital for new development, but by also helping them to be a more self-sufficient community.

**Hopkins**

Several of the elder fishers that have retired from commercial fishing as a result of the closure of grouper fishing grounds now rely heavily on their offspring for financial support.

“I look at his boats just sitting in the yard and at his ice boxes that have become rusty because he can no longer use them. What a waste! The reserves messed up a lot of fishermen, especially my Dad. My parents are surviving today because my sisters and I send money for them from the United States (Non-fisher IHP12, Personal Interview, 22 July 2008).”

While most of these elder fishers still make fishing trips, they do so mainly to supply their family, selling only surplus to the community. These fishers have passed down the tradition of fishing to their sons many of whom are now more interested in entering the lucrative tourism industry. As one of these such sons explained to me,

“The shift from fishing to tourism happens a lot. There is no way to escape tourism. Gas is too expensive. Fish is scarce. You would be foolish if you don’t make the change to tourism and go where the money is (Fisher IHP17, Personal Interview, 24 July 2008).”

Hopkins Village is currently transitioning from a culture of traditional fishers to a new identity, one that can be characterized as a translation of their inherited cultural capital of the marine environment into a marketable ecosystem service for all cultural ethnicities to enjoy.
It was with this same wisdom to foresee the potential gains of tourism for those in his generation that he cautioned,

“We should not take tourism for granted, though. If a hurricane comes tomorrow, it can wipe out the tourism industry. People in the tourism industry need to be flexible and not be a “one cylinder”. These days you can’t afford to only know one thing. You need to know about more than one thing with which to make money in order to survive. Life is too challenging now” (Fisher IHP17, Personal Interview, 24 July 2008).

And, it is with this need to be more than a “one-cylinder” with the ability to manage livelihood portfolios in mind that it is hoped the new generation of Garinagu in Hopkins will carry on the rich tradition of fishing inherited from their ancestors.

VIII) Conclusions and Recommendations

My first hypothesis, that Laughing Bird Caye’s “no-take” MMA designation would have a greater cultural impact on the coastal communities of Seine Bight and Hopkins when compared to the impact that accompanied Gladden Spit’s establishment as a multiple-use marine area, was not supported by my findings. Instead, my findings suggest that due to an almost non-existent involvement of Seine Bight with the two MMAs, this village suffered no identifiable cultural impacts from the establishment of either MMA. Hopkins Village, like Seine Bight, also has had a relatively low involvement with Laughing Bird Caye and, as such, did not suffer any cultural impacts from its establishment. Since most villagers have been fishing at multiple fishing grounds even before Gladden Spit was designated a marine managed area, the establishment of this MMA seems to have had little impact on fishers’ habitual fishing activities. This low impact is further supported by the fact that Hopkins residents are still allowed to fish during the mutton snapper season as they usually would.
Even though my findings confirmed that the Garinagu of the two study communities still rely on the sea and its resources for some of their spiritual practices, the establishment of the Laughing Bird Caye and Gladden Spit as MMAs has not specifically forced the Garinagu to make any cultural tradeoffs so far as their spirituality is concerned.

In terms of impacts to the Garinagu’s cultural heritage of non-market, subsistence fishers the findings of my study strongly suggest that the establishment of the study MMAs have had no identifiable cultural impacts on the communities. My findings did, however, confirm my second hypothesis that the rise of leisure tourism would be more influential than the establishment of the MMAs on impacting whether traditional fishing is still practiced. This finding was particularly highlighted in Hopkins Village, in which a greater proportion of its members seemed to have already traded traditional subsistence fishing for participation in commercial fisheries and tourism services markets relative to Seine Bight, where the impact of tourism is somewhat minimal and subsistence fishing is still widely practiced.

Finally, I hypothesized that if tourism development influences a shift in how people of these study communities use the marine commons to support their livelihoods, it would also influence the use of marine resources for spiritual practices. Analysis of my data did not provide any evidence to support this hypothesis.

Even though the result of my analyses revealed that there were no identifiable cultural impacts on the communities I worked with, it does not mean that establishment of the two study MMAs did not (and does not) have cultural impacts on other resource users or that MMAs do not have social and cultural impacts. Now that the cultural data on the coastal communities relating to the establishment of marine managed areas in the Belizean context have been collected, I recommend that these data be collected continuously to build Belize’s ethnographic knowledge-
base. These data collection approaches could include other coastal communities not included in the study. Moreover, these data are crucial for describing coastal communities and for documenting their cultural adaptations over time to forces beyond their control. Given the fact that MMAs do have social and cultural meaning, in addition to biological significance, it is important that cultural data are used to understand coastal communities and their cultural attitudes and behaviors in regard to the use of MMA resources.

As J. Palacio (2009) suggests, culture can be used to examine “a bundle of ways to how coastal communities respond to the imposition of a conservation code affecting the marine commons” (E-mail Communication, J. Palacio, 25 February 2009). This basic understanding is an invaluable first step towards predicting the biological, socio-economic and cultural “success” of MMA establishment not only in Belize but in countries in the wider Caribbean region and other countries around the globe. Given this, I recommend an amendment to existing policies that govern MMA management in Belize that would mandate cultural data collection for MMA processes including conception, design and post-establishment monitoring of MMAs.
IX) References


About Where We Work-South America. Accessed on April 8, 2009 from http://www.nature.org/wherewework/southamerica/


VII) Appendix

A: Semi-structured Interview Guide

1) History of involvement and use of LBCNP and GSMR by Seine Bight and Hopkins

- How were/are members of the community involved with the two MMAs?
- During what times of the year did the interactions occur?
- Who from the community was involved (fishers, families, others)?
- What was the nature of their activities and interactions?
- Was/is there any notion of “marine tenure” or territoriality in the fishery?

2) Community Characteristics, Structure and Process

- What is the place of commercial, recreational or subsistence fishing in the community?
- How is the community organized politically?
- What are the important social organizations and institutions in the community (churches, clubs, unions), and how do they relate to one another?
- Are there any songs, festivals, religious aspects, social events, etc that deal with or reflect a traditional coastal and/or ocean relationship?

3) Community relationship with and perception of “the environment”

- How do the members of the community view the biophysical environment and their relationship to it? Does this vary from land to sea?
- Do they view themselves as stewards of the environment?
- How involved are they in any formal (regulatory processes) or informal (personal or community ‘rules’) policy and management activities with respect to environmental or conservation issues, and in what ways?

4) Changes associated with the establishment of LBCNP and GSMR and other factors

- Since LBC was declared a no-take zone, where do you now fish? Periphery? Somewhere else?
- Has the establishment of management zones at GS limit the amount of fishing (tour guiding, etc) you do within this MMAS? If so, to what extent? If no, why?
- Have members of the community stopped fishing, fish less, fish more or fish the same since the establishment of the MMAs?
- If a community member fishes less or has completely stopped fishing, what does he/she now do for a living?
- How has tourism, aquaculture development, occurrence of natural disasters, etc impacted fishing tradition?
5) Women, Gender Roles and Marine Activities

- What type(s) of jobs did women have 20 years ago? Traditionally?
- What jobs do they have now?
- Are women leaving the village to seek employment to help their families financially?
- What do you think about the MMAs? Why?
- Do the types of jobs that women have impact the village…families….elders?
- Are women seeking business opportunities?
- Did women ever fish in this community? Do they fish today?
- For the women that fished (fish), why did they fish? What did they do with their catch?
- What is the community’s perception of women who fish?
- Do women catch fish for any religious/spiritual ceremonies of festivals of the community?
- How do men view the role of women today in the village?
B: Coding Scheme

**Metacode 1:** History of involvement and use of LBCNP and GSMR by Seine Bight and Hopkins

**Code:** Involvement with MMAs

**Subcode(s):**
- times of year when MMAs used
- activities within MMAs (before MMA establishment)
- who uses/interacts with MMAs
- age/time first used MMAs
- estimate of length of time MMAs used
- specific territory within MMAs for activities
- role of MMAs and their resources in local economy, cultural activities, festivals, beliefs

**Code:** MMA establishment

**Subcode(s):**
- participation in consultation meetings/session
- perceived role(s) of community in MMA establishment process
- perceived role(s) of other fishing communities in MMA establishment process
- understanding of the reasons/rationale for MMA establishment
- interactions with MMA co-managers

**Metacode 2:** Community Characteristics, Structure and Process

**Code:** Governance & Politics

**Code:** Local Economy

**Code:** Ethnic Composition and Relations

**Code:** Belief Systems

**Code:** Community & Social Organizations

**Subcode(s):**
- relation (if any) to each other

**Code:** Current Issues

**Subcode(s):**
- Teenage Pregnancy
- Crime
- Drugs

**Code:** Family/Kin relations

**Subcode(s):**
- Role of elders in community: cultural preservation, passing down fishing knowledge, discipline & maintaining order
**Code**: Cultural Activities and Events  
**Subcode(s)**:  
-songs, festivals, religious aspects, social events that reflect or deal with the coastal and ocean relationship  
-musical tradition—does that tradition evidence the coastal relationship?

**Code**: Fishing (History and Present)  
**Subcode(s)**:  
-markets and uses  
-place of commercial/recreational/subsistence fishing in the community  
-species/gear  
-territoriality/fishing rights/foreign fishers  
-fishing as recreation  
-recreational fishing industry

**Metacode 3**: Community relationship with and perception of “the environment”

**Code**: Perceptions/Description of the biophysical environment  
**Subcode(s)**:  
-variation in terrestrial, marine, coastal?

**Code**: Belief Systems

**Code**: Environmental stewardship

**Code**: Involvement in policy/management activities with respect to environmental protection/conservation  
**Subcode(s)**:  
-formal (regulatory processes)  
-informal (personal or community rules)

**Metacode 4**: Changes associated with the establishment of LBCNP and GSMR and other factors

**Code**: Impacts on community structure, organization

**Code**: Frequency/Restriction (if any) of activities after MMA establishment  
**Subcode(s)**:  
-cultural, religious, belief systems, economic/subsistence, leisure/recreational

**Code**: Impacts to the environment  
**Subcode(s)**:  
-view about environmental stewardship, environmental protection/conservation

**Code**: Other changes in context of MMA establishment:  
**Subcode(s)**:  

-growth of tourism sector
-local economy/job opportunities
-community development

**Code:** New Opportunities  
**Subcode(s):**  
- fishing  
- jobs/career

**Metacode 5:** *Women, Gender Roles and Marine Activities*

**Code:** Gender Roles, General  
**Subcode(s):**  
- role of women  
- role of men

**Code:** Gender Roles, Fishing/Marine Activities  
**Subcode(s):**  
- role of women  
- role of men
C: Marine Species Commonly Harvested by Study Communities

**Epinephelus itajara**  
Common Name(s): Jewfish/Goliath Grouper  
Retrieved on January 31, 2009 from  

**Trachinotus falcatus**  
Common Name: Permit  
Retrieved on January 31, 2009 from  

**Albula vulpes Linne**  
Common Name: Bonefish  
Retrieved on January 31, 2009 from  

**Megalops atlanticus**  
Common Name: Tarpon  
Retrieved on January 31, 2009 from  

**Epinephelus guttatus**  
Common Name: Jimmy Hind  
Retrieved on January 31, 2009 from  
[http://www.safmc.net/Portals/6/images/fish/red_hind.jpg](http://www.safmc.net/Portals/6/images/fish/red_hind.jpg)

**Centropomus undecimalis**  
Common Name: Snook  
Retrieved on January 31, 2009 from  
**Lutjanus analis**  
Common Name: Mutton Snapper  

**Lutjanus campechanus**  
Common Name: Red Snapper  
Retrieved on January 31, 2009 from [http://oceanworld.tamu.edu/students/fisheries/images/red_snapper_1.jpg](http://oceanworld.tamu.edu/students/fisheries/images/red_snapper_1.jpg)

**Lutjanus cyanopterus**  
Common Name: Cubera Snapper  

**Caranx latus**  
Common Name: Horse-eye Jack  

**Ocyurus chrysurus**  
Common Name: Yellowtail Snapper  

**Lutjanus synagris**  
Common Name (s): Silk/Lane Snapper  
**Lachnolaimus maximus**  
Common Name: Hogfish  

**Mycteroperca bonaci**  
Common Name(s): Black Grouper; Rockfish  

**Epinephelus striatus**  
Common Name: Nassau Grouper  

**Scomberomorus cavalla**  
Common Name(s): Kingfish/King Mackerel  

**Scomberomorus maculatus**  
Common Name: Spanish Mackerel  

**Mugil gyrans**  
Common Name: Fantail Mullet  
**Pomadasys crocro**
Common name: Burro Grunt

**Apsilus dentatus**
Common Name: Black Snapper

**Panulirus argus**
Common Name: Caribbean spiny lobster

**Sphyraena barracuda**
Common Name: Barracuda

**Strombus gigas**
Common Name: Queen conch

**Callinectes sapidus**
Common Name: Blue Crab/”Rawti”