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ABSTRACT

Belize is a small Central American country with a largely intact natural resource base. It hosts a tremendous array of biologically diversity, and due to its historically low population density and political stability, has not suffered the ecological damage that other Central American countries have. With much assistance in the past two decades from the international community, conservation initiatives in Belize have been steadily growing. Local non-governmental organizations (NGOs) have played a major role in conservation, as the government often lacks sufficient resources and population growth and economic development are on the rise. The Belize Audubon Society (BAS) is the oldest and largest conservation NGO in Belize, and unique in that it manages eight public protected areas for the government. This project examined BAS' management of protected areas, looking at six critical areas: national policy, international policy and law, organizational analysis, environmental education, ecotourism, and communities. The goals of this project are to develop recommendations and guidelines that BAS can use to develop its own integrated and comprehensive protected-areas policy. While the focus of the project was on protected-areas management, the recommendations have broader implications for the organization as a whole.

FREQUENTLY USED TERMS

AGM	Annual General Meeting
ANDA	Association of National Development Agencies
BACONGO	Belize Alliance of Conservation NGOs
BAS	Belize Audubon Society
BHNP	Blue Hole National Park
BOD	Board of Directors
BTB	Belize Tourism Board
BTGA	Belize Tourism Guide Association
BTIA	Belize Tourism Industry Association
CBC	Community-based Conservation
CBD	Convention on Biological Diversity
CBWS	Cockscomb Basin Wildlife Sanctuary
CTWS	Crooked Tree Wildlife Sanctuary
CZMU	Coastal Zone Management Unit
DOE	Department of Environment
EE	Environmental Education
EI	Environmental Interpretation
EPA	Environmental Protection Act
EU	European Union (European Community)
GEF	Global Environment Facility
GNP	Guanacaste National Park
GOB	The Government of Belize
HMCNM	Half Moon Caye Natural Monument
IUCN	International Union for the Conservation of Nature
MOU	Memorandum of Understanding
NEAC	National Environmental Appraisal Committee
NEAP	National Environmental Action Plan
NPASP	National Protected Areas Systems Plan
NPSA	National Parks System Act
NPPC	National Parks Policy Committee
NGO	Non-Governmental Organization
PA	protected area
PAM	protected areas management
PACT	Protected Areas Conservation Trust
PFB	Programme for Belize
PUP	Peoples' United Party
SPEAR	Society for the Promotion of Education and Research
TEC	Tropical Education Center
TMNR	Tapir Mountain Nature Reserve
TNC	The Nature Conservancy
WCI	Wildlife Conservation International
WPA	Wildlife Protection Act
WWF	World Wildlife Fund
UCB	University College of Belize
UDP	United Democratic Party
UNDP	United Nations Development Program
UNESCO	United Nations Environmental, Scientific, and Cultural Organization
USAID	United States Agency for International Development

Chapter 1: Executive Summary

I. INTRODUCTION

The Belize Audubon Society (BAS) aims to protect the diverse array of habitats and species found within Belize by fostering human understanding of the value of biodiversity and natural resources. In working towards this broad goal, BAS performs many activities, including educating about and advocating for environmental issues, yet functions primarily as a manager of protected areas (PAs). At the request of the organization, this project examined BAS' role as a protected-areas manager and provided recommendations to aid BAS in achieving its mission in the context of protected areas management (PAM). While the recommendations and conclusions drawn herein apply specifically to BAS and its role as a protected-areas manager, many—if not all—of the suggestions apply across the spectrum of activities undertaken by BAS.

II. NATIONAL POLICY

In recent years Belize has experienced an explosion of activity at the national level related to environmental protection, biodiversity conservation, and PAs. The country recently passed its first environmental pollution laws, is developing a national biodiversity strategy, and is moving forward with regard to improving PAM. The Government of Belize (GOB) has stated its commitment to the concept of sustainable development. Along with the country's conservation organizations, GOB is in the process of building the institutional and technical capacity necessary to sustainably manage the country's resources.

The non-governmental organization (NGO) community is becoming increasingly involved with the development of national policy, and BAS is no exception to this. BAS has been an influential voice for the environment ever since it was first established, and now the organization is playing a larger role in the development of national policies. There is a role for BAS, along with other organizations, in this domain. National issues that BAS could help address include biodiversity conservation, PAs and wildlife, co-management, population growth, pollution regulation, and economic development.

The chapter examines national policy and the national political context in Belize related to PAM, environmental education, and tourism, respectively. BAS' PAM agreement with GOB is examined in detail, as well as BAS' evolving relationship with various government agencies and political parties. The BAS Advocacy Program is also analyzed, and the section concludes with suggestions on how BAS can move forward with its advocacy program to influence PAs and other relevant policy at the national level. Recommendations are also given on how BAS can better integrate both national laws and policies, as well as its advocacy program, with its PAM program.

III. INTERNATIONAL ENVIRONMENTAL LAW

Increased transformation of the natural environment has wrought environmental problems of broadening complexity and scope. Recognizing the transnational significance of these threats, the international community has responded with a body of international law that addresses environmental concerns through international agreements empowered by the cooperation and self-regulation among independent nation-states.

Belize is a party to approximately 35 international conventions relevant to the protection of natural resources, and soon may be party to several more. Research indicates that many of these international conventions provide opportunities for various states and organizations to capitalize on measures designed to enhance the parties' ability to manage and sustain their natural resources. Provisions designed for this purpose usually entail financial assistance, technical assistance, and access to research, management plans, and experts. Of the many conventions to which Belize is a party however, three relate most directly to PAM.

The chapter discusses the historical relationship between humans and the environment, the growing global consequences of that relationship, and the international legal instruments conceived as a result. After an academic discussion of the administration and limitations of international environmental law, the chapter explores the intent and provisions of the World Heritage Convention, the RAMSAR Convention on Wetlands, and the Convention on Biological Diversity. It then discusses how BAS, charged with managing eight nationally protected areas in Belize, can capitalize on the provisions within these conventions to foster more effective protection of the areas under its purview. Finally, the chapter makes recommendations that take advantage of the financial, technical, and cooperative assistance provided by each convention that is designed to assist countries with the implementation and achievement of convention objectives.

IV. ORGANIZATIONAL ANALYSIS

BAS conducts their business within a highly complex web of customers, competitors, cooperators, and regulators. A structured organizational analysis draws the essence from this web, shaping it in a useful, organized fashion. An organizational analysis helps to evaluate an organization's internal capabilities and external environment, drawing attention to internal strengths and weaknesses and highlighting important features of the external environment. It is a tool for understanding where BAS is now, and where BAS should be in the future. The analysis does not dictate actions; rather, it invites insightful interpretation of the information within. The analysis is divided into two main elements: internal and external.

The internal organizational analysis offers BAS an opportunity to critically review its stakeholders, strategy, resource allocation, goals, strengths, and opportunities for improvement. The internal analysis begins with a description of the firm's business, then

delves into the mission and goals of the organization, highlighting Western goal theory and its application to BAS. Next, it touches on organizational design, then turns to an examination of resource allocation and the broader implications of allocation decisions. Lastly, the analysis examines the strengths of BAS, expanding upon the processes and resource applications in which the organization is particularly skilled.

The external organizational analysis begins with a look at the industry structure, then turns to a discussion of stakeholder relationships. Though originally based on Sharon Oster's adaptation of Michael Porter's *Five Forces* model, the model presented here represents a new approach to stakeholder analysis. Stakeholders ranging from GOB to the Board of Directors are classified as suppliers, customers, cooperators, competitors, or some combination of these groups. Those relationships deemed vital to BAS are explored in further detail.

The chapter concludes with recommendations that focus on translating the mission and organizational strategy into measurable action plans, creating a more stable revenue stream, examining the degree of centralization within BAS, and understanding the implications of resource allocation decisions.

V. ENVIRONMENTAL EDUCATION

Environmental education (EE) activities have just begun to be formally recognized on a global scale. Currently there are many countries that do not have the resources and expertise to conduct thorough EE programs. In many cases, interpretive programs, which require fewer resources, are the established educational activities involving the environment within these countries. In Belize, these and other educational programs are hindered by many challenges. The National EE Strategy of 1995 illustrates some of the challenges that EE faces, namely a lack of a nationally recognized EE definition, poor organizational coordination, and a lack of resources for program development and implementation.

The EE chapter discusses BAS' educational role as a conservation organization in an international and national EE context. The chapter then focuses on some of the issues that involve BAS' overall educational initiatives: advocacy and education, enforcement and education, multiple tasks for educational activities, and evaluation and standardization of educational programs. Next, the chapter moves on to discuss issues involving two specific areas within the EE program, namely school group visits and community education.

The chapter concludes with recommendations targeting the aforementioned areas. These guidelines revolve around the recognition that BAS has neither the resources nor the desire to become solely an EE organization. The management of PAs precludes large-scale involvement with EE. Educational activities within the organization may require more resources, an overall assessment of current practices, and a study on how these initiatives can work within PAM efforts.

VI. ECOTOURISM

Belize's abundance of intact and un-degraded ecosystems has been attributed to its traditionally low population density. However, as the country's population continues to grow, and immigrants from neighboring countries continue to migrate across the border, it will become increasingly necessary for conservationists to engage the people who live in and around PAs in meaningful dialogue and collaboration. In many cases, the government and NGOs will need to include these people in the planning and management associated with these PAs.

This chapter discusses the concept and growth of ecotourism as an increasing trend in protected-areas conservation. First, ecotourism and some of its economic, social, and ecological impacts in developing countries are examined. Next, the chapter looks at the growth of the ecotourism industry in Belize and several key issues that relate to BAS and ecotourism in the PAs BAS manages. Finally, the chapter concludes with a series of recommendations intended to strengthen the management of BAS PAs in relation to ecotourism issues.

VII. COMMUNITIES

The cultural and social settings surrounding BAS' PAs are as diverse as the ecosystems found within these PAs. Differences within and between communities are apparent among many of the communities that surround BAS' PAs. Attempting conservation in this multicultural setting is a formidable task.

Using a community-based perspective, this chapter illustrates some of the challenges that BAS faces. Perspectives gleaned primarily from interviews with community members, as well as government officials, BAS staff, and stakeholders, are placed in the broader context of community conservation.

The chapter chiefly discusses communities and their relationships with BAS and BAS' PAs. As BAS values and seeks meaningful communication and effective working relationships with communities, it is helpful to use experiences drawn from the field of community-based conservation (CBC), co-management, and related literature. Relevant findings discovered through field research are presented.

The chapter concludes with recommendations focused on expanding communication with communities and broadening outreach efforts. As well, coordinating with other land use and community development agencies and NGOs, providing community organizing training to wardens, and acquiring additional resources to address sustainable development are recommended to stimulate community involvement, and hence, improved PAM.

VIII. CONCLUSION

The recommendations contained in the previous chapters represent a diverse array of opportunities through which BAS can pursue more effective PAM. By including financial, organizational, educational, advocacy, and policy mechanisms, the above recommendations incorporate the many avenues through which BAS may influence PAM.

Although the preceding chapters cover diverse topics, each addresses issues essential to an examination of BAS' role as a protected-areas manager. Viewed collectively, they establish the greater context in which BAS operates. While the recommendations found in the chapters identify options specific to each issue area and to PAM in general, the following conclusions are drawn along thematic ties that can be applied to all BAS activities. As such, each conclusion addresses elements found within this project and should provide an understanding of the general focus areas that BAS may want to address.

The concluding chapter draws the essence from each of the sections, extracting individual recommendations from each, and linking them together into overarching, thematic guidelines. The chapter first provides a model for framing the recommendations, then touches on the areas of BAS' role definition, organization, collaboration, policy development, financial resource development, and co-management.

Chapter 2: Introduction

> "Belize has a wealth of intact, biodiverse ecosystems, while those of neighboring countries have been squandered. This reality was not planned but was the outgrowth of benign neglect of Belize by 'its colonizers.' "
>
> -Belizean Travel Guide

I. BELIZE

Belize is the least populated country in Central America. It is bounded on the north by Mexico and on the west and south by Guatemala. Formerly known as British Honduras, this British colony achieved independence in 1981. It has managed to achieve a relatively stable democratic environment in comparison to many of its Central American neighbors. The country has gained international attention in recent years due to its relatively "unspoiled" natural environment. An English-speaking country, Belize boasts the world's second-largest barrier reef, large tracts of pristine tropical forest, and many Mayan ruins, making it a major destination for ecotourists and researchers. Tourism has become one of the country's top sources of revenue. In addition to its environment, Belize's political and social stability, with little civil unrest and low crime rates, has made it appealing not just to tourists, but to immigrants as well. While Belize is ecologically pristine relative to its Central American neighbors, the country faces significant threats to its biodiversity. Given increasing population, a burgeoning tourism industry, and the need for economic development, Belize will soon have to make difficult decisions regarding its environment.

(Image from GOB homepage:
< http://www.belize.gov.bz/belize/welcome.html>)

Cultural Setting

Belize's population of 250,000 permanent residents (1995 estimate) consists of Mestizos (44 percent), Creoles (30 percent), Maya (11 percent), Garífunas (seven percent), and East Asians and Europeans (eight percent) (GOB, 1999a). Therefore, Belize is more ethnically diverse than other Central American countries. The most visible and controversial trend in recent years has been the shift from Creoles to Mestizos as the most populous (dominant) ethnic group (GOB, 1999a). Estimates of Belize's annual average population growth rate vary from 2.42 percent to 2.8 percent, which is one of the highest growth rates in Latin America and the Caribbean (World Bank, 1998 and UN, 1999).

Contributing to these high growth rates is the fact that Belize has a very young population (41 percent of the population is under the age of 14) and a high influx of immigrants, the majority from other Central American countries. The rate of this immigration has been increasing for the past two decades. In a 1994 government study it was estimated that 23 percent of the Belizean population is "poor," while another seven percent are "extremely poor."[1] The national literacy rate is about 70 percent (Ministry of Tourism and the Environment, 1995).

As opposed to the general trend of urbanization that is occurring throughout the rest of the region, Belize is experiencing *ruralization* due mostly to immigration. The rural population is increasing in both absolute numbers as well as in its share of the total population. It is estimated, for example, that 71.4 percent of Central American immigrants to Belize settle in the country's rural areas (Ministry of Tourism and the Environment, 1995). Belize's rural population is currently larger than its urban population, 53.2 percent compared to 46.8 percent; it is likely that this gap will increase in the near future (World Resources Institute, 1998). These trends will pose an increasingly difficult challenge for PAM and biodiversity conservation in Belize in the years to come. Recent government administrations have recognized the need for a population strategy, but the country at this time has no official policies on population (Ministry of Tourism and the Environment, 1995).

Despite Belize's ethnic diversity, the country has not been subject to the civil strife that many of its neighbors have experienced. Even as each ethnic group retains its own unique cultural integrity, the country as a whole is in the process of defining its national identity (Moberg, 1992). Cultural groups tend to dominate particular geographic regions of the country. The majority of Mestizos occupy the rural areas of the country and are often employed in the sugar, banana, and citrus industries. Mayans, as well as many other Belizeans, have a largely agrarian society. Mayan farming techniques vary little from past practices, as the traditional shifting slash and burn agriculture, called Milpa, is still the primary method for utilizing farmland (Moberg, 1992). Many Europeans and North Americans, and more recently Chinese and Taiwanese, are purchasing property for permanent settlement in Belize and are among the wealthiest people in the country (BAS staff, personal communication). The majority of the Garifuna in Belize reside along the shores of the southern districts of Stann Creek and Toledo. Given this high ethnic diversity, the education and community participation necessary for effective PAM and biodiversity conservation can be quite challenging.

Economic Setting

Until the 1940s and 1950s, the colonial economy of Belize was based on forestry, primarily the export of logwood (*Haematoxylon campechianum*), mahogany (*Swietenia macrophylla*), and chicle (*Manlikara chicle*) (GOB, 1999c). At that time agriculture began to expand, and has been the main base of Belize's economy until recent years, when tourism began to develop on a larger scale. The post-independence economy has

[1] In this government study, a person was considered poor if he/she was not able to meet the cost of basic food and non-food items.

been primarily based on agriculture, tourism, and agro-based industry (Belize Chamber of Commerce, 1997). The country's GDP is US$0.67 billion, and GNP is US$0.63 billion (World Bank, 1998).

Belize does not currently have a large industrial infrastructure, and the majority of the current national economy involves the trade of agricultural products for manufactured goods produced abroad. The country's main agricultural exports are sugar, bananas, and citrus fruits. It imports much of its power from Mexico. The country has received significant monetary assistance from the United States, Great Britain, and other international donor agencies. The value of imports has always exceeded the value of exports, and the country's trade deficit has widened in recent years (GOB, 1999b). Added pressures on the developing economy include periodic and destructive hurricanes. The United States is Belize's main trading partner, and is currently assisting the country in its trade diversification efforts (Belize Chamber of Commerce, 1997).

In 1996, agriculture, forestry, and fisheries accounted for 20.4 percent of GDP. Tourism was the next largest sector, comprising 18 percent of GDP. While agriculture has been the top source of foreign exchange for decades, it is likely that tourism, especially ecotourism, will soon become the country's main foreign exchange earner (Ministry of Natural Resources and the Environment, 1998). The average growth in the number of tourists was 8.7 percent over the period 1990-1995 and tourist arrivals increased by another 17.6 percent in 1996 to 142, 663. The estimated economic impact of tourism in Belize was US$84 million in 1996 (Commonwealth Online, 1999). The agriculture, forestry, and fisheries industries employ the largest percentage of the labor force, with tourism following close behind (Ministry of Natural Resources and the Environment, 1998). The overall unemployment rate is roughly 13 percent (Coutsoukis, 1999).

The current administration has boasted an economic growth rate of 6.4 percent, which is high compared to the last several years of economic stagnation (GOB, 1999b). It has pledged to increase exports by expanding and diversifying trade. Development strategies include an aggressive marketing campaign to promote tourism and information technology, expanding export markets for handicrafts, promoting cultural industries, and expanding the international financial services sector. There is a great need for basic infrastructure in both urban and rural areas, and the Belizean government has publicly recognized the importance of pursuing economic development that is both economically and environmentally sustainable (GOB, 1999b). Belize, so recently independent and still laying the foundations of its economy—in contrast to its Central American neighbors—still has time to craft carefully designed economic development policies that will ensure protection of the country's natural resources.

Political Setting

The desire to gain independence began to take hold in the 1930's, leading to the establishment of party politics. The first national party, the Peoples United Party (PUP), was established in 1950 and began to develop political momentum through the dispersal of various propaganda urging national unity. Several other parties came into existence

over time, as development issues, suffrage, and external political alliances were debated. The PUP maintained its majority party status until 1984, when the United Democratic Party (UDP) came into power. The UDP generally advances more conservative policy initiatives and when in power, has initiated increasing economic and political ties with the United States. The party came into power because of a mostly Creole backlash against the liberal immigration laws of the PUP. However, these parties have since alternated in and out of power, illustrating the divisive nature of party politics in Belize (Moberg, 1992).

National parties play a critical role in Belize, as the party in power is subjected to few checks and balances. Every five years an election is held and when a new party is voted for, any ties that were previously established are often severed. Everything from foreign affairs to land-use planning in Belize vacillates under the waves of party politics (Sutherland, 1998).

The current system, established under the sovereign nation's constitution in 1981, is based on the parliamentary democratic Westminster model. The executive body is made up a cabinet of ministers who initiate policies within many segregated ministries, a figurehead Governor-General, and the Prime Minister, who is the leader of the ruling party and the cabinet. The cabinet members are responsible to the legislative body, or National Assembly, which is made up of a 28 member House of Representatives elected by the people and an eight-member Senate appointed by the English Governor-General. The judicial system consists of a Supreme Court and magistrate courts, each political district having a magistrate court, with the exception of Belize City, which has four. This national government relies heavily on local governing bodies for the enforcement of its legislation (Bolland, 1986).

The country is divided into six political districts;[2] however, there are no district administrative units. There are municipal and village institutions that have a more localized influence. The municipal institutions are made up of eight town boards and the Belize City Council, all of which are extended arms of the national government. Each of the seven members of the eight town boards and nine members of the Belize City Council is elected for a three year term (Bolland, 1986). Recent legislation was passed in Belize that allows mayors to be publicly elected, rather than appointed by Town Councils (BAS staff, personal communication).

Village councils only recently gained legal status, within the past year (BAS staff, personal communication). They are initiated only by the village itself and operate as a community organization. They are involved with national politics and frequently align with chosen parties (Belsky, 1998). In some instances these councils are the only connection between the village or community and the "outside world," and yet they may or may not represent the community as a whole. Often the councils represent disparate factions within a village, as they become deeply involved in party politics.

[2] The six political districts are: Stann Creek, Toledo, Corozal, Belize, Orange Walk, and Cayo

II. CONSERVATION IN BELIZE

Ecological Context

Belize has a subtropical climate and hosts a tremendous array of biological diversity (Programme for Belize (PFB), 1995). There are over 576 species of birds, 163 species of mammals, 122 species of reptiles, and 159 species of fish in Belize, as well as over 4,000 species of native flowering plants (Ministry of Natural Resources and the Environment, 1998). The country's geology can be characterized as karst limestone, and has an immense network of subterranean caves. In spite of its small size, Belize has a highly diverse landscape. Nine distinct land regions have been identified, from the massive Maya Mountains and Mountain Pine Ridge that run through the center of the country, to the low-lying coastal plains (Ministry of Natural Resources and the Environment, 1998). Belize also has extremely diverse coastal mangrove and reef ecosystems. In addition, over 49 vegetation classes have been identified in Belize, ranging from lowland broadleaf forest to montane scrub and palm forests (PFB, 1995).

Belize's forestry industry declined in the earlier part of this century while the agricultural industry developed to fill its void, and has been growing since. Even as many rural farmers practice traditional agriculture, commercial agriculture is expanding rapidly. The economic shift from timber to agriculture has had a dramatic effect on the people and the land of Belize. The lifestyle of the timber workers was seasonal and extremely mobile, while farmers are more sedentary. Commercial agriculture has also changed land practices. Timber extraction involved partial felling, while large tracts of land are now being cleared for agricultural production. Also, widespread pesticide use is unchecked and growing. These changes are a growing concern in a young, seemingly environmentally conscious country (Moberg, 1992).

Given Belize's low population density, the country has not been subject to the high levels of deforestation prevalent in the neighboring countries of Mexico and Guatemala. In addition, traditional Milpa agriculture has been less destructive than large-scale commercial agricultural techniques common in other countries. Land use that is consistent with suitability is an increasingly contentious issue in Belize. As both traditional and commercial agriculture expands, increasingly difficult land-use decisions will have to be made. Approximately 66 percent of the land in Belize is considered marginal for agriculture. The country's forest reserves have often suffered from land clearing for agriculture, and according to a recent government study, nine percent of the land cleared for agriculture between 1989 and 1994 was within PAs (Ministry of Natural Resources and the Environment, 1998).

Concern for the conservation of flora and fauna was politically apparent with the passage of a colonial Plant Protection Ordinance (1941) and a Wildlife Protection Ordinance (1944). However, the practical application of these ordinances was hindered by several gaps in the system. This legislation lacked a mandate for the development of management plans, enforcement of those management plans, means of educating the public, and varied categories of PAs to allow for multiple management options (Munro,

1981). It was not until 1981, when Belize gained its independence, that national PAM policies were passed through legislation.

Protected-Areas Establishment and Management

In 1981, GOB firmly established PA legislation by passing the National Park System Act (NPSA) and the Wildlife Protection Act (WPA). The Fisheries Act was first passed in 1977, and allowed for the regulation of the nation's fisheries. The Crown Lands Ordinance of 1924 and the Forest Ordinance of 1926 provided the necessary legal premise for legislating PAs. All lands designated as forest reserve under the Forest Ordinance of 1958 are subject to multiple-use, sustained-yield management (Platt, 1998).

In order to establish a PA, an individual or organization must go through the legislative process. Sites are proposed to the appropriate ministry for consideration, based on criteria established by the International Union of the Conservation of Nature and Natural Resources (IUCN). If the ministry agrees with the need for protection the site will be declared and a notice regarding the declaration will be published, possibly in the Gazette newspaper (Zisman, 1989).

PAs fall under the administration of three ministries as Table 2:1 illustrates:

Table 2:1 PA Administration by Ministry

Ministry	**Department**	**Reserves / Areas administered**
Natural Resources and Environment	Forest	protected areas (nature reserves, national parks, natural monuments, wildlife sanctuaries)
Agriculture and Fisheries	Fisheries	marine reserves
Tourism	Archaeology	archaeological reserves

Source: The Directory of Belizean PAs and Sites of Nature Conservation Interest, 1996

The Crown Land Ordinance of 1924 gave this designation of authority to the various ministers of the cabinet. Once protected status for a piece of land passes legislation, the PA is administered by an individual ministry, which is headed by a minister. However, there are multiple ministries involved with PA administration. This situation necessitates constant communication between the ministries in order to coordinate management. Inter-ministerial communication is largely informal, and cooperation between different agencies often depends on the individual ministers involved and how dedicated they are to improved natural resource management (Bolland, 1986).

Due to the succession of different governments, PA designation became a piecemeal process depending on the current minister in power. This gradual evolution is apparent in the myriad names given to the various categories of sites. Bird sanctuaries were the first non-forestry related PAs to be established and were developed in order to protect certain wild bird species. In 1928, the first designated wild bird sanctuary, HMCNM, was

established in order to protect the habitat of the red-footed booby (*Sula sula)* (Zisman, 1989). However, as more categories were added, they were later incorporated under more generic names, such as "nature reserve," in an effort to homogenize the system.

Conservation in Belize

Belize has made great strides in environmental protection, biodiversity conservation, and PAM in the past two decades. While much of the initial PAs and wildlife legislation was passed in the early 1980s, the government passed an Environmental Protection Act in 1992, which established pollution regulations and a Department of the Environment (DOE) to implement them (PFB, 1995). Since that time the government has initiated an environmental impact assessment process, whereby major developments must be assessed by a committee in terms of their environmental impacts. This committee, the National Environmental Appraisal Committee (NEAC), has representation from government officials and NGOs, including BAS. Belize is in the process of strengthening its institutional and technical capacity to address the country's overarching environmental quality concerns. It has received substantial assistance from international donor agencies such as the United Nations Development Program (UNDP) and the European Union (EU), and from organizations like the World Wildlife Fund (WWF) and The Nature Conservancy (TNC) (McCalla, 1995).

There are 22 laws in Belize that regulate natural resources, but at this time, Belize has no policy specific to biodiversity conservation. However, a national biodiversity strategy was drafted in 1998, since Belize is a party to the International Convention on Biological Diversity (Ministry of Natural Resources and the Environment, 1998). With regard to PAs, much progress has been made, especially within the last five years. The National Protected Areas Systems Plan (NPASP) was developed by a local NGO (with the help of USAID) in 1995 to help guide the country in systematizing its approach to establishing and managing PAs. In addition, the government in 1995 created the Protected Areas Conservation Trust (PACT), which is a unique long-term funding mechanism for conservation efforts and PAs in Belize. The government and BAS have both committed to working with communities in managing PAs, and both are currently experimenting with co-management. The country is also aggressively pursuing eco-cultural tourism as a tool for sustainable development.

Belize has made significant progress in conserving its natural resource base, especially in light of its lack of resources and technical and institutional capacity. NGOs in Belize, especially BAS, have traditionally played a crucial role with regard to EE, conservation, and PAM. Recent government administrations have placed more emphasis on the environment, and in the last election the environment was a major platform issue for the first time. The general public in Belize is becoming increasingly aware of the benefits of conservation, and NGOs are playing a larger and more influential role in the development of national policies than ever before.

Despite this progress, Belize still faces many challenges. Population is increasing rapidly, and the tourism industry is expanding at an exponential rate. Many of the

nation's PAs and wildlife laws need to be strengthened and revised to reflect international commitments. There is no systematic approach to EE, whether targeting communities, school groups, or tourists. One of the largest problems to be tackled in Belize is the issue of land use.

Belize does not have a comprehensive land management policy, and existing land-use laws are not adequately monitored or enforced. Land suitability and usage are not consistent, and there is an urgent need for zoning. Only two percent of the population owns 90 percent of the country's private land, while 85 percent of the population owns only five percent of all private lands. Private lands make up about 40 percent of all land in Belize, and approximately 75 percent of private land is owned by foreigners (Vernon, 1999). Both the government and the NGO community are working on developing policies for land reform in Belize. Land reform is particularly important as agriculture and development continue to encroach upon PAs. BAS has been intimately involved with this land reform discussion as well as other conservation and PAs issues at the national level.

The government does not have the financial means to support all of the federal PAs, and therefore relies on assistance from communities and NGOs. Only recently have standards for NGO establishment been proposed (NGO representatives, personal communication). NGOs have carried the environmental movement in Belize by lobbying the government, writing laws, and establishing PAs. International conservation organizations such as the World Wildlife Fund (WWF), Wildlife Conservation International (WCI), and TNC, along with local Belizean organizations, have been instrumental to the country's environmental movement. BAS is leading this movement.

II. BELIZE AUDUBON SOCIETY

The BAS Mission Statement reads as follows:

> "The Belize Audubon Society is a non-profit, non-governmental organization dedicated to the promotion of the sustainable use and preservation of our natural resources in order to maintain a balance between people and the environment."

BAS was founded in 1969 as a satellite chapter of the Florida Audubon Society, during the onset of international conservation in neo-tropical areas. The Society had assumed independence in 1973 and began to lobby for PA establishment while promoting IUCN classification (Munro, 1981). The organization was aware that under these classifications these areas could gain international support and recognition. The organization became the first environmental NGO in Belize and the only one that managed large tracts of public PAs.

BAS has continued to evolve its environmental role in Belize following the establishment of the organization. The group signed a Memorandum of Understanding (MOU) with GOB in 1996 to manage 150,000 acres within six PAs established under the National

Park System Act (NPSA) (1981). The organization is responsible for the finance, development, and operation of these areas.

Organizational Structure

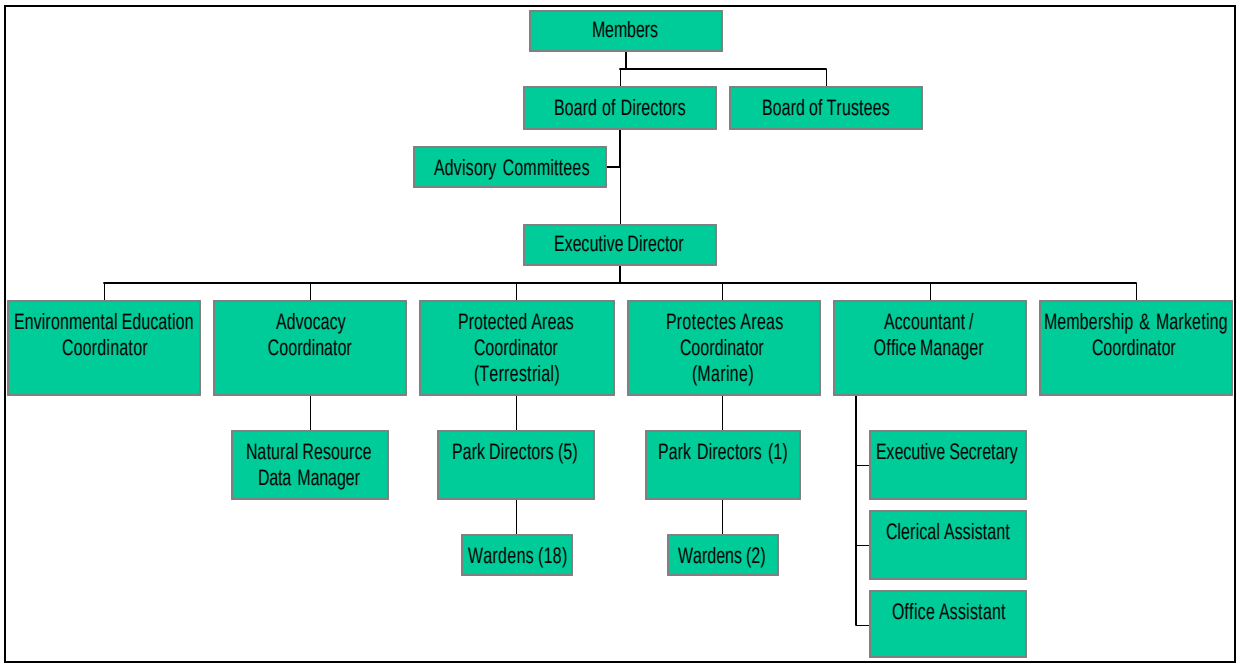
Several levels of management comprise BAS. Table 2:2 demonstrates the types of management groups within BAS while Figure 2:1 illustrates the organizational chart.

Table 2:2 BAS Management Groups and their Functions

Group	Function
Board of Trustees	manage endowment fund
Members (Belizean)	elect Board of Directors
Board of Directors	govern BAS, oversee Executive Director
Executive Director	heads BAS' operations
Volunteers	contribute valuable time and energy

Source: BAS staff, personal communication.

Figure 2.1 Organizational Chart for BAS



Ten staff (not including researchers) work from the main office in Belize City and 22 work in the field, spread throughout the PAs. The main office staff is currently divided among five functional areas, including the four program areas (marketing & membership and administration are support activities for the four program areas). Each program area retains one program coordinator (see Figure 2.1). At the time of research, the marine

protected areas program area was not established. Henceforth, only the three areas operational at the time of research will be addressed.

Protected Areas

The MOU signed by BAS and GOB in 1999 granted management authority over eight PAs, including two protected areas new to BAS, Victoria Peak Natural Monument and Blue Hole Natural Monument (see Table 2:3). As these two recently added PAs were not staffed at the time of research, nor were they at the time of printing (April 2000), the project team chose to focus on the six PAs with management presence.

Table 2:3 PAs Managed by BAS

NAME	# STAFF	SIZE (Acres)	CHARACTERISTICS
Cockscomb Basin Wildlife Sanctuary (CBWS)	6	120,000	tropical moist forest
Crooked Tree Wildlife Sanctuary (CTWS)	3	16,000	savannah, swamps
Half Moon Caye Natural Monument (HMCNM)	2	9,700	marine caye
Tapir Mountain Nature Reserve (TMNR)	2	6,740	sub-tropical wet forest
Blue Hole National Park (BHNP)	4	575	limestone formations
Guanacaste National Park (GNP)	3	50	tropical forest, riparian area
Total	**20**	**153,065**	
Blue Hole Natural Monument	no data		
Victoria Peak Natural monument	no data		

The six PAs listed above are illustrated in Figure 2.4. The PAs differ substantially in their accessibility, as some PAs such as GNP are closer to major roads and/or urban centers than PA's like TMNR, located in a remote area of the Cayo district. Communities in and around the PAs vary considerably, which poses the challenge to BAS staff of incorporating site-specific management practices into their overall management strategy. The following PA descriptions provide further ecological and geographical context for the PAs:

Cockscomb Basin Wildlife Sanctuary

The Cockscomb Basin Wildlife Sanctuary is situated in Southern Belize below the jagged peaks of the Maya Mountains' Cockscomb Range. The Cockscomb Basin is ringed on three sides by high ridges and mountains. The area was originally declared a forest reserve to protect the dense jaguar population and other resident wildlife. In 1986, a

small portion of the forest reserve was given sanctuary status, which afforded it complete protection.

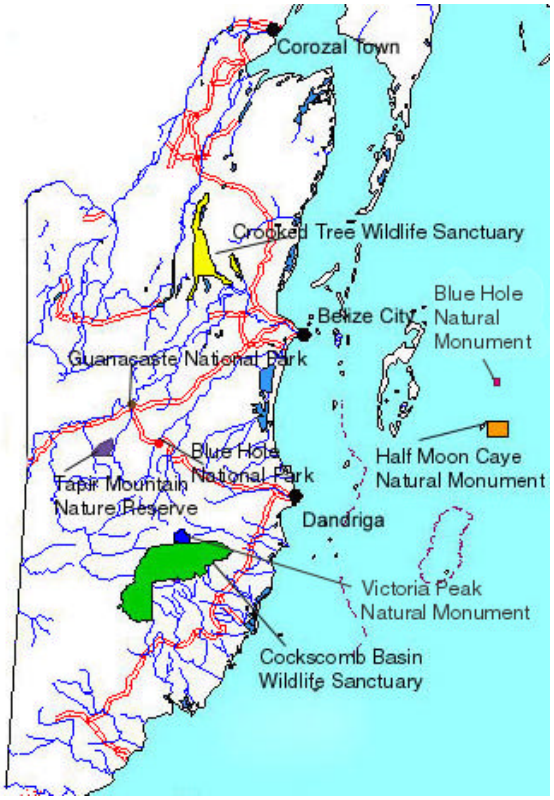
Crooked Tree Wildlife Sanctuary

Located 33 miles northwest of Belize City and two miles off the Northern Highway, the Crooked Tree Wildlife Sanctuary provides habitat for a diverse array of resident and migratory avifauna. The sanctuary consists of a network of inland lagoons, swamps and waterways. During the dry season, thousands of birds congregate here to take advantage of abundant food resources, including fish, amphibians, and reptiles.

Half Moon Caye National Monument

Half Moon Caye is located at the southeast corner of Lighthouse Reef, the easternmost of the three atolls in Belizean waters, some 50 miles southeast of Belize City. The caye itself is approximately 45 acres in size and is divided into two very distinct ecosystems. The western region, with its dense vegetation, has correspondingly rich soil made fertile by guano from the thousands of red-footed boobies and magnificent frigate birds (*Fregata magnificens*) nesting in this area. The eastern half of the caye is composed primarily of coconut palms with sparse vegetation below.

Figure 2.4 BAS-managed Protected Areas, 2000



(Image created by Jennifer Rennicks, SNRE, 2000)

Tapir Mountain Nature Reserve

TMNR is one of the few areas protecting the biological diversity of the Maya Mountains northern foothills ecosystem. Covered with subtropical and tropical moist forests, TMNR supports a rich habitat for wildlife, including numerous migratory birds and the endangered Baird's tapir, Belize's national animal.

Blue Hole National Park

The Blue Hole National Park is located 12 miles southeast of the nation's capital, and includes some 575 acres, covered with primary and secondary forest growth. From its northern boundary, the Hummingbird Highway, this rugged karst landscape quickly rises to elevations in excess of 200 meters. Much of this central area of Belize is limestone of Cretaceous age and includes such karstic features as underground streams, rivers, sinkholes, cenotes and extensive subterranean caves systems.

Guanacaste National Park

Guanacaste National Park is the name of a 50-acre parcel of tropical forest located on the north side of the Western Highway, within walking distance of the capital. The Park derives its name from the giant guanacaste, or tubroos, (*Enterolobium cyclocarpum*) tree growing near the southwestern edge. This colossal old tree shelters a large population of epiphytes.

Finances

BAS is financially responsible for the six PAs outlined above and must acquire the resources necessary for their management from a variety of sources. These sources are explored in greater detail in Chapter 6: Organizational Analysis. BAS has about 1000 members, approximately 40 percent of which are international. Membership fees vary according Another funding source comes from entrance fees to the PAs.

In 1995, BAS had limited funds to support the PAs and made a plea to the government for assistance (Waight and Lumb, 1999). USAID agreed to temporarily fund them while long-term assistance was formalized. GOB agreed to formalize the relationship between BAS and itself, as well as allow for the collection of entrance fees. The entrance fee quantities for each PA were established in the formal agreement with GOB, of which 80 percent goes to BAS and 20 percent goes to PACT. PACT was established by GOB during this financial crisis in order to provide national support for the management of PAs. PACT receives its funding from departing tourists who pay a BZ$7.50 fee to PACT along with a national departure tax. BAS applies for grants from PACT in order to fund specific projects.

The Project

Since the incorporation of PAM responsibilities, BAS has had to evolve to meet the changing demands of Belizean conservation and confront new management challenges. This diversity of responsibilities has created a mosaic of goals for BAS. During the spring of 1999, a team of six Masters students from the University of Michigan School for Natural Resources and Environment (SNRE) contacted BAS' Executive Director to initiate Masters level research on BAS' PAM.

BAS agreed to work with the project team, and together, they determined that the team would recommend improvements for the organization and the PAM program area. Once the overall goal was established, the client and project team worked together to develop a framework for the analysis.

The client and the project team targeted six areas of BAS' overall management strategies to evaluate, chosen according to the relevance to BAS and the team members' academic interests and expertise. In working together to formulate a framework for analysis, the

client and the project team created an integrated project capable of aiding BAS in establishing PAM policies.

The chapters included in the analysis are National Policy, International Policy, Organizational Analysis, EE, Ecotourism, and Communities. Each of these areas concludes with recommendations for BAS. These guidelines are then summarized in Chapter 10.

Chapter 3: Methodology

This report is based on the analysis of field data gathered during visits to Belize, primary and secondary documents, PAM plans, conservation materials compiled by BAS, and relevant literature. The methods utilized were largely qualitative and were designed to assess BAS' PAM as well as a wide range of associated perceptions and beliefs.

The six project group members visited Belize during March, May, June, and November of 1999 which amounted to approximately 31 person-weeks of field work. Two group members made a preliminary visit in March, the entire group visited for varying amounts of time during May and June, and a follow-up visit was made by two members in November. All six BAS-managed PAs were visited during these trips. While on site visits, team members conducted interviews with both park staff and community members and became familiarized with the physical settings of the PAs and surrounding communities.

Approximately 250 interviews were conducted with BAS office and field staff, residents of local communities, government officials, representatives of other Belizean NGOs, visitors to the PAs, Belizean and US researchers, and members of the educational and ecotourism communities. Subjects were typically interviewed using both structured interviews and semi-structured interviews with probing. For reasons of cultural sensitivity, data was not electronically recorded. BAS office staff were typically interviewed in the BAS office in Belize City while field staff were almost exclusively interviewed at their places of work, the PAs. Community members were spoken with almost entirely at their homes or personal businesses in their respective communities. In addition to formal and informal interviews, each member of the project team gathered data through participant observation while visiting PAs, local communities, the BAS office, and ecotourism facilities and businesses.

Interview questions were developed with the faculty advisor and with the staff at BAS headquarters to ensure that interviews were consistent and culturally appropriate. Before arriving in Belize, group members prepared for conducting qualitative interviews and participant observation research. Three books—Qualitative Interviewing: The Art of Hearing Data by Irene B. and Herbert J. Rubin (1995), Learning from Strangers: The Art & Method of Qualitative Interview Studies by Robert Weiss (1995), and Interpreting Qualitative Data: Methods for Analysing Talk, Text & Interaction by David Silverman (1999)—were read by the team members and discussed with the faculty.

Chapter 4: National Conservation Policy

> "If this country plays its future right, in twenty or thirty years Belize could become a developed nation in complete control of its natural resources."
>
> —Belizean NGO representative

I. INTRODUCTION

In recent years, Belize has experienced an explosion of activity related to environmental protection, biodiversity conservation, and PAM at the national level. The country recently passed its first environmental pollution laws, is developing a national biodiversity strategy, and is moving forward with regard to improving PAM. A solid foundation of PAs and wildlife legislation was established in the early 1980s, but many of these laws need to be revised to reflect the knowledge gained since their passage and the many international conventions that Belize is now party to. The Belizean government has stated that it is committed to the process of sustainable development and is, along with the country's NGOs, in the process of building the institutional and technical capacity to better manage the country's natural resources over the long term.

Belize has experienced rapid growth in its civil society since it achieved independence from Britain. The NGO community is becoming increasingly more involved with the development of national policy, and BAS is no exception to this. BAS has been an influential voice for the environment in Belize ever since it was first established, and now the organization is playing a larger role in the development of national policies. There is a definite role for BAS, along with other organizations, in this domain. National issues that BAS could help address through its advocacy program include biodiversity conservation, PAs, co-management, population, ecotourism, and economic development. BAS' experience as a natural resource manager and its continued involvement in national policy will be especially crucial as the Belizean population continues to rise, economic development pressures increase, and tourism rapidly expands.

This chapter examines the national policies and the national political context in Belize related to PAM, EE, and tourism, respectively. Understanding the national political context in which BAS carries out its programs and activities is essential to understanding the organization, what it has accomplished, and the challenges it must face. Understanding this setting and the policy-making process in general is also essential to BAS' advocacy program, which promotes environmentally sound national policy and sustainable environmental practices. Advocacy has been an integral part of the organization since its inception, although the advocacy program was only recently formalized.

BAS' PAM agreement with GOB is also examined in detail in this chapter, as well as BAS' evolving relationship with various government agencies and political parties. The organization's advocacy program is analyzed, and the section concludes with suggestions

on how BAS can move forward with its advocacy program in influencing PAs and other relevant policy at the national level. Recommendations are also given on how the organization can better integrate both national laws and policies and its advocacy program with its PAM program. Appendices 1a and 1b briefly outline the structure of the national environmental bureaucracy and the legislation most relevant to PAs in Belize.

II. NATIONAL CONSERVATION / PROTECTED-AREAS POLICY

Belize has no comprehensive national conservation policy or protected-areas policy (PFB, 1995). Therefore, BAS has no formal set of government policy guidelines to follow when it develops its own protected-areas policy for the six public PAs that it manages. While a National Biodiversity Strategy that reflects Belize's commitment to the international Convention on Biological Diversity was compiled by GOB in 1998 (with much public input), implementation of the strategy has been slow and no new national laws or policies have resulted (Ministry of Natural Resources and the Environment, 1998).

Environmental policy in Belize has routinely been expressed on an ad-hoc basis by individual ministries or departments (or NGOS) through specific statements and/or in legislation, to address their respective statutory duties. Decision-making with regard to PAs is therefore very fragmented, although it is an issue that requires coordinated and multidisciplinary action (PFB, 1995). Before the June 1996 release of the National Environmental Action Plan (NEAP), the closest thing to a national environmental policy was the economic policy of Belize, entitled the "National Five Year Plan." This document stated that "the fundamental objective is to improve the standard of living of the population whilst limiting impacts upon the environment" (PFB, 1995). Official government statements have often been supportive of PAs and biodiversity conservation, but are usually very general and vague.

The National Environmental Action Plan

The NEAP is basically an attempt by GOB to determine the major environmental issues facing Belize and to highlight areas most in need of government action. Some of the issues addressed in the document include the fact that Belize has no policy or strategy to control population growth and that environmental pollution is increasing with increased economic and industrial development. The document, however, does not prioritize these issue areas. The NEAP is important because it is the first time GOB has specifically stated where it stands with respect to the environment. While not a comprehensive policy, it serves as a "blueprint" for developing environmentally sustainable policies in the future (Ministry of Tourism and the Environment, 1996). The document emphasizes that one of the most serious problems that Belize faces is the absence of a national land management program, which has impacts on virtually every aspect of the environment and the economy, including PAs (Ministry of Tourism and the Environment, 1996). Correlating land suitability with use is a major issue, especially with respect to the clearing of marginal land for agriculture (Vernon, 1999). Governmental priorities mentioned in the plan that are directly related to PAs include strengthening land

management (which will be discussed later in this chapter) and strengthening environmental legal and institutional capacity.

In order to achieve the latter, the NEAP states GOB's intent to create a high-level independent commission that will clearly delineate ministerial responsibilities and review the allocation of resources to these government agencies. Establishment of a permanent inter-ministerial Coordinating Committee on Environment, chaired by the Ministry of Tourism and the Environment, was also a key goal. Now that the DOE has moved to the Ministry of Natural Resources and the Environment[3], however, it is likely that this Ministry would be expected to take the position of chair. The DOE is key, as it is responsible for such governmental coordination (expressed in its mission statement) and is the agency most capable of such a task (Ministry of Natural Resources and the Environment, 1999).

Finally, the NEAP stated the necessity of revising both the Forest and Fisheries Acts, as well as developing regulations so that the NPSA[4] can be properly enforced (Ministry of Tourism and the Environment, 1996). It appears that none of these goals have been accomplished to date. National laws will also need to be revised to reflect Belize's international commitments, such as the RAMSAR Convention on Wetlands. A national wetlands committee is being set up to discuss what the convention will mean for Belize, and it is likely that BAS will be very involved in this committee (BAS staff, personal communication).

The National Protected Areas Systems Plan

The document most pertinent to PAs in Belize is the National PAs Systems Plan (NPASP), which was prepared by PFB (PFB is a private conservation NGO in Belize that manages the Rio Bravo Conservation Management Area) with technical assistance from the Inter-American Development Bank and with USAID funding. The NPASP takes a comprehensive and insightful look at PAM and establishment in Belize and offers 26 recommendations to develop a systematic and self-sufficient PAs system. It is a groundbreaking document, and according to one member of the National Parks Policy Committee (NPPC), this is the plan that Belize should follow if it wants to be successful in PAM (NGO representative, personal communication). A top official in the Forestry Department also agrees that the document is a good starting point for improving national PAM (government official, personal communication).

The plan emphasizes the need for using ecological classification data to inform the designation of PAs, so that designations are more systematic, scientific, and appropriate to site conditions (PFB, 1995). Some classification work was conducted in conjunction

[3] The Department of Environment (DOE) was moved from the Ministry of Tourism to the Ministry of Natural Resources in 1998, when the new PUP administration was elected.

[4] The National Parks Systems Act is the act under which most government PAs are designated. The four designations under this act are nature reserves, national parks, natural monuments, and wildlife sanctuaries. PAs **not** designated under this act include private reserves and the national forest reserves, marine reserves, bird sanctuaries, and archaeological reserves, each of which is designated through separate legislation.

with the plan's preparation, including the identification of 49 distinct classes of natural vegetation. A subsequent gap analysis was conducted to determine which of these vegetation classes are not currently represented within the country's PAs (Protected Areas Conservation Trust, 1997).

The Protected Areas Conservation Trust

Since the NPASP was published in June 1995, Belize has continued to move forward with regard to PAM and policy development. One of the most successful endeavors to date is the government's creation of the Protected Areas Conservation Trust, or PACT. PACT, which was created through legislation in 1995 and began operations in June 1996, is essentially an innovative organization that will serve as a long-term funding mechanism for projects involving the conservation and sustainable use of Belize's natural and cultural resources (PACT, 1997). The Trust is funded continuously by a US$ 3.75 conservation fee (departure tax) paid by foreign visitors to Belize and by 20 percent of revenues derived from public PAs entrance fees, concession fees, permit and license fees, and cruise ship passenger fees.[5] In addition, grants from international donor agencies will be accepted, private fundraising will occur through a PACT Foundation, and interest income will be generated through an endowment fund (PACT, 1997).

The PACT funds are intended to supplement, not replace, government and NGO conservation expenditures (Ministry of Tourism and the Environment, 1996). PACT has generated approximately BZ$1 million (US$500,000) per year for PAs, about one-fourth of the total amount estimated as necessary to manage the country's PAs in a satisfactory manner. PACT therefore plays a crucial role in filling in the financial gaps in what the government and BAS cannot provide for PAM and biological and cultural resource protection (NGO representative, personal communication).

PACT's nine-member Board of Directors (BOD) includes representatives from the tourism sector, village councils, conservation NGOs, and relevant government departments (PACT, 1997). BAS currently represents the Belize Alliance of Conservation NGOs (BACONGO) on the PACT Board. BACONGO is a national conservation umbrella organization. BAS also supports the Trust through donating the mandatory 20 percent of PAs entrance fees that it collects. In addition, BAS' terrestrial PAs coordinator currently sits on PACT's Advisory Council, also representing BACONGO, and not just BAS (PACT, 1997).

Those eligible to apply for PACT funds through its grant award program include government agencies, NGOs, and communities (Ministry of Natural Resources and the Environment, 1996). Project funding priorities for PACT include strengthening the protection and management of PAs, developing eco-cultural tourism, improving archaeological sites, and supporting community based projects (PACT, 1997). In its five-

[5] The conservation fee is the only fee that has been fully implemented. Full implementation of the rest of these revenue generation options had been limited by a lack of institutional structures for the collection of these fees and by the need for a clear definition of what constitutes a cruise ship passenger fee or a public PA. (PACT strategic plan, 1997).

year strategic plan PACT has especially recognized the need to involve buffer-zone communities in natural and cultural resources management and to assist them in achieving their goals. It has stated that it will favor community-based development and will strive to establish linkages with communities, especially those not represented through mainstream agencies and NGO networks (PACT, 1997). PACT, through its expanding grant award program, will have much influence on PAM and policy development in Belize.

Indeed, PACT has recently entered into a three-year project with the United Nations Development Program — Global Environment Facility(UNDP-GEF) to support government attempts at co-managing four public PAs in Belize, which will help inform the development of a national co-management model. The grant will allow the Conservation Division within the Forest Department to work closely with the pilot buffer-zone communities. The government, as of June 1999, had already signed a formal joint-management agreement with at least one of these PAs (PACT, 1999). Currently the NPSA allows for the devolution of management responsibility, so co-management seems to be a legally viable management option under interpretation of existing law. In the case of BAS-managed sites, however, BAS is the agency to which authority has been devolved, and so the legal implications of further devolution of some management authority to buffer-zone communities is somewhat unclear. Therefore, the NPSA may need to be revised to explicitly include co- or joint-management provisions, especially when an NGO such as BAS is involved as a government proxy in managing these areas.

BAS is an advisor on the PACT project, but the project does not involve any of the BAS-managed sites. BAS is engaging in two of its own separate co-management projects. According to the PACT project summary, the funding agency did not feel that the structure of BAS would allow it to pursue a “comprehensive co-management effort” (PACT, 1999). It is unclear whether BAS would have difficulty finding continuous international donor support for co-management projects, given the view of this particular donor agency. The EU, however, is currently funding BAS’ two co-management projects (BAS staff, personal communication).

One BAS staff member thinks the government will be willing to engage in co-management, and that so far it has been very open and willing to listen and assist whenever possible. In general, GOB does not have the resources or staff to "focus on micro-management" and so they need the assistance of BAS and communities to manage the country’s PAs (BAS staff, personal communication). Co-management will need to be defined in Belize at the national level, but a national discourse on the topic has not yet begun. The PACT co-management project and BAS’ relationships with buffer-zone communities are discussed further in Chapter 9: Communities.

The National Parks Policy Committee and the Current Administration

In October 1998 the current Minister of Natural Resources and the Environment convened the NPPC. The committee is composed of eight representatives from various

government departments and NGOs, including BAS, that are involved with PAM.[6] The three major roles of the committee are to:

- Review current and pressing issues with respect to tourism and rural communities around PAs and make recommendations for policy innovation and implementation.
- Review the NPASP and other relevant documents relating to PAs in Belize and make recommendations.
- Develop a coherent and comprehensive policy regarding the establishment, management, and administration of PAs in Belize.

The final NPPC report is scheduled to be completed and presented to the public at the end of March 2000, after which the Committee will disband. BAS is one of the co-chairs of the NPPC, and was elected to this position by the entire committee. It has had a very strong and influential role in the committee, and therefore is at the forefront of protected-areas policy development in Belize. The Committee will recommend, among other things, the development of an autonomous National PAs Service. The Service would initiate legal reviews of all relevant legislation, make recommendations for change, and would ensure coordination among the various agencies and NGOs responsible for PAs (BAS staff, personal communication). It is likely that the Committee will suggest implementing many of the recommendations set out in the NPASP since BAS and the Forest Department, together responsible for all of the national PAs designated under the NPSA, are in agreement with many of the plan's basic recommendations.

The current government (the PUP Administration) appears to be more interested in conservation than previous administrations. It has pledged to invest more resources into reef conservation, set targets for the expansion of tourism, update and implement the national EE strategy, establish a PAs Coordinating Unit, and revitalize the Forestry and Fisheries Departments. Also, it has promised to remove the "absolute and arbitrary power" of ministers to either declare or de-reserve national PAs under the National Parks System Act (NPSA) (PUP, 1998a).[7] The current administration has not, however, formally adopted or endorsed the NPASP, and it remains to be seen how it will respond to the NPPC recommendations. The NPPC's proposed National Protected Areas Service could very well serve as the "Protected Areas Coordinating Unit" that this government has pledged to establish.

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[6] The government departments represented include the Forest Department, Department of the Environment, Fisheries Department, Archaeology Department, and the Physical Planning Unit within the Lands Department. The remaining committee members are the Belize Tourist Board (quasi-governmental) and the Belize Tourism Industry Association (BTIA), the only other NGO on the committee besides BAS.

[7] The Minister of Natural Resources and Environment, who administers this Act through the Forest Department, has much discretionary power. He or she can declare any area of national land a national park, nature reserve, wildlife sanctuary, or natural monument. Most problematic, however, is the Minister's ability through administrative fiat to alter the boundaries (de-reserve) of any part of or an entire PA. While this is not supposed to occur unless there is an "overriding public need," in practice, this stipulation has been ignored and Ministers have often de-reserved portions of PAs for political reasons and without any sort of public consultation. While de-reservation has mostly been an issue on the country's forest reserves (not managed under the NPSA), it leaves the majority of the nation's PAs legally vulnerable to political influences.

National Environmental Education Policy

Belize currently does not have a national EE policy. EE efforts are extremely fragmented throughout the nation, with a multitude of organizations and government agencies targeting different audiences. The Ministry of Education does not appear to be a strong leader in advancing specific EE curriculums for Belizean youth. BAS does not appear to have a meaningful relationship with this Ministry, aside from being invited by the agency to district-wide workshops on school curriculums (BAS, 1999a). EE in Belize has historically been the dominion of the country's NGOs. The 1996 National EE Strategy, the only broad-scale coordinated attempt to formalize an EE vision for the country, will be discussed further in the chapter 7: Environmental Education. BAS was one of the many organizations that participated in the development of this national strategy.

PACT has worked to some extent with BAS, the Belize Zoo, and the Sibun Watershed Association (a community-based NGO that deals with many environmental issues, including those involving BHNP) on EE. One member on the PACT BOD feels that environmental and conservation education needs to be worked more explicitly into school curriculums at the national level (NGO representative, personal communication). One member of the Forest Department also noted the need for more EE programs to increase general public awareness of the benefits of PAs. This staff member feels that the public is very aware of the legal restrictions pertaining to PAs, but disproportionately unaware of the benefits of conservation, and that this is one barrier to general public adherence to national PAs and wildlife law.

The Conservation Division of the Forest Department has an EE program targeted at school children (which includes periodic newsletters), and has had informal discussions with the Ministry of Education regarding EE as a requirement in school curriculums at all grade levels (government official, personal communication). Other governmental efforts at EE include a guide for developers that the DOE compiled and efforts to educate farmers about pesticide usage through a Pesticides Control Board (government official, personal communication).

The University College of Belize (UCB) is the only higher learning educational institution in Belize. It is a semi-autonomous body, and has agreements with GOB to share environmental information and serve as a governmental advisor through various national environmental committees. It offers a two-year degree through its Natural Resources Management Program, which is housed in its Marine Research Center. UCB would like to play a larger role in performing carrying capacity and baseline data research in Belize, but it currently lacks the institutional capacity to do so. It is further hampered by the country's lack of a "university culture," which also can make research difficult. The College does have information-sharing agreements with BAS as well, and has recently begun to house the BAS library (researcher, personal communication). This collaboration will provide opportunities for coordinated EE and research projects between the two organizations. EE in Belize and BAS' EE program are discussed in greater detail in Chapter 7: Environmental Education.

National Tourism Policy

Belize is in the process of developing national tourism policies and regulations. According to one member of the Belize Tourist Board (BTB), a quasi-governmental organization that works closely with both industry and government in marketing and facilitating tourism development, both political parties in Belize have placed tourism development high on their agendas. Both parties have promoted "eco-cultural tourism," and tourism in general seems to have been a major issue in the last election (government official, personal communication). At the national level, BTB is very influential and has pushed hard for tourism policy development. It sits on the NPPC along with the Belize Tourism Industry Association (BTIA) and BAS[8] (BAS staff, personal communication). BAS does have ties with the BTB, which is important in terms of influencing national tourism policy (see Chapter 8: Ecotourism). Aside from the Ministry of Tourism itself, there also exists a Belize National Tourism Council (with both public and private stakeholders) and an Inter-Ministerial Committee for Tourism, which allows for communication between at least six government ministries on major tourism issues. The president of BAS currently sits on the Belize National Tourism Council (BAS staff, personal communication).

There has been a surge in tourism legislation during the current administration. Relevant to BAS are bills such as those relating to the training and operations of tour guides, small hotels (such as might exist in buffer-zone communities), and a draft national cruise ship tourism policy which would affect all the PAs under BAS management. One BTB leader expressed a desire to see local communities more involved in all aspects of PAM, especially tourism, and would like to work with BAS in developing learning centers for ecotourism (government official, personal communication). National tourism policy is in a very dynamic developmental stage and BAS has a ripe opportunity to engage itself more deeply in this important national discussion. The BTB, at the very least, seems willing to work more closely with BAS. It will be critical to involve BAS field staff in both internal and external discussions about tourism policy. They have important perspectives on implementation issues, such as how national tourism police interact with PAs (BAS staff, personal communication). Tourism in Belize and how it relates to BAS will be discussed further in Chapter 8: Ecotourism.

III. DOMESTIC POLITICAL CLIMATE UNDER WHICH BAS OPERATES

Governance and Political Parties

As advocacy is one of BAS' main organizational functions, and as it shares management responsibilities for six PAs with the government, the political climate in which BAS must operate is very important and greatly impacts what the organization can accomplish. In Belize, the word "government" usually refers directly to the cabinet, which traditionally has operated without much transparency to develop the nation's policies (Barry and

[8] These three organizations (BTB, BTIA, and BAS) are the only non-governmental organizations on the NPPC, and therefore bring critical perspectives to national protected-areas policy development.

Vernon, 1995). Ministers, who make up the cabinet, have tight control over how the government is run. Virtually all bills originate in cabinet meetings and the ministers in effect hold both executive and legislative power, as the legislature basically acts as a "rubber stamp" (Sutherland, 1998).

In addition, Belize lacks a longstanding, democratic civil society, and the government does not have a built-in structure for consulting with civil society groups. The judicial system is highly biased, and there is not a strong common law grievance system to protect Belizeans from abuses of power and infringement of their rights (Sutherland, 1998). The government has had almost complete control over the flow of information, but this may be changing, as a Freedom of Information Act was passed in 1993. In addition, there are now weekly radio and newspaper cabinet briefings and GOB maintains a very informative website. Civil society is quickly evolving in Belize, and many refer to the Belize Civil Society Movement as evidence of this (BAS staff, personal communication).

Two political parties have dominated politics in Belize: the PUP and the UDP. The PUP is the current party in power, winning the last election by a landslide in August 1998. Once a party is elected in Belize, it has almost complete power over the governance of the country since there is no effective system for the separation of powers (Barry and Vernon, 1995). "Each change of government has shifted the spoils of governing from one small group of elites to another, so although elections are fair and democratic, the process of governing is viewed by most Belizeans as corrupt and exploitative" (Sutherland, 1998). Complaints of corruption about both parties have created a "yo-yo" system of party governance in Belize, with the party in power often retaliating against supporters of other parties.

Persecution of opponents has filtered down even to the village council level in some cases. Village council members loyal to the party in power sometimes use their advantage to settle personal vendettas against those supporting the opposite party (Sutherland, 1998). Co-management could prove especially challenging in buffer-zone communities where party politics in the village councils is particularly divisive. Village councils only recently gained legal recognition, and land (potentially protected land) is often distributed for political motives. Implementation of laws regulating village councils, land distribution reform, and the definition of co-management issues at the national level will all be necessary for successful co-management.

The PUP and UDP are not ideologically opposed, and so politics in Belize has generally been driven more by personality differences, differences in issue-emphasis, family political loyalties, and personal favors. Both parties seek to gain broad-based support across both income and cultural divisions, and usually run on vague, highly rhetorical platforms. Although the parties have alternated in office over the past four elections (constitutionally mandated every five years), their similarities, rather than their differences, have shown through. Both parties end up resorting to "the same patron-client relationships for which they had criticized the other" (Barry and Vernon, 1995). The

parties mostly depend upon large business contributions, especially from international trade merchants, large landowners, and agro-exporters (Barry and Vernon, 1995).

Both parties have also used land as a tool to gain election votes. Targeting community members, the parties will expedite land ownership, distribute land, or form cooperatives to gain allegiances (BAS staff, personal communication). These land concessions are often given with little consideration of land suitability. Furthermore, political and economic motives, not environmental concerns, have guided decisions regarding new road construction or the de-reservation of forest reserves for agriculture (Barry and Vernon, 1995). According to one BAS staff member, the parties show no striking difference when it comes to their "commitment" to the environment. The current PUP administration, although very receptive to environmental concerns, has not yet been as strong in actually implementing these concerns into its policies (BAS staff, personal communication). With regard to overall economic policy, party differences have often been hard to decipher (Barry and Vernon, 1995).

Civil Society

Belize lacks a strong tradition of civil society. Reasons for this include the country's colonial history, low population density, relatively stable social climate, availability of land, and multiethnic social composition (Barry and Vernon, 1995). Lack of resources is another major constraint. Significant NGO growth did not occur in Belize until the 1980s, due partly to large inflows of foreign funding and partly to increasing consciousness of the role private organizations could play in the newly independent country (Barry and Vernon, 1995). As a result of the very recent birth of civil society in the country and the lack of resources, "NGOs have as yet made little headway in sparking broader social development and sustainable rural development" (Barry and Vernon, 1995). The civil society movement in Belize is growing stronger, however, and evidence of this can be seen in the People's Manifesto, a visionary document recently drawn up by civil society groups that expresses the needs and desires of the Belizean public (BAS staff, personal communication).

Since the mid-to-late 1980s, NGOs have been asking for a larger role in government and for the development of clear and impartial regulations involving NGO rights and operations. Favoritism and/or political victimization of NGOs by GOB has apparently been an issue (Barry and Vernon, 1995). One BAS staff member admits that the government will try to "win over" any organization that has a lot of power (BAS staff, personal communication). An important umbrella organization for civil society groups called the Association of National Development Agencies (ANDA) was founded in 1987. It has advocated for, among other things, institutionalized mechanisms for government-NGO coordination (Barry and Vernon, 1995). BAS is a member of this organization, as will be discussed below.

Although much progress has been made by Belizean civil society with regard to joint and coordinated action (at least two other NGO networks exist now, for example), there is still much to be done before it can take on a stronger leadership in national policy

formation and change. For example, most Belizean NGOs (including BAS) are highly dependent on external funding and will need to develop mechanisms for financial, and therefore organizational, sustainability. As NGOs have been working to expand their institutional capacities, the government has been increasingly willing to give civil society a larger say in the governance of the country (Barry and Vernon, 1995). This may be demonstrated by the proliferation of government committees that allow for NGO representation. Many BAS staff feel that the government realizes the importance of NGOs in Belize, as they often manage to fill in the gaps in what the government simply cannot do (BAS staff, personal communication).

The current administration has, for the first time in Belizean history, proposed a bill for the regulation of NGOs. This has been long awaited by the NGO community in Belize, which is currently reviewing the bill and will present an amended bill to GOB. If passed, the law would regulate the establishment and registration of NGOs, their operations and standards, and other related matters. ANDA has been particularly active in coordinating action on this bill. BACONGO is involved as well, and has hired a lawyer who sits on the BAS BOD to consult on the unified legal NGO response to the government bill. One BAS staff member stressed the need for this type of legislation to prevent the establishment of "fly-by-night" NGOs, organizations that galvanize over short-term political or other interests, and then disband (BAS staff, personal communication). There is a sentiment among the established NGO community that only well-meaning Belizean NGOs should benefit from such legislation, tax exemptions being only one example. BAS, therefore, is playing a significant part in this important issue both through its membership in ANDA and through the involvement of the lawyer on its BOD.

IV. PROTECTED AREAS MANAGEMENT AGREEMENT BETWEEN BAS AND THE GOVERNMENT

BAS-Managed Protected Areas

BAS holds a unique and important position within Belize because of its shared protected-areas management responsibilities with the government for CBWS, CTWS, BHNP, TMNR, HMCNM, and GNP. The government, overwhelmed as it is with all the PAs it must manage, does not have enough staff or other resources to devote to these six areas. It has delegated management responsibilities for these six areas to BAS under the NPSA. These designations and their meanings are summarized in Table 4.1.

Table 4.1 BAS-Managed PAs

BAS-Managed Reserve Type	Main Purpose Under the Law (NPSA)	Legal Definition
Tapir Mountain *Nature Reserve*	Strict Protection with use limited to education and research	Protection to conserve biological communities or species and to maintain natural processes in an undisturbed state in order to have ecologically representative examples

		of the natural environment available for scientific study, monitoring, education, and the Maintenance of genetic resources
Blue Hole and Guanacaste *National Parks*	Protection of nationally important recreation areas	Protection and preservation of natural and scenic values of national significance for the benefit and enjoyment of the general public
Half Moon Caye *Natural Monument*	Protection of nationally important unique features for education, research, and appreciation	Protection and preservation of nationally significant natural features of special interest or unique characteristics to provide opportunities for interpretation, education, research, and public appreciation
Cockscomb Basin and Crooked Tree *Wildlife Sanctuaries* Source: (Zisman, 1996)	Protection of nationally important wildlife, habitats, and physical features	Protection of nationally significant species, groups of species, biotic communities, or physical features of the environment requiring specific human manipulation for their perpetuation

Government Protected Areas Management

As of 1996, there were thirty-six government designated PAs in Belize, including the six BAS-managed sites. There also exist a handful of private and community reserves, which are not included in this total because they are not legally recognized.[9] Of the government-PAs, there are four nature reserves, ten national parks, one natural monument, two wildlife sanctuaries, 17 forest reserves, and two marine reserves (Zisman, 1996).[10] According to Simon Zisman, who put together a directory of Belizean PAs in 1996, many of these government-designated PAs have no significant management and could therefore be considered "paper parks" (Zisman, 1996). These included three of the four nature reserves, one-half of the national parks, and 12 of the 17 forest reserves. All of the BAS-managed sites were considered to have a significant management presence (Zisman, 1996).

There are no implementing regulations under the NPSA, and so there is little consistency in how the nation's PAs are established and managed. The Minister of Natural Resources and Environment ultimately decides upon requests for designating PAs. Within the Forest Department, the organizational chart for the Conservation Division includes wardens and park guards, but many of these positions remain vacant. The Department

[9] One exception to this is PFB's Rio Bravo Conservation Management Area. This private reserve is legally recognized, and PFB has a land management agreement for this area with the government.

[10] As of June 1999, there were 41 government-designated PAs under the NPSA, but the breakdown of these areas was not available.

seems to have no set structure for assigning staff to PAs (PFB, 1995). External support for the management of forest reserves has come from the Overseas Development Agency (ODA) through its Forest Planning and Management Program, but the forest reserves are managed under the Forest Act, not the NPSA (Ministry of Tourism and the Environment, 1996).

Lack of financial resources within the government, lack of earmarking revenue for conservation purposes, and lack of institutional and technical capability (including enforcement capacity) within the Forest and other departments has led to these severe management deficiencies on the ground. In addition, there has been a lack of consistent communication and coordination between the government agencies directly responsible for protected areas[11]. The consequences have been a lack of park protection, incidences of illegal activities, and a lack of research and quantitative data on many of the government's PAs, especially those under the Forest Department's jurisdiction (Ministry of Tourism and the Environment, 1996). In addition, "many of the PAs have been established in a haphazard fashion rather than as part of a planned environmental strategy" (Barry and Vernon, 1995). Many have been created in an effort to preserve a certain species or to protect an area from a development threat.

Memorandum of Understanding between BAS and GOB

In general, there seems to be a high level of trust and cooperation between the government and NGOs in Belize. BAS may be the most striking and concrete example of this trust. A Memorandum of Understanding (MOU), a five-year agreement between the Forest Department, GOB, and BAS, was first signed in November 1995 and was renewed in February 1999. The agreement is very general and calls for the joint formulation and implementation of management plans for each of the six areas, with the government and the Forest Department responsible for all infrastructure and security in these areas (MOU, 1995). BAS is the government proxy with regard to these six areas, and appears to have a lot of flexibility in its management responsibilities. The agreement, which is fairly general, does not specify any limits on BAS' authority to experiment with different management strategies or to enforce national laws. Either party can terminate the agreement for any reason, especially if differences arise that cannot be resolved. Written notice must be provided if termination is desired by either party, and the agreement calls for six months to be dedicated to attempts to resolve the matter. Also, if the government for any reason wishes to resume the sole management of these PAs, it must agree with BAS on a transition period that does not exceed four years (MOU, 1995).

The government also pledged in the agreement to respond to requests by BAS for relevant PAs financial information and to assist BAS with tax exemptions and other benefits enjoyed by NGOs (MOU, 1995). Aside from the day-to-day management of these PAs, BAS is responsible for public awareness campaigns, education, and recreation with respect to these six sites. BAS is also supposed to provide the government with

[11] These government agencies are the Department of Agriculture and Fisheries (jurisdiction over marine reserves), the Department of Natural Resources and Environment (jurisdiction over terrestrial reserves), and the Archaeology Department (jurisdiction over cultural reserves).

quarterly financial statements and annual reports (MOU, 1995), although it has not kept up with this requirement. It seems that the agreement has been more closely followed by BAS than by the government. However, although BAS is currently engaged in two co-management projects, co-management of these areas is not mentioned in the MOU. In implementing this MOU, BAS has no comprehensive protected-areas policy or integrated management strategy, although management plans are in place for each site.

Despite the fact that BAS was involved with PAM since the early 1980s,[12] the government did not allow the society to collect entrance fees until the 1995 MOU was signed (Waight and Lumb, 1999). This may have been due in part to the controversial nature of charging fees. In this original MOU, BAS was allowed to keep 70 percent of its entry fee revenue, with ten percent going to the government and the other 20 percent allocated to PACT. A positive note for BAS is that in the recent renewal of the MOU the organization's allotment of entry fees was increased to 80 percent, with the other 20 percent allocated to PACT. The ten percent that was originally allocated to the government Consolidated Revenue Fund has been rerouted back to BAS. This is crucial, as BAS took on Victoria's Peak and Blue Hole Natural Monuments in the renewed agreement (Waight and Lumb, 1999). It is not yet clear whether the fact that BAS took on two new sites in the renewed agreement was what prompted the increased allotment to BAS of its entry fees, or whether the two events were merely coincidental or prompted by some other factor.

Overall, BAS seems to have a good working relationship with the government and with the Forest Department. There seems to be a genuine effort on the part of the Protected-areas manager to keep the Forest Department informed of both progress and difficulties on a regular basis (BAS staff, personal communication). Although the MOU establishes a formal relationship between BAS and the Forest Department, meeting times are not set, but rather are scheduled as necessary (government official, personal communication). The government, while it has not provided all of the infrastructure at BAS-managed sites, has assisted with building guard posts at BHNP and CBWS. For various reasons, GOB has not met BAS "halfway" in the management of these sites, as has been the case since BAS' involvement in other PAs beginning in the early 1980s.

It does not appear that the government in any way assisted BAS in the development of management plans for each of the six PAs, and it has only within the last year offered BAS tax breaks. As BAS' requests over the years for PAs designations were granted, its involvement in management was expected (Waight and Lumb, 1999). BAS has always taken the burden of management upon itself, and there seems to be an unspoken understanding that the organization will have to do more than its fair share in the management of these areas. Lack of government resources and technical and institutional capacity have been major reasons for this situation. Practically speaking, BAS seems to be managing these PAs with few expectations of GOB, despite what is mentioned in the MOU. Indeed, BAS is saving GOB money by seeking and successfully obtaining funds

[12] Prior to 1995, BAS managed most of the country's bird sanctuaries under an informal agreement with GOB that began in 1984. Thus, despite taking on the management of two new PAs, BAS narrowed down its PAs responsibilities with this MOU.

for managing these areas. Chapter 6: Organizational Analysis addresses this issue in further detail. Government officials generally seem very approving of BAS' PAM performance. Although BAS' relationship with the government is informal in many ways, there is much communication between BAS staff and government officials through frequent national advisory and technical committee meetings.

Some field staff feel that GOB is not doing enough to assist BAS in the management of these sites, and that BAS has not demanded enough of the government. For example, government responses to BAS requests for help with security and enforcement have been varied, depending upon whom in the organization is making the call (BAS staff, personal communication). In general, the field staff do not get the same response as the Protected-areas manager, who communicates often with the Forest Department. One warden would like to see the government provide tax-free fuel to BAS, pay for one third of BAS staff salary, and provide at least one government-licensed vehicle at each site for the transportation needs of the wardens (BAS staff, personal communication). In 1998, BAS staff even caught illegal loggers in TMNR that some members of the government had permitted to engage in this activity. BAS did not make a scandal out of the issue, however, as it tries to remain neutral and works hard to foster good relations with whatever government is in power (BAS staff, personal communication).

The recently elected administration has granted BAS sales tax breaks and an annual donation of BZ$100,000, twice what BAS had requested. Half of this annual donation will be disbursed to BAS in June of each year, with the rest being disbursed in December of each year. The first of these grants was awarded to BAS in late summer 1999 (BAS staff, personal communication). This gesture, along with the improvements in the renewed MOU, may indicate that the current administration is more serious about PAs and assisting BAS in management. It is too early to tell for sure.

BAS Protected Areas and National Policy

There seem to be inconsistencies within the organization as to who is well-informed about national PA laws and policies. In general, the central office staff, not the field staff, have a better understanding of national policy. Knowledge of PAs laws has not been a requirement to become a warden at the BAS sites, and those wardens that are fairly familiar with these laws have taken the initiative to study them on their own time. The exception to this is the Special Constable training that many of the wardens have received, which gives them the power of arrest to implement national laws. The most recent Special Constable training included a review of the NPSA, the WPA, and the EPA (BAS staff, personal communication). Previous training sessions did not include this information, and so some of BAS' wardens have not had this formal education.

The Protected-areas manager realizes the need for all field staff to have a good understanding of national policy, and would like to hold training sessions on-site for field staff with the help of the Advocacy Coordinator and the EE Coordinator. Indeed, warden orientation and training is being planned by BAS for the year 2000, although it is unclear exactly what this training will involve. (BAS staff, personal communication). BAS also

has an interesting exchange program for park wardens in which they can visit other parks to see what challenges they face and how they are managed. Relatively few of the field staff, however, have been able to participate in the program. Some BAS staff are weary of entering into international agreements and conventions before all of BAS is on the same page with regard to national policy and law (BAS staff, personal communication). It is important that BAS' management practices reflect national law and that national law is consistent with relevant international laws and policies.

V. BELIZE AUDUBON SOCIETY AND NATIONAL POLICY: ADVOCACY

Background

BAS has had a long history of influence on government decision-making and in PAM. There have been many instances throughout the years when the government has consulted with BAS regarding economic development decisions (Waight and Lumb, 1999). At the time of BAS' founding, PUP was the party in power, and the fact that two sisters and one brother-in law of the Prime Minister (George Price) sat on the BOD gave the organization special influence in the government. It was perhaps due to this political connection, along with the fact that the Forest Department seriously lacked resources, that BAS was entrusted with the management of many government PAs beginning in the early 1980s, despite its own lack of resources and expertise. Funding from the Massachusetts Audubon Society during this critical time allowed BAS to evolve from a volunteer organization to a more professional one, with full-time staff (Barry and Vernon, 1995). BAS began to lobby aggressively for the environment in the late 70s. In addition, BAS played a major role in the passage of the NPSA and the WPA; some BAS board members wrote first drafts of these primary pieces of legislation (BAS staff, personal communication).

BAS has often helped to fill in the "gaps" where the government has lacked the resources to act. In addition to taking on the management of protected sites, BAS has been available for the public to call about environmental concerns. If a government agency cannot respond to a question or concern, people often refer to BAS (BAS staff, personal communication). It does not appear that this has been too large a strain on the organization, although BAS does want to formalize and improve this function through its planned Quick Policy Response Program as a component of its Advocacy Program. Staff plan to establish an internal protocol by which BAS could quickly develop policy stances on new issues raised by the public (BAS, 1999b). In addition to filling in these gaps, some in the organization see BAS' role as reminding the government of its environmental commitments. This is important, as the parties rarely abide by their "promises" (BAS staff, personal communication).

BAS Advocacy Program

BAS did not have a formal advocacy program until September 1998, when it received a BZ$ 60,000 grant from HIVOS, a Dutch NGO, the Humanitarian Institute for Cooperation with Developing Countries (Waight and Lumb, 1999). The goal of the Advocacy Program is to "take action to ensure that policies set forth by the government, especially with regards to land, air, or water (Belize's Natural Resources), are environmentally sound and take the best interest of the Belizean people into consideration" (BAS, 1999b). It appears that BAS is gearing the program to address a broad range of environmental protection and natural resource management issues. While there is a need for increased environmental advocacy in Belize, BAS may find it useful to define the scope of this program early on, taking into consideration its organizational structure and its resource constraints. The program has five major objectives (BAS, 1999c):

- Expand the grassroots base of the organization.
- Target the actions of groups such as businessmen, politicians, large landowners, and immigrants in the organization's advocacy efforts to reform polices and regulations.
- Establish an information and research system to complement and add to the current government Conservation and Environmental Data System (CEDS).
- Take a lead role in steering the Belize Alliance of Conservation NGOs (BACONGO), and to participate more actively in ANDA.
- Demonstrate successful approaches to sound environmental behavior at both the central office and at the BAS-managed PAs.

One accomplishment of the program to date is BAS' "Environmental Agenda for the 21st Century," which the organization released to the public in June 1998, prior to the last GOB election. The document outlined the organization's stance on major environmental issues, including PAs, and gave general proposals for action. As a result of this document, both parties included in their manifestos, for the first time in the country's electoral history, whole sections devoted specifically to the environment (BAS, 1999a). According to one BAS staff member, the PUP incorporated more of BAS' suggestions into its manifesto and put more thought into workable environmental proposals than did the UDP (BAS staff, personal communication). The PUP manifesto placed a heavy emphasis upon developing a sound national land policy (PUP, 1998b). It remains to be seen whether or not the PUP, now a year and a half into its term in office, will go through with implementing any of its own or BAS' environmental proposals.

BAS' Advocacy Program is ambitious, especially considering that the entire program is essentially being run by one individual, the Advocacy Coordinator. Some of the more specific and important tasks of the program include: establishing more formal and strategic alliances with other organizations, drafting a method of policy analysis, formalizing a Quick Policy Response Program, entering into an agreement with the IUCN for the use of their regional wetlands database, and eventually developing mapping and GIS capabilities at the BAS central office (BAS, 1999c). Indeed, building GIS

capability at the BAS central office is currently underway through an agreement BAS has with the Wildlife Conservation Society or WCS (BAS staff, personal communication).

The hope is for BAS to be able to advocate with the use of sound environmental information that it can access within house (BAS, 1998b). In addition, the organization has established that any issues that the advocacy program takes on are to be relevant to and supported by BAS' PAM and EE functions (BAS, 1999b). With limited funds and a lack of supporting staff, the Advocacy Coordinator has been concentrating his efforts on developing strategic alliances with other organizations, which is seen by many in the central office as the most urgent task of the advocacy program. For the same reasons, the other tasks mentioned above are not likely to be accomplished in the immediate future.

The BAS Advocacy Program is currently focusing on a three-year national land reform campaign with other civil society groups called the Land Alliance for National Development (BAS staff, personal communication). BAS, along with The Society for the Promotion of Education and Research (SPEAR)[13] and the Belize Association of Producer's Organizations (BAPO), initiated this campaign in April 1999, and all three organizations pledged to be responsible for all initial expenses (Vernon, 1999). BAS' Advocacy Coordinator stressed the importance of land reform in Belize, as many other environmental problems stem from this issue. While regulations have recently been passed that require environmental impact assessments for large developments, many developments are taking place without consideration of land suitability. In addition, there are no zoning laws in Belize (including those establishing buffer zones around PAs), and in many cases commercial agriculture directly borders PAs boundaries. Land is also distributed unequally, and subject to political influences.

The campaign is directly relevant to PAs, as it encompasses crucial issues such as land-use suitability, zoning, and land tenure. Due to the magnitude of the campaign, it is imperative that BAS form alliances with other organizations, as a broad-based coalition is needed to gain enough power to influence the government on this politically volatile issue. Many organizations and individuals, from every district in the country, have either joined or participated in the campaign since its inception. The current government is apparently in the process of developing a land policy of its own, and BAS wants to ensure that civil society has input on this important issue (BAS staff, personal communication). This land reform coalition (in a nutshell) plans on acquiring external funding, recruiting more allies, and after much public consultation, presenting to the government by September 2001 its own concrete proposals for systematic change (Vernon, 1999). If such a broad-based consensus can indeed be reached, it is very likely that the government will work with this coalition.

[13] SPEAR, about as old as BAS, is one of the leading civil society organizations in Belize. It has been at the forefront of national campaigns to reform the political system, and is the only other NGO in the country besides BAS to have a formal advocacy program (Barry and Vernon, 1995).

Future of BAS Advocacy

Some BAS staff see BAS expanding its advocacy program in the future, eventually to the point where advocacy will be the "main reason" for the organization's existence (BAS staff, personal communication). Until now, management of PAs and the running of the organization itself have taken up most of BAS' time and effort. In terms of the organization itself, it is unclear yet what effect this focus on advocacy will have on the other BAS programs, or on the organization as a whole. BAS doesn't seem likely to give up management of the PAs completely, but rather BAS will move toward and eventually engage in co-managing its sites with buffer-zone communities (BAS staff, personal communication). The government will probably not be taking over the management of these areas any time soon. As a whole, the organization feels that co-management is both morally correct (the parks do not *belong* to BAS) and necessary for the sustainability of these sites.

It is indisputable that the management of PAs has been a source of power, influence, and respect for the organization. BAS has worked hard to prove itself as an objective and impartial resource manager, and has been very careful not to politicize any of the issues it has been involved with (whether management or advocacy issues). BAS is also highly respected for its transparency and the democratic way in which the organization is run (BAS staff, personal communication). For some of those leading the organization this move towards advocacy apparently is a natural progression for BAS, as its ideology has now moved beyond that of the six PAs that it manages to a broader national scope (BAS staff, personal communication).

In terms of the channels it can access to influence governmental policy, BAS appears to be in a relatively strong position to engage in heightened advocacy. The organization has sympathetic contacts at each radio station and newspaper, and sits on many important national and regional councils and committees (BAS, 1999b). Because of this fact, BAS has attracted more attention, and more people are vying for positions on the BOD. Membership has also been on the rise (BAS staff, personal communication). BAS is a membership driven organization, and plans to recruit more members by establishing a greater number of partnerships with other organizations, implementing a volunteer and internship program, and participating in more trade shows and educational festivals (BAS, 1999c).

BAS is a member of BACONGO, which is the only umbrella network of environmental NGOs in the country. According to one source, "Although still in the very early stages of development, BACONGO represents the first real attempt of the environmental NGOs [in Belize] to deal collectively with what has been one of their weakest areas - advocacy" (Barry and Vernon, 1995). While presently not the chair of BACONGO, BAS is the secretary, and has pushed hard for the umbrella group's current strategic planning efforts (BAS, 1999c). BAS also plans on pushing BACONGO to expand its advocacy efforts. This may take time, however, as BAS seems to be the only environmental NGO in Belize moving seriously toward increased advocacy (BAS staff, personal communication). In addition, BAS has recently assumed the role of vice-chair on ANDA's BOD, and will

encourage this civil society umbrella group to adopt an environmental component into its current strategic plan (BAS, 1998b).

As long as BAS does the groundwork, it generally fosters working relationships with both political parties and with government environmental agencies (BAS staff, personal communication). At times, BAS has been viewed as a PUP supporter because of the political affiliations of board members, despite the organization's neutrality with respect to political issues. While this has not been a major hindrance, the recently elected BOD is much more politically balanced than it has been in the past, and this is seen as an major advantage by the organization (BAS staff, personal communication). In the eyes of some BAS staff, the organization has the best working relationship (in general) with the DOE, which is not directly responsible for PAs, but seems to be the most powerful of the environmental/natural resource departments in the country. Working relationships with GOB agencies may differ to a degree, however, depending on the function or program being discussed within the organization.

BAS would like to hire an environmental lawyer to be able to develop specific legal recommendations for the national environmental laws in need of reform (BAS staff, personal communication). Examples of laws needing revision include the nation's wildlife protection and PAs legislation. In addition, many of the organization's leaders would like to see BAS invest more in grassroots efforts. The organization has rallied on social issues before and thus has good relations with many civil society organizations. Some staff envision BAS empowering at least one affiliate organization (does not necessarily have to be a BAS chapter, of which there are two) in every district to advocate for themselves, by hiring consultants trained in advocacy techniques. BAS would then be a source of information and technical support. This is important given the lack of community empowerment in Belize, the number of national advisory committees where positive citizen influence could be exercised, and the fact that many of the nation's laws are currently under revision. It is interesting to note that HIVOS, to whom BAS applied for (and received) more advocacy funds, would like to see the organization work more with grassroots efforts. HIVOS has funded BAS' grassroots advocacy efforts for another two years (BAS staff, personal communication).

VI. RECOMMENDATIONS

BAS has a vast wealth of natural resource management experience, and has an important role to play, along with other organizations, in helping to develop national environmental policies. BAS is very serious about moving towards an expanded advocacy program, and seems to have achieved a strong position for influencing national policy. The organization has a great deal of respect in Belize because of its PAM activities, its transparency, and the work of BAS staff in developing good working relationships with a wide variety of both governmental and non-governmental organizations. BAS is playing a major role in the development of a national PAs policy through its involvement with the NPPC, and has many opportunities to expand its influence in national tourism and EE policy, among other issue areas. The current administration seems to be showing greater concern for the environment than past administrations, and much activity has recently

taken place with regards to national tourism, NGO, and PAs policy. BAS recognizes the need to develop its own internal PAM policy, so that it can better coordinate its own activities, better inform national policy development, and remain consistent with national and international conservation laws and policies.

Relevant to PAM:

- Consider formalizing a system in which all field staff are educated about national laws and policies, and are kept up to date with relevant events/issues at the national level. Periodic workshops may be useful, as well as relevant legislative updates to all BAS staff.

- Consider mechanisms for getting feedback from field staff on how national polices are actually working on the ground. Field staff can provide invaluable feedback to the BAS central office. Such mechanisms could perhaps include more regular communication between field staff and the central office, as well as between field staff and the BOD.

- Consider continuing to facilitate the development of a comprehensive and accountable national protected-areas policy, and advocating for the coordination of such a policy with national land use and economic development policies.

- Consider working more to ensure that the public dissemination of the draft NPPC recommendations is widespread, especially within the buffer-zone communities surrounding BAS-managed sites, at the two BAS chapters, and amongst members of BAS affiliates. BAS may want to encourage GOB to develop mechanisms for obtaining valuable public feedback on this important document, such as district-wide workshops or meetings.

- Consider including co-management in the next MOU with the government, if the MOU is indeed renewed in 2004. BAS has the potential to influence government protected-areas policy and law to include co-management as well, and could use its co-management experiences to inform this discussion at a national level.

- Support efforts to define co-management issues at the national level, perhaps in conjunction with PACT and the Forestry Department. Co-management could be a subcommittee under the NPPC's National PAs Service. BAS may also want to consider the ramifications of including specific co-management provisions in the NPSA.

- Consider proposing to the Minister of Natural Resources and Environment and PACT's BOD that the US$3.75 conservation fee (departure tax) charged to foreign tourists be raised to increase available funding for PAM and other conservation projects in Belize.

- Encourage the Minister of Natural Resources and Environment to pass legislation allowing BAS and any other PA manager to collect higher entrance fees, so that parks can become more self-sufficient and so that management can be improved nationwide. Fees could remain differential for Belizean citizens versus foreign visitors.

- Encourage GOB to move forward with the Biodiversity Action Plan, and stay heavily involved in the national discourse on biodiversity conservation. BAS could encourage the government to convene a *permanent* national committee on biodiversity, or have this as a sub-committee under the NPPC's suggested National PAs Service.

- Encourage the government to revise the NPSA to include buffer-zone regulations for PAs to ameliorate the pollution effects of adjacent agricultural and/or industrial developments.

- Expand the exchange program for park wardens to include sites other than those managed by BAS, allowing more field staff to experience management practices and implementation issues at other PAs. An even exchange would avoid management deficiencies at the BAS-managed sites.

- Involve field staff more intimately in the next renewal of the MOU, to determine an organization-wide renewal strategy and vision before the organization consults with government lawyers.

Relevant to Advocacy:

- Examine BAS' priorities given limited financial resources and its management contract with the government. BAS' advocacy program and management functions may be political conflicts of interest, and the effects of an expanded advocacy program on the rest of the organization, especially the other two programs, should be examined.

- Revolve and focus the advocacy program around PAs, and as such define the scope of the program. This could be helpful to BAS, given the organization's resource constraints, and the fact that PAM is BAS' core competency. Defining the scope of the program is a useful way to direct and guide the organization's advocacy efforts.

- Help address national issues (in addition to land reform) through the advocacy program such as: biodiversity conservation, PAs, co-management, ecosystem management, population, and ecotourism.

- Consider taking the lead in recommending specific revisions to the NPSA and the Wildlife Protection Act, among others. Just as BAS is a leader in national policy, BAS can be a national leader in revising conservation legislation.

- Initiate a formal mechanism to keep all BAS staff up to date on current advocacy efforts, and to gather feedback. BAS could recruit volunteers and interns to assist in this endeavor.

- Use the BAS library housed at UCB to recruit local volunteers and interns interested in conservation. Joint education and research projects could be developed with the UCB students and faculty. Interns could also assist with policy analysis and advocacy efforts.

- Include field staff in internal discussions about which advocacy issues to embark upon. This is especially true if advocacy campaigns are to be coherent with management and EE. Input from the EE coordinator and protected-areas manager is also essential.

- Ensure that BAS has a strong network of strategic alliances with other organizations before it embarks on any major advocacy campaign. Considering the possibility that BAS' advocacy program and PAM program may be political conflicts of interest, it may behoove BAS to proceed cautiously with its advocacy program.

- Consider clarifying BAS' relationship with GOB in relation to PAM, given BAS' recent formalization of it advocacy program. Perhaps BAS can encourage GOB to more clearly define the roles and responsibilities of each party in the next MOU, and set reasonable objectives for each party to meet. That way the expectations of each party will be more visible, and the potential for conflict will be reduced.

- Consider the effects that future advocacy efforts will have on BAS' co-management efforts, as conflicts with GOB will most likely endanger delicate community-BAS relationships.

Chapter 5: International Environmental Law

> "We are the planet, fully as much as its water, earth, fire and air are the planet, and if the planet survives, it will only be through heroism. Not occasional heroism, a remarkable instance of it here and there, but constant heroism, systematic heroism, heroism as governing principle."
>
> — Russell Banks, *Continental Drift* 40 (1985)

I. INTRODUCTION

Although some 30 years into existence, international environmental law has yet to catalyze a significant body of research examining its role and potential relevance in managing and ensuring the longevity of national PAs such as national parks and wildlife refuges. This section examines the body of international law relevant to PAM and relates the findings from that research to PAs managed by BAS.

Belize is a party to approximately 35 international conventions relevant to protection of natural resources, and soon may be party to several more. Research indicates that many of these international conventions provide opportunities for various states and those organizations acting on their behalf to capitalize on measures designed to enhance parties' ability to manage and sustain their natural resources. Provisions designed for this purpose usually entail financial assistance, technical assistance, and access to research, management plans, and experts. Of these, however, three conventions relate most directly to PAM.

BAS may want to consider budgeting the partial time of one staff person with communications and/or development experience to establishing contacts with the various implementing bodies of conventions to which Belize is a party. This staff person, requiring limited time and financial resources, also should complete applications for available financial assistance, request materials provided by convention bureaus, and make contact with NGOs and other organizations associated with various conventions in an effort to forward some of its education, training, and management goals.

II. BACKGROUND

Increased transformation of the natural environment has wrought environmental problems of broadening complexity and scope. Recognizing the transnational significance of these threats, the international community has responded with a body of international law that addresses environmental concerns through international agreements empowered by the cooperation and self-regulation among independent nation-states. Although constrained by a lack of enforcement mechanisms, international environmental law is growing in its breadth of application and acceptance as an engine of environmental

protection. Further, the growing need for coordination and compromise among various states has created a role for the active participation of non-state actors engaged in global environmental protection.

The growing body of international environmental law includes conventions addressing a wide variety of problems and trends with global significance. Among these, several conventions address the importance of protecting natural areas for their ecological and cultural significance. Of primary importance among these are the Ramsar Convention on Wetlands, the World Heritage Convention, and the Convention on Biological Diversity. These conventions address issues that can be directly related to PA concerns as well as include mechanisms that may enhance PAM.

This chapter will discuss the historical relationship between humans and the environment, the growing global consequences of the nature of that relationship, and the international legal instruments conceived as a result. After an academic discussion of the administration and limitations of international environmental law, the chapter will explore the intent and provisions of the three aforementioned conventions. It will then discuss how BAS, charged with managing eight nationally PAs in Belize, can capitalize on the provisions within these conventions to foster more effective protection of the areas under its purview. Finally, the chapter will go on to make specific recommendations that BAS can undertake to foster better PAM in Belize.

III. THE NEED FOR INTERNATIONAL ENVIRONMENTAL LAW

Throughout human history, mankind has transformed the environment. As a primarily agricultural society for much of its recent history, humans have cut, plowed, and burned land, converting complex ecosystems into monoculture designed to nurture the seeds that sustain them. As population grew and methods of cultivation became more efficient, this trend continued, resulting in what William Cronon calls “second nature” in which the complexity, interdependence, and life-sustaining capacity of land is transformed into a nature “designed by people and ‘improved’ toward human ends” (Cronon, 1991). The advent of specialized agricultural tools such as the cotton gin and the mechanized plow ushered in an era of wholesale environmental transformation in which land was simply a production input, to the detriment of ecosystem health and biological diversity.

The industrial revolution introduced an entirely new context for mankind’s relationship with the environment. While agriculture remained the primary endeavor and continued to grow and transform the environment, the creation and growth of industry resulted in a truly mechanical view of the environment (Gadgil, 1993). Early industry used water, wood, and coal as the fuel needed to drive turbines, turn mills, and fuel transport. While natural resources provided the inputs to the production process, those same processes resulted in the introduction of waste products to the environment—tarnishing land, sullying streams, and fouling the air.

While the wholesale conversion of land for agriculture and the transformation of resources to waste via the industrial process had clear and visible impacts on the

environment, those impacts remained primarily local in nature. Mankind had not yet settled every corner of the globe and resources were perceived as infinite. The scale of agriculture and industry paled in comparison to that which survived healthy and untouched. Industrial processes, dirty as they were, could never reach global proportions.

Or could they? Since the Industrial Revolution, the global population has grown from 2.5 billion to over six billion today. Both the scale and scope of industrial production have increased dramatically and with it, the required inputs and associated waste products. Granted, most processes have become markedly more efficient. As well, national laws created to mitigate environmental damage have spawned remarkable technological progress, much in response to growing concern for environmental health. Regardless, human population growth, growing global trade, and the lack of understanding of natural processes and their causal relationships with human activity have contributed to global environmental decline on an unprecedented scale.

This fact has been repeatedly confirmed as advances in the physical and natural sciences continue to enhance the understanding of the deleterious effects that human activity continues to have on the global environment. While the facts are frightening, the trends in environmental indicators reflect an even more astounding reality that humankind and the environment may be on a collision course of epic proportions.

History of International Environmental Law

In response to scientific evidence, visible environmental decline, and the growing consequences that poor stewardship has had on national economies, countries began to recognize the value of the environment to human prosperity and longevity. Since the 1960s, the need to protect the deteriorating environment has led to legislation in most countries of the world. However, domestic environmental laws and traditional international law both prove inadequate to protect global, cross-boundary concerns. National laws, while recognizing environmental complexities, possess neither the jurisdiction nor the power to deal with the extraterritorial implications of contemporary environmental problems (Furuswamy, 1994). Likewise, traditional environmental law primarily serves to protect the security and economic interests of nation-states. Its basic tenet of state sovereignty renders it inadequate to manage issues necessitating compromise and collective focus.

Although serious environmental problems have been recognized for some time, the global effort to address them is fewer than three decades old. The UN Conference on the Human Environment held in Stockholm, Sweden in 1972 is considered the birthplace of this effort and the parent to a growing body of international environmental law, distinct from traditional international law in its need for collective action. Most clearly, these two forms of law are distinct in that the former addresses grievance against a third “party”—the environment—while the latter manages issues between states.

While the Stockholm conference did not result in any binding treaties, it produced several major initiatives that serve as the cornerstone to modern efforts to protect the global

environment. Most influential among these are Principles 21 and 22 of the Stockholm Declaration on the Human Environment, generally considered the cornerstones of modern international environmental law (Malanczuk, 1998). Principle 21 states that, while states have the "sovereign right to exploit their own resources pursuant to their own environmental policies," they also have the obligation to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction." Principle 22 makes these responsibilities and obligations more concrete, stating that "states shall co-operate to develop further the international law regarding liability and compensation for the victims of pollution and other environmental damage caused by activities within the jurisdiction or control of such states to areas beyond their jurisdiction."

Administration of International Environmental Law

Global environmental threats have necessitated a legal framework and policy emphasis that transcends the ability of the individual state to manage them. As such, a plethora of international environmental treaties have been brokered to address transnational environmental problems ranging from ozone depletion to oil pollution. However, in the absence of a world government and a world police force, who maintains the authority to administer and enforce those treaties?

International organizations, predominantly the UN, retain the responsibility to ensure that obligations inherent in international treaties are met. This includes the obligations made under environmental conventions. The UN charter, for example, includes as one of its four main tenets, "cooperation in solving international problems," which suggests its role in the administration of international environmental agreements (UN, 1999). The UN, therefore, is primarily responsible for the development of most international environmental law. Environmental treaties may emerge from the UN General Assembly, but also originate in the autonomous organizations joined to the UN through special agreements. For example, the World Heritage Convention is a program of the United Nations Educational, Scientific, and Cultural Organization (UNESCO).

The 1972 Stockholm Conference on the Human Environment also established the UN Environment Program (UNEP), which serves as a mechanism to coordinate, monitor, and track environmental trends and efforts. Ideally, UNEP catalyzes and promotes an international agenda for sustainable development. UNEP also generates reports on the state of the environment, convenes international meetings and conferences, and negotiates international treaties such as the Montreal Protocol on Substances that Deplete the Ozone Layer.

In addition to the UN or one of its affiliated organizations, convention "bureaus" often administer, implement, and enforce the elements of international treaties. These bureaus most often are established in the text of the convention itself, but may be formulated at a later meeting of the signatories. Often, the bureaus are elected by committees composed of states that are party to the associated convention. The Ramsar Bureau—charged with implementing the Ramsar Convention on Wetlands—is one example of an autonomous

entity charged with administering and overseeing the day-to-day implementation of a convention.

Participation in international agreements legally binds states to those treaties and states most often honor those commitments. In the alternative case, however, the lack of political will or enforcement mechanisms may result in obligations gone unmet or, worse, treaty violations. Rather than relying on any measure of authority over independent nations, organizations like the UN depend on the cooperative spirit of international agreements and the growing inter-dependence between countries as mechanisms to ensure compliance with treaty obligations.

Problems and Limitations in International Environmental Law

The existence of a body of international environmental law clearly promotes a global environmental agenda, but existence alone is not enough to protect natural resources. International law is limited fundamentally by its structure. At the same time, this legal regime provides ample opportunity to achieve its goals, given the proper incentives and enforcement mechanisms. The effectiveness of this body of law depends on several factors, most important of which is the cooperation among sovereign states and the availability of mechanisms to resolve disputes and enforce treaties. Strengthening state commitments to international environmental regimes and creating enforcement mechanisms will be critical to the evolution and success of international environmental law, as well as the viability of the resources that depend on it.

International environmental law is limited primarily by its horizontal structure. It addresses the conduct of nations as a whole rather than that of individuals. Moreover, each nation is considered an independent, sovereign entity, equal in its rights with other states. Unlike national law, international law was formed primarily to manage the external transactions between states and to reduce uncertainty in international relations. As such, it is a horizontal system based on the concepts of reciprocity and consensus rather than a centralized system based on command, obedience, and enforcement (Malanczuk, 1998). While international conventions are legally binding, there is no authority with ultimate legislative and enforcement powers to ensure compliance.

However, the proliferation of international conventions has led some scholars to suggest the existence of “international regimes” that maintain world order through cooperative pursuit of common goals. According to Stephen Krasner, international regimes are “principles, norms, rules and decision-making procedures around which actor expectations converge in a given issue-area” (Krasner, 1983). The existence of such regimes as effective mechanisms to address global environmental problems relies on several factors. First, the relationships among states that are party to a particular regime must depend on mutually common goals rather that a state’s pursuit of self-interest. Second, states must accept “substantive principles, norms, rules, and procedures rather than formal organization and law” as the vehicle through which these common goals are pursued (Vig and Axelrod, 1999). Third, cooperation relies on consensus agreement and the conglomeration of broadly gathered scientific evidence, necessitating the active

participation of NGOs and other non-state actors. In essence, states must adhere to consensus agreement, rely on the "hand shake" equivalent as a measure of commitment, and elevate international goals above state interests when the two are in conflict. In theory, this broad range of participants acts together to promote and achieve common goals.

However, this cooperative endeavor has several limitations that undermine the effectiveness and viability of international environmental regimes. The first concerns the willingness of parties to enjoin themselves from certain behaviors. While parties to international environmental conventions certainly agree with the provisions of the declarations in principle, their pursuit of economic self-interest often conflicts with agreements promoting broader, more abstract environmental or social goals. The "realist" view of international relations holds that sovereign nation-states act in their unique self-interest and cooperate with others only when it is in their national interest (Vig, Axelrod, 1999). Therefore, their participation in any international regime merely reflects the self-interest of the state and its participation will continue only so long as that interest is preserved.

For international environmental law to exist as relevant policy, individual states must take initiative to implement domestic law that reflects the goals and obligations of their international commitments. For example, the United States Fish and Wildlife Service has published its "Policy and Guidelines on Wetlands of International Importance" in response to the US's participation in the Ramsar Convention on Wetlands (Federal Register, 1990). However, more often than not, states fail to pursue the requisite domestic policies necessary to incur commitment to and enforceability of international environmental treaties.

The second limitation regards the lack of formal enforcement mechanisms. International law diverges from national law in that few mechanisms exist to enforce compliance with legal instruments. In response to states' failure to uphold the provisions of international agreements to which they are a party, international environmental law has little recourse. Although international courts and tribunals do exist, they ultimately rely on national governments to carry out their decisions (Vig, Axelrod, 1999). While it is true that the proliferation of international environmental agreements and the inclusion of more nations suggest that many environmental provisions may become customary law (norms), it remains true that no international governments or courts can enforce binding decisions on sovereign nations.

Confounding the enforcement difficulties inherent in international law is the body of law itself for, in addition to environmental goals, international conventions most often serve economic or other purposes that may be inconsistent with the provisions of international environmental law. As such, incorporating overarching environmental themes into national policies may violate specific international trade laws. For example, the World Trade Organization—the centerpiece of the global multilateral trading system—makes illegal many practices that may be perceived as a barrier to trade liberalization including environmental agendas. Holding other countries accountable to commitments made in

international environmental treaties, for example, amounts to "backdoor protectionism" according to many trade liberalists. Unlike most environmental conventions, the rulings of the WTO are law among its 135 members. As such, the WTO "trumps domestic laws and international treaties and imposes one-size-fits-all rules" (Hornblower, 1999).

The difficulties facing implementation of international environmental conventions can be further exemplified by the difficulties involved in getting developing countries to comply. Developing countries—which by far comprise the largest number of states in the political system—stand united against developed countries' efforts to influence environmental laws through trade. Economic difficulties at home make it difficult for these countries to adopt environmental protections that may incur greater costs on economic development. Therefore, while many of these countries are party to international conventions, many do not have the capacity or the intent to comply (Weiss et al., 1999).

IV. INTERNATIONAL ENVIRONMENTAL LAW IN BELIZE

Belize is a party to approximately 35 international conventions related to conservation and protection of natural resources. Among these, three are most relevant to BAS and their role as a protected-areas manager. The World Heritage Convention aims to protect sites of cultural and natural significance, one of which is the Belize Barrier Reef, managed in part by BAS. The Ramsar Convention on Wetlands is designed to promote the conservation and wise use of wetlands, especially as waterfowl habitat. CTWS is a Ramsar site. Finally, the Convention on Biological Diversity generally intends to conserve biological diversity and facilitate the sustainable and equitable use of natural resources. Rather than address biodiversity on a site-by-site basis, the Convention on Biological Diversity encourages states to promote conservation and sustainable use of its resources in all of its activities.

International Non-Governmental and Multilateral Organizations

The various conventions relevant to PAM most often are implemented by a convention bureau in partnership with other implementing agencies. These organizations are selected as partner organizations for their commitment to conservation goals as well as their experience with international environmental protection. Most often in fact, implementing bodies already have many programs on the ground in various countries, which holds true for Belize. While a full analysis of the various multilateral and non-governmental organizations and their foci is outside the scope of this project, their active involvement with international environmental treaties warrants a brief description. The following organizations are critical partners in the implementation of the aforementioned conventions:[14]

[14] Please see Appendix 2 for contact information at these organizations.

Global Environment Facility (GEF)

The Global Environment Facility (GEF) is a financial mechanism that provides grants to assist developing countries to address environmental problems that transcend international borders in four areas: global climate change, pollution and overexploitation of international waters, destruction of biological diversity, and ozone layer depletion. The United Nations Development Programme (UNDP), the United Nations Environment Programme (UNEP) and the World Bank jointly implement the GEF.

United Nations Development Programme (UNDP)

The UNDP's mission is to help countries in their efforts to achieve sustainable human development, focusing on poverty eradication, employment, empowering women, and environmental protection (UNDP Mission Statement, 1999). The UNDP recognizes that in a world without an international congress or enforcement body, national legislation and planning represent the only viable mechanisms to implement changes sought through international conventions.

The UNDP, in conjunction with the GEF, has many projects in Belize that relate to PAM and other chapters of this project. Among them, UNDP is financing the creation of a co-managed PAs system, financed at US$750,000. Other activities will be related in the context of the conventions discussed below.

United Nations Environment Programme (UNEP)

UNEP was born out of the 1972 Stockholm Conference on the Human Environment as the mechanism through which disparate environmental programs at the international, national, and sub-national level can be coordinated and interrelated. UNEP encourages partnerships with other UN organizations, the private sector, NGOs, and other organizations to pursue its concept of "sustainable development." UNEP's programs emphasize the relationship between socio-economic development and its impact on the environment. Like many other international environmental organizations, UNEP addresses a broad range of issues, many of which relate to PAM. Among their activities, UNEP promotes ecotourism (in conjunction with the WTO), capacity building for EE, and conservation of wildlife and biological diversity.

World Conservation Union (IUCN)

IUCN is the world's largest conservation-related organization. IUCN administers a variety of international conventions (including the Ramsar Convention) and implements a number of programs aimed at valuing and conserving nature. Programs relevant to BAS and its management of PAs include the Programme on PAs (which supports the work of the IUCN World Commission on PAs), the Marine and Coastal Programme, the Wetlands and Water Resources Programme, and the Biodiversity Policy Coordination Division.

In addition to specific programs, the IUCN's Economic Services Unit has developed resource kits on financing PAs and incentives for community-based conservation.[15] Both of these kits provide extremely useful information and would be useful to BAS as it pursues its conservation goals.

United Nations Education, Scientific, and Cultural Organization (UNESCO)

UNESCO's objective is to foster world peace and security by promoting collaboration among nations to further universal common rights and goals. UNESCO participates in many activities designed to promote education, research, and cultural understanding. UNESCO also adopts international conventions and statutory recommendations such as the World Heritage Convention. The activities promoted by UNESCO are very broad and reflect many of the foci of this project including community outreach, EE, and environmental protection.

Convention Concerning the Protection of the World Cultural and Natural Heritage

The Convention Concerning the Protection of the World Cultural and Natural Heritage (hereafter "World Heritage Convention") is an international convention designed to preserve historic monuments and outstanding natural areas in an effort to retain a "world heritage" protected against the pressures of a constantly changing world. The impetus for the Convention stemmed from the massive destruction wrought by World War II, which led countries to take various initiatives to conserve important cultural properties for the future. At the same time, the IUCN was preparing a convention to protect natural areas. The two initiatives were eventually combined, culminating in the World Heritage Convention (Jacobson, Weiss, 1998). Parties applying to the convention designate a minimum of one culturally and/or naturally significant site and include a plan detailing how the site is managed and protected in national legislation (WHC, 2000).

While parties to the World Heritage Convention must "recognize the duty of ensuring the identification, protection, conservation, presentation, and transmission to future generations" of their listed sites, the convention provides in return multifaceted assistance to help signatories achieve this complex goal. Belize, and more specifically BAS, can capitalize on this assistance to ensure better management and viability of the reef system, including HMCNM.

The Belize Barrier Reef

Belize, as a party to this convention, has contributed to the World Heritage List 96,300 hectares of its Barrier Reef System, including HMCNM, managed by BAS.[16] The site

[15] A list of resource kits provided by the IUCN Economics Unit is available at <http://economics.iucn.org/kits.htm>. As well, the list of various themes addressed by IUCN can be accessed at <http://iucn.org/themes>.

[16] The site also is included in the World Wildlife Fund – 200 Global Ecoregions system. Further description of this world heritage property can be accessed through the World Heritage Information Network at <www.wcmc.org.uk/protected_areas/data/wh/reef.htm>.

contains mangroves, islands, and coral, and is recognized for its "major wetland and marine value." The site consists of seven marine reserves, comprising 12 percent of the total area of the Belize Barrier Reef. This is the world's second largest barrier reef system and the largest reef complex in the Atlantic-Caribbean area. The Belize Barrier Reef is an area of great scientific value and provides habitat for many species of conservation concern (WHC et al., 1997). The area harbors probably the largest population of West Indian manatees in the world (300-700 individuals). As well, three species of sea turtles nest in Belize, including the endangered loggerhead and hawksbill turtles. The American crocodile nests at several sites among the offshore cayes and atolls. The site also contains major seabird and water bird colonies include those of red-footed booby (3,000-4,000 individuals), brown booby and common noddy (WHC et al., 1997).

The Convention

The Convention Concerning the Protection of the World Cultural and Natural Heritage was adopted by the general conference of UNESCO on November 16, 1972. The convention entered into force in 1977, after ratification by 20 countries. The Secretariat for the Convention is the World Heritage Centre, housed within UNESCO. To date, 158 states are party to the convention, with 630 sites inscribed on the World Heritage List.

Through this international legal instrument, countries voluntarily commit themselves to "protect monuments and sites within their territory that are recognized to be of such outstanding value that safeguarding them concerns humanity as a whole" (Batisse, 1992). Secondary reasons exist for participation as well. While developed countries solely may be concerned with protection of natural and cultural heritage, developing countries may see the convention as a vehicle for economic development, promoting tourism and foreign investment (Jacobson and Weiss, 1998).

Cultural heritage may include sites of architectural or archaeological significance, groups of buildings, and other sites that have "universal value" from the standpoint of history, art, or science. Examples include the Great Temple of Abu Simbel in Egypt, Stonehenge in England, and Tikal in Guatemala. Natural heritage sites include those with outstanding physical, biological, or geological formations, habitats of threatened species, and areas with scientific, conservation, or aesthetic value. Examples include Everglades National Park in the United States, Ngorongoro Crater in Tanzania, and the Dja Faunal Reserve in Cameroon.

The parties to the convention note that valuable cultural and natural heritage sites are threatened both by traditional forms of decay and changing social and economic conditions that exert increasing pressure on sites of historic value. Industrialization, tourism, and neglect are only a few of the forces contributing to a decline or loss of such sites. Although each site remains the sovereign property of the countries in which they are located, the convention calls for collective action in which the "whole of humanity must act as trustee for all the great landmarks of the natural and cultural history of the globe" (Batisse, 1992).

Consistent with its need to protect the valuable ecosystems of the reef and honor its commitment to the World Heritage Convention, Belize recently passed its Coastal Zone Management Act, which provides the institutional framework for the implementation of targeted interventions for biodiversity protection. The UNDP and the GEF has undertaken a full project to operationalize the Act, funded at US$5.35 million, which will significantly affect the management of the World Heritage Site.[17]

Unique Role of NGOs

Implementation of the convention is trusted to the World Heritage Committee, an intergovernmental body comprising representatives of 21 countries elected on a rotating basis. The committee reviews nominations to the World Heritage List, relying heavily on the technical advice of the International Council on Monuments and Sites (ICOMOS) for cultural properties and that of the World Conservation Union (IUCN) for natural sites. The Convention (in Articles 13 and 14) provides specifically that these organizations (NGOs) assist in treaty implementation and they play a critical role. They prepare the background investigations and reports as to whether proposed sites should be included on the List, review requests for financial and technical assistance, and monitor selected sites (Jacobson and Weiss, 1998). In addition, the World Conservation Monitoring Centre maintains a database including important information about World Heritage sites.

State Responsibilities

As parties to the convention, states must undertake and periodically report on "legislative and administrative provisions they have adopted and other actions which they have taken for the application of the Convention, including the state of conservation of the World Heritage properties located on their territories" (UNESCO Resolution, 1997). To ensure that the quality of sites is maintained, states report on the condition of sites, measures taken to preserve them, and efforts to raise public awareness of cultural and natural heritage.[18]

Financial Mechanism – The World Heritage Fund

State parties to the convention agree to contribute every two years to the World Heritage Fund, established to provide assistance to developing countries in maintaining sites on the List. The compulsory contributions of state parties must be at least equal to one percent of that state's contribution to the regular budget of UNESCO. The Fund also is replenished by voluntary contributions of states or individuals and earnings from promotional activities. The potential uses for the fund are numerous, but they must

[17] UNDP/GEF also have financed a US $3 million effort for comprehensive planning and management of littoral zones in Belize.

[18] Information on periodic reporting is available at <www.unesco.org/whc/nwhc/pages/doc/main.htm>. All forms related to the World Heritage Convention are available at <www.unesco.org/whc/nwhc/pages/doc/main.htm>. These include the forms for periodic reporting and international assistance applications.

contribute to the overarching goal of preserving the integrity of a World Heritage site. In addition, the parties created an Emergency Fund to provide assistance to sites under critical threat.

According to Article 13 of the Convention, the World Heritage Committee shall entertain requests for international assistance to "secure the protection, conservation, presentation, or rehabilitation" of listed sites.[19] When considering appropriations, the committee considers the respective importance of the site, the urgency of the work to be done, the resources available to the inquiring state, and the extent to which the site has been and can be safeguarded. Any party to the convention may request international assistance for property of outstanding natural or cultural heritage within its territory.

Requests for international assistance shall specify the proposed objectives, the necessary activities, the expected cost, the degree of urgency, and the reason why state resources are inadequate to cover expenses. Requests should be accompanied by experts' reports when possible. Requests based on disasters or natural calamities are given priority consideration by the committee.

Requests for funding have to fall into clearly defined categories: preparatory assistance, technical cooperation, emergency assistance, and training (anonymous, 1997). In general, the Fund will cover only part of the costs of approved projects, the balance of which is covered by the requesting state. However, states that are in arrears of their payments will not be eligible for financial assistance in the following calendar year, with the exception of emergency assistance (UNESCO, 1992). The funding categories are described as follows:

Preparatory Assistance: This type of assistance has a fixed ceiling of US$15,000 per request. The assistance can be provided for the preparation of lists of properties suitable for inclusion on the World Heritage List as well as for the preparation of training courses or large-scale technical assistance projects.

Technical Cooperation: This assistance is provided for sites that already have been inscribed on the World Heritage List. The goal of the assistance is to improve the conservation and management of these sites through (a) studies examining difficulties posed by site designation and management, (b) the provision of human capital to ensure proper program implementation, (c) supply of equipment, (d) provision of low-interest or interest-free loans, and (e) granting of non-repayable subsidies (although rare).

Training: Assistance is provided to train staff and specialists on all aspects related to management and conservation of World Heritage sites. Priority is given to group training initiatives in national or regional institutions. Individual training is limited to short-term modernization programs and experience exchanges.

[19] Requests for international assistance may also be concerned with identifying cultural and/or natural property where preliminary investigations have shown that further research would be justified.

Emergency Assistance: This type of assistance is designed to protect endangered sites by nominating them to the list or taking emergency measures to protect sites already on the list. Belize's barrier reef system most likely would qualify for emergency assistance in preparation for or in the wake of hurricane activity.

Recommendations

- Conditions at HMCNM and throughout the Barrier Reef Site have deteriorated significantly as a result of hurricane Mitch and high volume tourism. BAS may want to assess whether conditions at HMCNM—or any of the other six PAs [20] within the World Heritage Site—warrant an application for international assistance from the World Heritage Fund. A funding request could incorporate any of the following options:

    1. Assistance for technical cooperation in conducting ecological baseline studies to determine impacts on the reef ecosystem from hurricane damage and high-volume tourism.

    2. Educational/promotional assistance designed to create awareness of the reef as a World Heritage Site and promote a greater understanding of the reef and its ecosystems to visitors and young people.

    3. Training assistance to regional marine reserve managers for conservation, protection, and rehabilitation of natural heritage.

    4. Technical assistance or a loan to acquire watercraft essential to protecting the Site against poaching and other illegal activity.

- The World Heritage Centre examines requests for international assistance from the Fund and transmits its recommendations to the Chairperson. The deadlines for submitting requests for financial assistance are May 1 and September 1 of each year. To date, the Convention evaluates requests for international assistance on an ad hoc basis, based on the order of presentation and the availability of funds. As such, BAS would be best served to make their application for international assistance as soon as possible.

- The UNDP and the GEF have funded a US$5.35 million project to operationalize the Coastal Zone Management Act. Undoubtedly, some of these funds are targeted to the World Heritage Site, including HMCNM. BAS would benefit from coordination with UNDP, GEF, and GOB to ensure that HMCNM plays a significant role in this project.

[20] The other PAs are Bacalar Chico National Park and Marine Reserve, Blue Hole Natural Monument, South Water Caye Marine Reserve, Glover's Reef Marine Reserve, Laughing Bird Caye National Park, and Sapodilla Caye Marine Reserve.

The Convention on Wetlands of International Importance Especially as Waterfowl Habitat

The Convention on Wetlands of International Importance Especially as Waterfowl Habitat is an intergovernmental treaty emphasizing the conservation and wise use of wetlands for biodiversity conservation and as habitat for waterbirds. Like most conservation measures, it seeks to mitigate the adverse impacts of development and preserve the ecological integrity of the resource. Parties to the convention designate at least one wetland site for inclusion in the List of Wetlands of International Importance, committing to its conservation and where appropriate, wise use. The Belize became a party to this convention late in 1998 and has committed two sites to the list: the Mexico and Jones Lagoon Area and the Crooked Tree Lagoon Area. Crooked Tree is also a Wildlife Sanctuary managed by BAS.

Parties to the convention are expected to accept several obligations—such as staff training and reporting—designed to help protect listed wetlands. To help facilitate wetland conservation, the Convention may provide recognition, expertise, and funding to contracting parties. BAS can capitalize on several provisions of the Convention to better manage and protect the Crooked Tree lagoons.

The Convention

The Convention on Wetlands of International Importance Especially as Waterfowl Habitat (hereafter Ramsar Convention) was adopted on February 2, 1971, in the Iranian city of Ramsar. The Ramsar Convention was adopted in response to the worldwide loss and degradation of wetlands is the first of the modern global intergovernmental treaties on conservation and wise use of natural resources. The Convention entered into force in 1975 and now has more than 110 contracting parties that, collectively, have designated 950 sites totaling 70 million hectares. The administration of the Convention has been entrusted to the Ramsar Bureau, created for that purpose, and housed within the World Conservation Union (IUCN).

The Ramsar Convention seeks to conserve wetlands and related resources for their "economic, cultural, scientific, and recreational value, the loss of which would be irreparable." According to Article 1.1 of the Convention, wetlands are "areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six meters." Ecologically, wetlands are among the most productive environments in the world, providing flood mitigation, shoreline stabilization and erosion control, and serving as natural filters, spawning grounds, and habitat to an extensive array of flora and fauna. Wetlands also support high concentrations of birds, mammals, reptiles, amphibians, fish and invertebrate species.

While wetlands are among the richest and most productive ecosystems on the planet, but they are also one of the most fragile and threatened. About half of the world's wetlands system has been lost forever (Soderbaum, 1998). Factors contributing to wetland

destruction include the human perception of them as wastelands, rapid population growth, the worldwide drive for greater landholdings, and patterns of industrial and agricultural development. Industrial waste, domestic sewage, and agricultural runoff all contaminate wetlands, while deforestation and erosion increase sedimentation (Soderbaum, 1998).

Wetlands also provide extensive economic benefits, purifying and providing water, which is inextricably linked to healthy fisheries and recreation. In terms of valuing wetland ecosystems, some recent studies indicate that wetlands provide US$4.9 trillion of services annually (Ramsar, no date). Regardless of their value, wetlands remain one of the most ecologically threatened habitats in the world.

Crooked Tree Wildlife Sanctuary

Belize, as a party to this convention, has contributed two sites: the Mexico and Jones Lagoon Area and the Crooked Tree Lagoon Area, the latter of which is managed by BAS. Situated 32 miles north of Belize City, Crooked Tree is a complex wetland environment made up of lagoons, marshlands and waterways. This mosaic is complimented by savannas and logwood thickets, making excellent habitat for migratory birds and resident waterfowl. A total of 276 species having been sited at Crooked Tree, including double crested cormorants, egrets, herons, and the Jabiru stork, the largest bird in the Americas. Other species that inhabit the sanctuary include the peregrine falcon, Morelet's crocodile, black bowler monkeys, Central American otters, turtles, and iguanas. The boundaries of the site are difficult to discern because of the seasonal variation in water levels throughout the year. A GIS mapping effort estimates the area at 41,297 acres (Crooked Tree, no date).

Surrounded by the sanctuary is Crooked Tree Village, first settled as a logging camp in the 1750s. There are currently about 800 permanent residents in the village, mostly of Creole or Afro-European descent whose subsistence activities include farming, hunting, fishing, livestock raising, and logging and charcoal production. It is these activities that have lead to the conflict with the managers of the sanctuary (Crooked Tree, no date). (See the Communities chapter for more information about the village of Crooked Tree.)

Responsibilities of Parties

Contracting parties have several responsibilities in conserving and managing wetlands under the Convention. Responsibilities range from ensuring no net loss of wetlands to encouraging research and data exchange to managing to increase waterfowl. Two specific requirements are outlined in Article 4. Article 4 states that "each contracting party shall promote the conservation of wetlands and waterfowl by establishing nature reserves on wetlands…and provide adequately for their wardening." In addition, "parties shall promote the training of personnel in the fields of wetlands research, management and wardening." Given these requirements, BAS clearly plays a large role in implementing the Ramsar Convention.

Financial Mechanism – The Small Grants Fund for Wetland Conservation and Wise Use

At the 1990 Conference of the Contracting Parties, the Convention established the Small Grants Fund, designed to assist projects in developing countries and countries with economies in transition. The fund provides financial assistance in the form of small grants (maximum about US$24,500). The fund has dispersed approximately US$2,714,216 to date.

Monies allocated out of the fund usually go to projects related to implementation of the Convention Work Plan 2000-2002. Several objectives of this plan are noteworthy:[21]

- Review and, if necessary, amend domestic legislation ensure that Wise Use guidelines are applied. As well, integrate conservation and wise use into land-use and other planning at all levels. As mentioned previously, these efforts would address the incongruity between simply being a party to an international convention and domestic implementation.

- Conduct economic evaluations of wetlands benefits and environmental impact assessments of activities that may impact wetlands character and productivity.[22]

- Provide emergency assistance for sites on the List that have been damaged or are in imminent danger of damage from human or other forces. Requests for emergency assistance can be made at any time throughout the year.

- Other key objectives include wetland rehabilitation, promoting community and private sector involvement, education, capacity building, training, maintenance, and management.

Recommendations

- The Ramsar Bureau has not received Ramsar Information Sheets on the Crooked Tree Lagoon Area site. As such, the Bureau may be hesitant to provide technical or other assistance until this obligation has been met. If BAS wishes to capitalize on its participation in the Ramsar Convention, it may want to complete its information sheets and submit them to the Bureau.

- In 1995, the Bureau of the Convention, in conjunction with the United States Fish and Wildlife Service, supported a project at Crooked Tree aimed at increasing local community support for the site. This project was undertaken as part of the Wetlands for the Future training program. The goal was for the community to play a more

[21] Specific information about requesting assistance from the fund can be found at <www.ramsar.org/key_sgf_index.htm>. The site also provides links to lists and descriptions of previously approved projects.

[22] The Ramsar Bureau and the IUCN have published a guide on the potential uses for economic valuation of wetlands and how such valuation studies should be conducted. The guide and other information are available at <http://economics.iucn.org/issues-02-00.htm>.

direct role in the management and conservation of Crooked Tree. The project included US$10,000 in funds aimed at increasing local community support through dialogue and at promoting involvement of the local community.[23] BAS should consider exploiting the opportunity afforded by the Wetlands for the Future grant (or other mechanism) to further participatory management at the site.

- While the RAMSAR Convention is international in scope, it encourages regional cooperation to further wetlands conservation (Singleton-Cambage, 1996). BAS would benefit by encouraging GOB and regional authorities to initiate a binding regional agreement on wetlands. An example of such regional cooperation is the Brisbane Initiative (also known as the East Asian-Australasian Shorebird Reserve Network, or Flyway), established with the assistance of Wetlands International.

Convention on Biological Diversity

The Convention on Biological Diversity is an international treaty intended to conserve biological diversity, facilitate the sustainable use of its components, and fair and equitably share the benefits derived from the use of genetic resources. While recognizing the many values of biodiversity, it seeks to address the concern that biological diversity is seriously and irreversibly threatened by human activities. At present, a broad scientific consensus exists that biodiversity is being lost at a faster rate than any since the age of the dinosaurs, 65 million years ago. Scientists predict that at present rates, the earth will lose 20 percent of its biological diversity by 2020. While past extinctions have been due to natural phenomenon, the current transformation has been caused to a large extent by anthropogenic forces including habitat destruction and fragmentation, exploitation of living resources, and pollution (CBD, 2000).

Parties to the Convention commit to conservation of biological diversity within their sovereign states and cooperation with other nations toward the same goal. Parties are required to take a variety of specific measures—such as research and public education—to promote the conservation and sustainable use of its biological resources.

To facilitate the intended resource conservation, the Convention may provide parties with financial assistance, scientific and technical advice, and has established a mechanism to promote scientific and technical cooperation. Specifically, the Convention recognizes the general interest in helping "developing" countries achieve the Convention goals. As such, BAS can enhance their ability to manage PAs by capitalizing on provisions designed to conserve biological diversity.

The Convention

The Convention on Biological Diversity (hereafter, the "Convention") was signed by over 150 countries at the Earth Summit in Rio de Janeiro in June 1992. (Belize signed the convention on June 13.) The Convention entered into force in December 1993. At

[23] Information available indicates that the US$10,000 allocation required matching funds of US$30,000. It is unclear whether this project has been pursued.

present, over 160 countries have ratified the Convention and are committed to adhering to its goals. This international legal instrument recognizes the "intrinsic value of biological diversity and the ecological, genetic, social, economic, scientific, educational, cultural, recreational and aesthetic values of biological diversity and its components." It also recognizes biological diversity as "important for evolution and for maintaining life sustaining systems of the biosphere" (CBD, 1992).

Biological diversity is a broad concept that represents the stock of genetic material and the various species on the planet. Biodiversity accounts for all of the world's organisms, representing the collection of every organism that makes up the web supporting human life. The basic components of this web (or biosphere) are the inputs to the goods and services used by humans. Because the components are interrelated and interdependent for survival, disruption of one aspect of the biosphere often has ramifications throughout. As humanity has evolved the knowledge and skills necessary to manipulate nature to meet its own needs, they have eliminated species, destroyed habitats, and even altered hydrologic and geochemical cycles (WRI, no date). As a result, many of the biological resources that provide food, medicine, and valuable services have disappeared.

In January 1996, the Secretariats of the Convention Biological Diversity and Ramsar Convention on Wetlands signed a Memorandum of Cooperation agreeing to integrate their activities to the extent that their objectives overlap. While this is an important step in recognizing the interdependence among both states and environmental issues, the success of this integration ultimately depends on the willingness of the contracting parties to implement it.

BAS manages PAs that are among the most biologically diverse on the planet. Tropical forests contain more than half of the world's species, although they cover only seven percent of the earth's land surface. Coral reefs also contain vast species diversity and are some of the most productive ecosystems on earth (WRI, 1989). BAS manages both.

Consistent with the need to adopt domestic policies that support international conventions, GOB is formulating a National Biodiversity Strategy and Action Plan in accordance with Articles 6 of the Convention that calls on parties to "develop national strategies… for the conservation and sustainable use of biological diversity" and Article 8 that requires parties to "establish a system of PAs " or otherwise promote protection of ecosystems and biodiversity. To support this effort, the UNDP and GEF have contributed US$185,000 to enable Belize in its effort.

Responsibilities of the Parties

The responsibilities of contracting parties under the convention are extensive, reflecting both the importance of biological diversity and the extent to which human activities impact it. While parties must develop strategies to conserve and sustainably use biological diversity, each of the specific provisions is qualified as applicable only "as far as possible and appropriate." Again, the commitment of each state to the importance of biological diversity in decision-making determines the extent to which the Convention is

implemented and the success of conservation. The conservation commitments of the treaty are as follows:

- Identify and monitor components of biological diversity (such as specific ecosystems and communities) as well as identify processes and activities that may adversely impact biological diversity (UNEP 1992, Article 7).

- Establish a system of PAs and manage the resources upon which biological diversity depends regardless of protected status (Article 8).

- Adopt measures for ex-situ conservation (i.e., the sources of biological diversity at the origin) and for the rehabilitation of threatened species (Article 9).

- Integrate consideration of genetic resource conservation into national decision making and promote sustainable use of biological resources at various levels (Articles 10).

- Adopt incentives for the conservation and sustainable use of components of biological diversity (Article 11).

- Establish programs for scientific and technical education and training and promote research and public education (Articles 12 and 13).

- Develop assessment procedures for ensuring that impacts on biological diversity are taken into account in project design (Article 14).

Considering the fact that many of the biologically significant resources are harbored in developing countries and that those countries have limited discretion with their financial resources, the Convention directs technical and scientific cooperation, as well as technology transfer, between parties. As well, the Convention holds that the extent to which developing countries can successfully implement their obligations under the Convention depends on the developed countries' effective provision of financial resources and transfer of technology (Article 20). This success of this Convention, in particular, depends on universal commitment and cooperation between parties.

Financial Mechanism

Article 21 of the Convention establishes the financial mechanism "for the provision of financial resources to developing country Parties for purposes of this Convention on a grant or concessional basis." In accordance with this article, the Conference of the Parties at its first meeting determined the policy, strategy, priorities, eligibility criteria, and use of financial resources available through the funding mechanism. As well, the parties decided that the Global Environment Facility (GEF) would be the institutional structure under which the mechanism would be managed.

The financial mechanism is designed primarily to assist countries to prepare their national biodiversity strategies and action plans and/or their reports to the Convention. Specifically, the mechanism supports capacity building activities and activities designed to assess capacity building needs (GEF, 2000). In addition, the Convention required that a Clearing House Mechanism be established to promote scientific, technical, and technological cooperation among Parties and facilitate "access to and exchange of information on biodiversity around the world."

V. RECOMMENDATIONS

The Convention provides many opportunities for participating countries to build capacity within their own governments to protect and conserve biodiversity. Strengthening PAs will be a critical part of this effort. As such, BAS will play a critical role in implementing the Convention. BAS and GOB have many options to strengthen the protected-areas network in Belize. This can be accomplished in a number of ways, including establishing new areas, creating biological corridors between existing areas, and ensuring the biological integrity and viability of resources within the areas.

BAS may want to consider working with GOB to ensure that resources provided through the financial mechanism go to projects that support conservation of biological diversity. While the activities that BAS can undertake regarding this Convention are less direct that receiving and distributing financial or technical assistance, the potential impacts are just as sweeping. BAS, through its position on government committees and general influence with GOB regarding environmental matters, stands in a position to influence patterns of development to ensure environmental sustainability. For example, BAS can help establish guidelines to assess the environmental impacts of projects endorsed by GOB. Other ideas include the following:

- Article 11 of the Convention requires parties to create economic incentives for the conservation and sustainable use of biodiversity. In response, BAS should consider working with GOB to identify and remove perverse incentives, as well as create conservation incentives for users of biological diversity. Much of the community work discussed in this project can be incorporated here, as it will be necessary to empower communities adjacent to PAs in decision making.

- BAS may want to work with GOB to consider the implications of devolving decision making to the local or regional levels to embrace "ecosystem" approaches to land management and development decisions. This effort would require building local capacity, engaging local residents and stakeholders, and promoting cooperation between organizations and institutions (Miller, 1996).

VI. INTERNATIONAL ENVIRONMENTAL LAW: OPPORTUNITIES AND THE FUTURE

The opportunities afforded through Belize's participation in international environmental conventions have broad implications for BAS and their ability to manage the PAs under

their purview. From financial and technical assistance to enabling activities that promote domestic participation, provisions of the various conventions may result in empowering BAS as an organization, as an influence on government policy, and as a leader in the conservation of Belize's cultural and natural resources.

The growth in the body of international environmental law—as well as the NGOs and multilateral organizations empowered to implement it—indicates that conservation needs to be addressed beyond the self-interest of sovereign states and requires compromise and collective focus. While neither a world congress nor an enforcement body with authority over independent nations exists, cooperation on many levels and through many institutions is making strides in protecting biological resources. However, population, development, and other pressures continue to exact a toll on the health of the world's species and the ecosystems upon which they depend. By taking advantage of Belize's commitment to the environment and their own position as a leader in Belizean conservation, BAS can ensure that the course of human development in Belize results in sustainable development of its cultural and natural resources.

Chapter 6: Organizational Analysis

> "We are crawling. We need to stand up and start to walk!"
>
> ? BAS staff member

I. INTRODUCTION

BAS conducts its business in a highly complex web of customers, competitors, cooperators, and regulators. A structured organizational analysis draws the essence from this web, shaping it in a useful, organized fashion. This helps evaluate an organization's internal capabilities and external environment, drawing attention to internal strengths and opportunities for improvement and highlighting important features of the external environment.

The marketing department at the University of Michigan business school describes the organizational analysis as a tool for understanding the firm's past, present, and future situation and understanding how best to deploy its resources. The situation analysis is a tool for understanding where BAS is now and where BAS should be in the future. The analysis does not dictate actions; rather, it invites insightful interpretation of the information within. This analysis is divided into two main elements: internal and external.

The internal organizational analysis offers BAS an opportunity to critically review its stakeholders, strategy, resource allocation, goals, strengths and opportunities for improvement. The internal analysis begins with a description of the firm's business, then delves into the mission and goals of the organization, highlighting Western goal theory and it's application to BAS. Next, it turns to an examination of resource allocation and the broader implications of allocation decisions. Lastly, the analysis expands upon BAS' strengths and opportunities for improvement.

The external organizational analysis begins with a look at the players in and the structure of the industry in which BAS operates. The analysis uses Michael Porter's *Five Forces* model, adapted by Sharon Oster for nonprofit analysis. It begins by describing the structure of the industry, then moves to the forces that act upon that industry, including buyers, suppliers, new entrants, and substitutes.

The section concludes with recommendations that focus on the degree of centralization within BAS, the need for creating a more stable revenue stream, and the need to translate mission and high level goals throughout the organization.

The reader will notice that several areas, such as goal theory and resource allocation are covered in far more depth than others. Available information, degree of BAS scrutiny, and relevance to mission governed the extent of coverage. The project team recommends that BAS flesh out the areas not discussed in detail in this section.

II. ORGANIZATIONAL ANALYSIS: INTERNAL

Introduction

An organizational analysis begins with a description of the firm's business. Though its mission allows for a significant variety of conservation approaches, BAS has chosen to focus on three program areas: PAM, Advocacy, and EE. It also performs several other functions, such as marketing, membership promotion and support, accounting, and research. These functions all serve the organization, but are not separate program areas.

BAS has committed a substantially different level of resources to its program areas. PAM consumes the great majority of the organization's resources, from staff to finances. However, it also lends legitimacy to the other areas. Advocacy and education are far smaller operations, with one permanent staff member assigned to each, compared to the 21 in PAM.

Table 6.1 Resources allocated to program areas

Program	Staff	% of budget (1999)
PAM	21	53
Advocacy	1	8
EE	1	7

The emphasis of the organization has changed over time. From its inception in 1969 until 1984, when BAS took formal management responsibility for PAs, BAS focused largely on advocacy. Successful advocacy brought PAM responsibility to BAS and altered the form of the organization. Full time, resident park directors were added in 1988 and a protected-areas manager position was added in 1990 (Waight and Lumb, 1999).

Stakeholders are another basic element of understanding an organization. Stakeholders are the groups that have an interest in the actions of the organization. Entire models of organizational effectiveness are built upon the importance stakeholders play in shaping an organization and the outcomes it achieves (see Zammuto, 1994). BAS members, BOD, the Board of Trustees, and BAS staff form a set of "internal" stakeholders, while GOB, visitors, tourism industry representatives, donors, other environmental organizations, and citizens of Belize form an "external" set of stakeholders.

The organizational analysis goes beyond simply identifying the different stakeholders – it describes their needs, and the overall priority of those needs. For example, BAS staff may desire job security, identity with mission, and monetary compensation. Numerous frameworks and models exist to help organizations understand their stakeholders, ranging from a comprehensive needs analysis to a more focused organizational behavior model like the job characteristics model. A full stakeholder analysis is not only beyond the scope of this document, but may also be an activity the organization itself should conduct.

The next segment of the analysis deals with the mission and goals of the organization. BAS' mission and goals and Western goal theory are expanded upon in great detail in the following section. The purpose of this in-depth look is to fully examine the various aspects of goals and how goal-setting affects organizations. What are the organization's goals? How are they created? How measurable are they? What characteristics do they and should they have? This section attempts to shed light on the necessary translation of an inspiring mission statement into concrete action through goal-setting.

Shifting gears, the analysis next focuses on organizational strategy and tactics, a topic on the top of the agenda these days at BAS. In November 1999, the BOD and the Executive Director decided to convene a new strategic planning committee to review the overall strategy and direction of BAS. At the same time, all committees requiring board input were suspended, as the work was sapping the energy of the board and the staff. Other committees will be convened if the strategic planning committee deems it necessary. A full Strategic Plan should be in place in May, 2000, in time for the Annual General Meeting (annual member meeting).

A discussion of BAS' strategy and tactics might include questions like: What is BAS' overall strategy for fulfilling its mission? What are the existing "market" segments for BAS' services? How does BAS serve these segments? Does serving these segments help BAS fulfill its mission? This section should also include both a positive and normative analysis of the organization's resource allocation. How does BAS currently use its resources? How should it use these resources? Interviewees gave the project team numerous examples of current resource allocation. This topic is discussed later in further detail.

Lastly, the internal organizational analysis examines organizational strengths and identifies opportunities for improvement. Competitive advantages are usually discussed here, although in this report they fall under the external analysis in "threat of new entrants."

To summarize, the internal organizational analysis offers BAS an opportunity to critically review its stakeholders, strategy, resource allocation, goals, strengths and opportunities for improvement. This report expands upon a subset of these topics, leaving BAS to expand upon the others.

Mission and Goals

Before launching into a discussion about goal theory and its application, an acknowledgement of the truly Western bias in this area must be made. While this Western bias applies to other sections as well, it surfaces more glaringly here. Special attention is called to this section because goal theory is *known* to differ across cultures. If daily working habits are any indication of cultural difference, then a gap may also exist between many American subcultures and Belizean subcultures. Much of the project team's education and experiences are Western based, and while appropriate for analyzing

organizations in some Western cultures, the team must take care in applying this Western thinking to a society with different cultural beliefs, norms, etc.

Much modern organizational theory is grounded in the work of researchers trying to increase worker productivity, an idea that still permeates American society today. While not a "foreign" notion to Belize, productivity may not be an overarching theme of Belizean organizations. A simplified, Western explanation for this difference might call attention to the chronically high unemployment and underemployment in Belize. With an abundant labor supply, the constant need is to create jobs, not to create more productive jobs. A richer explanation would be beyond the scope of this paper, but the project team suspects it would draw heavily upon a difference in fundamental values of work, leisure, family, etc. Care is taken in presenting this example to demonstrate the wide gap between Western theory and Belizean application.

Cultural differences are known to exist in goal setting theories. Attention is drawn to these differences to further highlight the need for interpretation, not straight application, of the ideas presented below. In his discussion on cybernetics, Morgan (1998) draws on the work of William Ouchi to illustrate that targets or goals can have different meanings across societies. Morgan eloquently reduces American goal setting theory to a single sentence and compares it with Japanese theory in the next.

> "In the American view, objectives should be hard and fast and clearly stated for all to see. In the Japanese view, objectives *emerge* from a more fundamental process of exploring and understanding the values through which a firm is or should be operating."

If differences exist between Japan and the US, surely they also exist between Belize and the US. The task then, is for BAS managers to apply this Western thinking in a manner consistent with Belizean cultural values.

Mission Statement

BAS operates in a highly dynamic environment and has evolved over time to meet the changing needs of its stakeholders. External and internal pressures constantly reshape the goals and structure of the organization. One tool available for NGOs like BAS to manage such dynamism is the mission statement. In her chapter devoted to mission and mission statements, Oster (1995) summarizes their importance: "Mission statements serve boundary functions, act to motivate both staff and donors, and help in the process of evaluation of the organization." Oster devotes an entire chapter to the importance of a mission and a mission statement. At a retreat in 1991, BAS staff and members created a mission statement to help guide the organization's activities:

> The Belize Audubon Society is a non-profit, non-government organization dedicated to the promotion of the sustainable use and preservation of our natural resources in order to maintain a balance between people and the environment (Waight and Lumb, 1999).

Traditionally, an organization's mission statement helps guide its activities and motivate its stakeholders. It defines something, other than profitability, that the organization strives to achieve and is a clear signal to all of the overarching purpose of the organization.

Purpose of Goals

If BAS has in fact identified and funded the key program areas necessary to fulfill its mission, how does it achieve success in these areas? Modern Western organizational theory tells us that well-defined, well-communicated goals are necessary to achieve this success. Goals are the means through which BAS continually achieves a "balance between people and the environment." Locke (working paper) summarizes goal-setting theory and proposes three functions to goals:

> First, goals *direct attention* and action toward goal relevant activities and away from non-relevant activities… Second, goals affect *intensity of effort*. People expend effort, other things being equal, in rough proportion to the difficulty of the goal… Third, goals affect *persistence.* Persistence is effort expended over time and sustained in the face of obstacles and failure.

Long-Term BAS Goals

When prompted in an interview, Mr. Osmany Salas, Executive Director of BAS, quickly related five long-term goals for the organization as if he were constantly wrestling with them. Those goals were:

- Become the foremost environmental advocates
- Increase membership to 4-5,000 members
- Manage the most well-known PAs; increase the services at the PAs
- Have PAs closer to self-sufficiency
- Have more of an advisory role at larger PAs

A call to Mr. Salas in early March of this year confirmed that the goals are still accurate, with the exception of the membership target. He noted that the membership target has been reduced to 2500 (approximately one percent of Belize's population), a number determined recently in a membership and marketing strategy session that used the UK's Royal Society for the Protection of Birds as a benchmark (the society has a membership of over 1% of the UK's population).

Goal Specificity

Specific goals improve the possibility for meaningful feedback on progress toward these goals. They help clearly direct thought and action toward productive ends, whereas ambiguous goals can lead to frustration and wasted effort. (Note: this assumes clear communication of goals, a topic that will be addressed later in the section.) Richard Scott (1992) takes goal specificity to its logical extreme by defining it: "Goals are specific to

the extent that they are explicit, are clearly defined, and provide unambiguous criteria for selecting among alternative activities."

BAS has the option of creating open or specific goals, depending on the situation. For example, if BAS were to set a membership target, they could choose a specific goal, like a given number of people or a percentage of the population. Alternatively, BAS could choose to create an ambiguous goal such as "attaining a very large membership." Very large compared to what? How is this measurable?

The need for goal specificity may change depending upon the goal and the level in the organization. Scott (1992) notes that organizations may have quite general guiding principles, but that these are often refined at lower levels. Some level of generalization is of course necessary as goals are moved toward a higher level: it would be difficult to phrase a meaningful mission statement with specific goals. This leads naturally into a discussion about the need for cascading goals, goals that flow from the mission statement to action plans for individual staff members.

The need for goal specificity may also vary across cultures, even within the same organization. The Japanese bank mentioned in the introduction to this section provides an excellent example of how goal specificity may vary across cultures. Level of education and/or extent of experience may also play a role in shaping the specificity needed for goal attainment.

From a Western standpoint, goal specificity is one of the highlights of successful goal-setting. How specific should the goals be at BAS? Observation and interviews show that goal specificity and desire for goal specificity vary within BAS. Interviewees, especially at higher levels in the organization, indicated the need for more specific goals (BAS staff, personal communication). Though a small sample, the interviews point to the need for creating specific goals where they are not already established. However, not all employees desired more specific goals, and thus it becomes incumbent upon the managers to determine the need for creating more specific goals for subordinates.

While specific goals are important to program area directors, they appear to be less so to wardens. Two factors may cause this: first, specific goals may already be established, and second, specific goals may not be as necessary at the individual PAM level as they are at the program management level. There is evidence for both.

At one PA, the park director posts, copies, or generally makes goals, articles, newsletters, and other material available to keep the wardens informed and on track. Though informal goal setting most likely also takes place at this PA, it was the clear manner in which articles, excepts, etc. were displayed that shone forth. Importantly, these materials were in addition to the PAM plan and the Terms of Reference in the job descriptions.

At another PA, the wardens and the park director discuss daily goals every morning and prioritize them to assure that the most important tasks are addressed. Though not as formal as the posted and copied material mentioned above, the method used in this PA

appears highly effective and may serve to increase participation in goal/task setting, thus improving motivation.

On a cautionary note, the emphasis on the goal systems at these two PAs does suggest goal systems do not exist at other PAs. It may be as simple as interview bias (respondents in other interviews may have heard a similar question quite differently, leading to different responses).

Cascading Goals

As one progresses from the mission statement to daily activities, such as clearing paths and educating schoolchildren, one expects to see an increase both in the number and specificity of the goals deemed necessary to fulfill the mission. Graphically, it may look like a tree, with a mission statement as the trunk. It may also appear to be a pyramid, with the lower blocks supporting the apex/mission statement. Lastly, goals may be thought of as a waterfall, flowing continuously from the top to the bottom. Numerous sources argue for the importance of clear, cascading goals to both guide the organization and accomplish daily tasks. Scott (1995) emphasizes the work of James March and Herbert Simon (1958), who described the cascade as a series of means to an end that involves:

> starting with the general goal to be achieved, (2) discovering a set of means very generally specified for accomplishing this goal, (3) taking each of these means, in turn, as a new sub-goal and discovering a set of more detailed means for achieving it, etc.

Professor Kathleen Sutcliffe, who teaches in the Department of Organizational Behavior at the University of Michigan Business School, stressed the importance of cascading goals, and is the source for this paper's use of "cascading" to describe the flow of goals through the organization. She emphasized the importance of creating goals relevant to the overall organizational strategy at all levels of the organization.

Another supporter of cascading goals is the Ohio Award for Excellence (OAE), an organization that strives to:

> promote overall competitiveness and growth of Ohio-based organizations in domestic and global markets by developing and recognizing those organizations that practice measurable continuous improvement and utilize outstanding processes to achieve customer-focused performance excellence (<www.oae.org> , 3/28/00).

The OAE recently stressed the need for the United Way of Greater Toledo, a nonprofit human service organization, to translate their newly formed strategy into concrete, measurable action plans for employees. BAS may find the framework used by the OAE to be an effective one. The OAE uses a Malcolm Baldrige framework to assess organizations. The Baldrige framework (<www.quality.nist.gov>, 3/28/00) is used to assess for-profit, government, and nonprofit organizations.

At BAS, while the strategic goals are well known at the highest level, they do not concretely penetrate past the central office into the field. Even though three of the five long-term goals are directed toward PAs, PA managers may not be aware of them, at least in this form. This is not to say that the park directors are not aware of overarching organizational goals, because they are. The PA manager helps to communicate organizational philosophy, as does the mission, as do the park directors' visits to the central office. At the time of writing (April 2000), a park director is working with the PA manager to prepare the way for a co-management project that will shift BAS to a more advisory capacity in managing the sanctuary. This example illustrates the flow of organizational goals down to the PA level and presents a double-edged sword to managers ? it both opens the door for more innovation but also leaves the organization open to miscommunication.

Goal Communication

The issue of communication, or miscommunication, is one that will appear several times throughout this section. Here, the discussion focuses on communication as the structural base for goal achievement and organizational effectiveness. An effective hierarchy or cascade of goals relies heavily upon clear communication of goals within and between organizational levels. Jeffrey Pfeffer (1992) summarizes the importance of effectively communicating goals: "If you know your organization's strategy but your colleagues do not, you will have difficulty accomplishing anything." Though perhaps a little forceful, the message is clear; goals must be communicated clearly.

Effective communication of goals, both from the central office to the field and vice-versa is essential for smooth operations at BAS. One method for conveying park goals is through the management plans. Each PA has a management plan that describes both short and long term goals. The progress toward the management plan goals needs to be aggregated to determine how the organization is performing overall. During an interview, a park director framed the issue of communication: "There needs to be a constant, ongoing process of looking from bottom to top to make sure that the organization is not slipping." The comment points to the importance of bi- or multi-directional information flow.

Goal Participation

Locke (working paper) notes that while participation in setting goals is irrelevant, participation in setting task strategies does increase employee commitment.

Participation in setting goals, on the average, does *not* lead to higher commitment or performance than simply telling people what you want them to accomplish and why. Most people seem willing to accept the requests of leaders or managers providing what they ask makes sense. Recent studies have found that participation is more valuable as an information exchange device for developing task strategies than as a method of gaining commitment to goals.

Locke may be splitting hairs when drawing differences between goals and task strategies, but the point is that employees are willing to accept certain responsibilities and directives (goals), but would like some input into how these are accomplished (task strategies).

Western goal setting experiments attempting to relate participation in goal setting to performance have proven inconclusive. Here, BAS definitely differs from the Western norm.

In PAM, the goals for each PA are outlined to varying degrees in the management plans. The plans were written by a variety of groups over a period of years, and there exists significant variation in the scope (both in breadth and depth) of the goals from one PA to another. Variation in PA designation, date of acquisition, and several external factors such as availability of funding/support for the plan may explain some of the variation.

Other sources of goals for park directors and wardens are the individual staff members' Terms of Reference (in employment contract), periodic communication with both the Executive Director and the PA manager, and somewhat limited exposure to the BOD. Of these methods, the Terms of Reference and ongoing dialogue with the PA manager appear to play the largest role in setting PA goals.

Employee *participation* in setting the goals appears limited to management plans and communication with the PA manager. In some cases, employees may have had no input at all into the management plans, as they were written before the individual's tenure with BAS began (BAS staff, personal communication). This leaves open one method of communication – the PA manager. And, while it may be the responsibility of the PA manager to listen and respond to the concerns of all wardens and park directors, it may also be causing undue strain on the PA manager.

Several employees chafe at the lack of input they have into the local decision making process. One said: "The office doesn't like to listen to suggestions from the field," and another claimed that recommendations are made to the office, but they are not heard. Still another said somewhat detachedly "It has been viewed by staff that the head office staff dictates what to do" (BAS staff, personal communication).

However, this feeling is not universal. When prompted to comment upon their input into the management plan, one employee said he felt he was consulted to the "full extent" and another said he felt he had some input (BAS staff, personal communication).

To what extent should the office dictate what happens at the PA level? While this is a question best left to the managers, it appears that an increase in participation, at least in some circumstances, could alleviate pressure and possibly generate insightful suggestions. In this sense, BAS differs from Western goal setting theory–goal participation clearly does matter at some of the PAs. Managers may need to take the pulse of PA employees to determine their desire for participation. Managers may also

want to keep in mind that the ones most informed to make decisions sometimes are the ones closest to the ground.

Goal Difficulty

Locke (working paper) emphasizes the positive effect of difficult goals: "the research shows that *the more difficult the goal, the higher the level of performance.*" Performance however is dependent upon the degree of personal commitment to the goal, a factor to be discussed later along with motivation. While Locke notes that goals should not be made "totally preposterous," others, like Jack Welch of General Electric, are proponents of setting stretch goals. Simply put, stretch goals are goals that help create high performing employees. Steve Kerr, the Chief Learning Officer at GE outlined the GE approach to setting stretch goals (Sherman, 1995):

> No. 1, don't set goals that stress people crazily.
> No. 2, if you do set goals that stretch them or stress them crazily, don't punish failure.
> No. 3, if you're going to ask them to do what they have never done, give them whatever tools and help you can.

BAS may want to review the current process for goal-setting and include some stretch goals where and when appropriate.

Goal Measurability

A broad body of Western organizational theory literature, especially the work around effectiveness, addresses the need for measurable goals. To quote an oft-stated business axiom, "What gets measured gets managed." The need for measurable goals exceeds just managerial control. It permeates to many different stakeholders, from the BOD to donors to members. Because many nonprofits' and non-governmental organizations' missions are so general, they are difficult to measure. BAS is no exception to this rule.

To combat mission ambiguity, organizations can either redesign their missions or create measurable proxies. Because missions are meant to inspire various stakeholders, as Oster (1995) stated, this first solution is rather undesirable. A mission statement with the lofty goals like "promotion of the sustainable use and preservation of our natural resources" may be more inspiring than say a mission statement such as "preservation of 32.5 percent of our natural resources." In light of this, many organizations create measurable goals that serve as proxies for measuring successful progress toward the mission. John Sawhill, president of The Nature Conservancy (a US-based, global conservation organization), summarizes this point:

> the American Cancer Society, the Chesapeake Bay Foundation, the Boy Scouts, and the Girl Scouts ? all had developed specific, actionable, and most critical, measurable goals to bridge the gap between their lofty missions and their near-term operating objectives. Rather than expending inordinate effort in measuring mission, these groups have concentrated on identifying and then achieving goals

> that will move them in the direction of mission success–tacitly abandoning a direct measure of success in favor of a cheaper, faster, more useful surrogate of organizational performance.

An examination of BAS' stated goals reveals the opportunity to enhance their measurability.
Alternately, BAS can construct measurable sub-goals that indicate the degree of progress BAS is making on the stated goal. How measurable are BAS' goals? The revised goals are listed here for convenience:

- Become the foremost environmental advocates.
- Increase membership to 2,500 members.
- Manage most well-known PAs, increase the services at the PAs.
- Have PAs closer to self-sufficiency.
- Have more of an advisory role at larger PAs.

How will BAS know it is the "foremost environmental advocate?" BAS may want to create measurable sub-goals here. Some measures could include the number of participatory government committees BAS sits on and/or chairs. Another could be the number of policy forums BAS holds every year, compared to competitors. Lastly, BAS may want to rate the strength of its relationship with key government officials as a proxy for premier advocacy status.

Increasing membership to 2,500 members is BAS' most measurable goal. BAS may consider breaking this goal into the different membership categories, stipulating annual growth targets for each category.

Similar to the first goal, managing the most well-known PAs is a difficult one to measure directly. Measurable sub-goals might include percent of total visitors to PAs visiting BAS sites, total dollars devoted to advertising, and industry rankings.
BAS may want to consider creating annual targets for making more self-sufficient PAs. As mentioned in the goal participation section, BAS may want to involve park directors in setting annual targets for percentage of budget generated onsite, percentage of total budget administered by the park director, total revenue generation, and total operating costs.

How will BAS know from year to year whether it has assumed more of an advisory capacity at its PAs ? Chapter 9: Communities addresses some of these issues, but this goal, possibly more so than others, is difficult to measure as it stands. In assuming a role focused more on advisement rather than active management, BAS may want to generate a list of sub-goals to measure progress. These sub-goals may contain different annual targets for each of the PAs under consideration. Possible measures could include the number of full and part time staff (assuming a decline), number of full and part time local people employed from the community, and percentage of the PAs ' total budget administered by BAS.

Lastly, it is recommended that BAS institute an annual review process for each of the five goals and any sub-goals associated with them. The review process should include elements of assessment of progress towards the goals and a review of the goals themselves (to assure that goals and s7ub-goals are still in line with the mission).

Organizational Design

This commentary about organizational design focuses keenly on one area: the degree of centralization versus decentralization in the organization. This is an issue every organization must deal with, from the smallest NGO to the largest multinational corporation. Which players should have the power to influence human, financial, physical, and informational resources? How much faith is senior leadership willing to place in the people it manages? Who has the best information for making decisions? To what extent are the people at the local level qualified to make decisions? BAS needs to continually address these questions to assure it matches its organizational design to the one needed to make progress toward the mission and to satisfy stakeholder expectations.

During the summer research, the research team noticed a level of tension between the field staff and office staff. For the most part, it was unidirectional. The field staff felt frustrated as a result of actions or decisions made by the office staff. This could be a bias in the interviews, but all permanent field and office staff were interviewed and all were asked similar questions. One common theme from the interviews was the lack of control field staff felt they had over their own activities. Another was a sense of frustration that this lack of autonomy created.

Drawing once again from the field of organizational behavior, the job characteristics model
(Hackman, 1977) lists autonomy as a "core job dimension." Autonomy links directly to responsibility, a "critical psychological state" that affects "personal and work outcomes." This model describes the link between a sense of autonomy and satisfaction. Similar to theories about goal participation, care must be taken in applying this Western model to a non-Western (strictly speaking) organization, especially in light of the difficulty in applying it to some Western organizations.

The following example, drawn from a Harvard Business School case, demonstrates the need for senior leadership's discretion when determining the degree of decentralized decision-making authority in an organization. AES, a large independent power producer, encountered widely divergent cultures in its Thames and Shady Point plants. Employees at the Thames plant favored a much more informal, flexible organizational design than those at the Shady Point plant. Thames employees wanted and received a tremendous degree of autonomy, whereas the Shady Point employees desired a greater extent of managerial supervision. When the Thames plant decentralized style of operations was applied to the Shady Point plant (whose employees desired greater centralization), disaster struck (Mavrinac, 1995). Water quality test results were falsified, and the ensuing exposure shook the entire company. The lesson learned here is to design an organizational structure flexible enough to accommodate the varying needs of employees.

BAS is not on the brink of disaster, but it is at a critical point in its history regarding the structure of the organization.

Field Staff

The research team noted multiple instances of the field staff chafing against the authority of the office staff. Though the underlying reason for the tension differed from person to person and PA to PA, the results were similar: frustration and demotivation.

At one PA, a staff member said that the office staff never gave positive reinforcement, only negative. The motivational support needed was not given, leading to a high degree of frustration: "if it wasn't for the fact that I had a family, I would have left" (BAS staff, personal communication). An extensive body of literature addresses the cost to an organization of such thinking. The expectancy theory model (Kotter, 1973) nicely captures the flow of feelings in this example. The field staff member expected a certain amount of positive reinforcement from office staff members. The office staff managers may or may not have expected to provide this positive reinforcement. In either case, a mismatch in expectations led to demotivation, thus affecting performance and increasing desire to leave the organization.

Another employee had significant insight into the sources and implications of centralized control. He felt the field staff had a wealth of information and knew how to manage the PA, but did not have the authority to do so. This led to a lack of "ownership," or a feeling of personal connection to work. "If they don't create ownership, it's very hard to manage." Actually, the lack of ownership "makes you want to sit here and stare at the walls." Again, this emphasizes the negative effect the lack of autonomy has on productivity and motivation. On a more positive note, he noted "if we could work together as a team, it would be very easy" (BAS staff, personal communication).

One BAS staff member in particular appeared to understand the complexity of the issue. He both knew and sympathized with field and office concerns, possibly contributing to his own conflicting feelings. Summarizing the local PA's perspective, he said "there is no satisfaction in working here anymore." He also noted that the staff would think about changing jobs, but they hope for an improvement. This made the staff feel that they were unproductive, and that they should just wait for their monthly checks. Showing a broader understanding of the issues involved, he said "it's quite difficult to understand the position of the head office."
This BAS staff member also drew a clear link between PA employee demotivation and the need for more local decision-making authority. He felt that this authority should extend to control of the park's finances and stated that the current budgeting process lacked transparency. He also felt that the park in which he worked was subsidizing other parks, thus extracting money that could have been reinvested in staff, facilities, etc. He was worried that this drain would "kill the goose that lays the golden egg."

Turning his concerns to an organizational level, the employee said that there was a need to analyze the entire structure of the organization. He mentioned that he thought BAS

had reached a stagnant point, especially in PAM. "We are crawling. We need to stand up and start to walk" (BAS staff, personal communication)!

From the Executive Director to various park directors, the need for increased local control of operating budgets was observed. The Executive Director conveyed the goal (possibly a sub-goal of having parks closer to self-sufficiency) of having each program manager controlling his or her operating budget in one year's time. This thought may have been spurred by a recent experience he had at a PA. The Executive Director noted the appalling condition of various visitor amenities, and upon inquiring about them, learned that the field staff was afraid to ask for funding. He commented "maybe we are holding the purse strings too tightly. Maybe the field staff doesn't understand." The second point he made is an interesting one. Perhaps the need to maintain centralized control over operating budgets is not communicated as clearly as possible. An understanding of the funding swings might alleviate some of the tension.

One BAS staff member clearly stated the need for greater control of the PAs financing. He said that the staff questions the destination of the money the area generates. Furthermore, centralized control over revenues and expenses created a disconnect of spending at the local level. He had little information about how much the park was spending, because "everything is bought out there," meaning by the office. Not only does this example highlight the desire for greater local control, but also raises the possibility that expenses will be watched *more* closely if budgeting is decentralized.

Reinventing Government (Osborne and Gaebler, 1993) examines the possibilities of decentralizing budgetary control among government agencies. While the examples are drawn primarily from the public sector, many of the ideas apply to the private and nonprofit/NGO sectors. BAS may find this instructive if it pursues decentralized budgetary control.

The Executive Director also explained that the difficulty of pushing budgetary control down the organization lay in the variable nature of funding. Funds had to be borrowed from one area to support another, depending on the point in the funding cycle. Another difficulty, though unmentioned, of transferring control is the disturbance in the balance of power in the organization. There are bound to be parties who lose power and parties who gain, raising the potential for territorialism.

Stabilizing revenues and decentralizing budgetary control may be the first steps in creating a more decentralized organization. Decentralization and funding stabilization are covered in greater detail in the recommendations section.

Resource Allocation

A discussion of resource allocation in a nonprofit or NGO can turn quickly into a unanimous call for more resources. This section of the paper attempts to differentiate between the need for additional resources, which will apparently always exist, and the need for effective allocation of current resources. This issue boils down to two

straightforward questions about revenue growth and resource allocation, or growing and slicing a pie. First, how does BAS increase the size of the pie? Second, how does BAS slice the pie? The next two paragraphs outline some boundaries for the discussion by describing what the research project did not address. Doing so bounds the solution space and sets parameters for the scope of the discussion.

Almost all BAS interviewees relayed the need for additional resources, whether in the form of time, money, equipment, training, or staffing. However, given a limited pool of resources, BAS cannot feasibly increase funding to all programs and all parks at once, unless it grows the size of the pie. This paper lists several suggestions for doing so, but is neither an attempt to fully explore these options, nor is it an exhaustive list. The purpose of the examples is to raise awareness that the pie can be grown with effective slicing of the pie. The newly formed strategic planning committee is in a far better position to explore growth activities and recommend new strategic directions to the membership of BAS.

The project also was not an operations management exercise aimed at determining optimal allocation of BAS' scarce resources. However, the project team was privy to information (possibly due to third party neutrality) that may not be obtained by inquiries from within BAS, and so feels some commentary may be instructive. The comments are not meant to criticize, but rather to raise questions and concerns about the long-term implications of current allocation.

BAS staff (field and office) and knowledgeable outsiders mentioned the most pressing allocation issues in a variety of contexts, ranging from formal interviews to casual conversations. Concerns varied from lack of specific equipment needed for PA upkeep to an overarching need for more training among field staff. Among all the needs identified, those revolving around safety, training, and efficiency will be discussed. These issues were chosen because they figured prominently among concerns and they tie well to larger issues.

Safety

Safety concerns at BAS PAs are twofold. First, BAS needs to ensure the safety of its field and office staff while in the office, PAs and en route between them. Second, BAS must ensure the safety and security of visitors to PAs. The reader may at first question the link between safety and resource allocation, but the following examples should shed some light on the relationship.

A well-known series of security threats plagued GNP in 1995. Visitor numbers to the park plummeted, and BAS responded by hiring local staff members and obtaining special constable training for several wardens and park directors. Wardens with this training are authorized to make arrests, although none have had to do so. This incident provides an example of appropriate, though reactionary, action taken by BAS.

A separate incident threatened the personal safety of a BAS employee. While using a machete, a BAS employee in a remote PA sustained a severe laceration to one of his legs. Lacking communication equipment and proper medical equipment and training, the injured man was brought to a local clinic via bicycle by a fellow warden. Incidents like these, while rare, place employees and BAS as an organization in great danger. For individuals, the risk is to life and limb. For the organization, the risk is legal action taken by employees or visitors. It is the team's hope that BAS can apply the lessons learned from the above examples to other forms of safety threats.

BAS can take the initiative to prevent certain breaches of security and threats to safety before they occur. However, some events are outside BAS' control. In 1998, Hurricane Mitch devastated parts of Central America, including areas in Belize. At the time, a warden was stationed at HMCNM. BAS called on the British military to collect the warden, but the helicopter failed to locate the island. Were it not for a boat sent for the light house keeper, the warden would have had to endure the hurricane on the island.

Preparation by BAS cannot prevent all security threats from occurring, but it can facilitate mobilization of an action plan when emergencies do occur. To avoid further threats to safety, BAS may want to consider supplying each PA with a standard first aid kit and training at least one warden in its use. A new radio communications system installed in late 1999 will assist in timely evacuations in the event of severe emergencies.

Lastly, there is growing concern among wardens about their personal safety when confronting poachers. Occasionally, the poachers are equipped with firearms. The unarmed wardens are left with the difficult task of convincing armed poachers to cease their activities. While this report will not suggest an action to be taken, BAS may want to address this issue.

Training

Many of the staff at BAS have received significant levels of training, both in formal educational institutions and workshop programs, and in informal, internal training sessions. An argument could be made that more training at all levels would be beneficial to BAS, but again, that would involve not simply re-slicing the pie, but growing the size of the pie. How does BAS capitalize on training opportunities without reallocating a significant amount of resources? In other words, how does BAS create win-win training opportunities for itself?

One possible solution to the need for training lies in the expertise of BAS stakeholders. Board members, volunteers, members and other parties may offer their services at reduced rates or free of charge. During the summer research, the project team encountered a university professor who had offered such training, but BAS had failed to capitalize on the offer (researcher, personal communication). Like many opportunities that present themselves, this one involved committing short-term resources to realize long-term gain.

The same professor emphasized the need for more technical training among wardens and park directors. He also suggested that foreign visitors are increasingly demanding knowledgeable, courteous staff, and are willing to travel elsewhere if their expectations are not met. And, while BAS is not solely in business to serve foreign visitors, it does receive significant revenues in entrance fees, membership dues, donations, and grants from foreign individuals and institutions.
Training in public relations, especially as it applies to foreign visitors, could substantially increase revenues in the long run. Parks and staff that meet and exceed the expectations of visitors may receive more repeat visitors and may be more likely to gain "brand awareness" through word of mouth. For years, Club Mediterranean built its reputation by satisfying its customers and relying on positive word of mouth advertising.

This example is used to raise awareness of such opportunities, not to chide an organization for an opportunity missed. It also represents an opportunity for BAS to grow the pie in the long run by making strategic investments in its current staff.

Efficiency

Efficient allocation may appear a trivial issue, at least from a solutions standpoint. The project team could claim that BAS should slice the pie differently, and then recommend a more efficient allocation. First, as mentioned earlier, the project was not a study in operations management. Second and more importantly, none other than BAS managers are better qualified to make these allocation decisions. The more interesting question from a research viewpoint is what happens when BAS staff members feel that resources are not being allocated efficiently. While an effort is made to limit this discussion to the influence of allocation efficiency, this area is highly correlated to issues of organizational design, discussed above. A discussion of one is bound to include the other.

The examples below highlight both sides of allocation: resource abundance and resource scarcity. The details are removed both to offer the informants some distance and to emphasize the generality. It should also be noted that BAS is susceptible to variations in funding, almost ensuring some mismatches in allocation. It is therefore incumbent upon BAS to manage those situations over which it has control, and communicate those situations over which it has limited or no control.

At one PA, resources were committed to a project, but the funds "dried up," and the project was halted. While this could be a simple case of a project exceeding its budget, the implications exceed simply predicting costs more accurately to assure project completion. First, the staff was more than likely unmotivated to complete the task, as it was undertaken against their recommendation. Second, the unfinished project drew resources that may have been better applied elsewhere. Third and most importantly, the project created resentment among staff about how resources were allocated. This resentment between the local staff and those who made the decision tears the fabric of an organization.

The example of insufficient resource allocation comes from a PA that was promised the delivery of certain equipment, which was never delivered. At the heart of the matter is a mismatch in expectations. Researchers in the field of organizational behavior have constructed an entire theory of human behavior and employee satisfaction based on matching expectations between employer and employee.[24]

This example illustrates the expectations theory well. The employer promised the delivery of certain resources to the local staff, thus creating an expectation about the goods to be delivered and the time of delivery. When these resources were not committed, a mismatch was created between the local staff's expectations and reality. This resulted in demotivation and resentment, similar to the case of over-allocating resources.

The overall goal of providing these examples is not to chastise BAS for misallocating resources, but rather to inform BAS of the consequences of misallocation. The section on organizational design and the list of recommendations may offer some guidance for addressing this issue.

Strengths and Opportunities for Development

Rather than follow the more structured, formal analysis here, which would include a listing and explanation of organizational strengths and weaknesses, this section only covers BAS' strengths. The reasoning behind this is straightforward. A more traditional analysis would not include a recommendations section, but this chapter does. To avoid unnecessary repetition, opportunities for development are explored in greater detail under recommendations at the end of the chapter.

As an organization, BAS holds a number of strengths that have helped it navigate uncertain territory over the past thirty years. The strengths mentioned are largely the result of directed questions in staff interviews and thorough observation. Missing are the opinions of other stakeholders such as other NGO representatives, community members, tour guides, and government officials. And, while therefore not a complete study of organizational strengths, the following analysis does offer some insight, especially from an individual perspective.

One of BAS' most vital strengths is the intrinsic motivation of its staff, something that may have been undiscovered in an externally focused analysis. On a broader level, BAS possesses the ability to survive in a highly dynamic environment, or change management skills. These and other strengths such as park director/warden relations and BAS' relationship with GOB (not detailed here) have contributed significantly to the success of the organization over the years.

[24] See Kotter (1973) for a more thorough explanation of this issue.

Intrinsic Motivation

The following comments appeal once again to Hackman's job characteristics model (see Appendix 3a) to help frame the concept of intrinsic motivation. A series of core job dimensions lead to critical psychological states, such as meaningfulness and responsibility. When achieved, these psychological states lead to outcomes like intrinsic motivation, performance quality, and work satisfaction. Practitioners should take special care when applying this model outside of Western organizations, as it tends to describe only a subset of employees even within Western organizations. "High growth need" individuals are more likely to act in this way. These are people who have strong desires to increase responsibility in their lives, e.g. the mail clerk striving to one day be the chief executive officer. The model may not describe the path to motivation for mail clerks who prefer to remain in that position.

Evident throughout all levels of the organization was a commitment to BAS' mission and the interests BAS' addresses. "I like the ideas of what the organization stands for … what it does for the country and people" (BAS staff, personal communication). This sentiment broadly expresses the intrinsic motivation many at BAS have. From program manager to warden, many in BAS are motivated to further organizational goals based upon the overall conservation approach BAS takes.

Paralleling this support for BAS' mission is one BAS staff members feel toward their jobs in general. Staff members frustrated with one aspect or another of the organization did not allow that frustration to color their overall satisfaction. When asked about what he liked best about working with BAS, one warden commented, "I'm not here for the salary. I'm here because I love the job" (BAS staff, personal communication). A fellow warden at the same PA said, "I love the job I do" (BAS staff, personal communication).

Change Management

Over the past 30 years, BAS as an organization has morphed to fill the changing needs of Belizean conservation. A relatively small volunteer organization for its first 15 years, BAS has grown to manage over 150,000 acres, 31, full-time staff, over 600 members and a budget of about BZ$1.3 million (US$0.65 million).

The following external and internal details help provide some context about the environment in which BAS operates:

- Guatemala recently renewed existing territorial claims on Belize.
- GOB ministers have the authority to de-commission PAs, including those BAS manages.
- BAS has deflected two GOB attempts to reclaim its Front Street office location.
- BAS has had five executive directors in the past 12 years.

Throughout these tumultuous times, BAS has not just survived, but grown its reputation, management responsibilities, and membership. Looking ahead, organizational flexibility

will remain a crucial attribute as Belize copes with population pressures, changing demographics, and modernization.

III. ORGANIZATIONAL ANALYSIS: EXTERNAL

The external organizational analysis begins with a look at the industry in which BAS operates, then turns to an analysis of BAS' stakeholders. This model is adapted from Sharon Oster's (1995) revised version of Michael Porter's *Five Forces* model (see Appendix 7b), widely popular with Western businesses. Oster (1995) revises Porter's model to include cooperators and donors—insightful and practical additions for nonprofit analysis.

The original *Five Forces* model was designed to determine the attractiveness of an industry from a profit-seeking perspective. And, while making profits may not be an explicit goal of NGOs, the model nevertheless helps to examine organizations like BAS quite well. The model framework used herein is more akin to a stakeholder analysis than a strict Porter-like review of power. It begins with a description of the industry using two of Porter's five forces, substitutes and new entrants. The examination of these forces helps surface BAS' competitive advantages and provides context for the stakeholder analysis.

Industry Structure

Substitutes

A broad range of substitutes exists for the services BAS' program areas offer. Belize is a country blessed with a low population and diverse natural and historical resources, and consequently, many of these resources remain in relatively pristine condition when compared to those of its neighboring countries. Visitors to Belize may satiate their outdoor "desires" with excursions to Belize's rich array of archaeological sites or forays to Belize's world-class diving and snorkeling sites. The uncompromised beauty of Belize's natural resources that BAS strives to protect may actually pose a danger to the organization. Opportunities are many in a land of such riches. Caye Chapel is destined to become a top-rate international golf course, and may siphon some potential visitors from BAS' PAs. This recent development, combined with the already present trend of visitors skipping mainland Belize (with the exception of the airport, from which they catch flights to the cayes) poses a real threat to BAS PAs. It may become increasingly difficult to lure potential visitors away from islands that are rapidly developing to meet the needs of demanding Western visitors.

Substitutes in advocacy and EE are more difficult to imagine, but not impossible. A substitute for advocacy would have to replace the collaborative process that currently exists, not just dethrone BAS as the preeminent advocacy organization. Given the highly cooperative, mutually beneficial nature of the relationship between GOB and conservation organizations , the team does not foresee this happening in the near future. Equally unlikely is a major paradigm shift away from educating schoolchildren and

visitors in the PAs. Schools would need to develop internal expertise or formally subcontract this service to another organization. Again, though, the nature of the relationship would not predict a move by GOB to break its tie to BAS.

New Entrants

Consciously or not, BAS has erected barriers to prevent other organizations from encroaching on its territory. Barriers are evident both at the organizational and program levels. BAS as an organization has built a reputation and trust within the conservation community over the past 30 years. It would be difficult for a new organization to capture these qualities quickly. BAS has also established a widely known "brand." High brand awareness helps attract new members, visitors, and donors. In PAM, BAS has secured a unique MOU with GOB to manage public lands. Obtaining a similar agreement seems outside the grasp of established conservation organizations, let alone new entrants. In PAM, advocacy, and EE, BAS has developed close working relationships with government and/or school officials. The three program areas also cooperate to a greater or lesser extent with other NGOs. BAS employees have developed professional relationships with a complex web of individuals with stakes in Belizean conservation. To summarize, a new entrant would find it extremely difficult to match BAS' reputation, legitimate authority, and net of contacts.

Stakeholder Relationships

The bulk of this external organizational analysis is devoted to the stakeholder analysis. Stakeholders are described according to their relationship with BAS, whether customers, competitors, cooperators, suppliers, or any combination thereof. Certain capacities of relationships are emphasized over others for their perceived importance and availability of data. The analysis begins with customers and suppliers, then focuses on competitors and cooperators, which are discussed in parallel to demonstrate the extensive linkages between them.

The graph and chart below provide frameworks for the remainder of the discussion. In the chart, relations in shadow are explored in further detail and empty boxes are tenuous or non-existent relationships.

Figure 6.1 Stakeholder Relationships

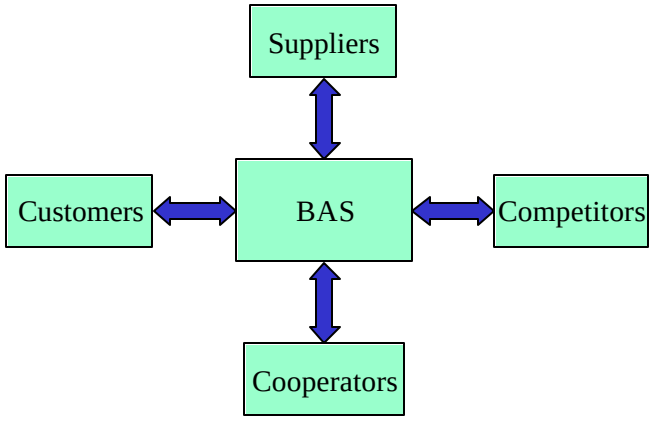


Table 6.2 Stakeholder Matrix

	Customers	**Suppliers**	**Competitors**	**Cooperators**
Members Individuals, organizations	PAM, advocacy, EE	management expertise (through BOD), authority		
Donors members, individuals, organizations	PAM, advocacy, EE	time, financial support, training		
NGOs *PFB, Belize Zoo*	forum for advocacy	training	grants, staff, donations, visitors	advocacy, PAM (eg. BACONGO)
GOB *Dept. of Environment Forest Dept. Fisheries Dept.*	PAM, policy innovation	management authority, financial support, body of law, flexibility	owned/operated PAs & cultural sites	expertise, grass roots, organized support)
Businesses *wilderness lodges, dive boat operators, tour guides, hardware stores, banks, consultants*	PAM	physical, financial, informational resources (eg. lumber, money management, expertise)	Education, outdoor experiences	BTB policy setting
Educational Institutions *primary and secondary schools, UCB*	outdoor education, jobs	educated workforce, environmentally literate citizens		outdoor education, jobs
Belizean Citizens and Communities	PAM, advocacy, EE, jobs, local development, showcase sustainable practices	management authority (through GOB), financial support		co-management
Visitors	outdoor experience, education	financial support		

Customers

Who are BAS' customers and what does BAS provide to them? Defining BAS' customers is akin to wrapping one's arms wholly around a mature Guanacaste tree – a difficult task, to be sure. At the broadest scale, BAS provides benefits to the entire world,

through carbon sequestration, air and water purification, and protecting biological diversity. At the narrowest, the cool waters of BHNP offer relief from the sweltering summer sun for a child from Armenia, a small village near the park. BAS provides a range of services at the local, national, regional, and global scales, and must interact with stakeholders at all these levels.

Porter's model of customers (buyers) and the balance of power between the organization and the buyers needs modification when applied to BAS. The emphasis on power in the relationship is not as appropriate in the nonprofit sector. Nonprofit organizations enter many unprofitable industries that for- profits would not consider entering (and probably would have a strategic disadvantage if they did enter). More useful in a nonprofit analysis is an examination of BAS' multifaceted relations with its stakeholders. In this analysis, a customer may also be a supplier and a competitor.

In a strictly for-profit organization ? one that attempts to profit maximize? absolute power over buyers (partially exhibited in monopoly situations) may be the holy grail, for it allows maximum extraction of producer surplus (profits). In the nonprofit context, though, this thinking may be flawed. Many nonprofit groups exist to fulfill the needs of non-paying "buyers" or customers. Ideally, though these organizations would seek input and action from their customers to better serve them. BAS may be taking this one step further with its plans for co-management, the sharing of PAM with local communities. BAS is planning to willfully divest itself of power; it is difficult to imagine a for-profit organization doing the same.

BAS deals with a problem familiar to many nonprofits, that of customer identification. Who are BAS' customers? Members, donors, PA visitors, communities, GOB, and educational institutions all draw on BAS. Which one, or what combination, is BAS' customer?
This section sheds some light on BAS' relationship with these stakeholders. While not prudent to suggest a particular group or combination of groups, it is recommended that BAS define its customer set.

Members

BAS members who visit and value the PAs warrant brief mention here. They wield significant power through the BOD, which consists of 7-15 directors elected annually at the Annual General Meeting. Directors have two-year, staggered terms. In addition, BAS established advisory committees composed of members for each of its program areas, including PAM. The committees are temporarily suspended to allow focus on the strategic plan. However, the advocacy advisory committee was active during the summer research session.

Ultimately, BAS is a membership organization and it must serve the interests of its members. However, BAS has undertaken responsibilities that reach far beyond the hundreds of members. BAS has assumed a preeminent role in Belizean PAM, and has sought multiple sources of support to achieve this end. Donors, GOB, communities, and

other groups all have a stake in BAS' management of PAs. Members, though have the power to change the mission, strategy, and activities of the organization, while these other entities do not. Members have the authority to cease BAS' operations. The other groups do not. This said, though, the members are a diverse group of people interested in making positive impact in Belizean conservation. It's unlikely that the members could reach such a radical decision. So, while BAS must serve its members, other stakeholders may also influence it.

Donors

Oster includes donors as a sixth force acting upon the organization. Donors are both suppliers and buyers ? they supply funds, expertise and other resources to BAS, and they expect competent application and management of these resources in return.

The research team realizes that the relationship with donors is one that should be explored more fully in future studies. Donors may influence the direction of the organization through making funds available for certain projects, initiatives, etc. In 1999, grants from the EU, PACT IDB/PROLEAD, PROARCA/CAPAS, Summit Foundation, and HIVOS accounted for about 45 percent of BAS' BZ$1 million budget (BAS, 1999). In return for their financial awards, donors may request a range of services, ranging from progress updates to sound management of donated funds.

Visitors

Individuals and groups that visit the park derive a host of benefits, including outdoor recreation and EE, and may be broadly divided into Belizeans and non-Belizeans. The distinction is drawn because these groups interact with BAS in fundamentally different ways. For Belizeans, BAS manages national lands—lands that belong to Belizeans. Through the government, they have granted stewardship authority to BAS. When they enter the PAs, they tread upon their land. Non-Belizeans, by nature, are truly visitors to the PAs, and though they may contribute money and other resources to the management of the PAs, they have little say in who or what manages these areas. This being said, visitation by non-Belizeans is essential to BAS and to the tourism industry.

In the strict sense of Porter's model, BAS can exert influence over its PA visitors, because they are a diverse, uncoordinated group with little ability to produce the entire PA "experience" by themselves and face moderate costs if they want to choose to visit alternative PAs. (Though other public PAs exist, they are either more difficult to reach or less well known, or both.)
Knowing that BAS retains the lion's share of power in its relationship with PA visitors only completes a portion of the puzzle: BAS cannot manage this relationship with this information alone.

Belizean visitors to the park, as mentioned earlier, are visiting their collective heritage. Power flows from Belizeans to their elected government, and then to BAS. BAS is entrusted with temporary stewardship over the land, and at some level, is legally

obligated to provide the services that Belizeans require of it. BAS could be replaced as the steward of this land, but this is not likely. Enter the competitive context: a dearth of qualified PAM organizations almost ensures that this responsibility will reside with BAS in the foreseeable future.

Non-Belizean visitors present another complex study. They are not concentrated but face low switching costs. They can easily vacation in Mexico, Guatemala, or Costa Rica to obtain a similar PA experience. For example, Costa Rica boasts 27 percent of its 19,929 square miles in PAs (an area roughly 60 percent of the size of Belize) and over 1400 tree species and 850 bird species (<www.lonelyplanet.com>). Costa Rica has a booming ecotourism business, with popular national parks like the Monteverde Cloudforest Biosphere Reserve.

Collectively, international visitors represent the nations and organizations that aid Belizean conservation. So, while BAS need not cater to the whims of individual "tourists," it should keep in mind, for example, that these visitors are the ones paying taxes in Europe to support BAS' grant from the EU. Funding organizations will shortly be covered in greater depth, but suffice it to say that they are represented through visitors, among other channels.

Communities

BAS targets communities surrounding the PAs it manages with EE, development projects, visitor concessions, community organizing, local PAM, and in some cases, extraction rights. People living in communities surrounding PAs also receive employment as park directors, wardens, or casual laborers. While job generation may not be included as a benefit in many cost-benefit calculations, in this case, the research team feels it appropriate.

Development projects, such as the Maya Women's center at the entrance of CBWS, are also highly desired. However, they may create tension in a community due to unequal distribution of the wealth generated from the project. Limited rights to extract natural resources (eg. fish from CTWS) from within a PA may also generate tension in a community, again between those that benefit and those that don't. The examples above demonstrate some of the benefits communities receive from BAS, and one of the problems associated with these benefits. The Communities chapter explores employment, development, and extraction in greater detail.

Government of Belize

GOB is the primary target of the advocacy program's efforts. As a customer, GOB is highly organized and concentrated, features which give it more influence over BAS. However, GOB would face medium to high costs if they were to transfer management authority to a different organization or even to an internal department. As GOB would rather avoid these costs, this lack of competition tends to shift power to BAS. For a time, GOB was even getting BAS' management services free of charge, at least from BAS'

perspective. Only as recently as 1995 was BAS permitted to partially offset its costs with entrance fees, and only in 1999 did GOB promise funds outside of said entrance fees. Though these funds add to BAS' coffers, they also make BAS at least partially dependent upon GOB for monetary support.

There is no need for strict adhesion to Porter's model here. BAS' cooperation with GOB overshadows any struggle for power in the relationship. GOB turns to BAS for expertise on an increasingly broad range of issues. Chapter 4: National Conservation Policy outlines the interaction between BAS' advocacy program and GOB in greater detail.

Educational Institutions

Educational institutions, and the students involved in them, receive direct benefits from BAS' PAs and EE programs. Administrators and teachers are able to enhance their curriculum with field trips and guest lectures from BAS staff, while children receive guided PA tours, talks, and other learning based services aimed at increasing their knowledge of their native land. The schoolchildren also benefit from the interpretive displays in the PAs visitor centers and various locations around the PAs.

Businesses

Dive shops, wilderness lodges, tour guides, and other businesses targeting the ecotourist benefit directly from BAS' management of PAs and indirectly from BAS' advocacy for environmental protection. Fully 18 percent of the Belizean economy depends upon well functioning natural areas to support ecotourism. This includes tour guides, who leads groups of visitors through BAS PAs and ecotourist lodges located near BAS PAs. Both types of businesses depend heavily on BAS' management services; without them, the lifeblood of these ecotourism businesses, natural areas, might be more prone to degradation.

BAS may be able to capture more of the value these ecotourism businesses place on BAS. Rather than only targeting the end user, or visitor, BAS may want to consider annual or per usage fees and other revenue generation policies to help increase fixed income. Along these lines, BAS has been successful in targeting Jaguar, a division of Ford Motor Company, to help support CBWS. Jaguar/Ford realizes the value of maintaining healthy populations of wild jaguars, and is willing to pay for their protection.

Suppliers

The next piece of the model is designed to illustrate the relationship between the organization and its suppliers. BAS may "sell" to and "buy" from the same individuals and organizations. The terms "buy" and "sell" are used very loosely here, because much of what is supplied to BAS is not sold and much of what BAS provides to its customers is not purchased. Suppliers to BAS include the citizens of Belize, represented by GOB, educational institutions, members, and donors.

Citizens of Belize

The people of Belize, acting through a popularly elected government (PUP), formally granted BAS the right to manage PAs in 1984. In doing so, they supplied the authority BAS needed to manage these areas. BAS recently renewed the contract, giving them management authority on the six existing PAs until 2004.

As long as BAS continues to act in the best interest of the majority of Belizeans and maintains its strong ties with the government, no change in the nature of the management contracts is foreseen, at least not from the suppliers' point of view. Citizens of Belize will continue to rely on BAS for PAM expertise as long as BAS is willing to supply it.

As a membership-based NGO, BAS as an organization is bound to act in its members' best interests. As early as 1969, this meant lobbying for environmental protection (Jabiru storks, in this example). As BAS and its calls for protection grew, so too did governmental expectations of BAS:

> Government consulted us [BAS] on matters relating to the environment, wildlife protection and developmental proposals. From the beginning, BAS had an important role in the management of PAs. As our requests for particular reserves were granted, our involvement in the management was expected. This arrangement was first formalized in 1984 (Waight and Lumb, 1999).

Evidence of BAS' increased coordination with GOB is seen in BAS' accepting increased management responsibilities, driving an entrance fee process, and finally, in receiving funds directly to manage the PAs.

Belizeans supply stewardship authority to BAS while BAS supplies PAM to Belizeans. This codependent relationship is due in part to the lack of PAM competition. Because the government is dependent upon BAS, any change in the nature of the management contract will likely be initiated by BAS. However, in the absence of a capable successor, BAS members are unlikely to hand over stewardship. Thus, the codependency will continue.

More likely than an absolute transfer of management is a gradual increase in reliance upon local community members to aid in PAM, a situation known as co-management. Fortunately for BAS, a move in this direction may not require any re-negotiation of contracts. However, it will require expanded management plans with greater community involvement. Co-management is discussed further in the chapter addressing community issues.

Educational Institutions

BAS draws its staff from various educational institutions, including secondary schools, UCB, and various international institutions. On one hand, the schools and colleges of Belize supply BAS with motivated, competent employees. On the other hand, BAS

supplies Belize with 32 meaningful jobs. Here again, BAS is in a unique position. Belize needs meaningful full time jobs as much as BAS needs a pool of educated, potential employees. BAS is managing this relationship through its EE program area, which tries to create more potential employees by reaching out to Belizean schoolchildren, tomorrow's PA managers.

High quality educational programs clearly produce benefits to BAS in terms of potential future employees. Creating and maintaining such programs requires communication and feedback between the customer and the supplier. In 1996, BAS took steps to enhance the relationship by issuing surveys to the teachers after they visited the PAs. The data generated from these surveys is essential to BAS if it wishes to build a successful school program. Without feedback, BAS may be misallocating their resources. Unfortunately, the distribution of surveys was stopped in 1997 and has not been restarted again. The EE chapter reviews this issue in greater depth.

Donors

Individual and organizational donors play a crucial role in BAS as suppliers of time, financial support, and training. Donors may be further separated into funding agencies, volunteers, members, and individuals and organizations that contribute financially to BAS. The distinction made among these different groups is somewhat arbitrary, as the entities may donate a mix of things to BAS. For example, a funding agency may make a grant to BAS for a certain project and provide managing expertise to help in implementation, or other aspects of the grant. Additionally, the grants may apply to specific PAs, like the Wild Wings Foundation's support of CTWS.

Since its inception, BAS has benefited from numerous funding agencies and volunteers. Appendix 3c lists the organizations and summarizes the purpose of the grant. In 1999, BAS received support from the EU, HIVOS, IDB/PROLEAD, PACT, PROARCA/CAPAS, and the Summit Foundation.

BAS has enjoyed the benefit of having many volunteer projects over the years. Volunteers have helped in projects ranging from cleaning up HMCNM after Hurricane Mitch to aerial PA assessments. A list of past volunteers and a summary of the projects is given in Appendix 3d (Waight and Lumb, 1999).

Members of BAS frequently donate their time and money to BAS. Members' classification as donors may appear out of place, considering members make up BAS. The member-based BOD aids in setting the mission, strategy, and goals of the organization. It also has influence over the operations through its oversight of the executive director. Members may also join committees, such as the advisory committee for advocacy or the strategic planning committee. Many other members give generously to the organization.

Cooperators and Competitors

Similar to the dual customer/supplier individuals and organizations, some organizations may be both cooperators and competitors. NGOs, businesses, and GOB all exhibit this dual, seemingly incestuous relationship. Communities appear unique in their position as just a cooperator. As with the other groups, this section makes no value judgements about which stakeholder groups are more important than others, rather it presents a picture of BAS' relationships with organizations with whom it cooperates and competes.

Non-governmental Organizations

Many NGOs operate in environments that are both competitive and cooperative, and BAS is no exception. It competes for grants, donations, and staff, while it cooperates with other nonprofit organizations to further its goals. BAS and other organizations seek to grow in size and influence, but also band together to produce a collectively more powerful voice. Environmental conservation in Belize serves as a good example of this cooperation/competition paradox, as its small size facilitates understanding of the key players and the relationships between them. An understanding of this paradox will aid BAS in achieving its goals of growth in size and influence (requiring competition) and in furthering its mission (requiring cooperation).

BAS' goals of being the foremost environmental advocate, increasing membership, and managing the best-known PAs require varying degrees of competition with other environmental NGOs. While BAS may have already succeeded in the first goal, it must maintain this position and gain ground in the latter two goals, at the expense of other groups. There is no room for two foremost advocates, or two most well-known PA systems. Competition ensues among organizations to achieve preeminent status. However, cooperation with other NGOs helps BAS achieve its mission of "sustainable use and preservation of our natural resources." It is highly unlikely that BAS or any other single NGO can achieve full preservation of Belize's natural resources. Organizations rely upon their collective strength to achieve conservation goals and fulfill individual missions.

In high-performing organizations, employees at all levels strive to achieve common organizational goals. When these goals require competition and/or cooperation with other organizations, it is useful for employees to be aware of their cooperators and competitors, to know their strengths and weaknesses and to anticipate reactions. At BAS, such knowledge of competitors and cooperators should permeate throughout the organization. Does it? The rich cooperation/competition paradox at the organizational level dwindles to ad hoc cooperation at the program level. When questioned about competitors, BAS program directors replied that they felt limited, if any, competition with other NGOs in their respective program areas (BAS staff, personal communication). These relationships tend to be cooperative and occur when cooperation serves both organizations in finite projects.

Competition with other NGOs is most keenly felt in hiring qualified staff, attracting and maintaining members, and seeking grants and donations. Interestingly, these competitive areas span the entire organization, yet they do not trickle down to the program area level.

There are a finite number of qualified Belizeans for conservation positions. BAS is trying to augment the relatively static labor pool through EE efforts in schools, but for the time being the pool can be viewed as a finite resource. The best example of competition over qualified staff is seen in career of the Executive Director of BAS, who started with BAS in 1990, joined PFB in early 1997, and returned to BAS in late 1997. Personal and organizational considerations aside, this career path demonstrates the scarcity of qualified senior management.

Competition for funding and donations is more muted than that for staff, but is present nonetheless. The large number of international funding agencies and wide availability of funding for conservation efforts in Belize mitigates direct competition for grants. Differences in the services Belizean NGOs offer also dilute possible competition. Despite these factors, BAS has experienced changing fortunes with its original funding source, the Massachusetts Audubon Society (MAS). MAS reduced its funding to BAS in 1987 to form a new NGO, PFB. Several one-time donations kept BAS afloat until it found new funding sources (Waight and Lumb, 1999). More recently, BAS and PFB applied for grants from the EU, and only BAS received funding (BAS staff, personal communication). The next few paragraphs give details about how the cooperator/competitor dynamic plays out at the program area level.

As part of the Advocacy Program at BAS, BAS employees represent the organization on various boards and associations. For example, BAS holds seats on BACONGO and ANDA, which are explained in more detail in Chapter 4: National Conservation Policy. The foremost cooperative agreement to which BAS is a part is BACONGO. Presumably, BAS benefits from involvement in this organization through furthering its own mission. The combined voice of BACONGO carries more weight than would the individual NGOs, as seen in the ability of BACONGO to advise policy making. In 1994 with the support of other groups, BACONGO successfully prevented GOB from leasing land to a Malaysian logging company (Barry, 1995). More recently, BACONGO convinced Belize Electricity Limited to halt construction of the proposed Chalillo hydroelectric dam (BAS staff, personal communication). Yet, even within this umbrella organization there are signs of competition. BAS recently sought to build its power in BACONGO by taking over the chair, and in doing so, threatened the cohesion of the group. BAS smoothed over the situation by withdrawing their bid for the chair and assumed the office of secretary.

BAS, the forerunner in the advocacy field, holds numerous conferences throughout the year designed to galvanize the environmental community into coordinated action. For example, during the team's fieldwork in Belize in the summer of 1999, BAS held a conference to help shape land-use reform. Advocacy is covered in greater depth in other parts of this report, most notably in Chapter 4.

Cooperation and competition in the EE program area are somewhat more straightforward, as there are only two players with large-scale education efforts? The Belize Zoo and BAS. Chapter 7: Environmental Education discusses the nuances of the differences in educational offerings, but nevertheless, Belize Zoo and BAS compete over one area of EI, yet not EE, because neither offers full EE services. However, the level of EI provided by the Belize Zoo far exceeds that of BAS. The organizations do compete to some extent with EI materials, as they help formulate the overall visitor experience, and hence may play a role in attracting visitors. Cooperation between the Belize Zoo and BAS is most evident not in the education of visitors, but rather the education of staff. For a number of years, BAS staff was trained at the Belize Zoo, made possible in part by a grant from the MacArthur Foundation. Soon after the funding stopped, so to did the cross-organizational training.

The Belize Zoo's visitor numbers (approximately 41,000 in 1998), both Belizean and non-Belizean, attest to its popularity. It receives more visits per year than all BAS' PAs combined (see the Ecotourism chapter for more information about the Belize Zoo). And, while visitation numbers should not be the sole measure of EI, it is useful to note that people seeking an educational outdoor experience do have alternatives.

BAS' PAM program benefits a great deal from cooperative agreements with other Belizean PAs. Other areas include private reserves, national forests, and community-based conservation areas. One of the best examples of cooperation between BAS and other organizations was the relocation of 62 howler monkeys from the Community Baboon Sanctuary to CBWS between 1992 and 1994. A combination of a simian yellow fever in 1956-7 and Hurricane Hattie in 1961 decimated CBWS' endemic howler population. BAS staff members and representatives from Community Conservation Consultants, the Wildlife Conservation Society, Duke University Primate Center, and British Armed Forces (air transport) collaborated in the relocation. Preliminary findings indicate that the howlers have a good chance of reestablishing a healthy CBWS population (Emmons et. al, 1996).

Government of Belize

Competition with GOB is further complicated by BAS' unique position in the industry. It is a membership organization charged with management of public PAs. BAS is in many ways a helpful thorn in the side of GOB. BAS is not just an advocacy organization, but nor is it the right hand of the government. BAS finds its home walking the line between pressing for change and implementing the changes.

BAS is able to walk this line because they have established a reputation for excellence and knowledge over the life of the organization. BAS has successfully accepted and managed over 150,000 acres of previously public land. GOB relies upon BAS' expert opinion on a wide range of environmental issues. The Chapter 4: National Conservation Policy chapter examines BAS' relationship with GOB in further detail.

Businesses

A extensive variety of businesses provide goods and services to BAS, from publishers to banks to hardware stores. More importantly, though, are those that operate wilderness lodges, guiding services, rental car agencies, and other goods and services that complete the package of ecotourism. Growth in ecotourism in Belize offers a potential windfall to BAS. However, BAS needs the full compliment of visitor amenities, including other, competing natural areas and outdoor experiences to fully realize the potential of increased visitation and revenue generation.

A visitor's experience in Belize is not based solely on their experiences in BAS' PAs, but rather upon the full range of experiences they have. BAS needs its competition as much as its competition needs BAS. As a result, BAS does not fully control the revenue it generates from visitors ? it requires the full range of visitor services to be present, including those offered by competitors.

Communities

Arguably the most significant customer/BAS relationship in PAM is the increasing role of communities in their management, especially at CTWS and CBWS. Both of these PAs have a long history of resource use by local communities, and have only recently become customers of BAS. They will soon be regaining some of the power they yielded when BAS took control. Ultimately, the degree of control each community gains rests in its own ability to organize and make sound management decisions. The team envisions a direct relationship between the amount of management control BAS transfers and communities' willingness and capability to manage PAs. The Communities chapter covers these relationships and the benefits communities derive from PAs in greater depth.

IV. CONCLUSION

The organizational analysis is a tool to help BAS better understand its operating environment. It delivers a framework for understanding internal capabilities and the external environment. Employees at all levels can benefit from the information within. The organizational analysis may aid senior staff and the Strategic Planning committee in charting a course for the organization, or it may offer a warden a better understanding the multiple perspectives of BAS' stakeholders.

The organizational analysis should be viewed as a journey, not a destination. This is a living document, intended to be modified and renewed according to BAS' needs. BAS may develop additional core competencies, a new environmental organization may begin managing protected areas, or any number of other factors may lead BAS to reconsider the information contained herein. And while changes like these may alter the competitive landscape, they do not change the need for a structured framework to evaluate BAS' role in Belizean conservation. It is the project team's hope that BAS will regularly struggle with understanding this role and apply this framework to understand how internal and external change influences the organization.

IV. RECOMMENDATIONS

Flesh out the remainder of the organizational analysis:

- When used in the complete form, the organizational analysis helps an organization navigate through its complex set of interactions with stakeholders. Specifically, the completed organizational analysis may aid the newly convened Strategic Planning committee in setting a course for BAS.

- The organizational analysis focuses attention on key questions for the organization, such as
  "who is (are) BAS' customer(s)?" Many nonprofits struggle with this question, as they serve a broad range of constituents from donors to members.

- The organizational analysis may also help BAS identify the best mix of programs and the appropriate allocation of resources to those programs, in light of the strategic direction of the organization.

Monitor and renew the organizational analysis:

- This is intended to be a living document. BAS managers may want to periodically review and renew the analysis to maintain its criticality. Changes in the external environment and/or in stakeholder needs may indicate the need to renew the document. The changes need not be extraordinary, though, as the accumulation of small changes through time can just as easily spur the need for review.

- Communicating the analysis' results with stakeholders on a regular basis will help create a living document, assuming both BAS and BAS' stakeholders find the information useful. It is likely that the BOD, members, and others will want to know how BAS is progressing toward stated goals. The organizational analysis helps provide a framework for setting and achieving goals. Stakeholders may anticipate updates of the plan, and apply pressure to complete it.

Translate BAS' strategy into measurable action plans:

- BAS managers may want to consider creating measurable goals at all levels of the organization, from progress toward fulfilling the organization's mission to an employee's progress toward his or her weekly goals. Essential to this process are the links between the higher and lower levels of goals.

- BAS managers may want to examine the current level of employee input into setting goals. Evidence from Western organizations shows improved performance when an employee helps to create some level of his/her goals.

- BAS may want to consider establishing a structured performance evaluation system. All employees would know and work toward a set of goals and be evaluated on their progress toward these goals. Ideally, a work or action plan would help the employee stay on track. After the performance review, a development plan would outline the steps necessary to achieve future goals and may call for additional training.

Increase amount of fixed income PAs and organization receive:

- Currently, BAS' ability to plan is constrained by the vagaries of funding cycles and the uncertainty in the grant application process. This may result in cross-subsidization of program areas, making it difficult for program managers to control their own budget. BAS may want to consider modifying the entrance and membership fee structures, acquiring grant-writing expertise, and/or developing a broader range of visitor services at the PAs. More detail on recommendations like these is given in Appendix 5c.

Examine tradeoffs of centralizing versus decentralizing decision-making ability:

- BAS may want to consider modifying the degree of centralization within the organization. Decisions, especially monetary, tend to be made at the upper levels of the organization. Pushing decision-making authority down in the organization may increase the motivation and productivity of employees.

- BAS may want to begin the decentralization process by shifting local decision-making responsibility to those most informed. Local decision-making would reduce the micro-level management decisions now residing with and expending the time of senior management.

- Along the same lines, BAS may want to decentralize a portion of the PA operating budgets. Some local staff feel constrained by their lack of authority over local financial decisions. BAS may want to pilot this program at one PA or release a small percentage of the budget to reduce the uncertainty associated with a new distribution of financial decision making.

Understand resource allocation implications:

- Broadly speaking, resource allocation issues run deeper than an unfinished project or a lack of equipment. Misallocation of scarce resources may affect staff morale and commitment to the organization. The cost of this, in some cases, could far outweigh the cost of solving the misallocation issue. This raises the general issue of committing short-term resources for long-term gain. Examples of such commitment are staff training and volunteer coordination.

- More specifically, BAS may want to create evacuation plans and supply standard first aid kits to each PA. This would also involve running evacuation drills and training wardens in emergency care.

Chapter 7: Environmental Education

> "The scarcity of educational opportunities in protected areas of the developing world is especially unfortunate."
>
> —(Rome and Romero, 1998)

I. INTRODUCTION

Environmental Education (EE) plays an integral role in the activities of environmental organizations throughout the world. People need to educate others to promote the development of an environmentally responsible citizenry and to empower those citizens to make informed environmental decisions. However, this field is new and covers an incalculable amount of material, and for these reasons it has an unstable foundation in the academic world. Therefore, it has been and will continue to be a struggle for institutions around the globe to construct thorough, successful EE programs. Those organizations located in more remote locations with limited access to local, regional, and global resources will likely have to develop programs through internally developed management strategies.

Belizeans still have limited access even to local resources due to a lack of technology and established communication methods (Moberg, 1998). These circumstances have inevitably led to an uncoordinated organizational structure within the country. The majority of the EE related functions in Belize have been varied initiatives implemented through disparate organizations. There has been some effort, however, to follow a more systematic approach to EE, and hopefully, these efforts will continue in the future. In addition, some of the organizations promulgating EE in Belize have been making concerted attempts to develop a variety of EE programs. Even as these programs have been relatively uncoordinated efforts, they represent a broad array of activities that other organizations can capitalize on. Many organizations that have limited resources have been utilizing a variety of communication methods including interpretive media.

BAS is working within this disjointed EE framework. The organization has a unique educational niche within Belizean society. It can utilize the large tracts of federal lands that it manages as education centers. However, managing PAs is the primary responsibility of BAS. Therefore, BAS has been trying to integrate its other efforts with PAM to maximize the resources allocated to this task.

Since BAS assumed management responsibilities after the PAs were designated by GOB, the organization has had to initiate enforcement activities within and around these areas (BAS staff, personal communication). This has created tension between bordering communities and BAS. However, BAS' educational activities did not focus on community initiatives. The organization instead began to target audiences in Belize City and other urban areas, possibly in an effort to avoid this conflict, to reach a larger populace, and/or to respond to current funding source trends. Recently, the organization

began to try and work with the communities in order to build positive relations. Subsequently, the EE program has tried and is still trying to accomplish a broad array of goals and objectives on both a national and a local level. Various issues have arisen with the multitude of responsibilities BAS' educational program has assumed and have been outlined in this paper in order to aid in the management of educational activities within BAS.

II. ENVIRONMENTAL EDUCATION

The international prominence of EE did not develop until the early 1970s when a UN Convention recognized the need for an international EE program. The program was designed during an international conference organized by UNESCO in 1974. The initiative involved international training conferences and the development of strategies to build consensus on EE programs worldwide. The foundational structure of EE on a global scale that is apparent today developed during the 1977 UNESCO meeting in Tbilisi. The conference culminated with goals, objectives, guiding principles, and a working definition of EE (Stapp, 1998).

EE, as a term, has represented different meanings to a variety of people and there still is no universal definition used and understood by everyone. However, now that EE has become a global phrase, international conferences have concentrated on the simple goal of defining it. UNESCO's intergovernmental conference in 1977 defined EE as "a learning process that increases people's knowledge and awareness about the environment and associated challenges, develops the necessary skills and expertise to address these challenges and fosters attitudes, motivations, and commitments to make informed decisions and take responsible action" (Tilbury, 1994).

This definition, however, has not been recognized as a standard. Many people are still unaware of the "established" conceptual base developed by an elite few. EE has been viewed and is still viewed as a simple information-transfer process. Their notion is based on the assumption of a linear relationship that providing scientific knowledge to an audience will lead to an environmentally responsible citizenry (Culen, 1998). However, people who have the awareness and knowledge about environmental issues do not necessarily act environmentally responsible, as they also need the skills and motivation to act. The goals of EE programs, as stated in the international conferences, moves beyond simply telling people about the environment to involving people in projects that motivate them to take action and make informed decisions (Simmons, 1991).

The time and resource-intensive nature of these programs prevents many organizations from initiating these activities. Therefore, many educational programs simply focus on programs that aim to increase the ecological/biological awareness and knowledge of participants. But many organizations throughout the world do not recognize these limitations and establish EE goals and objectives for educational programs that cannot be fulfilled.

An alternative, less-expensive method for educational programs is often utilized, but the programs target only the awareness and knowledge goals of EE. However, these are critical first steps, as they establish the foundation for skill and motivation attainment. These programs fall under the term Environmental Interpretation (EI).

Environmental Interpretation and Environmental Education

EI is often used interchangeably with EE in writing and in practice (Carson and Knudson, 1996). Both EE and EI programs aim to create environmentally responsible citizens, but they differ in where and how they are implemented. By recognizing these differences, organizations can develop feasible goals for their programs.

Examples of both types of programs occur in a variety of venues. EI programs are commonly associated with informal environments, such as visitor centers, nature trails, and nature centers. EE programs are usually associated with formal environments, such as school classrooms (Jacobson, 1999). However, many EE programs occur in informal environments as well, such as museums and parks. This area of EE has been called Informal EE, and is often why confusion occurs between EE and EI.

The difference between these programs lies not with the venue, but with the program itself. EE is an approved sanctioning system in which participants are required to learn and demonstrate certain competencies (Mullins, 1985). EI utilizes many of the same messages and media, but it lacks a method of certifying participant completion of a given program. EI works most often with non-captive audiences, such as park visitors who voluntarily participate and are expecting an informal atmosphere (Ham, 1992). One of the most critical differences between these two fields is that EI programs usually occur over shorter periods of time when compared with the time needed to complete EE programs (Knapp, 1998). The EI programs, therefore, only allow enough time to perform an information transfer and are less effective at changing peoples' behavior. These methods, as stated earlier, are often recognized as EE, which has led to the development of lofty goals for EI programs implemented by organizations around the world.

Environmental Education in Belize

The Belizean people have developed their own unique standards for learning. In addition, technology has allowed them to integrate their local customs with outside influences. The global environmental movement began to permeate the country in the early 1970s with education at the forefront (Tilbury, 1994). However, EE is often viewed as a simple information-transfer process in Belize (NGO representatives, personal communication).

Some NGO representatives stated that many Belizeans equate EE with the acquisition of scientific knowledge, such as ecology and geography, and also with the improvement of public health. Subsequently, Belizeans believe that once people are aware of and have the knowledge about environmental issues in these areas, then they will change their

behavior to act more environmentally responsible (NGO representatives, personal communication).

There are only a few resources available in Belize for EE initiatives, and many people do not have the understanding to discredit this belief. This misconception is also due, in part, to the lack of a national EE movement. In 1995, the first national EE strategy aimed to distill international EE concepts into educational activities currently developing in Belize. However, the international EE goals are not realistic, as they require resources and expertise that are currently not present in Belize.

National Environmental Education Strategy

In 1995, the Natural Resource Management and Protection Project (NARMAP), a cooperative project between GOB, USAID, and WWF, helped develop a National EE Strategy. The author, an education specialist with WWF, designed a survey instrument based on the input from various organizations connected with EE programs within Belize. Upon completion of the surveys and implementation of a two-day workshop for the EE community in Belize, the author compiled the feedback and generated the Strategy document. The document was then given to the participating organizations and others throughout the EE community in Belize (Medina, 1995).

The Strategy was designed to "identify national EE priorities, define [goals and] objectives, and assist in maximizing the use of limited resources by promoting the coordination of EE efforts in Belize." These goals, once accomplished, may spur support from international funding sources for future EE initiatives (Medina, 1995). The Strategy, however, merely resulted in the recognition of the myriad problems EE faces in Belize.

EE, as stated by the Belize National EE Strategy of 1995, has been defined with a variety of misconceptions. The definition incorporates both EI and EE under the strategy, yet the term EI is never mentioned. EE is defined as both formal EE within classroom walls and non-formal EE in zoos, museums, nature centers, and parks. The distinction between non-formal and formal EE, as stated in the strategy, is the venue. However, formal EE can occur in non-formal settings, as a curriculum and/or course of study can be designed for these environments. Most of the non-formal EE concepts overlap with EI, as these programs use a variety of media sources and are often directed toward a general and voluntary audience. This distinction is not clear in the strategy and illustrates the common misconceptions some Belizeans have regarding EE.

The Strategy targeted the organizations connected with EE in Belize (See Appendix 4a for a list of participants). The organizations were asked to state what the most important goals for EE in Belize should be. Their response was to increase the environmental awareness and knowledge, and change the behavior of their audiences. However, developing the skills to promote behavior change was prioritized last (GOB, 1995b). This illustrates the common misunderstanding that awareness and knowledge may lead to a change in behavior without the skills necessary to promote that change. But teaching

these skills is an important component of a thorough EE program that has sufficient resources.

Most Belizeans have not accomplished the first two primary goals of EE. They are still not aware of or have knowledge about the environmental issues that exist, and therefore, local educational organizations simply focus on those goals (NGO representatives, personal communication). In addition, organizations do not have the resources or expertise to conduct thorough EE programs. Given their limitations, these programs should be recognized and not set forth to change the behavior of the populace, as the awareness and knowledge of environmental issues cannot purport to do so. However, the awareness and knowledge of environmental issues does provide the necessary foundation for behavior change to occur. These changes will hopefully occur in the future when a more organized EE structure is established in Belize.

In working with the government, many environmental NGOs contributed to the construction of the 1995 National EE Strategy. However, the Strategy was not utilized to initiate any change. There was no continual funding for implementation beyond the initial study, as NARMAP funds expired.

Most importantly, the established goals and objectives were too lofty to be realized. The Strategy restated the international EE concepts and reconstituted these ideas as goals for the country of Belize. The Strategy suggested that each year the EE community should convene to reassess the document. However, the momentum died shortly after the document was released and no revisions took place. Some NGO representatives say that the failure to implement the Strategy was due to GOB's continual exclusion of outside expertise (NGO representatives, personal communication).

Environmental Education and National Curricula

EE within school curricula faces many challenges. Many practitioners approach EE as if it were an assemblage of discrete disciplines, when in fact it is interdisciplinary (Disinger, 1997). The central tendency of an institution that has traditionally followed an established curriculum is to view EE as an amalgam of various established disciplines. This is important to consider when teachers are often trained extensively in one area rather than trained in multiple areas. Therefore, their approach to EE may be through a biased lens and may promote disparate educational endeavors. Another barrier to EE curriculum development is that there is very little coordination between the disciplines able to promote comprehensive EE programs.

An important target for environmental organizations in Belize has been the national school curriculum. Their goal is to standardize the education system by including integrated environmental issues (NGO representatives, personal communication). Currently, EE is dispersed throughout the areas of science and public health within the curriculum. Some NGO representatives feel that the government primarily views EE as simple civic cleanliness that involves activities such as "throwing away the garbage"

(personal communication). This view may hinder a national concerted effort to promote the use of integrated EE materials, and the initiation of educator training in EE.

Incorporating outside expertise into the national curriculum standards is difficult. Oftentimes, a lack of resources prevents the establishment of long-term connections between educational institutions and informal organizations necessary to accomplish EE goals. Short-term educational activities presented by outside sources do occur. Most schools visit PAs once a year and do not have the funding to make multiple trips to a venue outside of the school district (government officials, personal communication).

Another challenge to the incorporation of external expertise into the school curricula is that the information presented by NGOs is often not relevant to the curricula required for standardized tests. The tests were left over from a British education system and are required in order to move on to high school and eventually college level institutions. Often, in order to attain a good reputation, a school must graduate a certain number of students necessitating a focus on standardized test material (government officials and NGO representatives, personal communication).

In 1999, the government set up meetings which included representatives from local environmental organizations in an effort to discuss curriculum reform (GOB, 1999). However, this initiative began after the NGOs had been lobbying the GOB on this issue. The Quality Assurance and Development Services (QADS), within the Ministry of Education, has held a few conferences with NGO representatives to solicit their ideas on a possible framework for a formal NGO-to-school information sharing strategy (personal communication, government official; Leacock, 1999). The organizations invited to the conferences included those involved in the 1995 EE Strategy and other local organizations involved with EE.

For years, educators have been utilizing environmental resources outside of the classroom, such as zoos and PAs (NGO representatives, personal communication). They have also invited resident experts from organizations working in these areas when teaching in the classroom. The government has now formally allowed for NGOs to have a limited amount of time to present materials in the schools. This has been due for the most part to a concerted effort by teachers to include hands-on environmental activities in the school curricula (government officials, personal communication). The concern, however, is how these materials will be formally incorporated into the curricula to ensure future EE programs.

Organizations and Environmental Education in Belize

The EE movement in Belize has involved at least 30 organizations, according to the 1995 Strategy. These include civil rights organizations, government institutions, media, schools, zoos, and other environmental organizations (See Appendix 4a for a list of organizations involved with the EE Strategy in 1995). These groups are working on programs for educating school children, building materials for educators, and educating the public about environmental issues, such as sanitation.

Representatives from these organizations were asked which audiences should be targeted for the EE programs. They felt that the most important audiences for EE programs are school children, educators, community leaders, and the general public, which covers nearly everyone in Belize. If organizations need to target audiences to focus their goals and objectives in a realistic fashion, then these groups will need to communicate with each other to avoid duplicating their efforts.

Currently, most of the EE efforts take place at the organizational level. This does not bode well for national change, as many organizations in Belize rarely coordinate on a long-term basis. Each organization has its own definition of EE and programmatic goals and objectives. The variances in goals and objectives among these groups and the competition for funding sources contribute to the lack of communication and coordination that is evident between them (NGO representatives, personal communication). Even though short-term projects enable some organizations to coordinate their efforts for mutual funding initiatives, these instances are ephemeral and do not result in long-term joint efforts.

The lack of long-term coordination between organizations is apparent to the organizations themselves, according to the 1995 Strategy (Medina, 1995). They each stated varying priorities for EE and therefore, do not appear to be working towards similar goals and objectives, resulting in a duplication of efforts. The Strategy stresses that organizations need to clearly define their own objectives and know how those objectives relate to those of other organizations in order to prioritize their efforts and work towards the unification of environmental goals for the country of Belize. The newly established BACONGO has been the first formal effort to unify environmental organizations and will hopefully help to consolidate EE initiatives in Belize.

Funding for education programs is primarily attained from international sources that contribute considerably more funding than Belizean organizations and businesses (NGO representatives, personal communication). Since Belize is a very small country, international funding sources may be reluctant to support two organizations with similar objectives in a similar time period. Therefore, organizations with the strongest EE programs, such as those of the Belize Zoo, would most likely benefit from international EE grants.

Two examples of organizations that are executing educational programs in Belize include PFB and the Belize Zoo.

Programme for Belize

PFB manages a privately owned PA called the Rio Bravo Conservation and Management Area (RBCMA) located in the Northwest corner of Belize. The organization involves about 1000 national and international students in its programs per year. Their partnership with TNC has provided them with valuable connections overseas. Many of the programs that are conducted by PFB are in fact EI programs and are recognized to have these

limitations. The PA has also been a venue for several programs involving American students. Some of the students have also contributed to the construction of interpretive materials within the RBCMA for the education of visitors to RBCMA (Rome and Romero, 1998).

Although PFB personnel do not recognize their educational programs as EI programs, they have focused on gaining support for such programs. In this effort, they have developed a variety of successful activities. The programs specifically target tourists that come for short periods of time and desire an informal atmosphere.

PFB plays a prominent role in ecotourism (See Chapter 8: Ecotourism). About 70 percent of their operating income comes from tourists (NGO representatives, personal communication). As a result, the organization has targeted funding sources that support interpretive program initiatives. The allocation of funding towards tourism initiatives has led to the development of nature trails, brochures, a research station, dormitory, and campsites. This infrastructure has allowed for a constant stream of student-teacher tour groups from North America to be involved in educational programs through PFB.

Belize Zoo

At the forefront of organizational EE is the Belize Zoo, which formally opened its doors to the public in 1991. The organization involves over 12,000 national and international students in its educational programs annually (NGO representatives, personal communication). The Zoos organizational structure, including two different education centers, and a dynamic founder have contributed to its success in implementing thorough EE programs.

Outside of the animal exhibits, the many of the Zoos management personnel are extensively trained in education. The Zoo houses the Tropical Education Center (TEC) that functions as the "research arm" of the Zoo. It has also become a venue for international student programs. The School for International Training (SIT), a field school based in Brattleboro, Vermont, has been sending US students to the TEC for four years (NGO representatives, personal communication). The students conduct research in the Center's library and conduct field research throughout the country on an individually selected topic. The profitability of this program has induced the Zoo to increase its investment in international student audiences in the hopes of supporting more educational initiatives for the populace.

The Zoo personnel are making efforts to incorporate zoo materials into school curricula. They make a concerted effort to connect with the education community through written materials and direct outreach programs. They also look at "what ideas they can incorporate into the curriculum after a thorough review of what the curriculum is teaching" (NGO representatives, personal communication). The Zoo's EE staff also have extensive experience as educators in the Belizean school system. This knowledge often draws schools to initiate relations with the zoo.

Schools contact the Zoo to set up visits and organize programs that Zoo personnel can present at the schools. The personnel also keep in contact with school groups after they have visited the area and encourage multiple visits, promoting long-term relationships. The personnel document all school visits and use these materials to continually evaluate the EE programs for cost-effectiveness. In addition, many educators, as well as NGO personnel, take part in the Zoo's well-respected teacher training workshops. The Zoo has been trying to balance its initiatives with training current educators and performing educator functions themselves (NGO representatives, personal communication).

The Zoo is primarily an EE institution, and its personnel and resources are allocated as such, which contributes to its successful perpetuation of its EE program. It is among the most popular tourist destinations in Belize. However, the Zoo's funding does not come from sources within Belize; therefore, many of their programs target international groups. In turn, the Zoo has established connections with international funding organizations. It has received a large portion of its funding from global organizations such as WCI and the MacArthur Foundation.

III. THE BELIZE AUDUBON SOCIETY AND ENVIRONMENTAL EDUCATION

BAS began in 1969 as a small organization focusing primarily on EE goals and objectives (Waight & Lumb, 1998). From the beginning, BAS has been educating people through the use of written materials, presentations and exhibits. These activities expanded in the early 1980s when BAS worked to establish itself as a PA manager. EE within BAS was dispersed among the variety of tasks needed to uphold this responsibility. As a result, the goals of the organization have evolved to encompass many different aspects of EE. Though there is only one person formally recognized within the EE program, there are many staff members who perform these various EE related functions (BAS staff, personal communication). This decentralization of tasks may have prevented the incorporation of important components in BAS' educational programs, including standardizing and evaluating the activities performed.

The EE program involves main office personnel in Belize City and field staff in the PAs. The field staff and the main office staff have divided and overlapping educational responsibilities. The office staff perform educational activities associated with the international and national populace, such as developing various publications for membership and advertisements. The field and main office staffs both work on educational activities within and around the PAs, such as school group visits and buffer-zone community education.

Given the lack of resources to implement educational programs, most, if not all, of the programs within the PAs that are considered EE activities are in fact EI programs. BAS' interpretive initiatives can refer primarily to programs targeting international visitors (e.g. tourism related media) and non-student Belizean visitors. Even some of the Belizean student programs are in fact EI, as students come for a short period of time and it is often uncertain whether these programs are integrated with the formal curricula. This does not

mean that BAS is unsuccessful in its educational endeavors. On the contrary, it has implemented a variety of effective communication methods to a broad range of audiences. These would include exhibits, brochures, media programs, and interpretive walks, all of which confer meaning to nature (Rome and Romero, 1998).

BAS personnel educate buffer-zone communities and staff members, develop interpretive media, organize school group visits, and reach out to schools among other responsibilities (BAS, 1995). These tasks vary in their priority, depending on the specifications of the funding agencies. Some of these functions are performed in coordination with other environmental NGOs. Though BAS has no formal partnerships with other organizations, it often works with groups like PFB and the Belize Zoo when a funded project arises requires their coordination. For example, BAS staff members recently attended guide-training courses at the Belize Zoo funded by the MacArthur Foundation. However, funding for that project ended and the Zoo charges a substantial fee that BAS cannot afford (NGO representatives, personal communication).

The diversity of tasks and the assimilation of new ones had created a mosaic of difficulties for BAS' EE initiative. In an effort to target some of the more prominent issues facing the organization, this paper will only cover part of this mosaic. EE program issues will be addressed, as will two specific issues associated with the EE program itself, namely buffer-zone community education and school group visitation (including schools in buffer-zone communities). These areas were chosen because of the accessibility of information on these topics and the relative importance of these functions compared with other aspects of the EE program.

Advocacy and Environmental Education

The avoidance of community education led, in part, to the expanding role BAS wanted to play in the national educational movement. Since BAS' efforts were already aimed to target larger audiences, their educational programs developed around this goal. This focus has also led to the development of a formal advocacy program that provides more active objectives than EE.

The entrepreneurial advocacy program, developed over the past few years, has somewhat altered the methods by which BAS communicates with the public. Even as BAS has always advocated environmental issues, the organization only recently decided to allocate significant resources towards this endeavor (Waight & Lumb, 1999). By taking an aggressive approach, BAS can have a greater influence on the environmental movement within Belize and abroad. However, establishing a strong stance on large-scale issues places the organization in a confrontational position with those that have opposing viewpoints. In addition, this aggressive method differs greatly from the more passive one endorsed by EE.

In educating people, EE aims to provide the means for which people become empowered to make their own informed decisions (Culen, 1998). All sides of an issue are objectively presented to an audience and leaving the audience to make its own decisions. Advocacy

places stress on the advocator's position and all sides of the issue are not objectively stated. However, environmental organizations do need advocacy for instigating policy changes. There is a need for lobbying GOB to promote large-scale change in policy initiatives (Jacobson, 1999). But, these initiatives undertaken by an organization will affect how audiences view that organization. The challenge lies in distinguishing the two roles.

Conflicting Goals: Environmental Education and Park Management

The field staff are responsible for patrolling and maintaining the designated PAs, and working with people in and around those areas (BAS staff, personal communication). In working with people, they have two missions, which include enforcing federal and BAS regulations and providing educational activities and materials. These are often opposing means of communicating with people. Unfortunately, communication through enforcement methods began prior to educational communication methods in and around the PAs (BAS staff, personal communication). This has required BAS to try and re-establish more neutral relationships with communities.

When BAS assumed management responsibilities from the government, the organization began to assume an enforcement position, as bordering communities were not consulted prior to the designation of the PAs (See the Chapter 9: Communities for more on this topic). Community members immediately viewed BAS representatives as law enforcement officials (community members, personal communication), jeopardizing the organization's EE goals and objectives.

To mitigate this problem, BAS has hired wardens from bordering communities in an effort to pacify relations and involve communities in BAS activities (BAS staff, personal communication). The wardens have been trying to deal with regulatory infringements in a passive, educational manner to prevent conflict. However, the staff are still viewed as enforcement officials and have become somewhat segregated from their communities (community members, personal communication). This division seemed inevitable given the lack of educational efforts that were initiated upon BAS' appropriation of park management responsibilities.

Environmental Education Goals

The resources allocated to BAS' educational activities are dispersed, as each BAS staff member plays a limited role in education. Given these limitations, the resources needed to conduct thorough EE programs are not available. Consequently, much of the educational involvement with various audiences appears to be through EI programs and not EE programs. BAS may be able to create more realistic goals and objectives by formally recognizing these limitations.

Currently, the goals and objectives of BAS' EE program are vague, which may lead to an ad hoc prioritization of educational activities. Depending on funding initiatives, activities come in out and out of importance throughout a given year. If the goals and objectives of

the entire program are established prior to the search for funding, then the organization may have more control over this flux (Jacobson, 1999). Chapter 3: Organizational Analysis addresses this issue in the context of the entire organization.

All of the wardens in each PA perform educational functions, though they vary depending on when the activities arise (BAS staff, personal communication). This creates multiple tasks for each person and prevents those persons from specializing in a specific area. There also appears to be no standardized method for presenting an interpretive program, detracting from evaluation possibilities. In addition, the evaluation of BAS' educational programs has been hindered by the multitude tasks the organization has assumed.

Standardization and Evaluation

Evaluating educational programs "provides the only objective method of identifying specific factors that lead to success" (Jacobson, 1999). It is difficult to believe that a program will have any long-term survival without incorporating means for improvement. To do this, personnel need to continually monitor their progress through the use of documentation. BAS staff or external experts can conduct the evaluations. Various methods for evaluation can include interviews and meetings that require relatively few resources (Jacobson, 1997).

After reviewing 56 tropical conservation education programs all over the world, Kimberly Norris and Susan Jacobson (1998), found that "the use of…evaluations in the program design was correlated with significantly higher rates of program success." Their research results also show that long-term data collection correlated with program success. In documenting past performance, program managers can establish improved programs in the future.

Evaluating programs also allows for feedback from the audience. Feedback is often necessary when an organization needs to target groups within diverse audiences. Groups of people have different ways with which to communicate with each other. Factors like age, gender, relative level of urbanization, and culture play important roles in deciphering how people communicate (Taylor, 1996). To communicate with specific audiences, educational programs need to target groups with the appropriate communication techniques. In standardizing programs for specific audiences, an organization would need to solicit audience feedback and utilize various evaluation techniques, both during and after the specified programs.

Every warden in BAS' PAs conducts educational programs, however there is currently no formally established standardized method for conducting and/or evaluating these activities (BAS, 1995). This process would require BAS to allocate considerable resources to educational endeavors. The current priorities of the organization seem to preclude this involvement.

Educational Activities

School Group Visitation

School group visitation is an integral part of the BAS' EE program (BAS, 1999b). One of the prominent goals of the EE program is to target younger groups to affect the next generation of Belizeans. The program has a dual role, as school groups visit PAs for educational purposes and BAS staff members travel to schools to educate students. Some of the issues that the school visitation program is faces are a lack of documentation methods and an inadequate organization of and training of the BAS staff for the implementation of school group programs.

Documenting activities provides fuel for funding initiatives and program improvement. Funding sources will be more apt to support organized programs that are able to illustrate their effectiveness through documentation. As mentioned in the evaluation section above, it is difficult to know what needs to be improved if there is no knowledge of what has been done.

The number of school groups visiting the PAs has increased since 1996, but the record keeping and organization of these visits has declined. Beginning in 1996, school representatives contacted BAS to set up PA visits. Follow-up forms were sent shortly thereafter, including a "what to bring" item list, trip evaluation form, and backround information request form (BAS staff, personal communication). All of these forms provided valuable written documentation of the school group program and presented a foundation of data to evaluate the program.

However, these forms have not been used since 1998. This may have been due to a lower prioritization for this activity compared with other responsibilities given to the EE staff. In addition, there were problems with the documentation process prior to 1998. Many teachers did not fill out the forms when they were distributed, either because the field staff did not follow-up on this procedure and/or the forms were not sent out to the schools. Most of the forms that were filled out were from Belize City and other urban areas. Therefore, either buffer-zone school groups were not visiting the PAs between 1996 and 1998 or they were not solicited or didn't fill them out.

The size of the school group entering a PA has been roughly monitored. School groups will sometimes enter an area with no prior notification. This is important when considering that the ratio of staff to students greatly influences the effectiveness of the program. At times, there have been over 100 students entering a PA with only one or two wardens present to assist them. However, the large groups traveling to the PAs is often due to the inadequate funding for schools to make this endeavor.

Another important aspect of the school group visitation program that is currently lacking is written education manuals for all the PAs. However, there has been some effort in initiating curriculum development. Three manuals were written by volunteers for two of the most *infrequently* visited PAs, namely TMNP and CBWS (Hutchins and Thomas, No

date; Redington, 1993; Smith, 1996). These books may be used in other PAs, however the environments of BAS' PAs vary to the extent that the manuals cannot be used in all of the PAs.

In addition, there is minimal oversight on manual development. The manuals do not provide the educators appropriate methodologies for implementing the activities. The programs focus on subject matter only. Simply stating the ecology and biology of organisms and their environment may not facilitate adequate performance of the activities presented in the manuals. The improvement of these manuals may require consulting education experts from outside sources.

Utilizing manuals to expand on the PA experience can be an important contribution to the EE program. But this effort requires resources that BAS may want to consider allocating to other areas within the EE program, such as community EE.

Community Environmental Education

In the past decade, the EE program has targeted audiences in Belize City and other urban areas, possibly due to the enduring conflict between BAS personnel and community members and/or due to the lack of community initiatives around the world. Only in the past year has BAS begun to include community education among its EE goals (BAS staff, personal communication).

BAS is concerned about mitigating conflicts with buffer-zone communities. These communities have the potential to inflict damage on PAs and also are likely to learn from these areas. BAS would like to utilize EE as a means for establishing a mutually beneficial connection between the PAs and the surrounding communities. Some of the issues that BAS confronts with Community EE are a lack of experience, an early enforcement of preordained PAs, multi-ethnic communities and an integration of EE with new ideas for co-management of PAs.

BAS has not included communities in most of their previously funded projects. As mentioned earlier, the government established the PAs and then BAS became responsible for enforcing PA policies, primarily upon the bordering communities who utilize the land within the PAs. Now, BAS is trying to backtrack and establish a more neutral relationship through education. This has proven very difficult, as the relationship between the communities and BAS has been strained (BAS staff, personal communication). Chapter 9: Communities covers more on this topic.

Community education endeavors in and around BAS Pas have been limited. Many of the field staff, as well as the EE coordinator are responsible for implementing the majority of the community outreach, working with the schools within the communities, and conducting EE programs (e.g. slide shows) for the communities. The main office staff is involved with the management and coordination of these activities. However, there is limited interpretive media for these programs, and strained relations may prevent a lot of

positive interactions (BAS staff, personal communication). However, BAS is working on projects to improve future community education programs.

There appears to be a sufficient number of funding sources for community education projects that are supporting grassroots efforts worldwide. BAS has begun to capitalize on efforts to gain funding for these initiatives. A current project, funded by the MacArthur Foundation's Program on Global Security and Sustainability, could actively educate and train community members in villages in and around CTWS and BHNP (BAS, 1999). The central goal of the project is to establish community educators that will continue educational programs within PAs while utilizing the PAs as education centers. This project represents the first formal strategy initiated by BAS to educate buffer-zone communities. This is a pilot project that if successful, will be implemented in the other PAs.

Community education initiatives in and around PAs have only recently become a trend (NGO representatives, personal communication). Projects involving co-management of PAs between organizations and communities are entrepreneurial efforts all over the world. BAS would like to utilize some of these projects in order to work towards co-management practices within the PAs it manages (BAS staff, personal communication). However, the organization has a few challenges to face.

One of the greatest difficulties of community education initiatives in Belize is that the resident populace represents a diverse array of cultures that utilize different languages (See Chapter 11: Communities for more on this topic). In addition, people living in urban environments communicate differently from people living in rural environments (BAS staff member, personal communication). Both urban and rural populations live in and around BAS' PAs. Therefore, education within and around each of BAS' sites involves varying communication methods.

IV. RECOMMENDATIONS

Currently, BAS has neither the resources nor the goals to become solely an EE organization. The management of PAs precludes large-scale involvement with EE. Educational activities within the organization may require more resources, an overall assessment of what is being done now, and a study on how these initiatives can work within PAM efforts.

There is an important distinction between EI and EE and they both vary in their goals and their methodologies for reaching those goals. Once these differences are assessed within an organization's educational programs then the programs could be evaluated in order to establish realistic goals and objectives and target the appropriate funding sources.

The current EE program incorporates many activities at a variety of levels (ranging from national to local in scope). The uniqueness of the EE program through BAS in Belize is the incorporation of PAs as educational venues. Other organizations with funded EE programs are spearheading national movements such as curriculum reform and EE policy

endeavors. BAS would be duplicating efforts if it were to concentrate its resources on national reform. The new Advocacy program aims to do just that. However, through incorporating this new program, BAS has potentially conflicting methods for reaching its goals. The organization needs to evaluate the potential issues that have already arisen and will arise from the incorporation of both education and advocacy programs.

BAS Overall

Environmental Education and Environmental Interpretation:

- Target EI endeavors, rather than longer-term EE goals, as this would allow BAS to focus on tourism, which could be a lucrative venture for managing PAs. Given the fact that BAS does not currently have the expertise or other resources to implement thorough EE programs, the current EI programs could be expanded.

Advocacy and Environmental Education:

- Clarify the two roles of advocator and educator for all BAS staff members. BAS may want to make sure that the staffs' educational responsibilities entail non-advocacy related objectives. The neutrality of education should be recognized, as educators need to be aware of and promote all sides of an issue. However, all environmental educators are also environmentalists. These dual roles function as two hats and each hat should be kept on "its proper head, while utilizing to the fullest the… skills of the environmental educators"
  (Hug, 1977).

Enforcement and Education:

- Increase educational training of wardens. BAS may want to sponsor training programs that focus on appropriate methodologies for implementing educational activities, as well as programs that focus on informative facts.

- Divide education and enforcement responsibilities between staff members, so that each staff member has either educational or enforcement responsibilities but not both. This would require BAS to hire more staff, but hopefully the resources to hire more people will be available in the future.

Education and Other Tasks:

- Target audiences within and around the BAS-managed PAs. Other organizations conducting EE programs in Belize, such as the Belize Zoo, have are focused on different venues. This would avoid duplication of efforts, as well as focus attention on building relationships with audiences that have a direct impact on the PAs. This would also help establish consolidated goals and objectives for the EE program.

- Focus on community groups and on developing co-management strategies that could establish mutually beneficial relations. Currently, there is a lot of emphasis on education initiatives in Belize City where fewer people interact with the PAs on a long-term basis.

- Consolidate EE responsibilities into one position at each PA. Staff training could be minimized and educational expertise could be developed. School group visits can be coordinated for limited days throughout the week to ensure that the warden with EE responsibilities is present.

- Establish formal partnerships with other NGOs, such as the Belize Zoo, to gain more experience in implementing thorough EE programs (if BAS chooses to allocate its resources to this endeavor). BAS staff could get help in working to cater these programs to PA education.

Evaluation:

- Establish a scale to measure program success. This scale should be flexible to allow for the variability between the PAs.

- Standardize the educational programs to target specific audiences. This would provide the blueprints upon which to evaluate the staff conducting the educational programs and also gauge the relatedness of these programs to the participants. Given the diversity of people that attend BAS programs, audience-specified activities are critical to program success.

- Use direct evaluation methods that could provide a relatively inexpensive mechanism for the continual assessment and potential improvement of the educational programs. This process involves a staff member assessing the programs.

Environmental Education Program

School Group Visits:

- Train wardens on *how* to educate, as well as on what to educate about. This may involve collaborating with educational institutions, such as the Department of Education and the University College of Belize.

- Maintain demographic records of school group to provide documentation to funding sources and to establish a baseline.

- Notify and prepare wardens for the task of working with large school groups. This will inevitably occur given the funding constraints of schools that enter BAS' PAs.

- Develop a curriculum guide that encompasses information on all PAs. This guide should include information on how to implement the programs as well as contain informative facts. One comprehensive guide would save publishing and printing costs by consolidating materials into one manual.

- Ensure that there is preliminary and follow-up work that occurs before and after a PA visit (if thorough EE programs were to be implemented). In order for the students to establish a meaningful context for the visit, they need to associate that experience with everyday experiences. Written materials, as well as teacher-training seminars, would enable the visits to transfer into the classroom and to connect with more frequent activities.

Community Environmental Education:

- Target co-management projects to build relations with buffer-zone communities. In addition, this would be an area for attaining international funding grants.

- Focus on school teachers within buffer-zone communities. BAS may want to initiate teacher-training programs to infiltrate environmental ideas through the schools. This would serve to educate future landowners about environmental issues regarding the PAs.

- Implement educational techniques that would allow for cross-cultural understanding, such as the utilization of pictures and other illustrative media. This could be an important method for conducting educational programs in the multi-ethnic communities that live around the PAs.

Chapter 8: Ecotourism

> "Tourism is like fire. It can cook your food or burn your house down."
> —R. Fox

I. INTRODUCTION

In this section, the concept and growth of ecotourism as a trend in protected-areas conservation will be examined and some of its economic, social and ecological impacts in developing countries will be discussed. Next, the growth of the ecotourism industry in Belize will be explored. This examination will include several key issues that relate to BAS and ecotourism in and around the PAs that the organization manages.

Although ecotourism alone is certainly not the key for viable protected-area management, it may prove to be a critical piece in ensuring the legitimacy of these areas and generating financial support for the organization and local communities. Consequently, this section will conclude with a series of recommendations intended to strengthen the management of BAS PAs in relation to ecotourism issues.

II. BACKGROUND OF ECOTOURISM

In the last 50 years, the governments of many developing countries embraced tourism as a renewable source of income and an economic panacea that would enhance quality of life, attract foreign investment, provide jobs for local citizens and ultimately stimulate infrastructure development. On the other hand, conservationists and local residents became increasingly concerned by the negative impacts that this traditional form of tourism was having on developing countries and their natural areas, such as overcrowding, pollution and local inflation (Belsky 1999; Horwich et al., 1993). These varying opinions have led to considerable debate on the subject during the past 20 years. Ecotourism evolved as an alternative to the traditional and more destructive forms of tourism and sought to provide a means of linking natural resource conservation with opportunities for viable community development in and around natural areas.

In the 1970s, conservationists and scientists in Latin America began to view ecotourism as “an alternative to logging, oil drilling, mining and other extractive activities” while conservationists in Africa considered it to be a viable alternative to the failed “protectionist philosophies” that include wildlife management that separated local people from PAs (Honey, 1999). In the 1980s, developing countries and various international development organizations began to embrace ecotourism as a means to simultaneously conserve fragile ecosystems while benefiting local communities. In fact, some organizations stated that protected-areas conservation would only be successful if it was linked with local economies: “the IUCN issued the World Conservation Strategy…stressing that protected-area management must be linked with the economic activities of local communities” (Honey, 1999).

Despite the fact that ecotourism is one of the fastest growing niches in the travel industry, there is no universally accepted definition. One of the earliest definitions, developed by Elizabeth Boo, Ecotourism Officer for WWF, states that ecotourism is "tourism that consists of traveling to relatively undisturbed or uncontaminated natural areas with the specific objective of studying, admiring and enjoying the scenery and its wild plants and animals, as well as any existing cultural manifestation found in these areas" (1990). The Ecotourism Society defines ecotourism as "responsible travel to natural areas which conserves the environment and sustains the well-being of the local people." Meanwhile, IUCN defines ecotourism as "environmentally responsible travel and visitation to relatively undisturbed natural areas to enjoy and appreciate nature (and any accompanying cultural features both past and present) that promotes conservation, has low visitor impact and provides for beneficially active socioeconomic involvement of local populations." The range of definitions are not the only incongruencies seen when examining ecotourism issues.

Other terms, such as nature-based tourism, adventure tourism and green tourism, are often used interchangeably with ecotourism. However, these terms are not necessarily describing the same activity. While all of these forms of tourism utilize natural and/or cultural resources in a recreational manner, ecotourism alone focuses upon the ecological, social and economic impacts that visitors have on an area (Honey, 1999). In this chapter, ecotourism with regard to BAS-managed PAs is defined as visitation that fosters an understanding of the cultural and natural resources, conserves the site's ecological integrity and provides economic benefits (either to the organization and/or the local communities) that assist in conservation efforts.

Ecotourism has been, and continues to be, a logical choice for developing nations for three reasons. First and foremost, the natural-resource base upon which the industry depends is often largely intact and requires conservation but not restoration (Pattullo, 1996). Secondly, because many developing nations are found in tropical regions they possess high-levels of biodiversity, which appeals to many nature tourists who have indicated an interest in activities such as hiking, birding and nature photography (Boo, 1990). Finally, small-scale ecotourism development generally requires relatively low levels of start-up capital, thus providing an opportunity for local residents to enter the market as business entrepreneurs.

Some proponents support ecotourism as a means of balancing contradictory objectives: the protection of natural and cultural resources and the generation of economic benefits. However, many skeptics feel that ecotourism is little more than mass tourism promoted with a "green" label. For example, some critics point to recent efforts to promote yet-unspoiled natural areas near Jamaica's large beach-front developments as one more example of "green washing" (Pattullo 1996). Despite such criticism, ecotourism has gained considerable attention in the past two decades as a viable alternative to more destructive forms of development.

Economic, Social and Ecological Impacts of Ecotourism

Ideally, ecotourism is driven by supply and not by demand. Therefore, it is often believed to have more economic, social and ecological advantages than disadvantages. Nevertheless, there are also negative impacts of ecotourism, and it is necessary to examine both the benefits and the costs of ecotourism in assessing its overall potential impacts upon PAs and adjacent communities. While not a comprehensive list, the following section provides examples of the positive and negative impacts that ecotourism may have in PAs and their buffer-zone communities (see Appendix 5a).

Benefits

The economic impacts of the mass tourism industry are hard to decipher when looking at statistical references. For example, it is estimated that global tourism (which would include ecotourism tourism) generated US$3.1 trillion in 1992 (Bequette, 1996). However, many of the economic benefits of ecotourism are difficult to analyze or quantify because they are so widely dispersed throughout the world economies and few credible studies have been conducted to date. It is believed that ecotourism can stimulate economies[25] in transition from agriculture to service industry and diversify economies by creating service jobs in tour guiding and other visitor services (Whelan, 1991). Ecotourism can generate revenues for the management of PAs and can foster a local market for goods and services, such as the Women's Craft Cooperative located outside of the CBWS in the village of Maya Center, Belize (Boo, 1990).

In addition to the economic benefits, ecotourism also provides a variety of social and ecological benefits. Ecotourism may raise the standard of living and can encourage educational opportunities for guides and local service providers (Long, 1992). Furthermore, ecotourism can facilitate the exchange of ideas and cultural traditions between visitors and hosts while fostering the preservation of cultural and natural heritage[26] (Mansperger, 1995). Finally, ecotourism may stimulate the construction of service-providing facilities such as health clinics and roads, which would benefit local residents and visitors alike.

The potential ecological benefits of ecotourism are also widely varied. Ecotourism can foster local stewardship of natural resources and provide incentives to create PAs (Lindberg, 1996). Furthermore, ecotourism can promote educational programs for local residents and visitors and these programs have, in turn, fostered low-impact use of natural resources.

[25] Belize is a prime example of a country in transition from the more traditional agricultural production to a newer service industry.

[26] It should be noted that some of ecotourism's critics feel that cultural exchange has the potential to dilute cultures, which would make it a cost rather than a benefit.

Costs

Inevitably, ecotourism development has produced costs with which developing countries and rural areas must contend. Many of the early studies that examined the impacts of ecotourism focused largely on the benefits and did not adequately address the costs (Ceballos-Lascuráin, 1996). For local residents, the economic consequences of ecotourism development may include the loss of access to traditional resources and a shift away from traditional life styles (Place, 1992).[27] Local residents often face competition from foreign investors and loose the opportunity to develop small-scale tourism infrastructure (Wells and Brandon, 1992; Patullo, 1996). Finally, visitor expenditures may cause an increase in the cost of living for local residents.

There are also social costs associated with ecotourism development. Widely observed throughout the Caribbean and Central America, an increase in crime and drug/alcohol abuse has been attributed to the rise in ecotourism and tourism development (Ceballos-Lascuráin, 1996; Horwich, 1998; Belsky, 1999). Another cost related to ecotourism development may be the undermining of traditional values, which can erode due to the increased presence of visitors. For example, ecotourism may foster a market for highly-processed and expensive foods, which are imported for tourists but increasingly consumed by local populations. Finally, ecotourism development may be a factor in the increase of health risks from sewage and other pollutants, by- products from the goods and services needed to attract and maintain visitors (Patullo, 1996).

Ironically, some of the most severe impacts of ecotourism are the ecological ones caused by visitors who have the potential to damage the resources through their presence and their actions. As a consequence, resource degradation may result, particularly if ecological carrying capacities[28] for an area have been exceeded by excessive visitor numbers (Marion and Farrell, 1998). The accelerated loss of biodiversity and damage to sensitive ecosystems, such as the destruction of coral reefs due to human disturbances, may also result from increased numbers of visitors (Boo, 1990). Visitors in these natural areas may be responsible for degrading the same resources that they came to enjoy. Finally, increasing numbers of ecotourists can place a strain on scarce resources, such as water in arid areas. Ultimately, the long-term viability of the ecotourism or tourism industries may be severely threatened by the actions of visitors and service providers in the short-term.

Despite this abbreviated list of the economic, social and ecological benefits and costs, it is apparent that ecotourism cannot be viewed as the universal solution to conservation issues or social inequities throughout the developing world. Nevertheless, some

[27] Place (1992) documented this effect in Tortugero, Costa Rica where the creation of Tortugero National Park prevented local villagers from their traditional harvesting of plants and animals from the forests and beaches.

[28] Carrying capacities initially referred to the number of cattle an area could support without obvious signs of resource degradation such as soil compaction, erosion, etc. (researchers and NGO representatives, personal communication). The term is somewhat controversial when it refers to human impacts in natural areas.

conservationists and scientists view ecotourism development as a better option than the common-development alternatives which include mining, citrus farms, commercial logging and industrial development (Gould, 1999).

Ecotourism in Belize

Although there is no universally accepted definition of ecotourism in Belize, the concept has been widely promoted throughout the country since the early 1990s[29] (NGO Representative, personal communication). Whether promoting a diving trip on the cayes or a journey into the rainforest, many brochures and advertisements for local companies promise a "natural, ecotourism" experience for their visitors. The present government actively supports the idea of eco-cultural tourism, which it defines as "tourism that explores Belize's natural, archaeological and cultural attractions in a manner that will protect these resources for future generations." The government's support of eco-cultural tourism is apparent in its manifesto, found in both print form and on the official GOB website, which asserts that "eco-cultural tourism is one of the twin pillars of the economy" along with agriculture.

Ecotourism has experienced tremendous growth in Belize during the past 20 years due to several factors. Belize boasts a wealth of natural and cultural resources which includes the second-longest barrier reef in the world and an extensive network of Mayan ruins. The country's extremely low population density[30] has enabled the Belizean government to protect many of these resources in the form of national parks, nature preserves and wildlife sanctuaries. As Table 8.1 illustrates, the governments of Belize had placed over 1,665,385 acres (approximately 40 percent of the nation's land) under some form of protection since gaining independence from Great Britain in 1981. Additional acres have been set aside by private owners/organizations.

Table 8.1 Government Declared PAs in Belize, 1996

Type	Number	Acres
Nature Reserves	4	111,690
National Parks	10	375,308
Natural Monuments	1	9,771
Wildlife Sanctuaries	2	144,297
Forest Reserves	17	940,323
Marine Reserves	2	83,996
Total PAs	36	1,665,385

Source: The Directory of Belizean PAs and Sites of Nature Conservation Interest, 1996

[29] Belize's tourism industry, initially developed around the marine resources, began developing in the 1960s. At the time it was not called ecotourism or even nature tourism, but many of the activities were similar to those visible today.

[30] With only 250,000 people in 23,300 sq. km, Belize is one of the least-densely populated countries in the world (Sutherland, 1998). The majority of Belize's population is concentrated in urban areas along the coast and inland, so much of the rural areas are sparsely populated.

Another factor in the rapid growth of Belizean ecotourism is the fact that English is the national language of Belize. Belize is also located just two hours by plane from two of the United States' major gateway cities? Miami, Florida and Houston, Texas. Finally, Belize boasts a democratic government and a stable currency that is tied to the American dollar. The combination of these various factors has fueled the growth of ecotourism in Belize and enabled the small country to compete with popular destinations like Mexico and Costa Rica. A 1990 survey of visitors in Philip Goldson International Airport (the largest airport in the country and a primary entry/exit point for visitors) indicated that half of these visitors chose Belize due to the quality and variety of natural resources. Furthermore, nearly two-thirds of those same visitors (63 percent) toured a PA during their stay (Boo, 1990).

One of the most significant factors in the development of tourism in Belize in the 1960s and 1970s (and later ecotourism in the 1980s and 1990s) is the presence of the barrier reef, which runs parallel to the coastline for 185 miles. The coral reef's four atolls, 70 types of hard coral and 400 species of fish have drawn scuba divers and fisherman to the offshore cayes (islands) since the 1960s (Boo, 1990; BTB, 1998; tourism industry representative, personal communication). These early visitors rarely ventured inland, so their economic, social and ecological impacts were largely confined to the most frequented islands, primarily Caye Caulker and Ambergris Caye. These two islands were the primary destination for Belizean visitors for many years due to their proximity to both the mainland and the barrier reef and the availability of visitor services and infrastructure in the form of dive shops, hotels and restaurants.[31]

The first wave of ecotourism that affected the mainland occurred in the early 1980s when wealthy tourists began taking day trips from Belize City to nearby natural areas (Horwich, 1998). The money spent by these affluent tourists was a catalyst for conserving additional natural areas, "thus ecotourism provided economic and political justification for the protection of certain natural areas, including the high-profile CBWS" (Boo, 1990). The late 1980s and early 1990s saw the second wave of ecotourism in Belize as the government began to promote the country as the number-one ecotourism destination in Central America (Gould, 1999). Unlike many Caribbean and Central American countries pursuing ecotourism as an offshoot of the existing tourism industry, Belize was attempting to define the shape and strategy of its entire tourism industry through ecotourism as a result of its extensive network of protected and other natural areas (Pattullo, 1996).

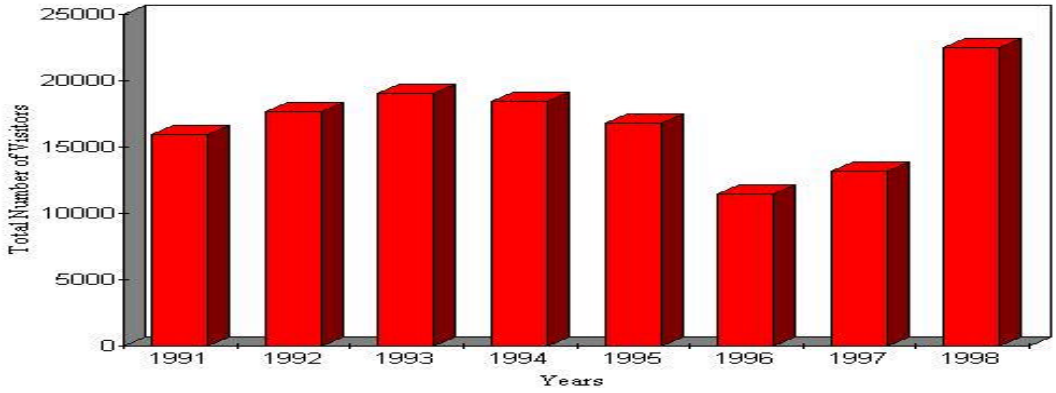
[31] Although other cayes and beach resorts on the mainland are gaining a share of the visitor numbers, these two islands still receive the majority of the visitors and their dollars (BTB, 1999).

Ecotourism and BAS

In addition to the vast network of national parks, forest preserves and marine reserves managed by the Belizean government, there are eight government-designated PAs[32] presently managed by BAS. As a respected leader in conservation issues, BAS was initially asked to manage these PAs in order to conserve the biological diversity contained within the sites. BAS staff and volunteers developed trails in order to patrol the sites and local residents were the primary users of these areas in the early years of BAS management. For example, residents from the communities of Armenia and Ring Tail were always frequent visitors at BHNP in the dry season to bathe in and take water from the swimming hole. Furthermore, residents and other Belizeans have frequently visited GNP in order to gain access to the banks of the Belize River for swimming and other recreational pursuits.

Through the efforts of the Belize Tourism Board (BTB) – a quasi-governmental organization charged with developing and promoting the Belizean tourism industry – and private tourism interests, Belize has became a well-known destination. Due to its natural and cultural resources, Belize is able to compete with the top ecotourism destinations in the world such as Costa Rica, Brazil, Kenya and South Africa (government official, personal communication). As the numbers of annual visitors to Belize increased throughout the 1990s, so too did the numbers of visitors to BAS PAs. As Figure 8.1 illustrates, visitation to the five BAS sites where visitation is permitted remained above 10,000 visitors per year throughout the 1990s and grew steadily in five of the eight years on record,[33] providing a much-needed source of income for BAS.

Figure 8.1 Visitation to BAS PAs, 1991 - 1998



Source: BAS Annual Report (January 1 – December 31, 1998)

[32] Of the six PAs examined for this assessment, TMNR is reserved for research alone and general visitation is not permitted. Therefore, "PAs " in this chapter refers only to the five BAS-managed PAs ? HMCNM, BHNP, GNP, CTWS and CBWS ? that permit general visitation.

[33] The drop in visitor numbers in 1996 and 1997 is not consistent with steady growth observed in overall visitation to Belize. The drop may be the result of criminal activities that occurred in several BAS and government-managed sites in 1996 or may have resulted during the transition to a new system of ticket sales and record keeping implemented by BAS at that time (BAS staff, personal communication).

As visitors began to explore the PAs on their own or with guided tours, ecotourism "suddenly happened" within and around the BAS-managed PAs (BAS staff, personal communication). In addition to their original duties of biological conservation, the responsibilities of BAS wardens have expanded to include visitor management, facilities maintenance, EE and EI programs implementation, and maintenance of community relations. However, the wardens may not be trained in each of these areas. One BAS staff member commented that "wardens must act as hosts, yet few, if any, have ever received hospitality training," (personal communication).

Each of the PAM plans developed from 1995 through 1999 (with the exception of TMNR as noted) acknowledges and accounts for some form of tourism and recreation in the PA. In fact, the management plan for BHNP explicitly states that "BAS continues to promote the protected areas it manages as ecotourism destinations" (1997). Furthermore, BAS updated its visitor brochures and produced a series of local television advertisements in order to encourage low-impact visitation to its sites to coincide with the 30th anniversary celebrations of the organization throughout 1999.

BAS staff members acknowledge that ecotourism in PAs can be beneficial for four reasons. Ecotourism generates a source of revenue for PAM through entry fees and dormitory/camping fees, as Table 8.2 illustrates.

Table 8.2 Entry Fees for BAS PAs, 1999

PA	Residents	Non-Residents
Guanacaste National Park	BZ$1	BZ$5
Blue Hole National Park	BZ$2	BZ$8
Crooked Tree Wildlife Sanctuary	BZ$2	BZ$8
Cockscomb Basin Wildlife Sanctuary	BZ$2.50	BZ$10
Half Moon Caye National Monument	BZ$2.50	BZ$10

Source: BAS Staff and website (1999)

In 1998, BAS managed protected-area fees provided BZ$166,700 (or 16 percent of BAS' income) to the organization, second only to grant income in the overall budget (BAS, 1998). Secondly, ecotourism creates incentives for protecting natural areas throughout Belize ? natural areas that are presently protected as well as sensitive habitats not yet protected. Furthermore, ecotourism has been a vehicle for promoting conservation awareness to local residents and visitors through interpretive and educational programs. Finally, as ecotourism revenues increase, the government may be motivated to increase its levels of environmental protection, as well (Gould, 1999).

III. ECOTOURISM AND BAS

Although a range of issues related to ecotourism, community economic development and BAS PAM were identified, it was not possible to thoroughly investigate and research each issue that was discovered. Therefore, this assessment focuses on four major issues

that presently affect or have the ability to affect PAM for BAS: ecotourism coordination within the BAS organization, ecotourism coordination with external organizations and agencies, ecotourism collaboration with protected-area communities, and increasing visitor numbers in BAS PAs.

Ecotourism Coordination Within BAS

BAS has taken numerous steps throughout the years in order to coordinate ecotourism programs and projects within the organization. In 1982, BAS staff members developed EI materials, such as informational brochures, for each PA. Updated versions of these brochures were created in 1999 by BAS staff (Waight and Lumb, 1999). In addition, BAS developed a colorful visitor guide entitled Belize Parks Guide in coordination with an EU project to provide basic visitor information and increase the visibility of each PA (BAS staff, personal communication). As management plans were developed for each PA, sections on tourism and recreation, visitor infrastructure and restricted-access areas were included in order to begin to systematically manage visitors and their impacts.

Although there is some visitor infrastructure to support ecotourism at each of the five PAs, the existing infrastructure may not be adequate for visitor needs (BAS staff, personal communication). For example, in a PA with moderate levels of visitation – such as CBWS which received 4,078 visitors in 1998 – the present infrastructure which includes dormitories, campsites, kitchen facilities, composting toilets, a visitor center with interpretive exhibits, and a well-marked, extensive trail system may be more than adequate to handle visitor numbers. On the other hand, a heavily visited area – such as HMCNM which documented 7,310 visitors to the caye and surrounding reefs in 1998 – has fewer visitor amenities. Furthermore, HMCNM staff indicated that the facilities can easily become over-taxed during peak-visitation periods when several chartered dive boats arrive at the same time. Moreover, the same type of visitor facility, such as a visitor center, serves different functions at different PAs. At GNP, for example, the visitor center serves as an entry and fee-collection point, an office space for the wardens, a space for displaying interpretive exhibits, and has restroom facilities. On the other hand, the visitor center on HMCNM is a small space and wholly dedicated to a collection of interpretive exhibits.

In addition to the existing visitor infrastructure, there are plans to develop future visitor facilities in the PAs. One project may include a canopy trail system at BHNP and a feasibility study began in 1999 by Egret Communications from Oregon, USA (BAS, 2000). Other types of facilities are being developed or considered at GNP. Construction of a small meeting room for visiting school groups was begun in 1999 and a trail for people with special needs is being considered if funding becomes available.

Various BAS staff members participate in conferences addressing ecotourism at the national and regional level. In June 1999, one BAS staff member attended and presented at the Ecotourism Capacity-Building Conference in Rio Bravo, Belize. In addition, some of the wardens have attended training sessions at the Belize Zoo to build upon their naturalist skills for guiding visitor groups within and around the PAs. Finally, BAS

central office staff recently developed a checklist in order to assess the organization's management efforts in the buffer-zone communities for the PAs that the organization manages (see Appendix 5b). Several of the categories address ecotourism-related issues such as the appearance of new locally-developed tourism businesses and community involvement in resource stewardship as it relates to ecotourism.

There are active steps that BAS may consider taking to improve internal management in relation to ecotourism issues. Although BAS has developed an environmental charter, the organization does not appear to have an internal definition of ecotourism nor an official tourism or ecotourism policy. A comprehensive ecotourism management plan that guides the direction of ecotourism in and around each of the BAS PAs does not currently exist, despite the fact that visitor numbers continue to increase annually. Moreover, various staff members are simultaneously attempting to address issues that arise from ecotourism in PAs and buffer-zone communities. Without a lead staff member designated to coordinate and facilitate the range of issues and projects BAS is involved with, inconsistent approaches and actions may be a potential result. According to the paper presented at the capacity-building ecotourism conference in June 1999, a plan is being developed to formalize BAS' external coordination of ecotourism projects with key stakeholders, such as BTB, BTIA and PFB. However, it is unclear whether one staff member or several will be appointed to manage this range of projects.

Ecotourism Coordination with External Organizations and Agencies

In addition to coordinating ecotourism programs and projects within the organization, BAS maintains external relations with a wide range of organizations and agencies for ecotourism programs and projects. BAS has collaborated with other Belizean conservation organizations, such as PFB and the Belize Zoo, and with representatives of Belize's major tourism organizations for short-term projects in the past. One of the lead tourism organizations in Belize, the Belize Tourism Industry Association (BTIA), was formed in 1985 to be the voice of the Belize tourism industry and provide a link between the public and private sectors (tourism industry representative and BAS staff, personal communication).

Another tourism association, the Belize Tour Guide Association (BTGA), was also formed in the mid 1980s to provide a collective voice for the growing number of professional tour guides in the country (tourism industry representative, personal communication). At present, no member of BAS staff or BOD is involved with the Belize Ecotourism Association (BETA), an organization formed in 1993 to advocate for support of ecotourism planning and policy throughout Belize. However, interviews with BETA members and others from the tourism industry indicated that there have been very few Belizeans involved in the organization since its inception and that the organization appears to be largely defunct at present. Furthermore, it appears as though the organization has (had) a primarily regional focus with an emphasis on ecotourism in and around the San Ignacio area in western Belize (tourism industry representatives, personal communication).

There are incentives for BAS to continue collaborating with these organizations in order to influence the direction of tourism policy and planning in the coming years, particularly as some of these policies will affect the management of PAs overall. However, representatives of PFB, BTIA and BTGA felt that more substantial and formalized partnerships with BAS would help to develop effective projects and provide a consistent message in ecotourism and general conservation-related issues (NGO representatives and tourism industry representatives, personal communication). Therefore, there is a window of opportunity for BAS to be more closely involved in shaping visitor policies that impact PAs in Belize.

BAS and BTB have collaborated in projects that have direct or indirect impacts on ecotourism for the organization. For example, the BTB was a major contributor towards the purchase of a 26 foot fiberglass boat, "Sula sula," which has been used for transporting staff and supplies to and from HMCNM since 1997. BAS has also maintained ties with BTB's Product Development and Marketing Division through joint advertising campaigns and joint promotions of BAS sites at international travel fairs (government official and BAS staff, personal communication). However, there does not appear to be a close collaboration between these two entities in all areas. For example, a current objective of BTB is "to facilitate foreign investment in the tourism sector throughout Belize" (BTB, 1998). BAS, on the other hand, has facilitated the formation of community groups in buffer-zone communities in order to support local tour guides and locally-owned tourism businesses.

One area where representatives of BAS and BTB both stated a need was for an ecotourism training program to enable local residents to fully participate in and receive benefits from the increase in visitors to the country (government officials and BAS staff, personal communication). Among the government's current tourism priorities is the development of a community-based ecotourism learning center located in or near a PA in order to promote first-hand learning using the natural resources (government official, personal communication). BAS involvement with this project, either as a consultant or as a host site, may strengthen BAS-BTB relations and provide a range of benefits for the selected community.

In addition to partnerships within Belize, BAS has worked extensively with foundations and organizations from the United States and Europe on ecotourism-related projects. During the 1980s, BAS collaborated with various volunteer organizations, most notably the US Peace Corps, in the development of the initial protected-area management plans as well as interpretive exhibits and other types of visitor infrastructure in the PAs (BAS staff, personal communication). In the early 1990s, collaboration with the RARE Center for Tropical Conservation resulted in an interpretive trail and look-out platform at BHNP. More recent partnerships with representatives of the EU have enabled BAS to complete the interpretive boardwalks at CTWS, construct visitor and interpretive centers at BHNP, and develop a new series of visitor brochures(BAS 2000). Finally, BAS has collaborated with international volunteer groups, such as Raleigh International, in order to build boardwalks and mark boundaries for some of the PAs.

Ecotourism Collaboration with Protected-Area Communities

Although BAS has promoted a variety of internal and external projects and programs that support ecotourism, the organization does not collaborate as frequently on ecotourism projects with protected-area communities. There are exceptions, however, as the women's craft cooperative in Maya Center (bordering CBWS) and the tour guide association in the CT community were both initially facilitated by BAS staff. At present, there are tentative plans to develop an underwater trail and guiding program with local fishermen at HMCNM (BAS staff, personal communication). However, there do not appear to be any jointly-developed projects outside the PAs. BAS staff indicated that they do not think it wise to coordinate or promote all of the ecotourism projects in the buffer-zone communities as, "community leaders should suggest projects to us; we don't always want to be the ones suggesting these things" (BAS staff, personal communication). It is likely that ecotourism projects and businesses located near the PAs will continue as long as the government continues to promote ecotourism on a national scale.

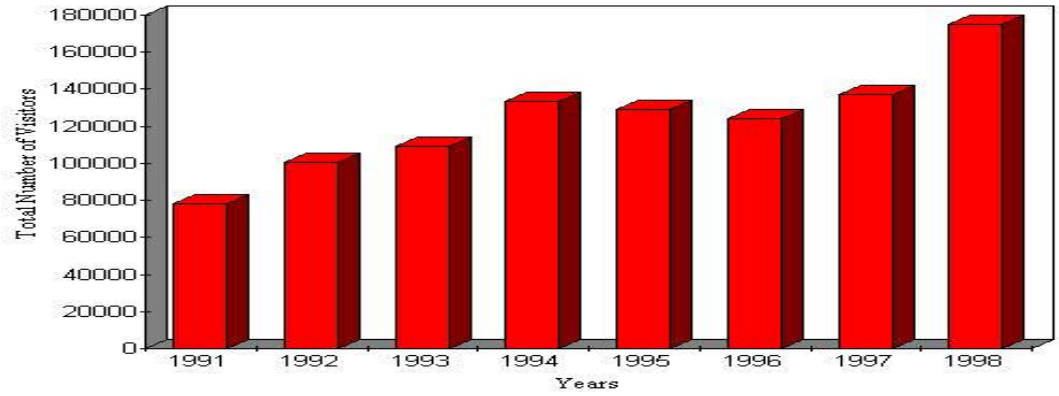
Although it is unclear whether BAS has formal partnerships or agreements with local tour guides or locally operated businesses near the PAs, staff generally do not recommend local guides or businesses to site visitors in order to avoid the perception of "favoring" one person or business over others (BAS staff, personal communication). Accordingly, no signs or brochures from local business are displayed in the visitor centers, so visitors must rely on guidebooks or local residents for information about tours, restaurants and accommodations. This internal policy is somewhat inconsistent, however, as some tourism-related businesses appear on the organization's website. Several of the businesses promoted on the website, such as the Radisson Hotel in Belize City, Chan Chich Lodge in the Orange Walk District, and Pelican Beach Resort in Dangriga, are BAS corporate sponsors and regularly pay for advertisements on the website or in the quarterly BAS newsletters. In addition, the names of some accommodations in CT and those near Cockscomb Basin Wildlife Sanctuaries are listed on the site, but contact information is not provided and the information is not easily found.

Increasing Visitor Numbers in BAS Protected Areas

The final area examined is the issue of increasing visitor[34] numbers in BAS PAs. In the last ten years, Belize has experienced a strong and steady growth in visitor arrivals as Figure 8.2 illustrates. In 1998, there was a record growth of almost 28 percent in visitors to Belize.

[34] As a broad category, the term "visitors" includes local residents, national and international school groups, national citizens and international tourists.

Figure 8.2 Visitor Arrivals in Belize, 1991 - 1998



Source: Travel and Tourism Statistics, Belize Tourism Board Report, 1998

According to industry publications, BTB intends to increase visitor arrivals by an additional 12 percent/ year by 2001 through a new "Belize: the Natural Destination" marketing campaign (government official, personal communication). Also, the government passed a law in 1998 to permit and encourage cruise ships to dock and discharge passengers in Belize City (NGO representative and tourism industry representative, personal communication). The government officially limits the number of visitors that can enter government-managed archaeological sites, such as Xunantunich and Altun Ha, to 200 visitors/day/site in order to minimize visitors' ecological disturbance. However, Ministry of Archaeology wardens admitted that these quotas are frequently overlooked when buses of cruise ship passengers arrive (government officials and tourism industry representatives, personal communication). In addition to the government sponsored publicity campaigns, BAS developed television and radio advertisements to coincide with their 30th anniversary celebrations in 1999 in order to heighten the visibility of the PAs and encourage additional visitation.

If joint BTB and BAS campaigns prove to be successful, readily accessible BAS-managed PAs (those located on or near major roads, such as GNP, BHNP and CTWS) may experience a substantial increase in visitation in the near future. Several staff indicated that the present visitor capacity at BAS sites is set by administrative limits,[35] and not by ecological limits (BAS staff, personal communication). Some BAS staff have speculated that with adequate staffing and visitor facilities, visitor numbers could double or triple at some of the PAs in the coming years. This increase in numbers would likely have both an economic as well as an ecological impact. With the exception of the HMCNM reef project that began in 1999,[36] no baseline ecological studies have been

[35] Administrative limits for BAS are determined by the availability of wardens, trails and visitor infrastructure such as restrooms and interpretive centers.

[36] Although no other PA in the BAS network has been systematically surveyed to establish baseline studies of the biological diversity and cultural artifacts, CBWS has been the subject of numerous biological studies. In the early 1980s, Dr. Alan Rabinowitz chose the jaguar-rich area as the focus of a two-year study. When this field study was concluded in 1984, researchers and BAS persuaded the government to establish a "no

conducted within BAS-managed sites to indicate the number of visitors that a PA can accommodate before the ecological integrity of the site is compromised. Without the necessary baseline studies as reference points, it may become difficult to judge the severity of the impact that visitors have within each PA. Although increasing numbers of visitors have the potential to impact the ecology of the PAs, they may also provide needed increase in revenues for the organization and the buffer-zone communities, as well. Visitors presently provide income through their entry fees, but may also contribute to BAS in the form of memberships and one-time donations.

IV. RECOMMENDATIONS

Although ecotourism alone is certainly not the key for viable protected-area management, it may prove to be a critical piece in ensuring the legitimacy of these areas and generating financial support for the organization, as well as local communities. The following recommendations are based on gleanings from the literature as well as suggestions made during interviews conducted in Belize. While all management decisions require careful consideration of economic, political and ecological climates, adapting and implementing some of these recommendations may provide for improved management of ecotourism and visitor-management issues in the PAs.

Ecotourism Coordination Within BAS

- Develop an internal definition for ecotourism and use that definition to develop an internal policy for ecotourism within and around the PAs.
- Use this internal policy to develop one comprehensive ecotourism management plan that addresses each BAS-managed PA.
- Designate one person as the primary contact within the organization on all ecotourism projects in order to focus responsibilities. This person would be the logical choice to represent BAS at all conferences and meetings that deal with ecotourism related issues.
- Consider joining The Ecotourism Society, or other international ecotourism associations, in order keep abreast of the current trends in ecotourism and community conservation and take advantage of funding opportunities.
- As funding allows, make improvements in the visitor infrastructure so that all PAs have comparable facilities, such as composting toilets.
- Refine the evaluation "scorecard" (Appendix 5b) first developed to asses the ecological, economic and social effects of BAS management on the protected-area communities and use it on an annual or semi-annual basis to monitor current status of the protected-areas and surrounding communities.
- Link the increasing number of BAS visitors to income generating efforts (see Appendix 5c). BAS may consider working with GOB and BTIA to raise the price of entry fees for non-residents in order to generate greater funds through the same amount of ecological impact.

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hunting" area within the National Forest Reserve to protect a suitably large jaguar habitat. (Waight & Lumb, 1999).

- Link the increasing number of BAS visitors to membership efforts (see Appendix 5c). Both foreign and domestic visitors may make one-time donations at the sites and the consistent use of membership brochures and newsletters may encourage visitors to join the Society.

Ecotourism Coordination with External Organizations and Agencies

- Assist the government in drafting a national tourism policy that differentiates tourism from ecotourism.
- Encourage the government to support rural enterprise and ecotourism development near PAs throughout Belize and lobby for pilot programs to be located near the PAs managed by BAS.
- Collaborate with the government in the development and design of the Community-based Eco-Tourism Learning Center that is among the government's tourism objectives for the next five years. Conduct an impact study to determine whether or not it would be beneficial to request that the Center be located in or adjacent to one of BAS' PAs, such as BHNP or CTWS.
- Encourage the government to re-examine the present policy that encourages cruise ships to dock in Belize City and search for ways to safeguard the marine resources while realizing he economic benefits from the cruise ship passengers.
- Continue working with organizations such as BTIA in developing sound tourism policies for Belize.
- Explore the opportunities of working with internationally-based NGOs, such as WWF, IUCN, World Resources Institute (WRI), TNC, and Conservation International (CI), to secure funding and assistance in the development of ecotourism projects. Each of these organizations are currently providing funding and assistance to ecotourism projects throughout Africa, Latin America, the Caribbean and Asia.

Ecotourism Coordination with Buffer-zone Communities

- Determine what role, if any, BAS will play in facilitating and coordinating ecotourism projects and programs in each of the buffer-zone communities.
- Work with community leaders to identify local concerns about ecotourism and increased visitation to PAs (such as erosion of local values due to increased contact with visitors). Build these concerns into the internal BAS ecotourism policy.
- Continue collaboration with local community leaders to encourage a range of diversified economic development projects, such as the cashew project in CTWS, to guard against the boom-bust cycles that are commonly seen with ecotourism in buffer-zone communities.
- Seek funding through PACT and international conservation organizations for community-BAS developed ecotourism projects.
- Continue collaboration with government and other organizations to develop and conduct training sessions for community members who want to develop guiding services, home stays and other ecotourism ventures.

- Consider displaying brochures and business cards for any local business in a place set aside for “visitor services” within each of the five visitor centers.
- Develop educational programs and material specifically for distribution to visitors to encourage respect for the local customs to avoid incidences that would strain community-tourist relations.

Increasing Visitor Numbers in BAS Protected Areas

- Request that the government provide financial and technical assistance in conducting baseline studies of the ecological and cultural resources of each PA in order to provide scientific data to support continued protection of these natural areas.
- Foster partnerships with University College of Belize as well as US and UK universities to enable baseline studies research to take place. Establish a monitoring program at each PA to ensure that future increases in visitation are not aversely affecting the PAs.
- Utilize the baseline studies to determine the Limits of Acceptable Change (LAC) that each PA can sustain before the ecological resources would be threatened.
- Strengthen existing visitor management policies and develop new ones that seek to control behaviors, activities and use of PAs in order to minimize impacts of visitors. For example, develop signs at the start of each trail head that explain to visitors why staying on trails will help to minimize the impacts of erosion throughout the PA.
- Promote the PAs in the off-peak season, particularly to national visitors, in order to spread the ecological impact of visitors throughout the year.

Chapter 9: Communities

> "Man should have dominion over the animals, but to take care of them, not to kill them."
> —community member, Crooked Tree village

> "We have no use for that. What we want that for?" referring to the "tigah" (jaguar).
> —community member, Crooked Tree village

I. INTRODUCTION

Belize's abundance of intact and undegraded ecosystems has been attributed to its traditionally low population density. However, as the country's population continues to grow, and immigrants from neighboring countries continue to migrate across the border, it will become more and more necessary for conservationists to engage the people who live in and around PAs in meaningful dialogue and collaboration concerning sustainable natural resource management and conservation. In many cases, the government and NGOs will need to include these people in the planning and management associated with these PAs.

BAS, having management responsibility for six PAs in Belize, is faced with significant challenges in this area. As diverse as the ecosystems that BAS manages within its sites, so too are the cultural and social settings that surround them. Attempting conservation in this multicultural setting is a formidable task. Additionally, Belize's diverse cultural setting allows for the definition of "community" to take on varied meanings.

This section will attempt to illustrate some of the challenges that BAS faces, using a community-based perspective. Perspectives gleaned from interviews with community members, primarily, as well as government officials, BAS staff, and others, will be compared with similar themes at an international level that have been identified as being crucial to effective conservation work with communities. The goal of this section is for BAS to be able to identify important areas of focus and concern and subsequently correlate its experience with the ideas reflected here.

This section will focus on communities and their relationships with BAS and BAS-managed PAs. Because BAS values and seeks meaningful communication and working relationships with communities, it is helpful to use experiences drawn from the field of CBC, co-management (or, alternately, collaborative or participatory management) and related literature. In order to accurately frame how these themes apply to BAS' situation, it will be necessary to attempt to define CBC and co-management and examine their origins and precipitating developments from a global view. Relevant findings discovered through field research will subsequently be presented and placed in this context.

Limitations of the Study

Community members were interviewed in ten communities, yet the greatest number of interviews were conducted in communities associated with CBWS and CTWS. These communities were focused on for two reasons. Primarily, the communities of Crooked Tree Village and Maya Center (a CBWS buffer-zone community) have had both a more involved relationship and more conflict with BAS than other communities. Secondly, BAS is poised to begin an ambitious experiment in co-management in these two PAs. Given these factors, it seemed pertinent to focus attention on these two areas. This paper's focus on these areas should not be seen as endorsing either the abandonment or support of some communities at the expense of others.

An attempt was made to interview a wide range of community members and stakeholders representing varying interests within and across communities. However, this was problematic due to a number of factors. The disparate geographical location of the communities, infrequent or non-existent public transportation, research time constraints, and, in some cases, lack of contact with BAS, prevented the inclusion of all buffer-zone communities. A lack of contact with BAS, at first glance, would appear to be a desirable factor in the inclusion of a given community in this research as those communities without contact are probably more likely to have misconceptions about the PA and are probably not deriving any benefit from the area. However, when attempting to contact and meet with community members, it was often necessary to have an established relationship with other community members, in this case, the BAS field staff, who consisted of wardens and directors. Because of this, community members' names were often recommended to the researchers, or the people themselves were introduced, by the field staff. This resulted in some of the community informants being family members or friends of the staff. While this would have been impossible to avoid in any small community, questions do need to be raised regarding the reasons for the staff having chosen those particular informants. This being said, a portion of the community informants may not have been entirely representative of their respective communities due to possible familial or sympathetic relationships with PA staff.

Additionally, community leaders were often interviewed, both for reasons of respect to the community and because they supposedly represent their communities. There are, of course, doubts as to whether community leaders are truly representative voices of their communities and if they are able to convey the specific, detailed concerns of small groups of stakeholders (Borrini-Feyerabend, 1996). On a similar note, ideas expressed by community members that are highlighted in this paper may not be entirely representative of their respective communities. It is nevertheless valuable to mention these points as they may be indicative of points of view seldom heard by BAS.

II. BACKGROUND

While long in coming, it is only within the last few years that communities in and around PAs have begun to receive significant attention from governments, NGOs, and donor agencies. There is a growing recognition that the long-term success of these areas is

dependent on the support and cooperation of local people (Wells and Brandon, 1992). In the spheres of international conservation and PAM, the CBC approach has attempted to reverse the centralized and protectionist paradigm of biological conservation which had previously excluded local people from the decision-making processes and saw the local communities as threats to conservation success (Ulfelder et al, 1998). As well, the recognition of local people and their own methods of natural resource management has begun to emerge.

In this atmosphere, the Third World Parks Congress of 1982 focused on conservation and how it could be employed for sustainable development. There was a significant voicing of the role that PAs could play in the betterment of local people's lives while still "serving the best interests of nature conservation" (McNeely and Miller, 1984). Further evidence of this recognition can be seen in the change of nomenclature and definitions of PAs in the IUCN PA classifications between 1978 and 1994. In the previous classifications, national parks were defined as comprising ecosystems unaltered by humans while the 1994 classifications recommended recognizing the presence of indigenous people within all six categories of PAs (Stevens, 1997). As the concept of sustainable development dominated the discourse during this period, conservationists began to toss around the concept of sustainable-use, where conservation would best be accomplished through people's use of resources. According to this perspective, biodiversity, and the parks that protect it, are threatened because the resources are locked-up and unused, and therefore are not being valued (Brandon et al., 1998). Giving these resources the value that they may have had to local people before park establishment—and encouraging wise use[37] and careful exploitation—would promote conservation. The 1980s also saw the focus shift from the PA itself to the areas outside the PA, often the park buffer zones. Additionally, at the 1992 World Parks Congress in Caracas, Venezuela, sustainable-use was billed as a "win-win" situation.

Currently, over 13,000 PAs around the world protect about 8.9 percent of the earth's surface (IUCN in Brandon et al., 1998). There has been a dramatic expansion of these PAs in recent decades; more parks and preserves have been established since 1970 than in all previous periods (WCMC in Brandon et al., 1998). However, many of these areas are inhabited by people; in Latin America, it is estimated that 86 percent of PAs are inhabited (Amend and Amend, 1992).

It is in this context—informed by the belief that conservation success can only be achieved if local people are actively involved (Pimbert and Pretty, 1997) and the reality of the proliferation of PAs with human inhabitants—that CBC has developed. Primarily, CBC comprises an objective—conservation—and an organizational approach to meet this objective—the community (Murphree, 1994). CBC has largely been advocated by NGOs working with local groups and communities and transnational organizations, both environmental and social justice-oriented (Brosius et al. 1998). CBC aims to find areas of "mutuality between those who want biological resources to be managed on a sustained

[37] This should not be confused with how the term "wise use" is currently used in the US where the term has been adopted by resource use advocates who are strictly opposed to land preservation and lobby for oil, mining, ranching, and gas interests.

basis and those who must rely on these same biological resources for the bulk of their livelihood" (Bromley, 1994). A key element or goal of CBC is the coexistence of people and nature (Western and Wright, 1994), where biodiversity is maintained and people's needs are met. However, it should be mentioned that experience with the CBC approach is relatively new and it is still very much in the development stage (Mehta and Kellert, 1998).

Using CBC as a framework or a frame of reference has relevance to BAS on a number of levels. CBC focuses on the people who bear the costs of conservation (Western and Wright, 1994), namely local communities. It is a promising approach, as it attempts to meet the needs of local people by allowing them access to natural resources and giving them a voice in planning and development decisions and at the same time accomplish conservation goals. Although allowing access to natural resources in this setting may not be appropriate as current Belizean laws do not allow for natural resource consumption in any of BAS' PAs, other issues associated with the community-based approach are relevant. BAS is currently about to embark on an ambitious co-management project, the goal of which is for local people to be eventually involved in PAM. Co-management has been described as a situation where "some or all of the relevant stakeholders in a PA are involved in a substantial way in management activities" (Borrini-Feyerabend, 1996) and is a relatively new and untested approach to PAM. Co-management as it is being developed in Belize and BAS will be discussed later in this chapter.

III. COMMUNITIES AND CONSERVATION

The global importance of PAs —and the associated conservation of biodiversity—to human survival is often implicit. The benefits provided by PAs include: the preservation of the diversity of species and their genetic variation; the safeguarding of habitats critical for the sustainable use of species; and maintaining the productive capacities of ecosystems. PAs can also serve various functions for local people, such as preserving the historic and cultural features important to their traditional lifestyles and welfare (McNeely, 1995). However, the importance and potential benefits of PAs to local people is often largely obscured by conflict. This is especially true in the face of conflict that can arise when opportunities are lost through the establishment of PAs. Communities often bear substantial costs as a result of lost access to natural resources and they may view the PAs as restricting their ability to earn a living (Wells and Brandon, 1992). Therefore, the task of compensating local people for their losses and ameliorating resource use conflicts often falls upon the shoulders of the entities that manage PAs. These entities are charged with both emphasizing the implicit benefits of PAs —services such as soil and water conservation—and developing potential benefits that local people may receive from the PAs, benefits such as ecotourism or other alternative income generation. Benefits such as these are likely to tip the scales in favor of conservation and this most likely holds true with communities in Belize.[38]

[38] See section on co-management where community-initiated conservation projects are discussed.

Communities in Belize

Belize's population is predominantly English-speaking Creole yet will probably soon shift to a majority Mestizo population with high levels of immigration from neighboring Central American countries and Mexico. In addition to Creoles and Mestizos, Garífunas, Mayans, German Mennonites, Asian immigrants, and North American and European expatriates and retirees contribute to the cultural mix of Belize. It is in this incredibly rich and diverse cultural context that BAS must operate because all of these groups are represented in and around BAS PAs. The 30 communities that are associated with these sites are a "cross-section of all the ethnic groups in Belize" (BAS staff, personal communication).

The conservation community in Belize appears to recognize the importance of communities to achieving conservation goals. The National Biodiversity Committee (NBC), a committee with the representation of government officials, NGO leaders, and UCB, which was formed to guide policy on conservation issues, puts "community" front and center. NBC's National Biodiversity Strategy of 1998 states that the successful implementation of conservation programs will be "dependent on the role of community…and the distribution of benefits thereof" (Jacobs and Castañeda, 1998). The strategy further states that communities can play an important role—even an "indispensable" role—in the management of PAs and that this is being explored in conjunction with a combined decentralization of powers to the communities. Furthermore, "co-management will be part of an overall protected areas policy to strengthen PAM in Belize" (Jacobs and Castañeda, 1998). Given the government, NGO, and education community's seeming recognition of the importance of and commitment to communities and co-management—an untested strategy—Belize is on the cutting edge of community-based conservation. The country's negotiation of these uncharted waters will surely be watched closely by the international conservation community.

Generally speaking, resident people—or, people who "occupy, reside in, or otherwise use…an established or proposed PA " (West and Brechin, 1991) are those who live in communities in and around PAs. BAS, and, it appears, other NGOs and the government, refer to these communities as "buffer-zone communities." It seems that a buffer-zone community is simply a neighboring community, although not always in the immediate vicinity (BAS staff, personal communication). While other management entities in the tropics have implemented variations of the Biosphere Reserve model—a core area surrounded by concentric rings of varying resource use and management regimes—BAS and GOB maintain no established buffer areas. Hence, what would be the core area in other management situations is, in the case of BAS PAs, the entire area. While this would suggest conditions ripe for boundary incursions and enforcement dilemmas, the lack of communities that actually share borders with the PAs and the low population density in the surrounding areas allows for something of a built-in buffer zone, albeit one that is not official. Furthermore, there is no national legal definition or policy pertaining to buffer-zone communities. From the government's standpoint, this allows a certain latitude in assessing each community/PA situation because "all situations are unique" (government official, personal communication). While this recognition of site specificity

is key, with no legal definition for communities, communities may be ignored by NGOs or GOB agencies to the detriment of both community inclusion and participation.

On a national level, attempting long-term projects—projects that appear to show commitment to working with communities—are only as good as the stability of the PAs themselves. Since power is concentrated at the ministerial level—and a given Minister can de-reserve a PA with the swipe of his pen—the status and boundaries of PAs are quite vulnerable. If for instance, political strife exists between a community's village council and a government ministry, the minister can "change everything on his own whims" (researcher, personal communication). The potential exists for years of hard-earned funding, institutional energy, and community trust to go down the drain.

BAS and Communities

Multicultural Context

In attempting to communicate with communities, BAS must often consider disparate cultural belief systems and differing community structures, dynamics, natural resource use traditions, and languages. For example, immigrants to PAs or to Belize in general have low local knowledge of the local ecology and this puts added pressure on PAs. Communicating through EE can help, yet developing different approaches for groups with differing knowledge bases and languages probably can put added stress on an already overworked staff. As BAS is charged with negotiating areas such as these, their position is a complex and difficult one.

The multicultural context around PAs is not limited to differences between communities themselves, however. Cultural differences probably exist between the BAS office staff and communities, as well. According to one BAS staff member, some communities or members of those communities have drawn away from BAS due to urban and rural cultural differences. At times, communities may be intimidated by BAS; they may view BAS staff as highly educated and wealthy, with different city mores and an unknown agenda. Sentiments such as these were expressed by community members.

Approaching Communities

At present, BAS has no formal mechanism for approaching communities. While this could be advantageous in some ways—no two community settings are alike and a rigid internal policy could needlessly constrain BAS' flexibility in dealing with localized situations—there exists the potential for inconsistency as well. Inconsistency in programming community initiatives can undermine community confidence in BAS and exacerbate conflict both between the communities and BAS and between the communities themselves, especially when one community is receiving benefits and others are neglected.

BAS has recognized the importance of involving communities for some time. However, this has not always translated into action on the part of the organization. Alternately, in

some cases where BAS has undertaken community initiatives, these have not met with success due to either funding constraints or misjudging community dynamics. Examples from specific sites will be detailed in the CTWS and CBWS sections.

According to one staff member, BAS has always engaged the communities, but before they didn't use the "right approach." Now, they have adopted a more "participatory approach." BAS approaches a community by using the community structure, working within already established local systems. Apparently, in communities where there is ongoing contact with BAS, these communities have the "freedom to call their own meeting" with BAS if they feel that issues need to be aired. At these meetings, BAS is always represented by virtue of the field staff being from the given community. However, wardens are most likely placed in the difficult position of representing both the communities' interests and those of BAS.

It appears that, for the most part, BAS has primarily undertaken community initiatives and activities on an as-needed basis. Initiatives and activities for the purposes of this report can involve everything from establishing simple vehicles for BAS-community communication to outright financial support for income generating projects. However, limited by funding constraints, BAS has probably only been able to work with communities around the PAs where conflict has emerged or where it is imminent.

It appears that in years past, BAS may have pushed for certain initiatives without full involvement of or consultation from the communities. Management plans for the PAs seem to lack adequate community consultation. In many cases, the management plans serve as rough blue prints for desired courses of action, often not reflecting the true state of institutional constraints. For example, the GNP management plan states that a refreshment stand and crafts center will be constructed near the visitor center. Although it appears that this was mentioned in the community, support from BAS has since diminished, probably due to funding and managerial shortcomings, such as lack of staff. The recognition of communities is obvious in the PAM plans, yet it seems that proposed activities for and with communities are ideals, not realistic goals.

Local Field Staff

One of BAS' attempts to reach out to communities that appears positive is that of hiring local field staff. This informal policy is unique and appears to bring a number of benefits to PAM. Hiring PA staff from buffer-zone communities apparently was begun at GNP in 1997. Crime in the park was common and incidents involving the robbery and assault of park visitors led BAS to hire wardens from the buffer-zone community of Roaring Creek. Subsequent incidences dropped dramatically; the positive effect of having familiar faces running the park was visible. The apparent benefits of this model allowed it to be transferred to other PAs and BAS began hiring wardens from local communities almost exclusively.

An area of concern that pertains to wardens as community members is their capacity as enforcers of PA regulations. While enforcement is a sticky issue in and of itself, the topic

of arming wardens was mentioned numerous times. While some wardens would like to be armed—they feel it gives them more authority and puts them at less risk—this would seem to come into direct conflict with BAS reaching out to communities. The presence of armed guards could potentially create conflict and exacerbate tensions. However, in certain situations, wardens are faced with the very real danger of armed hunters and fishermen. One warden, though, thinks that the best way to avoid conflict is through civil discussion and this seems to have worked so far.

Another warden mentioned that some of the benefits of being from the community include knowing the community, having a knowledge of the area, and having more love and care for the area. "When we don't hear the animals and birds, we miss them," he said, indicating the importance of local ecological knowledge to their jobs. Additionally, it was mentioned by communities that they feel like they are being taken into consideration when wardens are hired from the communities, that BAS is considering their interests. This is not insignificant in situations where communities feel that the management authority disregards the community's concerns. Local wardens are also better interpreters of the local natural history and environments, according one BAS staff member.

Another benefit of hiring local staff concerns staff members' standing in the communities in which they live. In at least three PAs, BAS field staff hold positions on their respective village councils. While this probably creates conflict for the staff—they may be placed in the difficult position of having to represent the community *and* the PA —it also allows for the opportunity to communicate PA goals and concerns. "We're the front line for BAS and we're respected in the community," said one warden. For example, one warden's responsibilities as a member of his village council include activities that pertain to "youth and education" which places him in a position to serve as a voice for both the community and the park. Furthermore, the wardens' presence on village councils indicates a degree of status in the community and they appear to take leadership roles both as wardens and community members. In one community, a school official said that the wardens, in addition to providing valuable education about the local natural resources, have been able to intervene positively in other ways. In one instance where children were repeatedly "causing problems" in the community, the wardens were able to involve them in Earth Day preparations and allow them responsibilities that they would have not had otherwise.

While few, it appears that there may be some drawbacks to having local wardens. One informant suggested that both friends and family in the communities will take advantage of their ties to the wardens, asking, How can they effectively enforce rules on their families? However, it was also mentioned that merely having the wardens in positions of authority commands respect and people are less likely to "cross them"—especially if they are respected members of the community. Similarly, one problem that may hinder BAS' effectiveness in doing community outreach is that the staff does not have training in working with communities. This is a drawback to hiring staff from communities, as opposed to opening the positions to the population at large. The field staff typically has less training than the office staff and they usually do not have community facilitation or

organizing skills. However, the potential benefits of hiring local wardens most likely outweigh the costs. Just as BAS offers training to their field staff in natural resource management, wardens can be trained in community skills.

Opinion Leaders

When discussing wardens as members of their communities, one is drawn to the larger issue of community leadership. Wardens are charged with disseminating information about the respective PAs to their communities. In some cases, the wardens are elected community leaders, in others not. Regardless of elected leadership, however, the question is raised as to whether wardens are "opinion leaders." As it is often said that community leaders may not always be representative of the interests of their communities, it should be asked if these other elected community leaders are also opinion leaders. Opinion leaders are those members of a system—in this case, the community—who are able to influence other individuals' attitudes or behavior (Rogers, 1995). As well, an opinion leader's leadership is not dependent on his or her status in the system. Their technical competence, social accessibility, and conformity to the system's norms allows them this informal leadership. Their conformity to the system's norms also allows them to serve as an apt model for their followers. BAS, in their position as "change agent," or, one who seeks the adoption of new ideas, may want to look for those opinion leaders to help influence the spread of new ideas. This could be done in how they select field staff *and* how they work with communities. Opinion leaders could potentially be significant allies in communicating and working with communities. However, it should be noted that opinion leaders can be "worn out" if overused by change agents. The respect with which they are held within their systems can be lost if they deviate too far from community norms or if they are perceived to be too much like the change agents (Rogers, 1995).

The Notion of "Community"

The discussion of intra-community dynamics also leads one to the question of just what is meant by "community" and how it is understood by conservationists. The notion of community has been the subject of much recent literature (Agrawal and Gibson, 1999; Belsky, 1999; Brosius, 1998). While the recognition of—and even focus on—communities has become the dominant paradigm in biodiversity conservation practice in the tropics (Kiss, 2000), "the conservation community has demonstrated enormous naivete about the nature of social communities, the notion of community consensus, their capacities for programming…" (Brechin et al., 2000). How BAS communicates with and perceives the buffer-zone communities that pertain to BAS PAs will certainly influence the efficacy of their working relationship with those communities.

In the move towards increasingly community-centered approaches, conservation organizations, funders, aid agencies, and governments have adopted the community as the focus of conservation projects. However, these entities have often employed a vision of "community" that is simplistic and generic. While placing communities at the center of conservation and resource management is attractive as an alternative to state control or

privatization of resources (Agrawal and Gibson, 1999), generalized and timeless visions of communities are problematic. Communities are often viewed as the best managers of their natural resources because it is often in their best interest to do so. They have a long-term need for the renewable resources near which they live and possess more knowledge about these resources than other potential actors (Agrawal and Gibson, 1999). However, the vision of communities functioning as an organic whole fails to consider the differences within communities and ignores how these differences affect resource management outcomes. It is the concept of communities as homogenous—as unstratified and having common ethnicities, languages, religions, incomes, and assets—that can undermine community-based conservation approaches. Communities comprise a multiplicity of actors and interests. Belsky (1999) echoes this in a study of Gales Point Manatee, Belize where divergent interests and income levels led to the failure of a community-based ecotourism project. The community was perceived historically as homogeneous by outside project developers, which led to the exacerbation of intra-community differences and produced a backlash against conservation.

Owing to Belize's cultural heterogeneity, it is not surprising that differences both within and between communities began to emerge from interviews with community members in buffer-zone communities. This will be mentioned in more detail in the following sections. For BAS, having to negotiate such a diverse and stratified social environment is extremely challenging. It is for this reason that BAS may want to consider the variety of groups and actors both within and between communities, and recognize and understand the patterns of differentiation within communities. This attention to multiple interests and identities within communities and their relationships to broader actors and institutions is critical to CBC (Belsky, 1999). It is also important to be aware of the actors within communities who seek their own interests in conservation programs—interests that may have an end result incompatible with conservation.

Co-management

Co-management in Belize, as well as on an international level, has been put forth as an alternative to both the top-down conservation models of the past and current community-based models that may not be as fully participatory as is needed for management success. It appears that Belize is beginning to experiment with co-management on a scale that has not yet been attempted and will certainly be an international focal point in the coming years.

Co-management can best be characterized by a process where "the agency with jurisdiction over the PA (usually a state agency) develops a partnership with other relevant stakeholders (primarily local residents and resource users) which specifies and guarantees their respective functions, rights, and responsibilities with regard to the PA " (Borrini-Feyerabend, 1996). Co-management is often aligned with CBC; the two approaches are complementary. If CBC seeks to develop local capacity and devolve power from state and transnational institutions to the community level, then co-management can be characterized as CBC's management tool. While a given co-management arrangement could feasibly be defined within a CBC framework, the

principle difference between the two approaches is that CBC does not necessarily involve the devolution of power while co-management generally does.

Many within the international conservation and social justice communities see ripe opportunities in co-management as it helps to erase memories of past exclusionist conservation. However, the approach is not always the appropriate one. Co-management takes time to develop and in cases of rapid ecological decline, it would be preferable to act quickly than to wait for consensus, for instance (Borrini-Feyerabend, 1996). Co-management *is* advisable when an active collaboration by stakeholders is essential for management of the PA and when access to natural resources is essential to local people's livelihood security and cultural survival.[39]

In a community setting, restricting access to resources takes away people's ability to make a living and with this comes conflict, at times resulting in deliberate abuse of resources. Allowing local people a stake in the resources and/or in the management of those resources can help to resolve conflict, and for this reason, the co-management approach is appealing. Equally, allowing people title to land fosters better stewardship (or allows them to reclaim their stewardship). However, turning over resource and land rights haphazardly in the interest of fostering better community relations can have decidedly negative implications. Many communities may not be ready, socially or institutionally, to take-on the responsibility of greatly expanded resource management responsibilities. The devolution of power should be approached cautiously and this is a key point that BAS will probably want to consider.

Co-management has been characterized as both a spectrum (Senn and Nielsen, 1996) and a continuum (Borrini-Feyerabend, 1996)[40] where differing relationships between stakeholders are described. While Senn and Nielsen's spectrum is based on a comparative analysis of fisheries co-management arrangements—and Borrini-Feyerabend's continuum addresses co-management in PAs —the two approaches are comparable. Senn and Nielsen describe the following broad categories of co-management and classify these "types" of co-management (the term "users" can be substituted with "local people" or "communities" for the purposes of this paper):[41]

- Instructive: There is only minimal exchange of information between government and users. This type of co-management regime is only different from centralized management in the sense that the mechanisms exist for dialogue with users, but the process itself tends to be government informing users on the decisions they plan to make.

- Consultative: Mechanisms exist for governments to consult with users but all decisions are taken by government.

[39] For additional conditions, see Appendix 6a.
[40] See Appendix 6b for further details.
[41] See Appendix 6c for a visual representation of this spectrum.

- Cooperative: This type of co-management is where government and users cooperate together as equal partners in decision-making. For some authors, this is the definition of co-management.

- Advisory: Users advise government of decisions to be taken and government endorses these decisions.

- Informative**:** Government has delegated authority to make decisions to user groups who are responsible for informing government of those decisions.

Being aware of the range of possible arrangements between stakeholders will be important to BAS as they begin their co-management project, discussed below.

A recurring theme in the discussion of co-management is the issue of devolution, or abdication, of power by the government in question. Typically, when a government relegates management authority of federal land to an NGO, community group, or other entity, it is seen as a loss of authority and control. For this reason, governments are often reluctant to relinquish such control. This sentiment is typified by a statement by a former GOB official who said, "We will never give CTWS to a village group." (BAS staff, personal communication). As well, "governments tend thus to resist any policy that entails dilution of power and above all participatory approaches that aim to empower the hitherto excluded" (Stiefel and Wolfe, 1994 in Pimbert and Pretty, 1997).

Nonetheless, the Forest Department, which has ultimate management authority over most of Belize's national lands—forest reserves, wildlife sanctuaries, and national parks among them—has never had much significant management presence to begin with. Consequently, the devolution of power appears to be nothing of the sort. This could be why the government is willing to try co-management, saying, in effect, "If you want to try co-management, go right ahead." One government official thinks that because resources are so stressed at the governmental level, co-management is really the only choice: "We can't do the management ourselves so we need them (communities) to help." However, both GOB and BAS will want to remember that community support is necessary for conservation success, regardless of financial resource constraints.

The view that co-management is necessary due to resource constraints is also supported by the NBS which states that, because GOB "does not and will not have the resources for effective monitoring and management," communities are a likely solution to this problem (Jacobs and Castañeda, 1998). It further states that co-management will be part of an overall Protected-areas policy. The government's recent actions also seem to indicate a true interest in experimenting with co-management. With the government supporting PACT's co-management project, they appear to be giving the green light. This is essential to the success or even the possibility of co-management, that is, the government's willingness to devolve power.

GOB and NGOs appear to be embracing co-management. As such, the co-management of PAs in Belize seems to be developing on three main fronts which will be discussed

shortly. Primarily, BAS is in the initial stages of a co-management project that will involve the highly visible CBWS and CTWS and their surrounding communities. Secondly, PACT is managing a co-management project with four PAs ' communities. Lastly, communities around the country appear to be coming forward, asking permission of the government to establish and manage their own PAs.

BAS and Co-management

BAS may soon be part of what could be described as a "tri-management" arrangement. In a sense, GOB is already co-managing with BAS, as they have devolved authority to an NGO. BAS will eventually begin to manage as a partner with communities and a three-way management arrangement will be formed. The relationships can be seen in the following way:

GOB ⟺ BAS ⟺ COMMUNITIES

It appears that currently, GOB has little interaction with communities with regard to BAS PAM. For this reason, communication flows mostly between BAS and the communities and BAS and GOB.

While co-management in Belize is ill-defined, BAS may have already taken the first steps to create a working definition by applying for, and receiving, a large grant from the EU. Through BAS' actions, co-management will, in effect, be defined. The EU approved BAS' three-year co-management project in August 1999. The EU will fund 80 percent of the project while 20 percent will be co-funded by BAS for a total of US$1.6 million. Concentrating on CTWS and CBWS, the project's objective is to "involve relevant stakeholders in ecosystems' management to promote biological diversity and ecological integrity through sustainable development activities" (BAS, 1999). The sustainable development activities, or "socioeconomic incentives," will include the promotion of ecologically sound economic activities such as beekeeping, fish farming, gibnut (*Agouti paca*) [42] rearing, cashew processing, medicinal plant production, and craft development. Community members will be trained in natural resource management such as water quality and wildlife monitoring, sustainable development, and the enforcement of PA regulations. Funding for administrative overhead and vehicle purchases as well as the hiring of a project coordinator are also included.

Broad in scope, the project seeks to comply with the NBS by increasing the participation of communities in PAM. Through this involvement, it is hoped that an increased stake in the PAs, combined with economic development, will be created. Additionally, it is hoped that "a relevant and effective co-management structure" will be an end result of the project (BAS, 1999). BAS is cognizant of their position in shaping the dialogue on co-management in Belize. Referring to the project, one BAS staff member said, "If we're successful, it will change the name of the game." According to another BAS staff member, BAS is well-placed to attempt co-management and could have some advantages

[42] The gibnut is a large forest rodent, prized as game.

over, say, the government. BAS, for instance, can access international funding for projects, funding the government would have to allocate itself. Furthermore, an NGO such as BAS can improvise and stretch funds—and use them creatively—and could therefore have more impact. BAS is also less affected by political constraints. It was mentioned, however, that BAS needs to improve internal structures within the organization before they can "jump into" co-management.

Improving internal structure is one of a number of things that BAS may need to consider as it proceeds with co-management. As BAS broadens its portfolio to include community development, it will want to consider the need for linkages between its activities. While BAS is most likely aware of this, it cannot be overstated that development activities must have associated benefits for conservation (Brandon et al., 1998). Without explicit linkages between project development and conservation activities, these activities are no more than a series of unconnected project elements. Development efforts should provide livelihood alternatives—ones that replace ecologically harmful activities—and forms of compensation that "people themselves identify as useful and desirable, and that are concretely linked to the conservation activities" (Brechin et al., 2000). However, care should be taken not to create centers of economic growth where these activities are implemented, as this would be a self-defeating for conservation.

It appears that BAS may not have undertaken sufficient community consultation in the preparation of the project. However, this may be connected to the fact that the EU funding mechanism does not provide for Project Development Funds (PDF), funds that would allow data gathering or preliminary studies (BAS staff, personal communication). For this reason, BAS may have been forced to rush the project proposal without adequate input from the communities. Communities may not be entirely aware of the projects that they will soon be involved with and this is problematic on a number of levels. Perhaps most concerning, however, is the appearance of BAS having gone against its better instincts—that is, consulting with the communities before proposing a community-based project—in order to meet a funding deadline or requirement. The potential of project-driven funding to influence BAS' relationships with communities should not be overlooked.

PACT and Co-management

PACT's Co-management of PAs project was approved and signed in May of 1999. Funded by the UNDP/GEF (US$750,000) and GOB (BZ$150,000), the project aims to develop a community co-managed park system for Belize. Seventeen communities around the PAs of Manatee Forest Reserve, Five Blues Lake National Park, Aguas Calientes Wildlife Sanctuary, and the Freshwater Creek Forest Reserve are involved in the project. One official associated with the project thinks that a policy procedure for co-management will develop from this project because one does not exist at the present time. Not only are procedures lacking in Belize, but it also seems that definitions of co-management vary widely from GOB to BAS staff. Not surprisingly, communities do not seem to know what co-management means and this was corroborated by government officials and BAS staff. As well, looks of confusion followed most references to co-

management in the BAS-associated communities. Similar to BAS' project, PACT's project is for three years, yet one official associated with the project feels that this is too short a time frame, that it takes longer than three years to build relationships. The first year of the project will consist of community capacity building, needs assessment, and profiles, GIS and community mapping, and training in advocacy. The second year of the project will see the development of management and operational plans, and in the third year implementation will commence.

As with BAS' community co-management project, it remains unclear whether the members of the communities that will be the foci of these projects were aware of the proposals. This would appear problematic for the very reasons that co-management is supposedly being implemented. If PACT and BAS are truly committed to forming working relationships with communities, then why would they propose large projects without the communities' input? Could it be that co-management is being implemented without full community support? Furthermore, it is not clear how the communities were selected for inclusion in this project.

PACT's early experiences show that the process will undoubtedly be a slow-moving one. As of November 1999, it appeared that the communities' ability to develop work plans had been much lower than anticipated. PACT's consultants are currently drafting a working definition of co-management for the country as a whole. This will help other groups as they "come-up," or come forward with plans for community-managed conservation (researcher, personal communication).

Community Initiatives

A phenomenon that seems to be increasing in Belize is that of community groups approaching the government with plans for developing their own PAs although little information on this topic was gathered for this report. However, in a number of cases community groups have approached GOB with both plans and proposals for community-managed natural areas. St. Margaret's Village, the principal community that has management responsibility at Five Blues Lake National Park, apparently approached the government before PACT became involved. It appears that communities are eager to benefit from ecotourism with the belief that creating national parks and other PAs in their vicinity will draw tourists to their villages. While the trend is intriguing—the communities appear organized and informed enough to approach the government—it points to an alarming issue. GOB's embracing of ecotourism as the uplifting path to economic development has clearly trickled down to communities. However, ecotourism is not always appropriate—especially in areas where tourism is unlikely—nor is it the panacea that it is often held to be.[43]

To some, co-management may appear to be the current hot topic in the ever-morphing and trend-susceptible international conservation discourse. However, one BAS staff member does not think that co-management is a "fashion trend"—at least not from the

[43] See Chapter 8 for a discussion of the costs and benefits of ecotourism

organization's point of view—and was thinking about the idea before it was "hot." Apparently, three years ago BAS submitted a concept paper on co-management to the GEF and it "got nowhere," meaning that it was not received enthusiastically (BAS staff, personal communication). However, given that the EU and GEF are now financing large co-management projects in Belize and possibly elsewhere, maybe BAS was simply a "trend starter." At present, BAS seems to be aware of the implications of co-management for conservation in Belize and in other countries that may be watching this experiment.

One Belizean researcher thinks that "co-management has become a buzzword and it needs to be defined *NOW* so it doesn't get out of control," illustrating that co-management has not only become the topic of much discussion, but is being implemented. He also thought that co-management should be defined with standards and limits, that it should be measurable and universal so it can be applied anywhere. Furthermore, it should be able to adapt, the system should be able to respond. "What if co-management is based on ecotourism, for instance, and a hurricane strikes, how will the system adapt quickly?" he wondered, highlighting the oft-mentioned need for adaptable systems.

One BAS staff member sees co-management as something of a process with actual co-management as the end result—the eventual goal. In this process, the first step is involvement—both within the organization and between the organization and communities. Involvement is followed by a partnership between the communities and the organization. It is only after a firm partnership has been established that co-management should be implemented. It appears that BAS is presently working through the involvement stage in some communities, while partnerships may be developing in others.

Another danger described by this staff member is that of the notion of participation and warns against merely holding meetings, asking questions of community members, getting the information, and leaving. This can lead the organization to think that it is doing the necessary work but really is not accomplishing much at all and it certainly is not "participation." Community members are not fooled, though, "they know the difference between meetings, consultations, and participation" (BAS staff, personal communication). In Belize, conservation groups and outside organizations have traditionally worked with village councils (government official, personal communication). However, this is not always participation, as the village councils may not be entirely representative of their communities. It was reported that in one Mayan village, a CBWS buffer-zone community, a BAS consultant watched an assembled community meeting chase away their village chairman when he arrived at the meeting drunk (BAS staff, personal communication).

Currently, co-management of PAs in Belize is a relatively untested strategy. While the approach holds promise both for biodiversity conservation and human welfare, legitimate concerns should be raised. Primarily, the lack of a national definition of co-management, at present, is problematic. A consensus should be reached between involved stakeholders

on just what co-management means in the context of Belize. Additionally, the possibility of BAS' relationship with GOB changing could have a significant impact on co-management arrangements if this relationship changes. This raises several questions. For instance, if the government is not satisfied with BAS' co-management initiatives, how will this affect the relationship? Or, if for some reason BAS is relieved of its management authority, how would this impact the communities with whom BAS has been working closely? Community efforts and conservation goals on the part of BAS could be set back years and many hours of work on the part of both communities and BAS would be lost.

BAS will be attempting co-management in CTWS and CBWS. In CTWS, a unique management situation and a history of mild conflict with the community of Crooked Tree necessitated a new approach to PAM. In CBWS, as well, conflict has characterized the community of Maya Center's relationship with BAS. The remaining PAs ' communities generally have had less contact with BAS and management issues appear to be less pressing. However, it is helpful to examine all of BAS' PAs in terms of their relationships with communities to draw out cross-cutting themes and areas that BAS may want to focus on in its management.

IV. THE PROTECTED AREAS

Tapir Mountain Nature Reserve

TMNR and the surrounding communities face a challenge that none of BAS' other terrestrial PAs face; TMNR is a nature reserve, a management designation that allows for no human use other than research. While this prevents the over-visitation that other PAs may see, it creates a challenge for BAS and its approach to working with communities. The hiring of local wardens appears to be the only tangible benefit to local communities. There being little to no visitation at TMNR removes the benefit of tourism from the equation and, hence, there are few opportunities to provide incentives for conservation. In fact, residents along the road leading to TMNR have little knowledge of what TMNR is and some are scarcely aware of its existence.

TMNR may have a heavier multicultural setting than any other BAS PA. As such, land-use regimes around TMNR are varied. While there are many milpa farmers whose small farm plots dot the surrounding area, there are also Mennonite communities to the west and northwest of the reserve that farm much more intensively. In parts of Belize, Mennonites have completely transformed the landscape for intensive agriculture. They typically use bulldozers, pesticides, herbicides, and fertilizer in producing over half of Belize's maize and rice (Wallace and Naughton-Treves, 1998). This kind of intensive land use stands in contrast to slash-and-burn agriculture where forest is still part of the landscape. There are also Creole and Central American refugee communities in the area. Hunting is apparently somewhat common and Creole informants said that the "Spanish" residents hunted both more often and a greater variety of animals, including the mountain cow—or tapir (*Tapirus bairdii*)—which is both endangered and Belize's national animal.

This variety of resource use patterns and associated cultures would probably require that BAS use multiple approaches to communicate effectively with such a diverse audience.

It seems that in an attempt to rectify the shortcoming of having no apparent incentive for conservation, BAS has included in the management plan provisions for Integrated Conservation and Development Projects (ICDPs) in the surrounding communities: "the reserve will provide employment and entrepreneurial activities for residents of surrounding communities" (BAS, 1997A). However, it did not appear that BAS had begun or helped facilitate any such projects. If BAS does decide to begin implementing such projects, though, it will want to consider the need for linkages between the projects and conservation. More specifically, these projects should have explicit benefits related for conservation (Brandon et al., 1998). For example, if BAS promotes activities that seek to replace resource extraction from TMNR, it will want to emphasize *why* it is promoting such activities—that the new activities are more sustainable—within an educational context.

In the buffer-zone community of Black Man Eddy, BAS established a community group, "Friends of Tapir Mountain," in order to facilitate communication between local stakeholders and disseminate information about the reserve. Community members related that they had joined the group for the potential educational opportunities that BAS would provide. A series of workshops, designed to serve as a community needs assessment and increase awareness about the reserve, were held with Friends. Members said that there had been talk of developing income generating activities such as a craft/souvenir shop, but this never materialized. The few workshops that BAS held, it appears, were well received, according to members of Friends. The group now appears to be inactive, most likely due to BAS institutional and funding constraints. This inconsistency in programming and support by BAS probably erodes the confidence of the community.

Although Friends has fallen-off, it would seem that BAS could regain, or establish, positive community relations. One informant sees Friends as a good opportunity for bringing community members together because similar activities and interest of other organizations does not exist. This would seem a valuable factor for BAS to capitalize on: if the community positively views BAS' involvement—and it fills a niche in the community—reconnecting with the community group could be beneficial to all stakeholders. As well, TMNR, given its lack of visitors—and the related lack of conservation incentives—makes this PA a prime location to develop EE activities with communities and schools. Without EE, and having little apparent benefit to communities, TMNR is likely to remain unknown and unappreciated.

Guanacaste National Park

The setting of GNP is essentially urban. Seated at the juncture of two highways, GNP is the most accessible of Belize's PAs (BAS, 1997b) and one of the smallest at 55 acres. The town of Roaring Creek, with a population close to 4000 (community member, personal communication), is located to the west, just across the river from the park.

Belmopan, Belize's administrative capital, with a population of 5500 (BAS, 1997b), is located two miles to the south. Given the proximity of the park to large towns, human presence is an inescapable factor affecting GNP. This proximity is a double-edged sword: locals are constantly moving in and out of the park, which creates management dilemmas, yet the wardens can easily communicate with the communities (the English speaking ones).

The park fits the definition of an island, ecologically speaking. It is bordered by two rivers, surrounded by farmland, and shares a border with Roaring Creek. Roaring Creek and the surrounding hamlets—including the refugee communities of Salvapan and Las Flores—exemplify the multicultural nature of Belize as a whole. Creoles, Mestizos—both nationalized Belizeans and recent immigrants—Garífunas, Mayans of at least two different groups, and American missionaries, make up the local mix of cultures.

The local warden policy would appear to be only as effective as the communication skills, or cultural similarities, between the wardens and the communities. The mix of cultures surrounding GNP, as well as other PAs, provides a challenge to park staff who are charged with communicating information about the park and providing EE. BAS does not have the resources to hire staff that represent all local cultures and as a result, some staff may not be able to communicate with certain communities.

GNP faces a familiar problem of parks in the tropics, the issue of local access. Hunting and fishing by local people are concerns and have obvious implications for resource conservation. The hunting of iguanas in the park is particularly rampant. However, people also merely use the park as a means of access—a thoroughfare—and have done so for many years. They cross through the park on their way to work or to their fields. Taking away this access, if not for fishing and hunting, is problematic and creates resentment in the community. "It would be different if the laws had been in place from way before but it bugs you when they tell you not to hunt or fish," said one community leader from Roaring Creek, where interviews were conducted. Community members say that they used to use the area for picnicking and recreating but it is not available in the same way as it used to be. However, some also say that they have other areas just as suitable, yet closer, that are not within the park's borders.

It is unclear exactly what the park's policy is on local access. However, it appears that the wardens allow access to locals on a limited basis. This is an example of the occurrence of incidental decentralized management; the wardens are making decisions based on what they see as the primary concerns and management priorities. More explicitly, while policy may dictate that only paying visitors are allowed access to the park, the wardens may be using their discretion in enforcement based on their knowledge of local people's behavior. This may indicate a need for wardens to be allowed more decision-making responsibility as they are in closer contact with the local situation than the central office.

The diverse and difficult responsibilities that the field staff take on is further illustrated at GNP. The wardens, who spend the majority of their time attending to day-to-day

management duties, are also charged with reaching out to the community. While the wardens' mere presence in the community doubtlessly allows for informal EE of community members and the communication of certain park goals and objectives, the amount of time that they have to devote to community activities is minimal. However, it appears that the wardens currently are active in trying to organize youth groups on their days off. This would serve various functions. In addition to educating the local youth about the importance of conservation and the park, it would serve the purpose of allowing them to engage in extracurricular activities, a valuable objective in a community subject to increasing rates of drug use and high unemployment.

One community informant said that the park "should do more," indicating a sense that the community thinks the park should be involved in the community. Another informant thought that BAS should publicize the park more. A Peace Corps Volunteer had recently started working with youth groups in Roaring Creek. Working closely with Peace Corps Volunteers in such areas as community development and environmental education could be a way for BAS wardens to continue working in the community with outside support, yet without stressing BAS' resources. As well, conservation education could be achieved. BAS may want to strengthen this link.

BAS has considered the idea of allowing a concession stand in the park, perhaps run by women from the community who could sell baked goods. Apparently, BAS was "talking strong" about this endeavor, according to a women's group leader, but has not approached the issue for some time. However, it was also mentioned by one informant that having a concession stand would be an invitation to thieves. Security in this situation would have to be addressed by the government and BAS.

Other possible community projects mentioned by youth group leaders included a rotational boating concession and an iguana reintroduction project for kids. The boating concession would need to be promoted to tourists by BAS as park visitors do not often visit the community. An iguana reintroduction project could serve as a vehicle for community-based EE and the involvement of youth in park management activities—a desirable combination. However, this is problematic as it could also send mixed messages about wildlife consumption or even hunting in the park. Questions about why BAS is helping to raise iguanas could arise in the communities and the conservation purpose of the project could get misconstrued. Is BAS raising iguanas to repopulate for hunting purposes, a community might wonder? BAS may want to consider this if they attempt this type of project.

Half Moon Caye Natural Monument

The notion of community takes on new meaning when discussing HMCNM; "community" in this marine context is difficult to define. Because the site is located 55 miles east of Belize City and the mainland on the edge of Belize's barrier reef, "local community" is a relative term. BAS considers ten communities and large towns to be buffer-zone communities, although none of them are local—the majority are fishing towns on the mainland. These towns and communities are considered buffer-zone

communities because it appears that many of the fishermen who illegally fish in the waters of HMCNM tend to travel from these communities.

Lobster and conch are of particular interest to fishermen. They are both bigger and more plentiful, given the relative distance and isolation of HMCNM from communities and towns, and the area's protected status. Heavy fines are imposed for fishing out of season, yet there exists a sizeable black market for seafood. Additionally, fishermen from Guatemala and Honduras are often seen in the area and it is unlikely that the threat of fines would deter them from fishing.

Until recently, the wardens on HMCNM were without a boat and trying to catch the fishermen—either to explain rules or to enforce them—was like, "a one-legged lady trying to catch a two-legged man," according to one warden. Additionally, the fishermen knew that the wardens were incapacitated, only adding to the wardens' frustration. It appears that now, with the addition of a boat, wardens will be able to explain and, if needed, enforce rules. An ex-fisherman was hired as a warden, the benefit being that the warden is both intimately familiar with the activities of the fishermen—which facilitates enforcement on the part of BAS—but also provides a measure of "enforcement lite" whereby community members—the resource users—are primarily counseled, as opposed to reprimanded.

It appears that communication with the fishing community, as in all other management situations, is key. However, realizing this communication and contacting fishermen is problematic due to the disparate nature of the communities, some of which are located many miles apart from each other over open ocean. The potential exists, however, for outreach to be facilitated through fishing cooperatives. Seventy-five percent of commercial fishermen in Belize are represented by cooperatives (fishing industry representative, personal communication) so working with these organizations as a forum for educating fishermen about the function of PAs could prove fruitful.

Blue Hole National Park

The villages of Armenia and Ringtail are located on either side of BHNP. While Ringtail is contiguous with the park border, the potential impacts on the park from this community appears minimal; only five families inhabit Ringtail. Armenia, on the other hand, is located four miles north of the park but is home to over 400 people (BAS, 1997c). Interviews were conducted primarily in Armenia.

Most of the residents of Armenia are Spanish-speaking immigrants from El Salvador and Guatemala, some of whom have lived in Belize for 20 years, while others are recent arrivals. Residents typically farm for a living, growing mostly corn and beans but also producing tomatoes and cabbage on a smaller scale.

Community members' interaction with BHNP seems relatively limited. People are hired from the communities, especially Armenia, but only for infrequent construction projects, not normal maintenance (community members/BAS staff, personal communication).

Two park wardens are from each of the communities. Community members in Armenia appear to recognize the wardens' employment as a benefit to the community. While it seems that BAS does not often engage in EE activities, perhaps once or twice a year, the community sees the wardens bringing "new ideas" to the community as positive and thinks the park provides educational opportunities to the "younger generation." The number of educational activities will probably increase in the coming months with the implementation of the MacArthur Foundation-sponsored "Education for Sustainability" project. Women occasionally travel to the park to sell crafts to tourists, yet community members stated that they thought it would be better if the women could remain in the village to sell their crafts. BAS has mentioned the possibility of a craft store, as well, but there are no plans to go through with development at the present time. A concession stand is also being considered for the benefit of community members, yet it is not clear how it could be set up to be of benefit to more than one person in the community. A tour guide group, which would facilitate coordination between tour guides and develop their business, has been proposed but this is still in the planning stages.

Citrus farms in close proximity to the park create numerous challenges and may, potentially, pose a greater risk to the ecosystem health of the park than community activities. Ecological management concerns are obvious; agrochemical runoff, erosion, and the absence of vegetative buffers along streams are particularly destructive. These factors are damaging for ecological reasons but also serve as a negative stewardship model for surrounding communities. In Armenia, community members wondered why rich people could flagrantly disregard environmental laws: "Why should we comply if the business doesn't?" they asked. To them, it seemed ludicrous. As well, if the government supports—or does not condemn—harmful land management practices, community members notice. In Gales Point, Belize, a community member reflected on the government granting timber concessions in a nearby forest reserve: "Why should we respect the government and its rules for hunting when they are cutting in the reserve?" (Belsky, 1999). BAS may want to pressure GOB to enforce buffer strip laws in these areas.

If extension groups hope to do work in forest management, soil conservation, and general natural resource management in this area, having such a negative and visible example created by the citrus farms will probably be a disadvantage to future work in this area. Additionally, the fact that many of the residents of this farm are migrants/non-residents, the resulting lack of feelings of ownership or having stake in the area may create challenges to conservation. Staff from communities on both side of the park are represented yet the citrus farm, which is much closer geographically, seems to have no sort of representation or inclusion by BAS. Apparently, two years ago there was a problem with citrus workers poaching in the park. The park director went to the boss of the farm and had the boss spread the word that BAS would be patrolling and arrests would be made (BAS staff, personal communication). While this supposedly ended the problem, it seems that reaching out to these groups through EE could be an added measure to address poaching.

BHNP will soon be expanding by 3500 acres with the addition of land donated by Target Earth/Eden Conservancy, a Christian EE organization. The fact that this new area has been acquired begs the question: What will BAS do? Will they continue to manage as they have been, that is, with a somewhat hands-off approach to land management? The expansion will create a true "buffer-zone community" in that Armenia will now be much closer to the park border, whereas before, the land between the park and Armenia served as something of a buffer. This was indicated by a staff member as the reason for the lack of conflict between the park and Armenia—the fact that there exists a significant area between the community and the park boundary.

That this buffer exists highlights a need for BAS to begin to collaborate with land-use organizations and agencies. If BAS is to tap in to the current trend of ecoregional approaches towards land and biodiversity conservation, it will need to begin to address land use by communities around its PAs. In an area like Armenia, where families are growing and land is being cleared for farming, agroforestry and sustainable farming practices should be promoted.
Although community members have little involvement with the park, they seem to view BAS favorably and express a desire to work with them. Perhaps the residents' seeming willingness to participate may stem from a desire to be recognized or consulted with. It seems likely that any positive attention or inclusion by the governments of the countries from which these people fled was minimal at best. For this reason, they may be willing to cooperate and work with BAS, a nationally recognized NGO.

Crooked Tree Wildlife Sanctuary

"We born and grown-up here. We have a right to fish. Everyone has a right to fish." —Fisherman in Crooked Tree

CTWS is unique among BAS' PAs. It is characterized by a complex inland freshwater lagoon and wetland system and is known for its diverse and abundant migratory and resident avifauna, including the endangered Jabiru stork (*Jabiru mycteria*). The very nature of the sanctuary's location creates management challenges; the village of Crooked Tree (CT) is located on an island in the middle of the Crooked Tree lagoon and is, in effect, surrounded by the sanctuary. In CT, many community members fish for subsistence and recreation while only seven to ten people fish commercially. The commercial fishermen string gill nets and catch large quantities of fish to sell in nearby villages and local markets. It is this commercial fishing that is primarily of management concern as it is illegal to fish in a designated wildlife sanctuary.

The village, in the heartland of Belize's rural Creole population, is one of the oldest Creole communities in Belize with a long and proud tradition of hunting and fishing in the surrounding lagoon. With over 200 years of fishing and subsistence and commercial natural resource use, it is not surprising that when the sanctuary was established in 1984, the community had reservations. The other buffer-zone communities that pertain to CTWS—Lemonal, Biscayne, and May Pen—were not visited during this research. Although these communities should not be overlooked, CT's special history of conflict

and contention with BAS—and the fact that BAS is about to embark on the ambitious co-management project—makes the village the focus of this section. Consequently, community members were only interviewed in CT. While it is not within the scope of this paper to detail the history of the conflicts between BAS and the community,[44] illustrating key issues can help to shed light on their current state of relations and provide insight for future courses of action.

BAS and the Community

Conflicts arose between BAS and CT after the sanctuary was established in 1984. Originally, the community members thought the sanctuary would be primarily for bird preservation. They say that there was little resistance to the idea of a bird sanctuary and there was even a significant amount of support as tourist income was mentioned as a potential boon for the community. Additionally, the community supported a bird sanctuary because it would have limited waterfowl hunting by drunken, gun-toting American hunters who caused the community concern (Johnson, 1998). It seems that resentment grew when they realized the sanctuary would not be just for birds but for fish, game, and pest animals, as well. It appears that miscommunication has characterized the relationship between BAS and the community from this point onward. One community leader indicated that the people may not have been sufficiently aware of exactly what was meant by "sanctuary" and what the resulting restrictions would be. When signs with the words "fishing prohibited" started being posted around the lagoon without explanation, resentment in the community swelled. One informant said that the restrictions were sudden; "BOOM, they said 'stop,'" referring to BAS.

At one point, realizing that tension was building in the community, BAS solicited the participation of the community in the development of the CTWS management plan. BAS assumed that presenting a series of drafts to the community, and engaging the community in the development of the plans, would ensure their participation. However, CT villagers value oral more than written communication. This became evident when they chafed at the draft management plan which was put before them in printed form. The community was incensed when they saw the plan. Apparently, they were not aware of the fact that it was a *draft* plan, that it was preliminary and not final. They thought it had been completed before they could give their opinions and subsequent participation was halted (Johnson, 1998). In this case, a seemingly participatory process was derailed because of a failure to fully incorporate community mores and sentiments. This incident, still referred to in the community as "the meeting," points to a difference in mores between BAS and the community—cultural differences between urban and rural—and a misperception on the part of BAS of what "participation" meant.

BAS claims to have taken a participatory approach to the community conflict but it appears that their approach was not amenable to the community. Some community members feel that they were not consulted by BAS, both before implementing restrictions *and* before a subsequent attempt at community development. At one point, BAS helped

[44] See Johnson, 1998.

secure funding from UNDP for a community cultural center and gift shop. This project was to be a gesture by BAS aimed at helping the community gain benefits from the sanctuary through tourist visits. Apparently, however, the women's group that was to run the center disintegrated and the building sat there, unused. One community leader says that maybe just an enthusiastic few were consulted, people who were open to ideas of promoting tourism. It was also mentioned that in certain circumstances, representation was undermined in other ways. A community representative from Lemonal was chosen to be on an advisory committee yet she was a teacher with a steady salary, a "bad choice" for representing the views of the resource users in the community, according to one informant. Farmers and fishermen should have been invited instead.

One warden feels that people have become more comfortable with the idea of the sanctuary yet he feels that communication between BAS and community groups is a major issue. He also said that people do not see the benefits of participating in groups and there appear to be a number of reasons for this. Primarily, BAS' history with the community may keep people from wanting to either be involved in a fractious debate or be associated with an organization that could be seen as not having the community's best interests at heart. Additionally, people may not want to take on leadership roles as they put themselves at risk of either being ridiculed or gossiped-about; looking "foolish" in front of the community is to be avoided (Johnson, 1998).

It appears that cultural differences between BAS and the community may influence the relationship. One informant mentioned what he felt to be arrogance on the part of BAS and how they approach the community, a certain urban elitism—"because they've been to school, they think they know everything." In another example, BAS' ideas for how to make a community more inviting to tourists do not sit well with the residents and reflect a contrast of urban versus rural values. In CT, cattle are ubiquitous and free-roaming. Apparently, BAS has suggested that cattle owners begin fencing their cattle for ecological reasons—the cattle eat important marsh grasses and may disturb nesting birds—to protect them from jaguars, and also aesthetic and safety reasons. Cattle owners are not likely to be amenable to this, although some other community members feel that something should be done about the rampant cattle for the safety of the community.

An additional historical consideration is the perceived legitimacy (or illegitimacy) of an organization trying to implement management regimes in a place like CT where there exists something of a history of outsiders meddling with natural resource use. Before CT was a sanctuary, there had been a history of white hunters descending on the village to hunt waterfowl and jaguars. Twenty years later, whites were now coming to the village, telling the villagers to conserve waterfowl and jaguars (Johnson, 1998). This seeming contradiction is probably not lost on CT residents.

Community Dynamics

Recent literature has illustrated that community conservation initiatives have been wrought with the assumption of community homogeneity (Belsky, 1999; Brosius, 1998) and CT shows that communities are anything but homogenous. CBC advocates have

often ignored the critical interests and processes within and between communities (Agrawal and Gibson, 1999) and NGOs have been misguided in their assumptions of community consensus and communities' capacities for programming (Brechin et al., 2000). It is possible that these faulty notions of communities working and responding as an integrated whole have not manifested themselves in BAS conservation initiatives in CT. However, the variety of divergent interests, beliefs, resource use patterns, and perceptions of BAS certainly indicates that these issues should be given consideration.

When asked how people felt about the rules, people responded that they thought that times are changing and you have to change with them. Many indicated that you cannot hold on to the "old ways," meaning that resource exploitation cannot continue as it used to. There seemed to be an overall consensus that both fish stocks and wildlife numbers were depleted. One informant thought that people were scared their lifestyles would change yet "we can't keep on like we used to." However, equal numbers seemed to be saying that you just cannot change people's ways. On a similar note, people feel equally conflicted about BAS. Some say that BAS is doing a good thing, protecting nature for future generations. However, others would just like to see the organization gone. In either case, people do seem to agree that BAS needs to communicate more with the community. However, if BAS is to increase its community presence, this is a double-edged sword. On the one hand, it could show the community that BAS is committed to working with them and not against them. However, if just its mere presence creates resentment, then that is something that would have to be addressed.

Further highlighting the often divergent interests within a community, circumstances in CT mirror that of Gales Point, Belize (Belsky, 1999) where ecotourism initiatives result in unequal distribution of benefits. These inequalities between community members, while probably already present, are exacerbated by such infusions of money. One woman who opened a small bed and breakfast in CT was apparently undermined by another community member who opened a larger and more luxurious hotel. The hotel owner was also able to pay people to wait by the entrance to the village to wait for tourists and lead them to the hotel. Resentment resulted from this competition and eventually forced the bed and breakfast owner to shut down. Similarly, a small restaurant owner said that most of the tourists did not come to her establishment; they tended to eat at the hotels where they stayed. Such situations not only point to community socio-economic stratification, but also indicate that ecotourism promotion can create conflict within the community.

There has been much outside intervention (or involvement) from groups such as Peace Corps, School for International Training (SIT), BAS, and tourists and there are some indications that people have what could be termed "intervention fatigue." Villagers are often surveyed (it is unclear whether these are BAS staff or outside researchers who are doing the surveying) yet they are not shown the results. Because of this, the residents are skeptical of giving information. This skepticism of outsiders may also extend to tourists. One bed and breakfast owner who was forced to shut down became exasperated with the behavior of tourists. Tourists would come and wake her up in the middle of the night, looking for a room. They would inspect the room and leave to go to another hotel. She

indicated that it was not worth the trouble. Such intervention could limit the potential for ecotourism as a viable means of generating income if community members are wary of attracting more outsiders. For this reason, community members would have to be thoroughly consulted before any such ecotourism initiative in the future.

Fishing was originally the most contentious issue, although it is unclear if it still stirs the same flames that it did. Although commercial fishing is only practiced by seven to ten people, it did (and does) generate disproportionate angst within the community. At issue is the fact that fishing within a wildlife sanctuary is illegal. There seems to be consensus that native fish stocks have declined dramatically. It seems that now, if not before when BAS was given management authority, the commercial fishermen are a vocal few. It is unclear whether they are particularly good at playing to community fears and mistrust of outsiders/intervention or whether the community tacitly supports them because of those fears. One BAS staff alluded to the possibility that there may exist this vocal pro-fishing minority, another minority that is pro-management, but the majority may be indifferent. One community member thought that many people, may, in fact support some sort of limited fishing restrictions. The major challenge, according to one BAS staff member, will be approaching the issue of outside fisherman.

One of the current management challenges that the staff face regards the presence of fishermen from "outside" towns and villages. It seems that current management as practiced by the wardens involves allowing buffer-zone community residents to fish while chasing away people from Orange Walk, the district where the majority of non-local fishermen come from. This type of management conflicts with national law, as it is illegal to fish within a wildlife sanctuary. However, to the community it may show some sort of commitment by BAS to protecting the community rights. This is further deepened by what could be described as traditional resource-use defense. Community members alluded to there being a traditional resource use and defense regime in CT. They related that people used to chase away outside fishermen from the lagoon and outsiders generally tended to respect local rights to fishing access. While it is not clear why this is not still the case—maybe the need for this has been filled by BAS—it points to interesting issues of common property resource usage and local resource use territoriality. If this is indeed true, this defense of community fishing rights, BAS' co-management project is more likely to be successful as the community is likely to appreciate BAS' efforts to allow them resource access. Nonetheless, co-management of fisheries resources in CT will not be possible unless GOB somehow legislates or approves limited fishing access in the lagoon. Until then, the situation will remain uncertain with GOB and BAS tacitly allowing fishing by locals and restricting access by outsiders. Relatedly, one BAS staff member suggested that there may even have to be a separate clause or designation for CTWS when they reauthorize the NPSA because CT is so unique a situation. Another BAS staff member suggests licensing a percentage of the outside fishermen as one way to achieve limited management.

Another noteworthy community dynamic is that of the notion of species introduced by BAS. People alluded to the introduction of crocodiles (*Crocodylus moreleti*) and Tilapia by BAS. While crocodiles most likely existed in the lagoon before the community—and

certainly before BAS management presence—some people believe that BAS introduced crocodiles to the lagoon and was raising them in a small pond. Community members related that they used to swim in the lagoon until the introduction of the crocodiles and now they mostly fear for the safety of their children. Apparently, BAS did take part in the relocation of one crocodile from one part of the lagoon to another but has not participated in any organized effort at the reintroduction of the species.

The appearance of Tilapia in 1996 has also been attributed to BAS. Tilapia, a non-native African fish genus, popular for farming, are known to be aggressive and can out-compete native species. They appear to be having a negative effect on the native fish populations of chrona (*Cichlisoma uropthalmus*), tuba (*Cichlisoma friedrichsthali)*, and bay snook (*Petenia splendida*) in CT lagoon. Tilapia are edible and there is a local market for them, however, people tend to prefer the native fish for eating and they bring a slightly higher market price. It was alluded to that BAS introduced Tilapia, although the reason why BAS would have done this is unclear. Realistically, Tilapia appeared in the lagoon after most likely escaping from a fish farm.

The protection of jaguars (*Panthera onca*) angers some residents. Jaguars are seen as "mean and dangerous" and although this is probably a belief from "way back," according to one warden, people are scared of jaguars. More importantly, though, is the fact that jaguars do occasionally kill cattle and BAS' efforts to control retaliatory hunting by the community is seen by some as unjust. The wardens' attempts to prevent children from shooting squirrels was also mentioned as an example of BAS lack of understanding (squirrels apparently eat young coconuts, preventing potential harvesting by community members). It appears that both BAS' regulating hunting of harmful animals (jaguars) and the perception of their being involved in management activities that the community is resentful of (introduction of Tilapia, crocodiles)—regardless of whether these things are true or not—probably creates ill will toward BAS. While compensation for livestock killed by jaguars is a tricky issue in Belize—investigating incidents is inherently time consuming—BAS may want to explore this possibility.

Given the complexities and challenges facing CTWS—not to mention a history of strained relations between CT and BAS—it appears that BAS feels that co-management is a necessary alternative. "We won't succeed if we don't share the responsibility" for management, said one BAS staff member. However, BAS will have to determine if the community is ready to enter into this type of arrangement. Competing interests between community members, differing opinions about natural resource management, and social inequality within the community are all important considerations in attempting co-management. A key component of the project will be alternative income generation for the community and BAS will want to focus on activities that have explicit benefits for conservation *and* the community—and make the link obvious through integrated EE initiatives.

Cockscomb Basin Wildlife Sanctuary

Comprising over 120,000 acres, CBWS is certainly BAS' largest and most visible PA and is, quite possibly, one of Belize's best known PAs. Alternately known as the "jaguar reserve," the area gained international attention through the work of zoologist Alan Rabinowitz who surveyed the jaguar population there from 1983-1984. Formerly a Crown Reserve, the area was subsequently declared a sanctuary in 1986.

The CBWS area is to be the other focus of the co-management project. There are a number of issues that BAS will want to consider as they proceed. Issues of factionalism and divergent community interests, some of which BAS is probably aware of—as well as disparities between communities—seem to be at the fore.

One of the buffer-zone communities of focus, Maya Center (MC), is one of eight buffer-zone communities that are located near the sanctuary's borders; the average number of residents in these villages is around 350 (Isla Villar, 1999). Villages listed for inclusion in BAS' co-management project include MC, Red Bank (pop. 600), Maya Mopan (pop. 407), and Georgetown (pop. 365), a Garífuna community. Community members were interviewed in the villages of Santa Rosa (pop. 200), San Roman (pop. 340), Maya Mopan, and Red Bank.

MC has a population of just over 400 ethnic Mopan Maya. Some residents of MC hold title to their land but the majority lease plots of land from the government, which are typically planted in citrus. As well, residents grow corn and beans, mostly for consumption, on leased, private, and communal plots. Others work at resorts in nearby Placencia,[45] a developed town on the coast that is popular with tourists. MC is situated six miles from the sanctuary at the start of the only road that leads to the sanctuary. Because of its location, MC is in a unique position to derive a certain amount of benefits from tourism. In addition to the benefits associated with tour guide and laundry services, a craft shop, food stores, restaurants, and increased food production,[46] the hiring of research assistants, cooks, and casual labor have benefited the community.

In the Cockscomb Basin area, the notion of "community," particularly the idea of "local community," is complicated. Many of the Mopán Maya inhabitants are not originally from the Stann Creek district where CBWS is located. Many began migrating from the Toledo district, due to privatization of land and the ensuing dislocation and unrest that followed, starting in the mid-1970s (researcher, personal communication). It appears that since the settlement of large numbers of Mayans in the district, there has been a fair amount of in-migration. Mopan Maya, who are thus relatively new to the CBWS area, Kekchi Maya, who are from Guatemala, Creoles, Garífunas, and Spanish-speaking immigrants from Honduras, El Salvador, and Guatemala, comprise communities in the area. While ethnicities generally differ between communities, some are represented *within* communities, as well. Additionally, even Mayan villages that appear to be

[45] It should be noted that none of these means of generating income is mutually exclusive.
[46] According to community members, the stimulated local economy has boosted corn and plantain production.

ethnically and socially homogenous represent divergent interests and beliefs. This was at least partly evidenced by community dynamics and structure in Maya Center. Such cultural and social disparities have definite implications for partnership-building and communication between BAS and the communities.

Issues of Relocation

Local people's attachment to an area—legally, geographically, ecologically, and spiritually—determines everything from resource use patterns to participation in community projects. When local people are denied right to the land, first and foremost, their dedication to maintaining sustainable systems is eroded. This is particularly true in instances of local people being relocated for the establishment of PAs. In the case of relocation of local people, national "long term interests may conflict with the interests of groups and individuals who are adversely affected" (Cernea, 1988) and this appears to be the case in the establishment of CBWS. This relocation is not far from the memory of many in MC and underlies much of the relationship between BAS and the community.

Twelve families were removed in 1984 from the area formerly known as Quam Bank preceding the establishment of CBWS. The area where they were removed from is now where the sanctuary's facilities are located. These families were mostly engaged in small-scale agriculture at the time. BAS points out that the families living there had been doing so illegally as it was Crown Reserve land, land designated as such by the colonial government. Thus, the land officially had protected status, although this may not have been apparent to the Mayan migrant farmers and timber workers who had established small farms and residences in the area. GOB was responsible for the relocation, not BAS, as BAS did not yet have management authority. When asked about this "eviction," one BAS staff member responded that it was not an eviction because the people there were "squatters" and had been there for only maybe two years prior. It was also said that the families had resided there for eight years (researcher, personal communication), an indication that this issue is certainly viewed differently by different stakeholders. Six of these families resettled in Maya Center and the remaining families resettled in the other buffer-zone communities of Maya Mopan and Red Bank. They were given land to farm in Maya Center, albeit leased land.

Resentment is directed towards BAS who has managed CBWS since it was established and has been responsible for most or all management decisions since that time. BAS seems to think that the resentment should not necessarily be directed towards them yet, to the community, the distinction between the government and BAS is probably non-existent. The fact that the land was a Crown Reserve before it was established as a wildlife sanctuary—a justification for the relocation, in the mind of one BAS staff member—is probably irrelevant in the minds of the people who were living there. Furthermore, while the number of actual families removed was small, the intervention was and still is "felt by whole community" and resentment lingers (BAS staff, personal communication). It appears that community members feel that BAS owes them something for the perceived injustice of resettlement while BAS has the attitude that community members ask too much of them.

Furthermore, this "injustice" has probably been magnified and compounded by other government interventions. A dynamic similar to one that exists between MC and BAS may exist in another buffer-zone community. In Red Bank, there are around 100 Kekchi Maya families who were evicted from the area that was to become Chiquibul National Park, an area to the west of CBWS (Saquí, 1999). While they now are living far from Chiqibul, they are living just outside the CBWS boundary. If there are feelings of resentment toward either the government or PAs in general, this would make approaching these people as partners somewhat difficult. A researcher also thinks that maybe 70 percent of the residents of Red Bank would rather not have the park at all, indicating that the park has somehow restricted their activities. PFB has been involved with an ecotourism project focusing on the conservation of the Scarlet Macaw (*Ara macao*). However, the people supportive of the Macaw project are *not* those who were removed from the Chiquibul area (researcher, personal communication).

While the issue of possible human rights abuse is never far from any discussion of forced resettlement, there is the possibility that benefits are gained from the relocation. One informant in MC indicated that there is no resentment on the part of the evicted families—his family being one of them—because their children could not go to school before. As well, they gained a stronger voice with which to approach the government when they went to inquire about land (which they were subsequently allowed to lease).

Given this history of relocation, MC's history with BAS is marked by conflict. There have been incidents where communication between the community and BAS has broken down and while it is not within the scope of this paper to detail the history of this relationship, it is important to note the environment in which BAS operates.

BAS and Maya Center

BAS appears to be currently working towards improved communication with MC, although it maintains little contact with other buffer-zone communities. BAS communicates with MC by through local staff and an advisory committee. The advisory committee was formed in the wake of a dispute between BAS and the community in 1998 where the community threatened to close the gate to the park. BAS established the committee as a forum for communication and as a sounding board for community concerns and includes CBWS staff, community leaders, and BAS administrative staff representation. BAS feels that this situation is unique in that an NGO or management entity allows such input from a community. The fact that "we allow ourselves to be advised is novel" said a BAS staff member, and this arrangement demonstrates a participatory approach being implemented. BAS also feels that this type of arrangement has improved relations with the community and wants to replicate it in other PAs.

A warden indicated that communication between BAS and the community was improving but that very same day, a meeting with BAS office staff was cancelled with no previous notice. While it is unclear if this is a common occurrence, the community members present indicated that this negligence on the part of BAS was aggravating. Improved communication was indicated by a number of community members as

something they would like to see happen between BAS and the community. They want open communication in order to be kept abreast of things—they do not want "surprises" and want to be sure BAS considers their recommendations. It was also indicated that meetings with BAS are "talk but no action" and they are infrequent at best.

BAS has a number of agreements with MC. In a non-binding agreement, BAS is committed to first-preference hiring of staff and casual labor—in consultation with the advisory committee—from buffer-zone communities, yet all but one of the CBWS staff is from MC. This could be problematic for other buffer-zone communities that BAS may wish to include—and who wish to be included. Integrating the community in daily operations of the park is under consideration. Allowing the community a greater stake in the management of the visitor facilities in CBWS—visitor dorms, cabins, and kitchen—has been discussed, but it is not clear how this should be approached and managed. The establishment of a concession stand run by community members has also been considered, yet it is difficult for community members to reach CBWS on a frequent basis and visitation is, at times, infrequent.

With the start of its co-management project, communication with and participation by communities will surely expand. During the research period, CBWS staff had had little contact with communities for some time. This was mostly due to the lack of a functional vehicle with which to reach communities. However, BAS has since purchased a vehicle and staff will probably begin to expand outreach and EE efforts.

BAS coordinates primarily with the Women's Center (WC). The WC, also known as the Maya Center Women's Craft Cooperative, was established in 1988. BAS helped the WC secure funds for a corn mill project, which appears to be the only community development activity that BAS has undertaken. The WC sells handicrafts to tourists and is conveniently located at the only entrance to the sanctuary. The WC has been given the authority by BAS to collect entrance fees for CBWS at the gate, yet there is only a verbal agreement between Maya Center and BAS, that is, there is no legal binding agreement between the parties. Apparently, BAS had considered erecting a second gate closer to CBWS and away from the community, although this was decided against. It appears that the community thought that the ticket collection would be moved closer to the park border. This could have been perceived by the community as underhanded, and it certainly would not improve relations between the two parties. To the community, having this uncertainty attached to a benefit that they value may create a sense of distrust.

Currently, ten percent of sanctuary admissions collected at the gate by the WC are kept by the Center. This is a unique agreement; park revenues are rarely returned to local residents in similar situations internationally (Wells and Brandon, 1992) and benefits to local people are usually somewhat more indirect. The opportunity to highlight this link between the park and the community cannot be overstated. In 1999 and 2000, BAS and the MC village council were trying to decide if the money should go to the village council instead of the WC, an action recommended by the advisory committee. It appears that some members of the community felt that the money was not being fairly distributed throughout the community. Not all women in the community are members of

the WC and some felt that the money would be more fairly distributed if it passed throughout the village council. It was also mentioned that women within the WC were also divided over how the money was allocated. While the WC eventually was able to retain control over the money, concern over the mismanagement of funds and a division within the WC arose. Situations such as this have the potential to create divisions within a community, divisions that may not have existed previously.

With the start of the co-management project, it is likely that if BAS makes explicit that it is sincerely soliciting the managerial capacities of the community, doubts of BAS' intentions and the tenuous nature of their agreement will begin to vanish.

Differences Within and Between Communities

Cultural and social differences exist within and between communities. These differences affect their relationships with BAS, their relationships with each other, and their resource use behavior. Primarily, MC derives most of the benefits of tourism associated with CBWS while other communities who lack the strategic geographic position of MC are left wanting. Additionally, ecological differences between community settings play a part in these communities' relationships with CBWS.

In the CBWS area, communities are located no less than five miles from the sanctuary border so there exists somewhat of a buffer between the communities and the sanctuary. However, the buffer, in some cases is comprised of mostly citrus plantations which merely forces hunters to go beyond the plantations into the sanctuary. In the case of MC, one of the biggest possible threats to the integrity of the sanctuary is the lack of protection of the land between MC and the sanctuary, land which is relatively undisturbed forest—a seemingly effective buffer. Apparently, the land is privately held; at any given moment, it could be put into production and erase any buffer area between MC and the park boundary. Developers and private interests own much of the land to the east and south and this is probably a much bigger threat than communities, according to BAS staff. MC has been the focus of BAS' attention, given its history with the sanctuary and BAS and the organization's associated management responsibilities. However, other communities are actually closer to the sanctuary border and may, in fact, be involved in more resource exploitation within the sanctuary. This could be partly due to the local ecological characteristics.

San Roman, Santa Rosa, and Maya Mopán are located in areas where the extent of lowland broadleaf tropical forest is limited. Pine savanna is more prevalent, yet probably features fewer game species than the broadleaf forest that characterizes the sanctuary and some of the areas surrounding other buffer-zone communities such as Red Bank and Maya Center. The pine savannas are home to white-tailed deer (*Odocoileus virginianus*) and some ground birds which are popular game species. However, the broadleaf forest is home to gibnut, agouti (*Dasyprocta punctata*), quam (*Penelope purpurascens*), red-brocket deer (*Mazama americana*) and peccary (*Tayassu* spp.)—a greater diversity of species of equal or higher interest than those of the pine savannas. This difference in species distribution indicates that people from these communities are tempted to travel

into the sanctuary in search of these species (BAS staff, personal communication). Given this potential difference in resource exploitation, BAS may want to devote more attention to these communities. As for enforcement, one staff member felt that punishment was futile, saying, "If a child crosses the road to go play, you might spank the child but (the problem) isn't solved." He suggested examining why hunting is being done.

It seems that hunting by community members is mostly for subsistence, not trade. Gibnut, peccary, and deer are hunted for the most part, not jaguar. However, given that gibnut and peccary are the jaguar's primary prey, over-hunting of these animals has significant effects on the jaguar. When asked about people's resource use in and around CBWS, one community leader said that people do hunt, but if they have money, they do not need to. In the same conversation, a warden contradicted this by saying that people do hunt, regardless of income level. Another informant said that people "need to have the taste" of bush meat. Yet another stated that whether he had beef, chicken, or pork on his table, he would still need to have wildlife meat: "People grow up eating it and can't give it up," he said. However, the same informant said that in other communities, they people probably hunt more because they do not know what the sanctuary is and they are not seeing the benefit of the sanctuary.[47] According to him, "most," or around 75 percent, of the residents of Maya Center saw CBWS as important. A number of informants indicated that at least in Maya Center, there is a conscious connection between killing wildlife and tourists not wanting to come. Another informant supported this by saying, "If you kill it, you'll have nothing left to show the tourists." While a certain recognition of the importance that CBWS plays seems to flow through MC, the differences in beliefs and opinions—and indications that conservation awareness is higher here than in other communities—are important not to overlook.

Communities often neglected are those of migrant citrus and banana workers. These communities, such as Mayan King, located to the east of CBWS, are difficult to reach for varying reasons. Many of the workers are Spanish speaking immigrants (sometimes known to other Belizean groups as "the Spanish") and a communication gap exists between them and the CBWS staff. One BAS staff member felt that this cultural gap was due not only to language barriers. The immigrants are not Belizean and this in itself prevents meaningful communication as the groups share different cultures, histories, and nationalities: "We Belizeans can understand each other," he related. The warden also mentioned that it was difficult to form a working relationship with the members of these communities due to the short period of time that they reside in the area. Because of this, the immigrants' ties to the land, and, thus, their feelings of ownership or stewardship, are tenuous, and this can create barriers to resource conservation.

Furthermore, it was mentioned that "the Spanish" tend to use forest resources differently. "Immigrants eat everything, much more than us," said one informant. Mayans tend to hunt only peccary, deer, and gibnut and hold the jaguar to be sacred while it appears that the "Spanish" hunt these animals in addition to cats, tapir, and various forest birds and other animals of conservation interest. "They eat everything," said one Mayan informant.

[47] It should be noted that this particular informant was a tour guide and earned income directly from sanctuary-related activities.

These migrant workers, referred to by one Mayan informant as "aliens," also fish the rivers differently. They use nets, "sweeping the river—catching everything, great and small" (community member, personal communication). Other community members indicated that the "Spanish" take all the jobs. Mayans typically earn BZ$15 per day but the "Spanish" are willing to work for BZ$13 and this creates tension. While the immigrant issue is complex at many levels, one BAS staff member thinks that immigrants should be given citizenship status and they should be made to feel part of the system as much as possible. When they "feel they're a part of the system, they work with it" and without nationality, they have no reason to protect the natural resources (BAS staff, personal communication).

While it is not clear how much knowledge these immigrants have of CBWS, it is likely that they are involved in resource extraction activities within the sanctuary. Reaching out to these groups is difficult given communication gaps with BAS staff, the groups' transient nature, and low levels of social cohesion (Isla Villar, 1999). However, BAS may want to consider supporting staff exchanges between PAs. In this way, Spanish speaking field staff from other PAs could conduct workshops and educational activities in the immigrant communities for limited amounts of time.

That MC receives the majority of benefits from the existence of CBWS is not surprising—and this is not lost on the residents of other communities. One MC community leader said that MC is deriving benefits from the sanctuary while other communities are not. Additionally, one BAS staff member thought that BAS may give a certain amount of preference to Maya Center, yet thinks that all the buffer-zone communities should be allowed to gain benefits. Another MC community member said that women from Santa Rosa and San Román go to MC to sell crafts. However, this was refuted by community leaders from Santa Rosa who said that MC does not let residents of other communities sell their crafts in MC. Members of this community say that the benefits are being taken by MC only. This points to the larger questions of cultural cohesion and cooperation between communities. It is highly likely that the perceived benefits of CBWS have created divisions between communities. According to one warden, people from MC became upset when a director was hired from another Mayan community. Apparently, they believed all benefits should be going to MC while BAS was attempting to reach out to other communities.

There is an interesting issue of "it's not us, it's them" in MC. Numerous informants from Maya Center said that the other communities hunt more, that the wardens need to go there and educate. This could be a function of the greater number of interviews conducted in MC or MC may be more exposed to and influenced by conservation rhetoric. Additionally, residents of MC could truly have a greater investment in and concern for CBWS than communities who derive no benefits. Furthermore, residents of Santa Rosa think that San Roman is "doing all the cutting and clearing" in the vicinity of CBWS which is possible given San Roman's more rapid growth (community members, personal communication).

As well as the cultural differences between communities, it seems that cultural differences between BAS office staff and community members could be leading to difficulties in communication. While the entire staff of CBWS is Mayan, there are no Mayans in the office in Belize City. Cultural differences seem to arise in management behavior. Mayan women typically bring their infants and small children to work with them but the office frowns on this; they see it as disruptive to working. Additionally, BAS often hires villagers from Maya Center for casual labor in the sanctuary. The villagers would like to spread the hiring through the village, allowing the benefits to flow through the community. However, this is problematic from a management perspective. Training a few community members to do a range of jobs is much more cost-effective than allowing a constant flow of untrained or under-trained laborers. BAS is actively reaching out to the community by hiring community members but it seems that if BAS wants to improve the relationship, it may want to consider these cultural differences in work behavior.

With regard to BAS' operations, one researcher said that NGOs have a mandate to carry out projects and this is compounded by the fact that different NGOs have differing objectives. They find the people who are interested in participating yet those who do not participate are further removed from the activities; divisions within the community are then exacerbated (government official, personal communication). Conflicts arise and divisions are created in communities when community members who are involved with the projects receive certain perks and benefits. Those who receive training or are paid to travel around the country—or even outside of the country—are now receiving a certain preferential treatment and may be viewed as such by other community members. Additionally, the communities may not have the skills to work-out the conflicts that arise. On a related note, in its co-management project, PACT is attempting to seek out community members who have not been trained repeatedly by various projects.

Community members in Santa Rosa and Maya Mopan indicated that they would like tourism and the benefits that it brings. They see the success of Maya Center, a community that has benefited economically from ecotourism, and wonder how they can attract the tourists. In San Roman, the community may have heard of CBWS, but many are not sure what exactly it is. Apparently, they hear about it on the radio but there is not enough information available to them. They indicated that they want to learn more, though, and would like any support BAS can give them, especially with regard to tourism.

Promoting ecotourism is problematic for a number of reasons, not the least of which is perceived cultural "pollution" by the tourists. One community leader in a buffer-zone community (Maya Mopan) mentioned an incident where visitors, who were helping to build a guard outpost in the CBWS, were swimming naked and "dancing around" in a community bathing area in plain sight of women and children. While the leader did not appear to begrudge the visitors their behavior, acknowledging that different cultures behave differently, he was explicit that this behavior was not welcome in his community. He said that when visitors come, they should respect local ways. This concern that tourists can have a negative impact on local culture was raised in other PAs (CTWS).

The cultural implications of tourism and conservation intervention may need to be given consideration. Tourism and the resulting imbalances in income levels "has wrecked Maya Centre. It was a change they were unprepared for," said one researcher, indicating the rapid cultural and social changes brought about by tourism.

The importance of accounting for these cultural differences cannot be overstated. Both GOB and BAS will want to give weight to and consider these differing world views as they enter into partnerships with disparate ethnic groups such as those in the Cockscomb area. As well, the importance of having Mayan staff and directorship at CBWS is crucial to negotiating communication between BAS and the Mayan communities. It is here that the need for having field staff trained in community facilitation comes to the fore.

Establishing the link between conservation and development in projects directed towards these ends is extremely important (Wells and Brandon, 1992; Brandon et al., 1998). However, in the case of BAS supporting projects in the communities without a clear link to conservation, it is possible that the good will factor could play a part in fostering conservation. For example, BAS is currently managing an IDB-funded project entitled "The Indigenous Women in Local Governance Leadership Program." The project's goal is to train Mayan women in local governance and the political system and prepare them to participate more fully in the political process. While one goal is to allow them the opportunity to participate in the advisory committee on CBWS, the other project goals are less concerned with CBWS management directly. In the case of this project, its implementation could very well show that BAS has an interest in the well-being of the community and the village may appreciate this. Community development projects may help to increase support for BAS and its mission. However, these projects cannot be expected to influence behavior with regard to CBWS. The links between projects such as these need to be explicitly linked to conservation.

Attempting co-management in this setting will be a challenge for BAS. At present, divisions within the community of MC, differences between communities—both cultural and geographic—and possible cultural differences between BAS and the communities will figure in creating obstacles to partnerships. BAS appears to be committed to forging new working relationships with communities in the CBWS area, however, and will most likely continue to develop innovative strategies for dealing with such a complex and ever-changing environment.

VI. CONCLUSION

BAS is faced with the formidable challenge of approaching and working with communities in the context of PAM. The diverse cultural and social settings that surround BAS-managed PAs magnify this task.

BAS is heading in the direction of increased community involvement. In the case of CBWS and CTWS, the levels of involvement and participation by communities will be more pronounced than in other areas. Given this trend, BAS will need to increase its

capacity to work with communities. While it has not been entirely successful in its community collaboration in the past, the organization appears to learn from its mistakes, incorporate new ideas, and adjust its actions accordingly.

Furthermore, BAS is not faced with the uphill battle that faces protected-areas managers in many other parts of the world. Conflicts between BAS and communities have been few and where there have been conflicts, they have been relatively low-intensity. Population density around PAs in Belize is low, although this will soon change, due to both a high birth rate and steady migration from neighboring countries.

Based on the information given above, the following recommendations attempt to capture salient community issues in and around BAS-managed PAs.

VII. RECOMMENDATIONS

Recommendations for CTWS and CBWS

- Increase EE outreach both to communities that have been accessed in the past and new communities whose contact with BAS is limited or non-existent.

- BAS will need to ensure that links between community development projects and conservation are explicit.

- Create a regional management or steering committee with staff from BAS on the committee to coordinate. BAS is considering helping to establish advisory committees in all ten villages around CBWS with an advisor from each committee sitting on a regional committee. This model should be developed and disseminated to other BAS-managed PAs.

General BAS Recommendations:

- Overall community consultation should be a top priority. As BAS begins to involve itself in community development activities, it will need to fully pursue active community consultation and solicit communities' opinions on topics that concern them.

- Define "community" and "buffer-zone community." BAS should take the lead, nationally, in defining what constitutes a local or buffer-zone community in the context of PAs. BAS may want to coordinate with community development organizations or agencies and solicit feedback from them. BAS will also want to define "buffer zone" to set a national standard.

- Define co-management. BAS may want to convene a national roundtable on co-management with the outcome being an ongoing forum for progress reports on co-management. This would serve various purposes. Primarily, it would allow for communication on successes and failures as these projects proceed. In this way,

projects could be tailored and adjusted as they are implemented. The advantage of this would be that results would be apparent to stakeholders—primarily communities, GOB, and organizations like BAS—sooner rather than later. Secondly, because co-management is currently a "hot" topic, attention would be drawn both to BAS and to Belizean conservation. This could have the effect of opening new doors to funding opportunities as Belize's actions gain notoriety.

- Increase BAS' capacity to work with communities. It can do this on various levels:

    1. BAS may want to consider creating a community outreach position on the staff. Although a project director will be hired for the co-management project, a staff person working with communities should be allowed more than three years—the length of the project—to establish and maintain meaningful working relationships with communities. This project director could be hired permanently as a community liaison to work with all the communities with whom BAS has relations.

    2. BAS field staff may need to be trained in community facilitation techniques. This could involve learning community data gathering techniques, educational approaches, and community organizing. In this way, BAS field staff can serve to carry out initiatives in conjunction with the community outreach/liaison. However, BAS may want to take care to not increase the workload on an already overworked staff. The expanded portfolio should complement the field staff's management duties, not replace them or overburden the staff. TNC partner organizations have experimented with "community park rangers." These park rangers' role, according to the project, is to serve as community leaders and guide their communities through a process of sustainable community development and natural resource conservation (Ulfelder et al., 1998).

    3. BAS may want to consider soliciting volunteers who can work on community issues yet will not place undue stress on BAS' resources. Examples include Peace Corps Volunteers who have built-in institutional support yet would require some guidance from BAS. Additionally, the University of Michigan Population-Environment Fellows Program provides opportunities for two-year placements with organizations such as BAS. These Fellows work on developing institutional capacities and inter-sectoral projects related to community development and linking the population and environment fields. Foreign volunteers, however, would need to be trained in Belizean cultural issues.

- Address land-use issues in PA buffer zones. While it appears that both BAS and the larger conservation community in Belize are developing and planning more holistic, eco-regional approaches to conservation through the linking of corridors, BAS has the opportunity to influence this trend on the ground. With a large portion of national lands under BAS' management, BAS and the government will need to coordinate approaches to land use by communities and larger land holders in the vicinity of PAs. As well, if the conservation community is to establish biological corridors, they will

need to promote sustainable land-use practices in these corridors. With BAS' access to communities, part of this job will need to be addressed by BAS. BAS will want to improve institutional and project-based relationships with land-use extension organizations and agencies, reaching out to communities with collaborative projects. ICDP and community development activities should focus on agroforestry and low-impact land use. BAS may want to consider hiring a community outreach staff person who is also trained in natural resource or land-use management.

- Establishing advisory committees with communities in *all* PAs will be key. While BAS is most likely very much aware of the need for this course of action, the importance cannot be overstated. It appears that BAS has plans to strengthen the advisory committees in CTWS and CBWS. However, the inclusion of all relevant buffer-zone communities will ensure that these communities are represented. This will be especially important for communities that have not yet had a voice with BAS. These committees can be instituted at a community level with a representative on a larger regional committee.

- BAS may want to focus efforts on buffer-zone communities where immigration is heavy. Population change and its potential effects on resource use around PAs, as well, should be considered in BAS' decision making as areas with high migration rates stand to impact PAs. Spanish speaking BAS field staff can be accessed to work with these immigrant communities.

BAS may want to craft a general approach to communities. This approach, or policy, would have to address different types of people and situations and have built-in flexibility with room for adaptation. The need for policy to be able to adapt and accept ongoing revisions that address changing ecological and social conditions cannot be overstated.

Chapter 10: Conclusions

BAS aims to protect the diverse array of habitats and species found within Belize by fostering human understanding of the value of biodiversity and natural resources. In working towards this broad goal, BAS performs many activities, including educating about and advocating for environmental issues, yet functions primarily as a manager of protected areas (PAs). At the request of the organization, this project examined BAS' role as a protected-areas manager and provided recommendations to aid BAS in achieving its mission in the context of protected areas management (PAM). While the recommendations and conclusions drawn herein apply specifically to BAS and its role as a protected-areas manager, many—if not all—of the suggestions apply across the spectrum of activities undertaken by BAS.

The recommendations included in the previous chapters represent a diverse array of opportunities for BAS to pursue more effective PAM. By including financial, organizational, educational, promotional, advocacy, and policy mechanisms, the recommendations incorporate the many avenues through which BAS may influence PAM and represent a number of possibilities for BAS to work toward its mission.

The choice of tools that BAS considers implementing rests solely with the organization. While this project has delved into many facets of BAS activity and has perhaps facilitated a broader understanding of the vast challenges it faces, only the organization's boards (BOD, Board of Trustees), staff, and members have the intimate knowledge required to determine those options that best meet the future needs of the organization. While inappropriate to direct BAS in its future endeavors, this assessment may contribute to BAS' long-term efforts by sharing an understanding of the climate in which BAS operates and addressing the overarching themes identified through the diverse research contained herein.

BAS functions in a complex environment with many actors, agendas, and influences that determine the course of action taken by BAS in managing PAs and promoting the "sustainable use and preservation of [our] natural resources in order to maintain a balance between people and the environment." BAS must continue to respond to various forces in shaping its PAM strategy. For example, the ever-changing political climate may alter the relationship between the government and BAS, its largest protected-areas manager. BAS as an organization also must understand the ever-changing business environment within which it operates and be flexible internally as the organization changes over time. In addition, Belize plays an active role in international affairs and therefore must understand and pursue its obligations to the international community.

Although the preceding chapters cover diverse topics, each separately addresses an issue essential to BAS' role as a protected-areas manager. Viewed collectively, they establish the greater context in which BAS operates. While the recommendations found in the chapters identify options specific to each issue area that are relevant to PAM, the following conclusions are drawn along thematic ties that can be applied to all BAS

activities. As such, each final conclusion in this chapter will address elements found throughout this project and should provide an understanding of the general focus areas that BAS may want to address.

I. FRAMEWORK OF ANALYSIS

Recommendations drawn from previous chapters are combined here. The product is a sum greater than its parts: by integrating commonalities among chapters, the analysis is taken to a higher level. But, how does the project team effectively convey its findings? How do BAS staff members assimilate the seemingly diverse array of suggestions? The greater thematic recommendations add value, but the value is lost without a framework for understanding how the recommendations tie together to form a comprehensive whole.

BAS can view these recommendations from an organizational standpoint. Some recommendations inform the organization's internal environment, while others speak to the interaction with external stakeholders. *Internal* recommendations cover areas like role definition, organizational structure, and degree of centralization. *External* recommendations involve interacting with entities outside the boundaries of the organization, such as GOB agencies and community groups. However, the line between internal and external is sometimes unclear, if not fully permeable. Decisions BAS makes internally about its operational organization and its role in Belizean conservation affect parties outside BAS' walls. Similarly, decisions made regarding interaction with external entities will influence BAS internally. Nevertheless, this approach may be a useful way to view this final chapter of recommendations, given the complex environment within which BAS operates and the number of actors with which it must deal.

The internal/external framework proposed above is but one possible method for understanding the recommendations. Others include viewing the recommendations on a local, national, and international scale, and determining the interaction between each. BAS may also discover a more effective method of understanding and communicating these thematic recommendations.

II. RELEVANT THEMES

Role Definition

At present, BAS acts principally as a protected-areas manager—where most of its responsibilities lie—but also serves as an environmental educator and environmental advocate. It is not clear whether BAS will continue to manage these three responsibilities as it currently does, or if it will choose to narrow its focus and energy on only one or two of these program areas. Considering the broad scope of its mission statement, BAS may want to consider envisioning the future trajectory of the organization and determine which of its activities best serves its future goals.

BAS' strengths appear to center around PAM. PAM has given BAS a vast amount of natural resource management experience, which has been a source of power, legitimacy,

and respect for the organization for many years. By weaving education and advocacy into its PA program—and using PAs as a platform for these approaches—BAS can focus on its core strength while addressing these other important and far-reaching sectors.

Defining its future role has several benefits essential to the success of the organization. Most important among these is consistency of its strategy and mission. With a clear vision of where the organization is going, BAS will be better prepared to plan for the future and allocate its resources accordingly.

Organization and Structure

BAS may want to initiate further efforts to examine the nature and structure of the organization. Given its mission, goals, and commitments, is BAS properly structured to address them? Once BAS has defined its role, continued organizational analysis can help determine the prominence of PAM, education, advocacy, and ecotourism in the organization's portfolio. Identifying the organizational structure also will help ensure that resources—staff and financial—are allocated effectively and efficiently.

Examining the organization also includes determining and developing the roles of the staff. Individual staff will be better prepared to contribute to the BAS mission if they have an understanding of their role in the organization—as advocate, educator, or protected-areas manager, etc.—and where their responsibilities begin and end.

By soliciting the input of staff in mission development and day-to-day management and decision-making, coordination and communication between the headquarters and the field staff will improve. BAS may also want to examine the tradeoffs associated with centralized versus decentralized decision making. Devolving power in the organization may lead to increased motivation and productivity, thereby improving the performance of the organization as a whole.

Collaboration

BAS recognizes the value, importance, and necessity of collaboration, and the organization maintains numerous relationships with GOB agencies, other NGOs, universities, businesses, communities, and individuals. By strengthening its ties with a wide range of external parties, BAS stands to benefit from improved communication, greater visibility in tourism and ecotourism policy development, and long-term partnership opportunities. The external parties that BAS presently collaborates with include government agencies, conservation and tourism organizations, and buffer-zone communities. In addition to strengthening current ties, BAS may consider networking to explore new relationships with collaborative possibilities. For example, BAS may want to consider collaborating with international organizations that support the environmental conventions to which Belize is a party. These organizations, such as Conservation International—and other international NGOs that support conservation in general—have much to offer in the way of technical and other types of assistance.

While it appears that both BAS and the larger conservation community in Belize are developing and planning more holistic, eco-regional approaches to conservation, BAS has the unique opportunity to influence this trend. With eight national PAs under BAS management, BAS and the government may need to coordinate their approach to land use with communities and larger landholders in the vicinity of PAs. If the conservation community is to establish biological corridors, for example, they will need to promote sustainable land-use practices in these corridors by collaborating with communities. BAS will want to improve institutional and project-based relationships with land-use extension organizations and agencies and reach out to communities with collaborative projects.

In terms of BAS' relationships with communities, it appears that the organization is moving towards increased communication and involvement with communities. Continuing in this direction is crucial for local support of PAs. In the case of CBWS and CTWS, the levels of involvement and participation by communities will be more pronounced than in other areas. Given this trend, BAS may need to increase its capacity to work with all of its buffer-zone communities. It can do this on various levels. It can do this through creating a community-outreach position on the staff, training its field staff in community-facilitation techniques to better implement outreach initiatives, and soliciting volunteers who can work on community issues. While these volunteers would require some guidance and training, they could contribute much to the organization without placing undue stress on BAS resources.

Collaboration with universities in Belize and abroad may be necessary in order to develop long-term monitoring programs at each PA to observe levels of resource use over time. As BAS sites continue to experience annual increases in visitor numbers, developing a reliable means of assessing humans' ecological impact will be critical. For this reason, BAS may want to pursue developing new partnerships with national and international universities and strengthening existing the ones.

Policy Development

BAS exists in a dynamic political arena, both nationally and internationally. As such, BAS must continue to play an active role to ensure that Belize's commitment to the environment is pursued through policy development at the national level. Several policy areas exist upon which BAS may want to expand. For example, Belize is a party to several major international environmental conventions, many of which impact PAM. Belize needs to honor those agreements in domestic law, because without a commitment at the national level, international agreements often go unimplemented. BAS can play a significant role in this by urging GOB to take policy and legal actions consistent with their international commitments. This, in turn, would strengthen BAS' ability to manage PAs and to protect biodiversity.

BAS is in a strong position to engage GOB and influence their decision-making on domestic-policy issues. Through its advocacy program, its position on government committees, and through networks with other organizations, BAS can actively participate in national-policy development. In addition to PAs and conservation policy, BAS could

be an influential player in developing policies on other relevant issues such as ecotourism, EE, population, and economic development. BAS' involvement at the national level will be critical to ensuring that GOB maintains its stated commitment to the environment and its people, and that the country's natural resources are managed in a sustainable fashion.

Financial Resource Development

As BAS is well aware, funding concerns often expend much institutional energy and resources and insecure funding can create program instability. Vagaries in funding cycles, grant applications, and other variable income flows constrain BAS' ability to plan for the future. As well, funding requirements can alter the direction of BAS' project planning and destabilize relationships with communities. While cross-subsidization of PAs and program areas helps smooth funding uncertainties, it can strain program managers and protected-areas staff.

Ensuring stable financial resources will help BAS commit to an unwavering mission and prevent the altering or reorganization of its goals. In doing so, BAS will be able to plan and develop its role as protected-areas manager, educator, and advocate. A number of financial mechanisms have been described in this project and BAS may want to consider devoting staff time to development activities. This staff person can acquire the expertise to write and submit grants, capitalize on provisions in international agreements, and seek out entirely new sources of financial support. Possibilities for increasing the fixed portion of revenues include modifying the entrance and membership fee structures or developing visitor services at PAs.

In addition, foreign visitors may constitute a significant source of revenue. Capitalizing on foreign visitation through increased entry fees to the PAs could help generate substantially more funding through existing programs. Moreover, BAS may consider seeking donations and memberships from enthusiastic visitors—through donation boxes, mailings or electronic mail messages—in order to pursue its goals without having to mold them to fit funding requests to the donor community.

Co-management

Co-management is emerging as an important paradigm in Belizean conservation. Given BAS' prominence and influence in Belize, the organization is poised to inform how the co-management discourse is shaped. However, BAS may want to consider that the co-management of PAs is a relatively new concept and, as yet, has been tested little. For this reason, a cautious approach to co-management is recommended.

BAS can help inform the development of a national co-management model through its experience with PAM in general, and its co-management projects at Crooked Tree and Cockscomb Basin in particular. As well, BAS can influence the national agenda for communities and conservation. BAS may want to consider advocating that national policy incorporate provisions for community consultation before PAs are established.

IV. FINAL THOUGHTS

As dynamic and complex as BAS is as an organization, so too are its challenges and the environment in which it operates. Blessed with an abundance of relatively intact ecosystems, Belize and its people increasingly will face the often-competing pressures of conservation, development, increasing rates of population growth, and rapid growth in tourism, to name just a few. As such, Belize must confront numerous challenges in negotiating the complicated path towards a sustainable future. BAS is intimately attached to this process, and has been leading the environmental movement in Belize since its establishment 30 years ago.

BAS is well respected, both nationally and internationally, and extremely influential in shaping environmental policy and dialogue in Belize. The organization has been largely successful in its endeavors, owing to its dedicated staff and membership, and to its collaboration with other stakeholders both within and outside of Belize. BAS is likely to continue in its role as an environmental leader in Belize and as an advocate for sustainable environmental practices. This project was developed, in part, due to the fact that BAS realizes the need to develop an organization-wide strategy for PAM and has the vision to address the even wider range of environmental challenges ahead. It is hoped that this project, through its analysis and recommendations, will help to inform BAS' future endeavors as it enters the next century as one of the leaders in sustainable natural resource management in Belize.

APPENDIX 1a

I. OVERALL GOVERNMENT STRUCTURE IN BELIZE

Belize won its independence from Great Britain on September 21, 1981 (GOB, 1999). It has had a stable democracy compared to the rest of Central America and its system of government is based on the British Westminster system. Although independent, Belize is a member of the Commonwealth of Nations and retains a formal allegiance to the Queen of England, although the links between Belmopan (the capital) and Buckingham Palace are mostly ceremonial (Barry and Vernon, 1995). The Governor General, Prime Minister, and Cabinet make up the executive branch. The Prime Minister is appointed by the Governor General and serves as the head of both the Cabinet and the ruling party (Belize Tourist Board, 1999). Cabinet members are each responsible for a government Ministry and are appointed by the Prime Minister from the National Assembly, the bicameral legislature which comprises both the House of Representatives and the Senate. The Cabinet is the chief policy-making body in the government, as every bill introduced to the National Assembly has first been drafted and approved by the Cabinet. The Cabinet and the Prime Minister steer all government action (GOB, 1999).

This legislative structure has concentrated power into the executive branch of the government, and there is a weak system of checks and balances between these two branches of government. The implications of this have been great with regard to the country's development and its national policies and laws, as decisions are made without much transparency. In theory however, the Cabinet is accountable to the National Assembly and through the National Assembly to the people of Belize, who may call for a change in government at the next general elections, which occur approximately every five years (GOB, 1999).

The judicial system in Belize consists of a Supreme Court and lower magistrate courts in each of the six political district capitals. In Belize City alone there are four magistrate courts (GOB, 1999). Each district town also has a locally elected Town Board of seven members. Belize City and Belmopan are exceptions, the former having a nine-member city council and the latter being administered by the Reconstruction and Development Corporation. Village councils, who just recently gained legal standing at the end of 1999, are responsible for local government beyond the Town Boards. The recently passed Village Councils Act has yet to be implemented (BAS staff, personal communication).

II. FEDERAL ENVIRONMENTAL BUREAUCRACY STRUCTURE

At present, administrative responsibility for GOB is divided between 15 Ministries (GOB, 1999). The three principle Ministries concerned with the environment and PAs are the Ministry of Natural Resources and the Environment, the Ministry of Tourism, and the Ministry of Agriculture and Fisheries. The three government departments (each housed within one of these Ministries) with direct control over PAs establishment and management are the Forestry Department, Fisheries Department, and the Department of Archaeology (PFB, 1995).

Ministry of Natural Resources and the Environment

Department of the Environment (DOE)

The Department of the Environment is a relatively new agency. It was legally established in 1992 with the passage of the Environmental Protection Act (EPA), and is responsible for national environmental protection and pollution control (Ministry of Natural Resources and the Environment, 1999). Although it was originally established within the Ministry of Tourism, it was brought under the authority of the Ministry of Natural Resources after the 1998 elections by the new administration. Previous to the DOE, governmental attempts at comprehensive environmental protection were essentially nonexistent. Although the department does not have direct control over PAs establishment or management, it is an important player in governmental environmental decision making and has great influence over the larger environment in which the PAs are embedded (PFB, 1995).

The mission statement of the Department states that it is "responsible for fostering the prudent use and proper management of the natural resources of Belize, the preservation, protection, and improvement of the environment and the control of pollution, thus guaranteeing a better quality of life for present and future generations" (Ministry of Natural Resources and Environment, 1999). The department, in implementing the EPA and its many pollution-control and environmental impact assessment regulations, emphasizes consultation with other stakeholders as a key goal. With its broad regulatory authority, the DOE must deal with communities, NGOs, other agencies, the private sector, and the public in general. Overall, the department plays a major facilitative role, and seems to have been the major catalyst behind the development of the National Environmental Action Plan, which will be discussed later (Ministry of Tourism and the Environment, 1995).

Forest Department

The Forest Department is the oldest government agency that deals with PAs. It was established by the colonial government in April 1922 (Stevenson, 1939). Forest reserves were first established by the colonial government in the 1920s and 1930s as an attempt to modernize the forestry industry in Belize, and their creation marks the beginning of the protected-areas network in Belize and the management responsibilities of the Forest Department (PFB, 1995). The Forest Department, with technical and monetary assistance from international donor agencies, has expanded its efforts at forest planning and management to include a broader array of uses than its historical emphasis on timber production.

The Department is responsible for administering the Forest Act, the National Parks Systems Act, and the Wildlife Protection Act, and therefore for managing all PAs designated under these acts on national lands (PFB, 1995). Basically, this means that the Forest Department is responsible for all PAs in Belize that are not marine or

archaeological reserves (Zisman, 1996). This is a tremendous task for one agency, and this is one of the reasons that the department has delegated management responsibilities for six of the nation's PAs to BAS. The department also has a Mangrove Unit with jurisdiction in coastal areas and is a participant in the Coastal Zone Management Unit (CZMU) (PFB, 1995).

The Department is subdivided into three functional divisions and two territorial divisions. The functional divisions include management, research, and conservation. The territorial divisions are the Western and Southern divisions (McCalla, 1995). The Conservation Division within the Forest Department is directly responsible for public PAs other than forest reserves. It was established in 1991 with funding assistance from the World Wildlife Fund (Barry and Vernon, 1995) and deals with mangrove and wildlife conservation, EE, and any other management issues in the non-forest reserve PAs (government official, personal communication). This department, like all of the other government environmental departments, is extremely short-staffed and under-budgeted. The department does not have enough staff to monitor the over 8,000 square miles of reserves under its jurisdiction (Barry and Vernon, 1995).

Lands and Surveys Department

This department is responsible for land-use planning and the allocation and surveying of national lands according to the dictates of the National Lands Act and the Land Utilization Act (PFB, 1995). It is a large department with many different divisions and conducts mapping and physical planning with GIS capabilities at the Land Information Centre, also housed within the Ministry of Natural Resources and Environment (McCalla, 1995). The Land Information Center is the Secretariat of the Conservation and Environmental Data System (CEDS), which is one of the major databases of environmental and natural resources information in the country. Sixteen government and non-governmental organizations utilize the system under a data exchange agreement, including BAS (BAS, 1998).

Ministry of Tourism

Department of Archaeology

The Department of Archaeology is responsible for the archaeological reserves established under the Ancient Monuments and Antiquities Act of 1981. Ten sites were designated as reserves under this act in the 1980s. Although these reserves are managed primarily for their cultural values and are therefore fundamentally different from the other PAs in the country, they can be established within other PAs. Caracol, for example, is an archaeological reserve (Mayan ruin) situated within Chiquibul National Park (PFB, 1995). Future relations with this department will be particularly important to BAS if any Mayan remains are found on BAS-managed sites, which is highly likely (BAS staff, personal communication).

Ministry of Agriculture and Fisheries

Fisheries Department

The Fisheries Department is responsible for implementation of the Fisheries Act, research, quality control of marine produce, training of fishermen and operators of fish processing establishments, and the protection of marine environments (McCalla, 1995). The establishment of marine reserves is undertaken by CZMU, founded in 1991and housed within the Fisheries Department, under the authority of the Fisheries Act (PFB, 1995). The CZMU is essentially charged with coordinating management of the coastal zone. The Fisheries Department is legally responsible for all seas extending 200 miles out from the coastline and the one thousand cayes contained within that territory. In 1993, the Belizean government extended its territorial limits and its "exclusive economic zone," so that half of Belizean national territory is now under sea (Ministry of Tourism and the Environment, 1996).

Issues with Inter-Ministerial Coordination

Inter-ministerial coordination with regard to environmental decision-making, policy formation, or education has not been fully institutionalized. Overall ministerial coordination is supposed to take place through a formal Physical Planning Subcommittee, but it is not clear whether this body is fully functional (McCalla, 1995). Most communication is informal and coordination is inconsistent and depends in large degree on the particular ministers and officials in charge and how willing and dedicated they are to cooperate with other agencies (government official, personal communication). The National Environmental Appraisal Committee (NEAC), charged with assessing the environmental impacts of large development projects, is currently the main avenue for coordinating environmental decision-making among government agencies and NGOs (Ministry of Tourism and the Environment, 1996).

In addition to this, the Ministries lack clearly defined roles and responsibilities, and confusion and duplication of effort have sometimes resulted (McCalla, 1995). In particular, significant overlap has occurred between the Fisheries and Forest Departments in the coastal zones and in inland water bodies, including wetlands (PFB, 1995). Part of the problem is that no comprehensive and systematic conservation or protected-areas policy exists in Belize. Another problem is that the basis for resource allocation among these agencies and departments is not clear. The allocation of funds to the various government environmental departments has been inconsistent and unsystematic (Ministry of Tourism and the Environment, 1996). This only makes it harder for these ministries and departments to operate from year to year and to engage in long-term planning.

References for Appendix 1a:

Barry, Tom and Dylan Vernon. 1995. *Inside Belize: TheEssential Guide to its Politics, Economy,Society, and Environment*. Albuquerque: The Interhemispheric Resource Center.

Belize Audubon Society. 1998b. *Belize Audubon Society Advocacy Program: Investing in Grassroots.* Belize City: BAS.

Belizean Ministry of Natural Resources and the Environment. 1999. *Department of the Environment: Policy and Strategy Statement*. Belmopan: Government of Belize.

Belizean Ministry of Tourism and the Environment. 1996. *National Environmental Action Plan*. Belmopan: Government of Belize.

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Available: <http://www.travelbelize.org/gov.html>. [1999, May 14]

Press Relations Office, Government of Belize. 1999. How We Are Governed Home Page. Available at:
<http://www.belize.gov.bz/library/how_we_are_governed/welcome.shtml>.
[1999, May 14].

Programme for Belize (with assistance from the Inter-American Development Bank). 1995. *Towards a National PAs Systems Plan for Belize: A Synthesis Report*. Belize City: PFB (NARMAP Contract No. 001/94).

Stevenson, N.S. 1939. "Forestry in British Hondouras." Caribbean Forester 1:1.

Zisman, Simon. 1996. *The Directory of Belizean PAs and Sites of Nature Conservation Interest*. Belmopan: Government of Belize and USAID.

APPENDIX 1b

National Laws Most Relevant to BAS

While there are over 22 laws in Belize that govern natural resource management and natural resource protection, the four laws outlined in this appendix are among the most directly relevant to BAS. A comprehensive and detailed description of all the country's environmental laws can be found in the *Compendium on Environmental Protection and Natural Resource Management Legislation in Belize.* This document is available from GOB through the Department of Environment, housed within the Ministry of Natural Resources and Environment.

I. National Parks System Act (1981)

The NPSA provides for the preservation and protection of highly important natural and cultural features, and for the regulation of their scientific, educational, and recreational use. It allows for four designation categories for PAs : national parks, nature preserves, wildlife sanctuaries, and natural monuments. The Act does not apply to private or community reserves (the famous Rio Bravo Conservation Management Area being one exception). There are to date no regulations to implement the rules of the Act, and so it is the least enforced of all national PAs legislation (BAS staff, personal communication). The Minister of Natural Resources and Environment, who administers the Act through the Forest Department, can declare any area of national land a national park, nature reserve, wildlife sanctuary, or natural monument, and is empowered to develop regulations for the "good management" of these areas. Although management plans for these areas are required and are to be approved by the Minister, there are no guidelines in the Act as to the contents of such plans (McCalla, 1995).

The Minister has a lot of discretionary power. He or she can, by administrative fiat, alter the boundaries of any of these designated PAs, and can de-reserve any part or whole of these areas (PFB, 1995). This has mostly been an issue with the forest reserves, although there have been such occurrences in other types of PAs. The definition of "national land" according to the act includes the seabed. Fishing permits may be issued in some circumstances, except in nature reserves, and delegation of management to parties other than the Forest Department is an option provided for in the legislation (PFB, 1995).

There have been recent efforts in Belize to amend and strengthen the NPSA. Part of the problem is that designations have been somewhat arbitrary, and may not reflect the characteristics of the site nor the best management approach (PFB, 1995). Some suggested reforms include: a) Authorizing the Minister to zone National Parks for differing levels of use, b) Expanding the number of categories of PAs under the law, c) Developing regulations and strengthening the evidentiary basis for prosecutions under the Act, to improve enforcement, d) Ensuring that National Parks cannot be sold nor leased, and e) Allowing private reserves to have legal PA status. None of these amendments have been officially passed to date (McCalla, 1995). Many in the country are also

pushing for stripping the Ministers of the unrestrained ability to de-reserve PAs, and to allow this only in clearly defined cases of overriding public need.

II. Wildlife Protection Act (1981)

The WPA provides mainly for "the conservation, restoration, and development of wildlife, for the regulation of its use and for all other matters connected therewith" (Zisman, 1996). It basically regulates hunting and commercial dealing in wildlife (the definition of which does not include fish). The Act applies to all undomesticated mammals, birds, and reptiles, and all parts, eggs, and nests of any of these wildlife forms. It prohibits the hunting of certain species, including all species of whales and dolphins, as well as of immature wildlife or females accompanied by young. Regulations regarding fish and sea turtles are found under the Fisheries Act (McCalla, 1995).

Hunting of non-prohibited species is allowed through "resident" and "non-resident" licenses, and in some cases, the Minister of Natural Resources and Environment may issue a "dealer's license" in wildlife as long as it is consistent with the provisions of the Act and the principles of good wildlife management. Regulations promulgated under the Act call for fines not exceeding BZ$500 for any violation of the law and a fine of up to BZ$1000 or imprisonment of up to six months if a second offense is perpetrated within five years of the first. Under the law, all hunting is specifically prohibited in Cockscomb Basin Wildlife Sanctuary by special amendment. In the other BAS-managed PAs hunting permits may be granted, depending on the circumstances (McCalla, 1995).

The Act has been largely ignored, despite widespread public awareness about it. Indeed, a 1995 study by Round River Conservation Studies found subsistence hunting prevalent among all cultural groups in Belize (Ministry of Tourism and the Environment, 1995). As with the NPSA, there have been efforts to reform the WPA. These include increasing the level of penalties and strengthening the powers of arrest for offenses under the Act. There have been calls to expand protection to include wildlife habitat and plants. In addition to this, some have advocated the use of grassroots community-based ecotourism as a decentralized approach to providing incentives for wildlife conservation (Ministry of Tourism and the Environment, 1995).

III. Environmental Protection Act (1992)

Until the enactment of the EPA in 1992, Belize had no comprehensive environmental protection legislation. The Act established the Department of the Environment (DOE) and placed it within the Ministry of Tourism and Environment, giving it a broad range of regulatory and enforcement authority. The DOE deals with the prevention and control of environmental pollution, conservation and management of natural resources, and environmental impact assessments (EIAs).

With regard to PAs and conservation, the most important powers of the department under the Act, are to:

- Conduct environmental impact assessments and risk analyses
- Promote successful management of wetland ecosystems
- Assist the Forestry Department in promoting the development of a "balanced forestry management program"
- Be responsible for the continuous and long-term assessment of natural resources and pollution, and to regulate pollution
- Advise the government on the formulation of policies relating to good management of natural resources and the environment
- Foster both inter-ministerial cooperation and governmental-NGO communication with regard to the prudent use and proper management of the natural resources of Belize

Current recommendations to revise the Act include the setting up of a Tribunal to hear disputes over environmental impact assessments, the introduction of provisions to allow the Department to issue stop orders when a serious threat to the environment is perceived, and various steps to facilitate the prosecution of environmental offences. Overall, this law has provided for the most significant advance in environmental protection in Belize, providing the government with the comprehensive authority it needs to address modern environmental pollution problems (McCalla, 1995). This is significant considering that buffers surrounding BAS-managed sites will face increasing encroachment from surrounding communities, agricultural operations, and other development.

IV. Fisheries Act (1977)

The Fisheries Act, conferring wide powers for regulating fisheries in Belize, applies to "the whole" of Belize. This includes inland lakes, rivers, streams, and lagoons. Section 6 of the Act prohibits commercial fishing unless the person holds both a boat license and a fishing license. While the primary focus of the Fisheries Act is the regulation of the fishing industry, section 13A does focus on the protection of fish and fish habitats. This section, added in 1983, empowers the Minister of Agriculture and Fisheries to establish marine reserves, basically in any area within the fishing limits of Belize and on any land adjacent to this (McCalla, 1995). While none of BAS' sites are marine reserves, this act does have legal implications for marine biodiversity in an around HMCNM and BAS' recently acquired (1999) Blue Hole Natural Monument.

Unlike the NPSA, there is no specific provision in this law for devolving management of PAs to third parties. The process for establishing marine reserves and planning for their management is more coordinated and consultative, however, compared to the process for designating PAs under the NPSA. This is largely due to the CZMU, which acts as a coordinating body for marine conservation. Suggestions have been made to amend the act to allow for delegation of management of marine reserves such as the NPSA allows (PFB, 1995). In any case, GOB is considering revising current fisheries legislation to ensure more "sustainable use" of the country's marine resources (Ministry of Tourism and the Environment, 1996).

References for Appendix 1b:

Belizean Ministry of Tourism and the Environment. 1996. *National Environmental Action Plan*. Belmopan: Government of Belize.

Belizean Ministry of Tourism and the Environment, Department of the Environment. 1995. *Proceedings of the Second National Symposium on the State of the Belize Environment*. Belmopan: Government of Belize.

McCalla, Winston. 1995. *Compendium on Environmental Protection and Natural Resource Management Legislation in Belize*. Belmopan: Government of Belize.

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Zisman, Simon. 1996. *The Directory of Belizean PAs and Sites of Nature Conservation Interest*. Belmopan: Government of Belize and USAID.

APPENDIX 2a

Contact Information for the World Heritage Convention

World Heritage Centre

The World Heritage Centre implements the day-to-day management of the Convention. The Centre engages in a variety of activities ranging from organizing annual meetings to arranging workshops and handling requests for assistance from state parties.

Regional Desk Officers for Latin America & Caribbean:

UNESCO
7, Place de Fontenoy

75352 Paris 07 SP (France)	Herman van Hooff	Niklaus Schulze
Fax: (33.1) 45.68.55.70	01 4568-1869	01 4568-1091
E-mail: <wh-info@unesco.org>	<h.van-hooff@unesco.org>	
	<n.schulze@unesco.org>	

Website: <www.unesco.org/whc>

The International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM)

The International Centre for the Study of the Preservation and Restoration of Cultural Property is an intergovernmental body that provides expert advice on how to conserve listed sites, as well as training in restoration techniques. ICCROM was set up in 1956 and is located in Rome. It is an active partner in the World Heritage Information Network.

Via di San Michele 13
I-00153 Rome, Italy
Tel: 396-585 531
Fax: 396-5855 3349
E-mail: <iccrom@iccrom.org>
Website: <www.iccrom.org>

The International Council on Monuments and Sites (ICOMOS)

The International Council on Monuments and Sites provides the World Heritage Committee with evaluations of cultural and mixed sites proposed for inscription on the World Heritage List. It is an international, non-governmental organization, founded in 1965, with an international secretariat in Paris. ICOMOS is one of the main participants in the World Heritage Information Network (WHIN).

49-51, rue de la Fédération
75015 Paris, France
Tel: 33-1-45 67 67 70
Fax: 33-1-45 66 06 22
E-mail: <secretariat@icomos.org>
Website: <www.icomos.org>

The World Conservation Union (IUCN)

The World Conservation Union is an international, non-governmental organization, that provides the World Heritage Committee with technical evaluations of natural heritage sites and, through its worldwide network of specialists, reports on the state of conservation of listed properties.

Rue Mauverney 28
CH-1196 Gland, Switzerland
Tel: 41-22-999 0001
Fax: 41-22-999 0010
E-mail: <mail@hq.iucn.org>
Website: <www.iucn.org>

Contact information for the following organizations is provided at <www.unesco.org/whc/nwhc/pages/doc/main.htm>:

International Council of Museums –	founding partner in the World Heritage Information Network
Nordic World Heritage Office –	regional office for the nordic countries
Organization of World Heritage Cities –	serves as a exchange for knowledge and management techniques for the over one hundred World Heritage cities facing unique pressures.

APPENDIX 2b

Contact Information for the Ramsar Convention on Wetlands

The Ramsar Convention Bureau

Rue Mauverney 28, CH-1196
Gland, Switzerland
Tel: +41 22 999 0170
Fax: +41 22 999 0169
Email: <ramsar@ramsar.org>
Website: <www.ramsar.org>

Margarita Astrálaga
Regional Coordinator for the Americas
<astralaga@ramsar.org>

Wetlands International

Wetlands International maintains a database of all Ramsar sites, as well as statistics
Home page: www.wetlands.org

Administrative Authority Responsible for Administering the Convention in Belize

Conservation Division
Ministry of Natural Resources and the Environment
Forest Department
Forest Drive
Belmopan, Belize
Tel: +501 8 22079
Fax: +501 8 22083

APPENDIX 2c

Contact Information for the Convention on Biological Diversity

Secretariat of the Convention on Biological Diversity

World Trade Centre
393 St Jacques Street, Office 300
Montréal, Québec
Canada H2Y 1N9
Tel: +1-514-288-2220
Fax: +1-514-288-6588

Global Environment Facility

United Nations Environment Programme
GEF Unit/UNEP
Nairobi, Kenya
Tel: 254-2-621-234
Fax: 254-2-520-825

Cyriaque Sendashonga
GEF Senior Programme Officer for Biodiversity
Tel: 254-623-257
Fax: 254-520-825

Isabella Masinde
GEF Task Manager for Global Biodiversity Assessment
Tel: 254-623-264
Fax: 254-623-926

A complete list of Global Environment Facility contacts is available at <www.gefweb.org/agencies.htm>.

APPENDIX 2d

Other Organizations

World Commission on PAs (WCPA)

The WCPA has three main objectives:

- Assist in the planning of PAs and their integration into all sectors by providing strategic advice to policy makers,
- Strengthen capacity and effectiveness of PA managers through the provision of guidance, tools and information, and as a vehicle for networking,
- Increase investment in PAs by persuading public and corporate donors, as well as governments, of their value.

Adrian Phillips, WCPA Chair
2 The Old Rectory,
Dumbleton
Evesham, WR1 6TG, UK
Tel: +44.1386.882094
Fax: +44.1386.882094
E-mail: Adrian.Phillips@wcpa.demon.co.uk

David Sheppard, Head
Programme on PAs
IUCN World Headquarters,
Rue Mauverney 28
CH 1196 Gland, Switz
Tel: +41.22.9990162
Fax: +41.22.9990015
E-mail: <das@hq.iucn.org>

United Nations Environment Programme

PO Box 30552
Nairobi, Kenya
Phone: +254 2 623114 or 230084
Fax: +254 2 623692 or 623927
E-mail: unepinfo@unep.org
Website: <www.unep.org/unep/per/ipa>

United Nations Development Programme

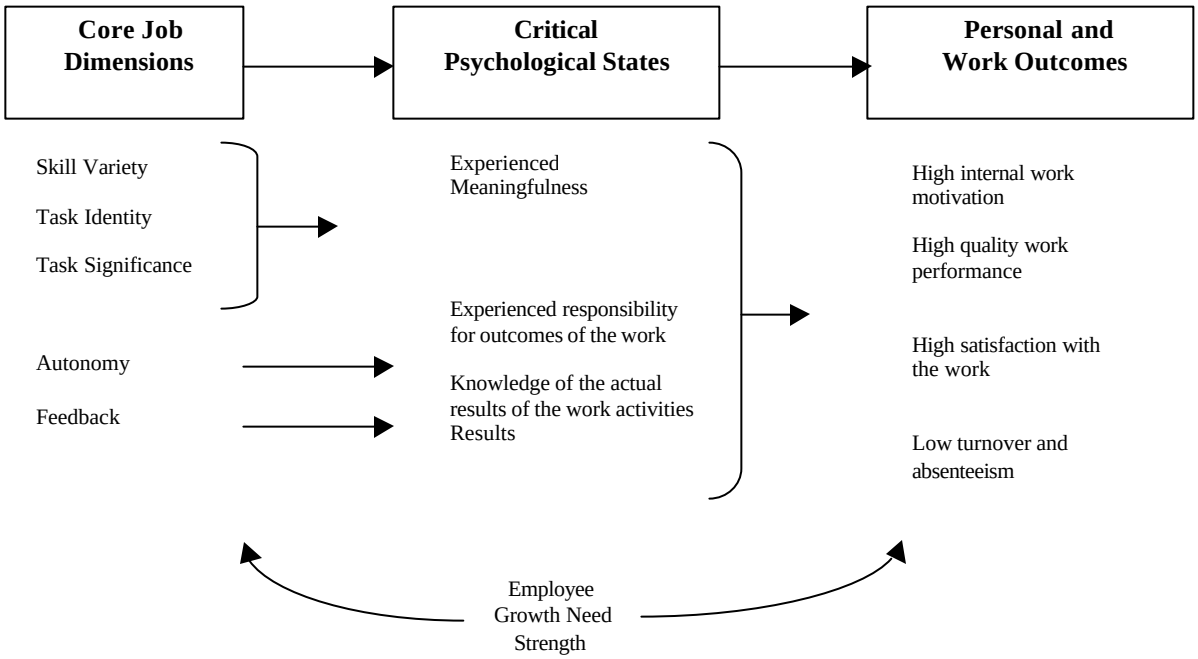
304 East 45th Street
10th Floor
New York, NY 10017

Within GEF, UNDP's emphasis is ensuring the development and management of capacity building programs and technical assistance projects. As of December 1999, the UNDP-GEF portfolio totaled US$938,63 million (not including US$779 million in co-financing). Over 500 projects (not including small grants) in the current portfolio range in size from US$10,000 to US$15 million, and involve constituents at every level from grassroots to high-level decision makers. In addition, UNDP manages the Small Grants Programme (SGP) on behalf of the GEF.

APPENDIX 3a

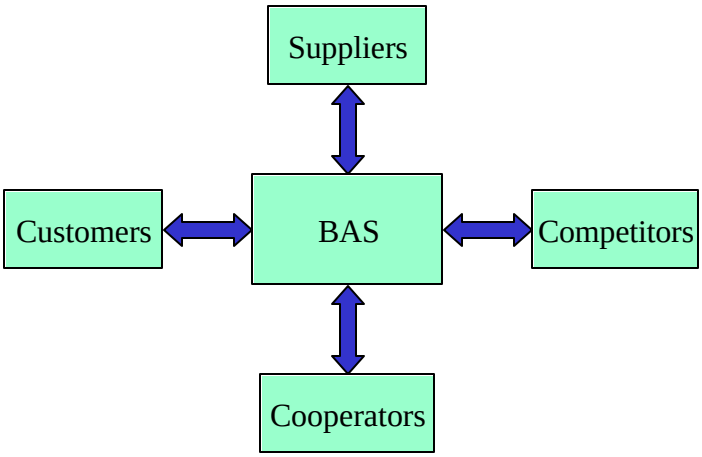
Job Characteristics Model

Source: Hackman, 1977.



APPENDIX 3b

Stakeholder Analysis



APPENDIX 3c

Granting Agencies

Granting Agency	Gift/Purpose
British High Commission	TMNR, CBWS
Canada Fund	TMNR
Centro Agronomico Tropical de Investigacion y Ensenanza (CATIE)	Purchase HMCNM land, consulting expertise
Commission of the European Union*	Development of revenue generation systems, training
Earthquest Belize	Sea turtle patrols
Humanitarian Institute for Cooperation with developing Countries (HIVOS) *	Advocacy
IDB/PROLEAD*	XXXX
MacArthur Foundation*	PAM, institutional strengthening, community outreach, advocacy, EE
Massachusetts Audubon Society	Institutional development
Natural Resources Management Program (NARMAP)	Seminar, equipment
The Nature Conservancy (TNC)	TMNR
PROARCA/CAPAS*	XXXX
PA Conservation Trust (PACT)*	EE, marketing
Ramsar Bureau	Conflict resolution, CTWS
Summit Foundation	XXXX
United Nations Development Program	Training workshops
Weeden Foundation	Endowment fund
Wild Wings Foundation	CTWS, PAM
Wildlife Conservation Society	Jaguar study in CBWS, black howler program
World Wildlife Fund (WWF)	EE, CBWS

Source: Waight and Lumb, 1999. * indicates 1999 grant

APPENDIX 3d.

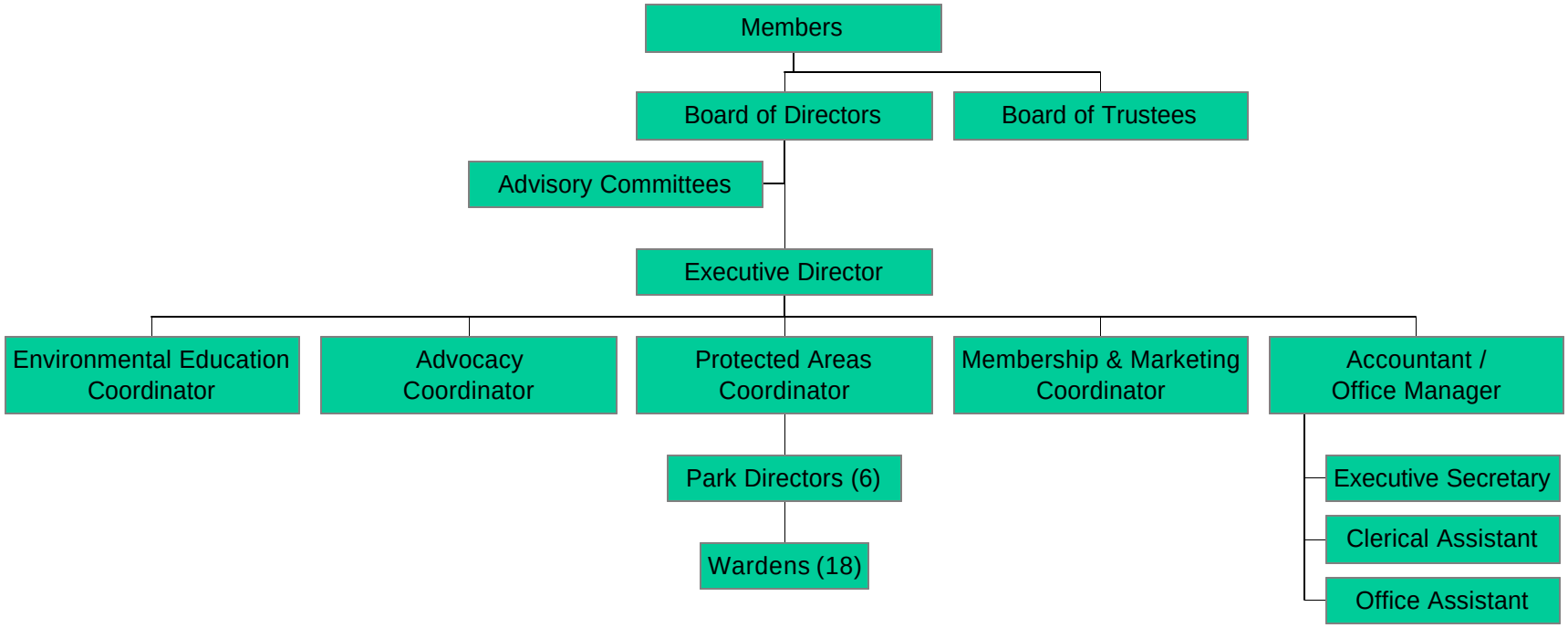
Volunteer Organizations

Volunteer Organizations	Purpose
Peace Corps	CTWS
Raleigh International	Facilities at CTWS, BHNP
Jaguar of Canada	CBWS
Yalbac Ranch and Cattle	xxxx
Swim for the reef	xxxx
Longacre Expeditions	Picnic tables
Lighthawk	Aerial assesments
Women on Top	CBWS
FAVA	Water quality training, CTWS
Hike and Bike for the Rainforest	TMNR
Volunteer Service Organization	Staff & training
Belize Youth Conservation Core	Facilities improvement
Youth Environmental Action Group	Tours, GNP
Students Understanding Nature	Facilities improvement, GNP
Students Encouraging Environmental Development	Facilities improvement, GNP
Trekforce	Facilities improvement, CTWS, CBWS

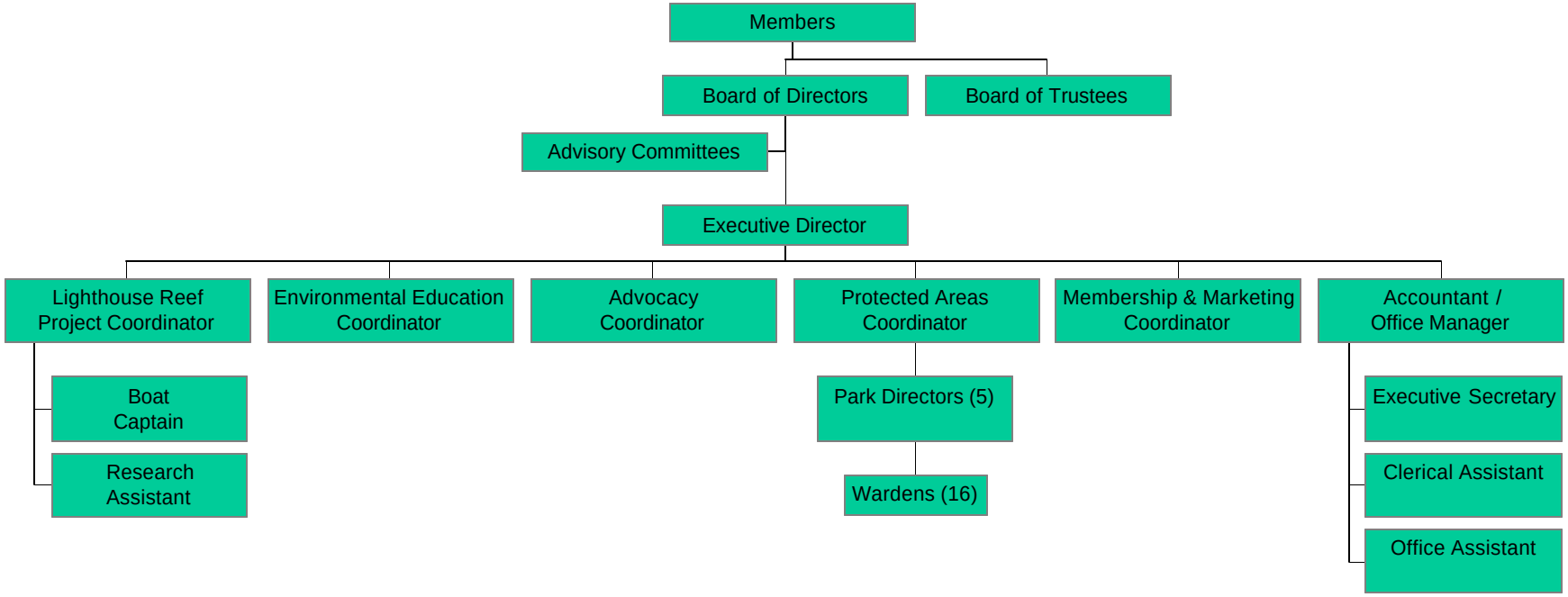
(Waight and Lumb, 1999):

APPENDIX 3e

Organizational Charts: At time of research (June, 1999)



Organizational Charts: April 2000



APPENDIX 4a

Organizations Active or Interested in Environmental Education in Belize

(From the 1995 National Environmental Education Strategy)

Belize Archives Department
26/28 Unity Boulevard
Belmopan

Belize Audubon Society (BAS)
12 Fort Street
P.O. Box 1001
Belize City

Belize Center for Environmental Studies
P.O. Box 666
55 Eve Street
Belize City

Belize Enterprise for Sustainable Technology (BEST)
P.O. Box 35
Forest Drive
Belmopan

Belize Tropical Forest Studies (BTFS)
P.O. Box 208
Belmopan

Belize Review (BR)
P.O. Box 1234
Belize City

Belize Youth Conservation Corp (BYCC)
P.O. Box 666
Belize City

Department of the Environment (DOE)
Mayflower Street
Belmopan

Department of Museums
Belmopan

Belize Zoo and Tropical Education Centre
P.O. Box 1787
Belmopan

Department of Archaeology
Belmopan

Education Development Centre
Landivar
Belize City

Fisheries Department
P.O. Box 148
Belize City

Health Education & Community Participation Bureau (HECOPAB)
Cleopatria White Health Centre
Princess Margaret Drive
Belize City

Agriculture Department, Ministry of Agriculture and Fisheries
Belmopan

Monkey Bay Wildlife Sanctuary
Mile 31 ½ Western Highway
P.O. Box 187
Belmopan

Programme for Belize (PFB)
P.O. Box 749
Belize

Public Health Bureau
Corner St. Joseph Street and Princess Margaret Drive
P.O. Box 749
Belize

Vocational Technical Training Unit
St. Thomas Street
Belize City

Society for the Promotion of Education and Research (SPEAR)
Corner Picknock Street and New Road
Belize City

Slate Creek Preserve
Central Farm P.O. Box
8 mls. Mountain Pine Ridge Road
Cayo District

Stann Creek Ecumenical College
Ecumenical Drive
Dangriga Town

University College of Belize (UCB)
University Drive
P.O. Box
Belize City

United Nations Development Programme (UNDP)
Garza Avenue
P.O. Box
Belmopan

United Nations High Commission for Refugees (UNHCR)
Cardinal Avenue
P.O. Box
Belmopan

United States Peace Corps
35 Gabourel Lane
Belize City

Voluntary Services Oversees (VSO)
Angelus Press Building
Constitution Drive
Belmopan

APPENDIX 5a

Benefits and Costs of Ecotourism in PAs and the Buffer-zone communities

Ecological	Benefit	Cost
	Stimulate economies in transition from agriculture to service industry	Loss of access to traditional resources and a shift from traditional life styles
	Diversify the economy by creating service jobs in areas such as accommodations and tour guiding	Create competition between local residents and foreign investors for developing the needed infrastructure
	Generate revenues for management of PAs	Increase in the cost of living due to visitor spending in local economies
	Create a local market for goods and services (provides an additional source of income)	
Social	Enhance the quality of life by raising the standard of living	Increase crime and drug and alcohol abuse
	Encourage educational opportunities for guides and local service providers	Undermine traditional values due to the increased presence of visitors
	Facilitate the exchange of ideas and cultural traditions and foster the preservation of cultural and natural heritage	Create a market for highly-processed and expensive foods that are imported for visitors and consumed by local residents
	Stimulate the construction of service-providing facilities, such as health clinics and schools	Increase health risks from sewage and other pollutants created by infrastructure development
Ecological	Create an incentive to protect natural areas and foster local stewardship of natural resources	Accelerate resource degradation due to increasing visitor numbers
	Generate support for the creation of additional PAs	Accelerate loss of biodiversity and damage to sensitive ecosystems
	Promote educational programs that foster low-impact use of natural resources by visitors and residents	Damage to the very resources that visitors came to enjoy
		Strain limited resources

APPENDIX 5b

By utilizing the following criteria and queries, BAS has developed this six-point checklist in order to assess its management efforts in the buffer-zone communities for the six PAs the organization manages. Several of the topics deal directly or indirectly with tourism and ecotourism in the buffer-zone communities.

(1) Protection of biodiversity: How informed have the communities become on their biodiversity? Is it being greater protected? Are more members of the community involved in the management of their environment?
(2) Community benefits: Is the tourism industry utilizing any services from the community? Have new tourism related businesses been established? Are they being managed properly? Are employees at all levels adequately trained? Is there an interest by the general public in the issues surrounding PAs and the surrounding communities? Is there increased membership from the communities? From the general public?
(3) Advocate for Issues: Are the environmental concerns of the community properly articulated and/or presented? Who speaks on behalf of whom? In what manner are the decision makers reacting to these presentations/issues? How is BAS membership involved?
(4) Education: Do the primary schools of the area include the park and its staff in their lesson plans? Do the schools visit these areas? How frequently? Is there adequate follow-up by BAS personnel? Do the school have conservation and tourism components to the curriculum? Does the school staff regularly consult with the park and general BAS personnel? Do all children attend school? What proportion of the student population complete the different levels of education available? Is there advocacy for improved education facilities for the communities?
(5) Ownership of these Areas: How are the PAs perceived by the communities? Is there general support for the continuation of having a PA in their midst? Are the communities desirous of either increasing or decreasing the size of the PA ? Is there support for increasing or decreasing the size?
(6) Potential Areas: Do other communities desire to establish a PA in their community's vicinity? Has the tourism industry and/or other communities identified areas that may require protection? Is this desire based on tourism potential? If these areas are established, who stands to gain more than others? If these areas are established, are the buffer-zone communities willing to be involved with the management of these areas?

Source: "Creating Partnerships between the Belize Audubon Society and the Tourism Industry for greater institutional and financial support for the proper management of Belize's PAs," presented by Rudi Burgos, Membership and Marketing Coordinator, at the Developing an Agenda for Ecotourism Capacity-Building in Mesoamerica conference in June, 1999.

APPENDIX 5c

Specific Fund-raising Recommendations Linked to PA Visitors

- Install donation boxes in each visitor center and post information explaining how the donations will be used for conservation efforts.

- Develop "Friend of Belize Audubon Society" decals to be sold through Pas visitor centers, the main office and the website. Develop an informational brochure to be given out with the decals explaining how the funds will aid conservation efforts.

- Consider conducting a willingness-to-pay survey to determine benefits of raising entry fees for non-residents.

- Explore the opportunity to establish warden-guided tours through the PAs; may also be tied to community ecotourism efforts.

- Explore the option to collaborate with tour boat operators out of major ports (Belize City, San Pedro, Dangriga, Placencia) to collect entry fees for HMCNM and Blue Hole Natural Monument as part of snorkeling/diving packages. Wardens would not be required to personally collect fees and visitors may not feel as though they are paying twice for their excursion.

- Stock visitor centers with full complement of t-shirts, guide books, posters, and postcards for sale to visitors.

- Request full mailing address from visitors who wish to receive one complementary issue of BAS' newsletter in order to generate foreign membership enrollment. These lists should be separate from log books so they can be sent to the office periodically.

- Request that a donation box (with pictures and descriptions of BAS' PAs) be installed at the airport in the departure area to collect change from visitors.

- Print envelopes to accompany every airline ticket sold that solicit donations ? visitors can mail them in once they return home.

- Prominently display brochures for membership enrollment and the "Adopt a Park" program in each visitor center.

APPENDIX 6a

Additional Conditions for Partnership Agreements

Source: Borrini-Feyerabend, 1996

It is particularly appropriate to pursue partnership agreements when one or more of the following conditions apply:

1. The local stakeholders have historically enjoyed customary/legal rights over the territory at stake.

2. Local interests are strongly affected by the way in which the PA is managed.

3. The decisions to be taken are complex and highly controversial (e.g., different values need to be harmonized or there is disagreement on the ownership status of the land or natural resources).

4. The agency's previous management has clearly failed to produce the expected results.

5. The various stakeholders are ready to collaborate and request to do so.

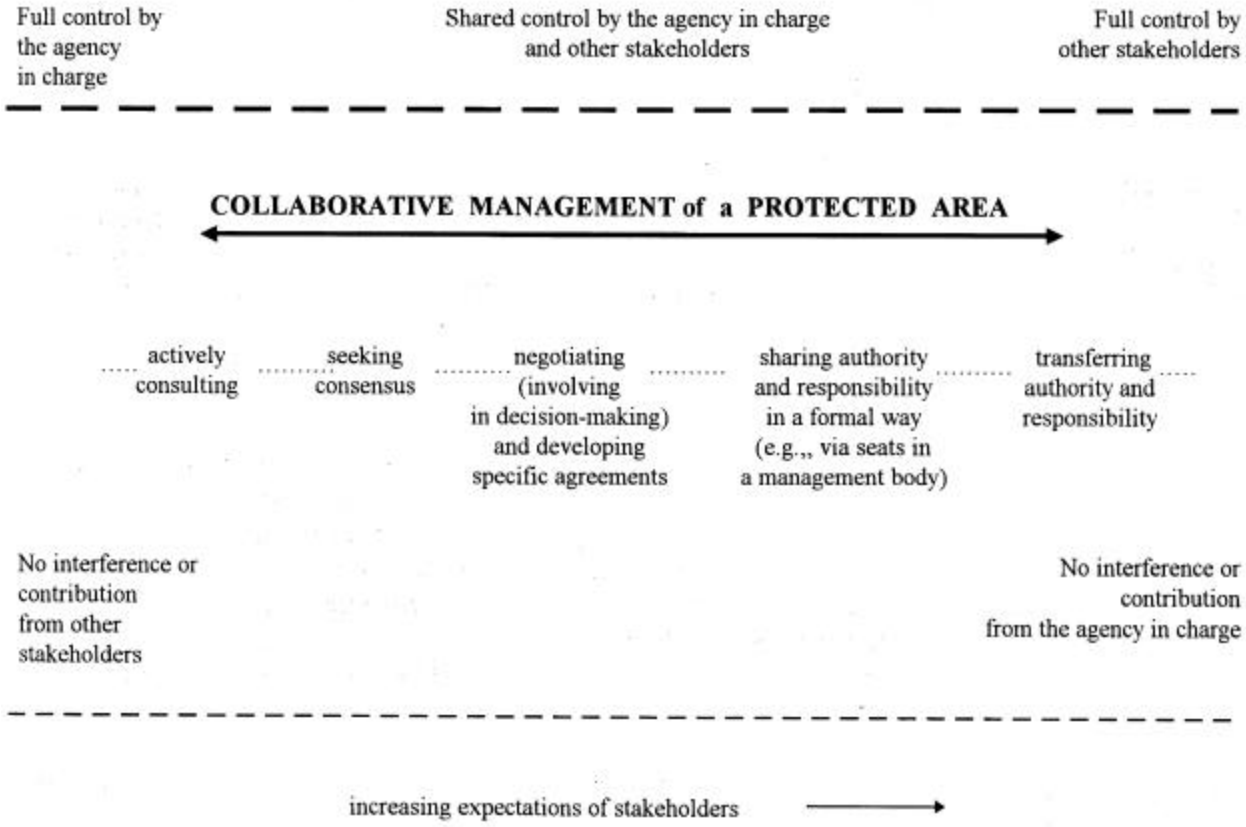
6. There is ample time to negotiate.

APPENDIX 6b

The Collaborative Management Continuum

Source: Borrini-Feyerabend, 1996

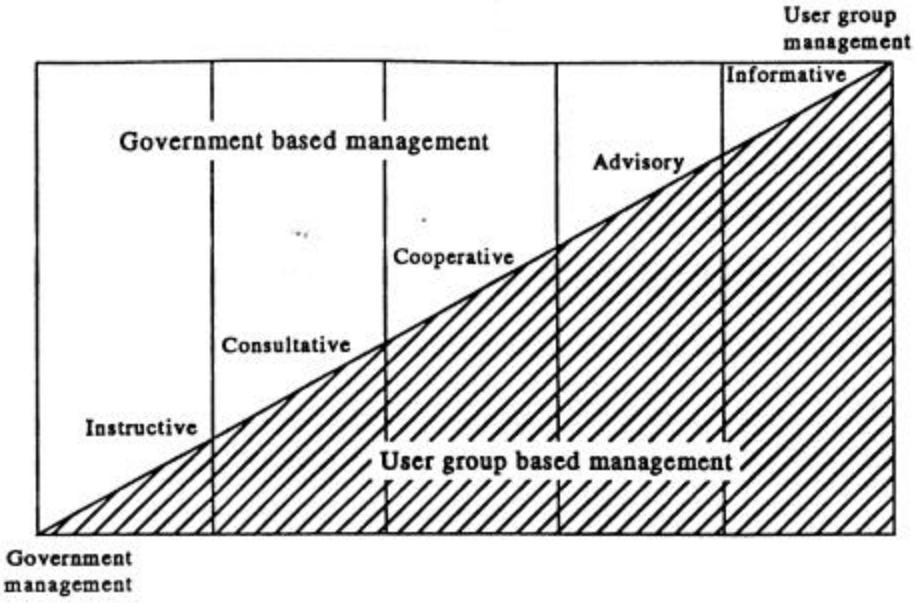
A schematic representation of participation in PA management (sharing of influence and control) seen from the perspective of the agency in charge. The representation refers to *de facto* situations, regardless of underlying tenure rights, policies and legislation. Obviously, if supportive policy and legislation exist, they do strengthen a management partnership.



APPENDIX 6c

Spectrum of Co-management Arrangements

Source: Senn and Nielsen, 1996



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Chapter 9

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