ECOTOURISM:
TOURISM DEVELOPMENT AND THE ENVIRONMENT
IN THE CARIBBEAN

by

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ABSTRACT:
A fundamental shift in attitudes toward environmental issues is becoming increasingly visible in the tourism development industry. Fueled by market demand, environmental awareness, governmental regulation, and the quest for a new marketing niche, "Ecotourism" has become the industry buzzword of the 1990's. This thesis specifically examines ecotourism in the Caribbean.

The islands of the Caribbean are currently under economic pressure to develop tourism. This pressure, and the immediate need to protect the environment (given its sensitivity and limited supply) make this a critically important region today. The governments there, as well as conservationists, developers, and the tourism industry are being forced to consider how to balance these demands. More than simply finding the 'right' level of development, the question is how development and the environment can support each other in a solution that will satisfy the tourism market, be financially viable, and be environmentally sustainable. The middle ground of these seemingly opposing goals is the emerging field of ecotourism.

The thesis begins with an examination of the multiple definitions of the term 'ecotourism,' what it means to whom, and how it is being used. The distinctions are important as a means of organizing the spectrum of project types that might fall under the ecotour banner. What is ecotourism, to what degree, and what is not ecotourism are necessary lines to draw for the sake of analysis and comparison. These classifications are defined, and set the framework for the remainder of the paper.

The shift toward ecotourism in the Caribbean is being driven by a combination of forces, including tourism market trends, a new global awareness of environmental issues, regional macro economics, lending criteria of financing institutions, and governmental policy and regulation of land use. The greatest response to these forces to date has been in the form of "planning and preparation." There are, however, places in the Caribbean where the concept has been applied and implemented. Some countries have embraced ecotourism as a national policy, but the majority of implementation has been at the private sector project level. Example countries, and projects at each level of tourism are reviewed.

A critical analysis of this trend and the outlook for its future are made, considering the financial viability and ecological sustainability of the ecotourism product. External factors to which this market may be vulnerable are explored, as is the educational component of ecotourism.

In conclusion, ecotourism is not the panacea for the Caribbean region, but can be a valuable, diversifying, and profitable addition to an existing tourism market. If development and environmental protection can be reconciled in this sensitive region, there may be important lessons for other parts of the world. Thus, though the focus of this thesis is on the Caribbean, ecotourism solutions developed there may well have larger significance and broader application.
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"A prosperous tourist industry and healthy environment are key factors in the quest for an acceptable standard of life in the Caribbean."

Jean Holder, Secretary General, Caribbean Tourism Organization

CHAPTER 1. INTRODUCTION

A fundamental shift in attitudes toward environmental issues is becoming increasingly visible is the tourism development industry. Fueled by market demand, environmental awareness, governmental regulation, and the quest for a new marketing niche, "Ecotourism" has become the industry buzzword of the 90's. This thesis specifically examines ecotourism in the Caribbean.

The islands of the Caribbean are currently under economic pressure to develop tourism as the region has been experiencing growth in the tourism sector at a rate between five and eight percent annually. Simultaneously, as irreversible mistakes from the past become painfully apparent, environmental issues are coming to the fore. The governments and people of these island countries are coming to realize the critical importance of addressing the sustainability of their fragile environments. Historically there has been a conflict inherent in tourism: development versus the environment; real estate development, by definition, transforms and consumes land. The current pressures to develop, and at the same time, protect the environment of the Caribbean have forced developers, government regulatory bodies, and the travel industry to look at ways to balance these demands. More

1 Caribbean Tourism Statistical Report (Barbados: Caribbean Tourism Organization, 1991)
than simply finding the right level of development, the question being asked is how development and the environment can support each other. From the development side, how can the environment be enhanced, marketed, and made an asset rather than an obstacle? From the environmental side, how can tourism be used to educate visitors, and to promote and protect the environment? Is there a sustainable middle ground? Can development actually enhance the environment? Will tourists pay for this type of product or experience? Is it possible to be both environmentally sensitive and financially viable?

There are many examples in the Caribbean, ranging from single projects to entire islands, where a past lack of environmental sensitivity has virtually destroyed the natural attraction. There are efforts under way to address these mistakes, attempts to reverse the damage that has been done. These actions are certainly necessary, but review of this cleanup-type approach is not within the scope of this paper. Instead, this thesis is about real estate development, and therefore focuses on the proactive side of the issue, specifically, how development for tourism is addressing environmental issues. Within this general topic, several specific issues are emphasized, including:

- the macro-economic issues that are driving the region, its tourism, and specifically, ecotourism
- the actual ecotourism projects that have been developed in the region
- the financial issues, i.e. the viability of the ecotourism "product," to the extent that such information is available for this fledgling sector.
- the costs and benefits of this trend toward ecotourism, in economic and social terms, and the policy level implications of these distributions.

The pressures to develop, and the immediate need to protect the environment (given its sensitivity and limited supply) make the Caribbean a critically important region today. The priority of environmental issues varies in different parts of the world. They are important issues regardless of the location, regardless of the seemingly infinite supply of
"environment" in any location. However, not many other parts of the world are currently under comparable pressure to develop, either because of economics, remoteness, or unrealized development potential. If development and environmental protection can be reconciled in this sensitive region, there may be important lessons for other parts of the world. Thus, though the focus of this thesis is on the Caribbean, ecotourism solutions there may well have larger significance.

The term "ecotourism" has been employed to describe or promote a great range of tourism activities. Accordingly, this paper begins with an examination of the multiple definitions of the term (Chapter Two). A definition that is widely accepted in the tourism industry is that put forth by the Ecotourism Society, "...responsible travel that conserves natural environments and sustains the well-being of local people."2 The social issues that are inextricably tied to physical development do not receive much attention; this is a paper on real estate development, and the focus is therefore on the land use and development issues. The impacts and benefits of ecotourism on regional people and communities underlay the thesis.

Beneath the broad banner of ecotourism, I have distinguished levels or tiers, from traditional tourism with an environmental twist at one end of the spectrum, to conservation projects with a secondary tourism component at the other; the tiers are defined by the emphasis each places on conservation/preservation. Analysis and application of the concept of environmental tourism development is only possible through such a multi-level definition. The five levels, and the criteria demarking each are set forth in Chapter Two.

Chapter Three of the thesis considers the economic and market forces driving the tourism industry. What is pushing the trend toward ecotourism, or at least environmentally sensitive tourism development? It is important that everyone involved in the tourism

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industry, including the public and private sectors, developers and environmentalists, understand these issues. The data presented here are from current literature, as well as from two weeks of field research throughout the Caribbean, including interviews with a number of key professionals in the field.

More specifically, the third chapter examines the tourism industry, focusing on its trends, statistics, and demographics. This includes a snapshot of the emerging ecotourism market. I next look at the new environmental awareness that has evolved globally, and specifically in the Caribbean. I explore regional economics and how they affect tourism, including the increasing reliance on tourism in most Caribbean economies, the role of foreign aid, and regional competition. Next I consider financing of tourism ventures, which is difficult, at best, in today’s lending market. Environmental concerns add yet another layer to the financing process as lenders become more aware, and wary, of these issues. Finally, this chapter on market forces addresses environmental policy and regulation; the governments of these island countries are becoming more concerned with environmental issues, and manifest this concern through regulation of development. How have the governments of the Caribbean responded to these trends and forces? To what extent has regulation driven, rather than responded to, these forces?

I summarize the market forces within the context of the levels of ecotourism as defined in Chapter Two. Although all of the forces are at work at each of the levels, their order of relative importance shifts from one end of the continuum to the other.

The fourth chapter of the paper, "Industry Responses," addresses how tourism development has reacted to the market forces just described. To a large degree the response to date has been meetings and seminars, planning and preparation, but the focus here is on real efforts being made in the Caribbean to implement this concept, and capture the ecotour market. Again, the responses fall along a continuum, and are organized into the tiers set forth earlier. While there are actual examples at each level, it would be premature to hold any single project or program up as THE model of ecotourism. At the outset I had hoped
to find such a project at each level to use as in-depth case studies, thought his did not prove to be a useful strategy; while the examples that I cite at each tier offer some interesting and useful innovations and lessons, no single project captures the full range of issues. Consequently this section is more in the nature of a survey, focusing primarily on the middle levels. More specifically, the focus is on those ecotourism projects that involve significant real estate development, and an environmental experience. Traditional development, which only meets the letter of environmental regulation, receives less attention here, as is also true of conservation and nature trips, which do not have enough of a real estate development component to warrant inclusion here. Most intriguing is the middle ground, the attempt to find a new balance between development and environment, that is emerging as a new trend under the ecotourism banner. Hence the focus is here.

Chapter Five is an analysis of ecotourism, and an outlook for its future. The first question is the strength and depth of the ecotourism market, i.e. is ecotourism a fad? The industry professionals that I interviewed in the Caribbean shared their views about the depth and size of the ecotourism market, and its place, if any, in the tourism industry's mix of offerings. The opinions varied considerably, but it is precisely this lack of agreement, even within the industry, that I want to highlight. Although most agreed that there is a bright future for ecotourism, others sharply disagreed. The second question for analysis goes to the economic viability of ecotourism; given the performance of these projects to date, is ecotourism, at each of the defined levels, financially workable? Under what conditions? Is it an appropriate product type for all Caribbean markets, or only for those with certain characteristics?

Many tourism ventures have been financially viable, but not many have been ecologically sustainable. Ecotourism strives to strike this balance. Can nature tourism or ecotourism actually be sustainable, or will some degree of environmental degradation have to accepted as inevitable? What measures might be taken to minimize impacts?
Chapter Five continues with a cautionary note; there are exogenous economic variables that affect the tourism industry in the Caribbean, some quite volatile. A number of looming events could negatively impact the region's economies. If all were to occur in the worst case scenario, the results could be devastating. These variables include the North American Free Trade Agreement, the opening of Cuba, shipping accidents including oil spills and plutonium leakage, political instability, natural disasters, and the health of the global economy.

Education is often a component of ecotourism, with varying degree according to tier. This includes education of the local people, the tourism industry, tour operators, guides, and all visitors. This section of Chapter Five considers how education fits into ecotourism, and its importance as a component for ensuring the continuity of the conservation/travel ethic.

This analysis and outlook chapter concludes on a philosophical note; conservation efforts, and certainly ecotourism, strive to enhance the natural environment, and where damaged, to repair or recreate it. How far can a site be enhanced and recreated before it becomes the creation of an artificial environment? How real is real?

The final chapter of the thesis, Chapter Six, considers the broader application of the principles learned from Caribbean ecotourism. Each ecotourism project is unique due to the special qualities of its site. Replication of any project cited is therefore not necessarily possible. Nonetheless, the application of the concepts, the innovations, and the ethic to other sites and other regions of the world is certainly valid. The larger concepts include public policy implications, and perhaps most importantly, the unresolved issues facing the ecotourism development industry.
CHAPTER 2. DEFINITIONS OF ECOTOURISM

The word 'ecotourism' has been used, if not misused, to describe or promote a great variety of activities and projects. The term originated in the late 1970's as a marketing buzzword: "Tikal, which established itself as a general tourism agency, decided that the natural history market held great promise, and coined the term 'ecotourism' in its brightly illustrated brochures of Costa Rica's natural attractions." 3 At one end of the spectrum of definitions is ecotourism as a conservation effort, with tourism as the means. One such example is Las Cabezas de San Juan in Puerto Rico, a private reserve owned and operated by the Conservation Trust. At the other end is "three ducks in a pond," in the words of Jean Baulu, Barbados Wildlife Reserve director, referring to project marketing that takes advantage of the confusion over ecotourism's definition to falsely promote environmental sensitivity. The Barbados Reserve is an example of a successful project with a strong commitment to conservation and biological diversity. Also critical of the use of the term was Skip Benvie of Maho Bay Camps, perhaps the quintessential ecotourism destination in the region, who said, "To a lot of industry people, ecotourism means low flush toilets, but they still bulldoze the site to build, and do the asphalt parking lot. It's not very defined."

There is an entire vocabulary to describe ecotourism. Karen Ziffer of Conservation International, in her 1989 paper on ecotourism explained, "One category of terms is merely descriptive. The expressions nature-travel, adventure-travel, and cultural-travel, segment tourists based on what activities they participate in during their visit. Another category of terms are value-based. The phrases, responsible tourism, alternative tourism, and ethical travel, highlight the need for considering the approach and impact of travel regardless of the activities pursued." 4 Kreg Lindberg of the World Resources Institute, and author of a number of publications on the subject, uses the term 'nature tourism' rather than

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'ecotourism'; "the important distinction is between mass tourism and nature tourism...Most nature tourism sites feature natural attractions and a solitude that the traveler lacks at home."5 Similarly, Ziffer observed that although often used interchangeably, nature tourism and ecotourism are increasingly being used to describe two different things. While both have an environmental component, "nature tourism is not necessarily ecologically sound,"6 but rather is nature as an attraction. Preservation in nature tourism is stressed to the extent that it enhances the attraction value of the amenity. Ecotourism is a more comprehensive term, based on an ethic of conservation, not simply preservation, with the environment as a conservation project financed by visitors.

"The term has eluded firm definition," Ziffer asserted, "because it is a complex notion which ambitiously attempts to describe an activity, set forth a philosophy, and espouse a model of development."7 Many definitions have been developed, including "...traveling to relatively undisturbed or uncontaminated natural areas with the specific objective of studying, admiring, and enjoying the scenery;"8 "...attracting visitors to natural areas and using the revenues to fund local conservation and fuel economic development," and "the point at which capitalism and conservation join together to fight for the same cause: wildlife preservation, at a profit."9 These definitions have a common theme; tourism interests and environmental issues are not mutually exclusive, but can work to enhance each other, in a variety of forms, under the flag of ecotourism. "Ecotourism is about many things, but in its broadest sense it is about closing the gap between our intentions and our actions toward the environment."10

7 ibid, p. 5.
The semantics may seem trivial. However, the fact that the term means different things to different people makes the definition important. It is important as a deterrent to continued misunderstanding and contradictions of the term within the industry. It is important for consistency in its use in marketing and promotion to avoid confusion and misperceptions by the traveling public. And it is important for clarity in the organization of this, and other theses and publications. By specifying what ecotourism is, a clear definition will also eliminate those things that ecotourism is not.

Stanley Selengut, developer of Maho Bay Camps on St. John, and Harmony, the prototype sustainable resort development currently under construction adjacent to Maho Bay, is considered an expert on ecotourism. He defined ecotourism as one part of a larger issue. "Ecotourism is one facet of the broader question of sustainability, using the resort business as means to sustain it." 'Sustainable development' has also eluded clear definition. While merely a buzzword to some in the planning and building industries, to others it represents the cornerstone of a new set of environmental values, a completely new approach to planning and design. Sustainability is a long term outlook at a natural balance between inputs and outputs, and is a goal that the development industry, especially in a fragile and finite environment such as the Caribbean, must strive for. Anything less will result in continued environmental degradation, and a corresponding drop in the quality of life in the region. It is appropriate in this sense to think of ecotourism as a component of the larger shift toward a sustainable approach to building.

The definition of ecotourism becoming most widely adopted by the tourism industry is that put forth by the Ecotourism Society, "...responsible travel that conserves natural environments and sustains the well-being of local people." The Ecotourism Society is a non-profit, non-government organization (NGO) formed in 1990 with the goal of "finding the resources and building the expertise to make tourism a viable tool for conservation and sustainable development." The impetus to formation of the organization, according to Executive Director Megan Epler Wood, was the need to bring together the
diversity of voices needed to advance ecotourism as a conservation tool. The tourism industry, developers, conservation groups, and governments had all been discussing ecotourism, but not in a united forum. In Ms. Wood's words, such a forum was "going to happen if someone just lit a match." Hence formation of the Society.

The Ecotourism Society's main objectives are education and training of the travel industry, policy analysis, and project and tour evaluation. Collection and dissemination of this information to Society members and the tourism industry are at the core of the Ecotourism Society's mission. The current membership of 600 professionals is growing at nearly 20% per year. The membership is made up of approximately 35% to 40% tour operators, 25% academics, 10% development and conservation interests, and 5% travel industry professionals. Funding of the Society's activities, which has barely reached break-even levels since its founding, is from membership fees, donations, grants, and sales of publications. The mere formation of this group, and its rapid growth in numbers and scope of activities, are indicative of the interest that is building at all levels in the emerging ecotourism trend. The lack of adequate funding for this venture is also indicative of the slow response conventional funding sources have had to ecotourism.

The Ecotourism Society's definition casts a net widely enough to capture a range of project types. It deals with the intent of tourism development, and the dedication to address environmental and social issues. According to Megan Epler Wood, the Society's Executive Director, the cutoff line between real ecotourism, and conventional development with an environmental component, is the former's intention to enhance, preserve, and conserve the environment, as opposed to the latter's attempt to simply mitigate the impacts of its own development. In her words, "As a field, we need to orient ourselves to look at projects that are working to protect or enhance the environment, not just offsetting their own impacts." Certainly mitigation of impacts is to be encouraged, if not mandated, as a first, minimum step toward addressing environmental issues, but should not alone qualify a development project as ecotourism.
Beneath the broad banner of ecotourism, projects vary by the level of emphasis each places on conservation/preservation, from conservation projects with a secondary tourism component at one end, to traditional tourism with an environmental twist at the other. The concept of environmental tourism development can only be analyzed using a multi-tiered definition; comparison is not valid, for example, between a trek in the rainforest of Belize, and a week's vacation at a beach-front resort in Antigua. The differences are many, including the physical development needed to support the activity, the degree to which each is a product versus an experience, and how and to whom each is marketed. The cutoff lines between tiers are fuzzy, as the projects are points on a spectrum, or actually multiple points on a number of spectra. The lines are drawn using defensible, tangible criteria. Projects can arguably fall into more than one level, depending on the criterion applied. As defined, the tiers form a framework in which projects can be analyzed and compared, but they are not hard and fast compartments.

I have defined five tiers, labeled TYPE 1 through TYPE 5, from those with the least conservation component to those with the greatest. This ordering offers a point of reference; the typical Caribbean tourism development addresses environmental issues to the extent necessary to get permitted and built, i.e. is TYPE 1. This is not to say that all projects are guilty of ignoring environmental issues, or malicious in their development intentions, but TYPE 1 offers a very tangible baseline from which the trend toward environmental sensitivity begins. The levels are defined as follows:

**Type 1** The projects of this type are off the ecotourism scale, as they are only as "sensitive" as is required to get permitted. There are plenty of historical examples, ranging from single projects to entire sections of islands where this approach is glaringly obvious. There are also current examples, such as the Grand Palazzo on St. Thomas, U.S. Virgin Islands. Due to a number of factors, regulatory and economic, this seems to be a dying breed for new developments. To date, however, it has been the mainstay of Caribbean
tourism development. Although not ecotourism itself, inclusion of this project type in this discussion of ecotourism gives a contemporary benchmark of development against which to measure newer initiatives.

**TYPE 2** This tier is defined as traditional development making a serious effort to address environmental issues through site sensitivity, clustering and lower densities, and use of design and materials that minimize visual and environmental impact, yet provide the amenities, services, and activities of traditional resorts. Palmas del Mar Resort on Puerto Rico is a good example here, as is Jumby Bay Resort on Antigua, and perhaps the Four Seasons on Nevis. The focus of this tier is the resort product, and the use of natural amenities to enhance the appeal of the product.

**TYPE 3** Travel here is a rustic experience "out there" in nature. It is a product, but also an experience that is being offered. There may be an educational component, or at very least, an attempt to sensitize the visitor to the site's ecology. This includes overnight accommodations, with a focus on comfortable, close-up, longer-term environmental exposure. The development is environmentally sensitive, minimizing impact on the site, and seeks to remain at a sustainable level. The quintessential example of this tier is Maho Bay Camps on St. John, U.S. Virgin Islands. Caneel Bay Resort on St. John may fall into this, or the prior level, depending on one's definition of 'rustic.'

**TYPE 4** This tier includes natural attractions with visitor centers and interpretive tours, such as nature reserves, national parks, botanical gardens, and aquariums. It is characterized by day-trip destinations, nature-as-entertainment. There is an emphasis on education of the visitor through exposure- a quick impression. The focus is the experience, with the physical development component of the project intended to deliver and enhance
that experience. The project is, either in and of itself, or through off-site field work, involved in conservation and preservation efforts.

**TYPE 5** This final level covers treks, tours, and adventure travel to remote areas. The emphasis is almost entirely experiential. There is a wide range of offerings even within this tier, with varying degrees of emphasis on flora, fauna, history, and culture. Experiences like Outward Bound are at the very limit of this tier, or maybe merely cousins to it, with the emphasis one step removed from the physical setting, turning inward on the personal experience. Tour operators at this tier cover the spectrum in terms of dedication to environmental conservation, and promotion of cultural sensitivity.

Projects of **TYPE 1** will not be the subject of much attention here. It is important to mention this tier as it is so prevalent in the Caribbean. It is the baseline against which the other levels can be compared. It is the fallback, default position for tourism development, still being taken by many major developments in the Caribbean, and will probably continue to be the operating norm for large scale projects. However, intensified regulation by governments and financing institutions is bringing even this end of the scale closer to an environmental ethic. These types of projects cater to the mass tourism market that is the mainstay of many Caribbean economies, and information about them makes up the bulk of Caribbean tourism literature.

Comparison against this benchmark has the sound of judgment that the other levels are better or morally superior. That is not the intention. To use the words of Vera Ann Brereton, Regional Tourism Education and Training Consultant for the Caribbean Tourism Organization, "I don't see anything wrong with traditional development, with the exception of some horrendous mistakes." The prevalence of this type of project, and its location near one end of the continuum, make it a tangible baseline.
Similarly, projects of TYPE 5 will not be reviewed here. The focus of this thesis is real estate development, and most projects at this end of the spectrum have a very small, or nonexistent physical development component. There are a number of excellent sources of information on these types of tourism, including *Ecotravel* by Buzzworm Publications of Boulder, Colorado, which includes a section on questions to ask the tour operator, and how to evaluate them. Further, the Ecotourism Society has undertaken a Green Evaluation project of TYPE 5 tour operators in the region.

Arguably, projects of TYPE 2 should not qualify as ecotourism. Using the cutoff criteria proposed by the Ecotourism Society, these developments address environmental issues to the point that they offset their impacts; mitigation does not ecotourism make. On the subject of large hotel chains and travel companies, Megan Epler Wood said, "Most are not remotely doing anything ecotourism by our criteria. What we're doing is just not related to what they're doing at this time." However, TYPE 2 projects are included here because clearly they are displaying an environmental ethic in making an effort toward addressing the issues. The level of thinking behind this approach is evolved far beyond that of TYPE 1 projects, and warrants at least review in the context of this thesis.
CHAPTER 3. FORCES SHAPING THE ECOTOURISM MARKET

The shift toward ecotourism in the Caribbean is being driven by a combination of forces, including tourism market trends, a new global awareness of environmental issues, regional macro-economics, lending criteria of financing institutions, and governmental policy and regulation of land use. Everyone involved in the tourism industry, including the public and private sectors, developers and environmentalists, can benefit from an understanding of these variables driving the trend. The data presented here were gathered from current literature, as well as from two weeks of research throughout the Caribbean, including interviews with a number of key professionals in the industry (see Appendix for list of interviews).

3.1 TOURISM TRENDS

3.1.1 World Tourism

Tourism has become the largest industry in the world, according to the World Travel and Tourism Council (WTTC). Tourism revenues worldwide will exceed $3.5 trillion in 1993, representing 6% of the world's gross national product, a larger sector than the automobile, steel, electronics, or agriculture industries. One in fifteen workers worldwide will be employed in a tourism related job in 1993, a total of 127 million workers. (WTTC, 1992) The World Tourism Organization (WTO, a U.N. affiliate) estimates that international tourism grew by more than 57% in the past decade, and forecasts it will grow by another 50% this decade. Despite the slower growth rate that has followed the recent downturn in Western economies, growth is expected to continue through the 1990's at 3.7% annually, on average. (WTO, 1992) This projection appears conservative, as other growth forecasts for the tourism industry range from 4% average
through the 1990's (Ziffer, 1989) to 5.7% average, doubling by the year 2005 (WTTC, 1992).

3.1.2 Caribbean Tourism

The Caribbean is sharing in this rapid growth in tourism, which is now the largest industry in the region.11 A 1987 study for American Express estimated that the Caribbean captured about 4% of world tourism expenditure. Tourism growth in the region has outpaced the worldwide rate; Caribbean tourist arrivals grew between 1970 and 1991 from 4.2 million to 11.7 million, an increase of 178.6%, almost 9% per year, on average (CTO figures). Other estimates range from 5% to 9% annually. The cruise ship industry alone is projected to grow at 4% to 8% annually from its 1992 level of 4 million Caribbean passengers, according to Robert Sturges, Vice President of Carnival Cruise Lines. Clearly, Caribbean tourism is on the rise.

As world travel continues to increase, the type of tourism experience being demanded is shifting. Increasingly, international travelers are looking for, and willing to pay for, unique, exotic vacations. As transportation and communications make the world's farthest reaches more and more accessible, tourists are venturing farther from home, and farther from traditional holiday fare. According to Calvin Howell, Executive Director of the Caribbean Conservation Association, "More and more, international tourists are going for exotic and natural adventures in the developing countries of the Caribbean and Latin America." The allure of a natural, unspoiled attraction is being echoed throughout the region: "All of the travel industry meetings and groups are talking about people who want an environmental component to their holiday," said Leona Bryant, Assistant Commissioner of Tourism of the U.S. Virgin Islands. "There is a demand for a different kind of experience that involves the environment."

This shifting demand appears to be supported by data from the U.S. Virgin Islands. Visitor exit surveys have been conducted over time to track trends in tourist impressions and preferences. The last fully compiled data are from 1989. A new survey was conducted in 1992. Although compilation of the results is not yet fully complete, Dan Inveen, Chief Economist with the government of the U.S.V.I., reports that a preliminary look at the data suggests a drop of about 7% in the number of people responding that they "would like to return" (from 86% to 79%), which Inveen interprets as people being less satisfied with traditional vacation offerings. Preferences changed over that time; "Beaches and Water" as the primary attraction dropped from 30% to 19%, while "the Island in general" rose from 2.4% to 10%. Inveen suggests that this shift shows people's broadening interest in a full range of tourist offerings, not just the sea and sun. This trend is substantiated by Luther Gordon Miller, Tourism Development Specialist with the Caribbean Tourism Research and Development Centre (now the CTO), who wrote, "[A] multitude of surveys substantiate the view that the tourists themselves rate a 'high quality' environment as a prime factor dictating the choice of holiday destinations."12. The industry has responded with marketing that gets away from simply the three S's. In Calvin Howell's words, "The island countries are shifting towards promotion of natural attractions and amenities other than the traditional sun, sea and sand."

Two things are clear from the data: international tourism is a fast growing segment of the Caribbean economy, and many travelers are increasingly looking for a different experience, often with a nature component.

### 3.1.3 The Ecotourism Market

The market to capture these trends is the ecotourism or nature tourism market. "A very definite market exists. It's not a question any more if there's a market; there is. And

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the market is growing," according to Leona Bryant, Asst. Commissioner of Tourism of the U.S. Virgin Islands. The question, she said, is whether the opportunities currently available fit the demand. Actual numbers on nature tourism are difficult to come by.; most countries of the Caribbean keep statistics on tourism as a whole, but none currently break nature tourism out as a separate sub market. Doing so would allow a look at the actual size and growth rate of ecotourism. A good indicator may be the scuba diving industry, itself a sub market of the ecotourism sub market, which as of 1988 was generating nearly $1 billion annually in the Caribbean.13 Estimates of the total ecotourism market are being attempted; ecotourism "is a burgeoning business which transfers U.S. $25 billion per year from the developed to the developing countries," estimates Calvin Howell of the Caribbean Conservation Association.14 This estimate is for ecotourism worldwide. Another estimate comes from a 1992 study by the World Travel Organization, which found that nature tourism accounted for approximately seven percent of all international travel expenditure.15

Combining these estimates for worldwide tourism and ecotourism expenditure, I arrived at a very rough estimate of the size of the nature tourism market in the Caribbean: $3.5 trillion is the WTTC estimate for 1993 world tourism expenditure, four percent of this figure goes to the Caribbean according to the American Express study, and nature tourism captures seven percent of this expenditure (WTO). This very simplistic approach assumes that nature tourism's share of the world tourism market holds true, percentage-wise, in the Caribbean at seven percent. Given these serious limitations and assumptions, the size of the nature tourism market in the Caribbean is estimated to be $9.8 billion annually.

Regardless of the precise size of the market, and regardless of how ecotourism is defined, there is widespread agreement that the market is growing. "There is some evidence to suggest that the number of nature-tourists is growing in the neighborhood of

15 Lindberg and Hawkins, 1993, p. ___
20% per year," says Ziffer's 1989 report for Ernst & Young. The Specialty Travel Index in 1979 listed 110 advertisers in nature travel. By 1990, that number was up to 539, an increase of nearly 17% annually, on average. A 1991 survey of travel companies by Todd McCamy Rymer of Florida International University found that the ecotourism market between 1980 and 1989 grew 124.5% in the number of "nature tours" offered, and a 460.6% increase in direct revenues from nature tourism. Further, ecotourism's share of total U.S. tourism expenditure more than doubled in this period. In the words of Vera Brereton of the Caribbean Tourism Organization, "The market is growing. As the environment gets worse elsewhere, the demand grows for this type of product."

3.1.4 Demographics of the Ecotourist

Who is the nature tourism traveler? It may be premature to attempt a profile of THE ecotourist, as this sub market is just beginning to come to the attention of mass tourism. The profile today may change radically as new, different, and maybe surprising niches discover nature tourism. Further, even the tourist with a profile opposite that of the 'average' nature tourist might be enticed to add an environmental component to his/her holiday, if packaged and promoted correctly. Richard Ryel and Tom Grasse, President and Director of Marketing and Public Relations, respectively, for International Expeditions (the largest American ecotour operator), asserted that "in order to fulfill its mission and to achieve business success, ecotourism must reach out to potential consumers unfamiliar with the concept. Therefore, the ecotourist must be made as well as born."

The World Wildlife Fund conducted a survey of nature travelers, and found, on average, that the ecotourist is slightly older than the average for other groups, nature travelers as a group are more evenly split along gender lines than other groups, it was their

16 Ziffer, 1989, p. ----
first visit to the country for the majority of nature tourists, as opposed to other groups who had a higher rate of return visitors, and fewer nature tourists traveled alone- the percentage traveling in groups was higher than the average for all tourists.20

Although specific data are not kept on ecotravelers at Maho Bay Camps on St. John, Skip Benvie, Assistant Manager of the development, offered some observations on the demographics of their visitors. The majority, he said, consider the development luxury camping in a great location. This group is made up of two types- campers who consider this luxury, and "hotel types" who are looking for a rustic experience. Others come because they love the price as compared to other accommodations on St. John (which range from $300 to $600 per night, as compared to $85 per night at Maho Bay), and consider this the minimum level of amenities they demand. The average age of the nature tourists at Maho is in the mid-thirties in the summer (off-season), and in the mid-forties in the winter peak season. A large percentage are repeat guests (approximately 40%), and many come with their families and children.

Kreg Lindberg, in his 1991 publication for the World Wildlife Fund, categorized four types of tourists that seek out this type of product:

"type 1 Hard-Core Nature Tourists. Scientific research, educational tours, etc., maybe a conservation project component

type 2 Dedicated Nature Tourists. People who take trip to area specifically to see the protected area, and want to understand the history and culture

type 3 Mainstream Nature Tourists. People who primarily want to take an unusual trip

type 4 Casual Nature Tourists. People who partake of nature incidentally as part of a broader trip"21

20 Boo, 1990, p. 43.
The demographics of ecotourists may be different from the market segment that Caribbean tourism has largely been targeting of late, which is the upper-end market. Marc Koenings, Superintendent of the Virgin Islands National Parks suggested that the ecotourism 'product' and the high-end of the market "may not be a good fit." Vernita Fort, Chief Economist with USAID Latin America/Caribbean agreed. "Many islands want to focus on the upper end tourist segment, which they perceive to be recession-proof. To the extent that the upper income tourist wants to rough it a bit or do something different for their vacation, there is a market. But the upper end tourist may not have the correct demographics for this type of travel, or at least the market will be limited. The interest is being expressed at the middle, in fact at all levels, but except for the upper end, they may not actually have the money to do it." A comprehensive survey of who the ecotourist is today, and what the most appropriate target markets will be tomorrow, has not been done to date.

If the demographics of the ecotourist are not exactly clear, his/her spending habits are more so. The World Wildlife Fund conducted exit surveys in 1988 at selected airports in the Caribbean. The results indicate that "nature-oriented tourists spend more money in the country than tourists that are not nature-oriented [by comparing those who said that they had chosen the destination primarily due to its parks and protected areas, and those who had not.) This is a good proxy for 'nature tourists.' In our survey, nature tourists spend less time in countries but spend more money. People who said that the country's natural areas were the main criterion in selecting the destination spent more money than any other group." In fact, this group, which gave nature attractions top priority spent almost 50% more than the group giving natural areas lowest priority.22 There were limitations to the survey which could skew the results, including too small a sample size to warrant statistical application to the tourism market in general. Further, those rating nature as a low priority could partly have been made up of people visiting friends or relatives, which would explain

22 Boo, 1990, p. 35.
their priority of reasons for visit, and account for their lower expenditures (no hotel accommodations needed).

Regardless of the shortcomings of the survey, there is at least an indication that the nature tourist spends more money than the average tourist. A more comprehensive survey is obviously needed to substantiate these preliminary findings. Such a study is warranted by these data; if the nature tourist truly does spend 50% more money than the average tourist, the governments and tourism industry in the Caribbean will be scrambling to compete for this market segment. If the expenditure level turns out to be less than the 50% indicated, even by half, it is still a very significant differential. The elusive ecotourist is beginning to emerge as a substantial, big-spending customer.

3.2 A NEW CONSCIOUSNESS

Nearly all tourism development professionals agree that there is an increased awareness of environmental issues, a new consciousness or ethic. This is true among the industry itself, consumers, and even government regulatory bodies. "We're not talking about a fad, but a lifestyle, a set of values that is changing," according to developer Stanley Selengut. A recent Urban Land Institute publication asserted that "public consciousness about environmental problems and sensitivity to environmental issues has risen dramatically. A recent Harris poll shows that an overwhelming majority of Americans consider themselves to be environmentalists."23

The reasons behind this new consciousness are not agreed upon, however. The current literature and my interviews suggested a combination of reasons. Primary among them is a reactive response to the environmental damage and mistakes of past, and present

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development. "We've seen our mistakes, and other people's mistakes, and realize the need for environmental sensitivity in development projects," said Jean Bell of the Caribbean Development Bank. There is something of a defensive element present. Demand for unspoiled nature grows as the environment gets worse in other parts of the world. Pushing this farther, some tourists "have a fatalistic attitude and want a glimpse of the scenery which may not exist in a few years."24

What is it that people really want to see? Paul Buchanan addressed this question in his 1993 article on ecotourism for the Utne Reader. Does an environment or animal have to be endangered before it is in demand as a tourist attraction? Witness the popularity of African safaris (which have shifted focus from the big-game hunting safaris of Teddy Roosevelt's day, to photo opportunities today) and rainforest tours in the past two decades, and it would appear so. Buchanan describes a rainforest tour where guests will start "on the southern rim of the Amazon basin, head into the great rainforest itself, piercing the deep woods' woven shade, meeting environmentalists on the front lines, and maybe even witnessing the act of deforestation itself."25 The implication is that seeing the 'before and after' is needed to enhance appreciation of the environment.

Ecotourism might be criticized on this issue; "Come and see the last unspoiled nature in the world," is not viewed by pure environmentalists as garnering support for conservation and preservation, but as a tourism industry exploitation of the remaining unexploited resources. A review of potential harm in Yellowstone Park in the 1991 book, Nature Tourism, warns that "tourism could be a Trojan horse that will disgorge all manner of ecological and social chaos on this spectacular region."26

In addition to reactive reasoning, there are a number of proactive reasons behind this emerging environmental ethic, particularly the desire to make a positive contribution. Governments and developers alike also recognize the market potential of this tourism

24 Ziffer, 1989, p. 11.
niche. As Leona Bryant of the U.S. Virgin Islands Government Tourism Department said, "There is a new level of consciousness about the environment in the region. We've come to realize that enhancing the environment is good for business. It's a source of pride for the local community, its good publicity, and it's good for marketing."

Largely responsible for public awareness of environmental issues have been the international non-government organizations (NGOs). The oldest NGO in the region is the Caribbean Conservation Association (CCA). Along with others such as the World Wildlife Fund, the World Resources Institute, Conservation International, Island Resources Foundation, and now the Ecotourism Society, CCA has been working for years through research, education, policy initiative, lobbying, and direct project involvement, to bring environmental issues into the mainstream.

The reasons behind this new consciousness are important in determining the strength and depth of the trend. An attempt to discern the reasons and motivations is to plumb the depths of the human psyche. I am neither prepared nor qualified to drag the reader through that exercise. It is clear that regardless of the reasons, everyone at every level, governments, developers, and the tourism consumer, is more aware of environmental issues than they were just a few years ago. In the words of Vernita Fort, Ecologist, and Chief Economist with USAID Latin America/Caribbean, "We're looking at a complete paradigm shift."

3.3 REGIONAL MACRO ECONOMICS

The economies of the Caribbean countries are heavily dependent on tourism, and becoming increasingly so. For example, tourist expenditures account for fully 50% of the gross domestic product (GDP) of the Bahamas. The figure is 49% for the U.S. Virgin
Islands, 40% for Antigua, 25% for Barbados, 20% for Grenada, and 18% for Jamaica.\textsuperscript{27} These staggering numbers are a representative sampling. Governments in the region have often turned to tourism as a quick solution to economic woes, especially employment and foreign exchange crises.

The population of the Caribbean is growing at about 1.8% annually.\textsuperscript{28} At the same time, agricultural employment, once the staple of most Caribbean economies, is on the decline. Until about a decade ago, there were numerous opportunities for people from the region to go abroad for employment. The large Caribbean populations in Europe, Canada and the U.S. attest to this. Recent changes in immigration qualifications and work permit requirements in these receiving countries has closed the opportunity to work abroad for most Caribbeans. This creates pressure on the governments of the region to keep the growing population employed. The obvious solution has often been tourism development, a visible, and relatively expedient means of employment.

The region's almost desperate reliance upon tourism caused many Caribbean governments to turn a blind eye to the physical development of tourism facilities. Bulldozers and cranes were seen as signs of progress, meaning jobs and revenues to the island/country, which translated into votes. (It would be interesting to test election dates and building activity in the Caribbean nations for statistical correlation.) Issues that might have hindered tourism industry development were overlooked, including, very often, environmental concerns. Long-term sustainability was generally not considered, rather development was piecemeal, absent master planning strategies, environmental assessments, or comprehensive review.

This is not an implication of all governments of the region. In most cases, the lack of comprehensive planning was not due to malicious intent, or even to a lack of concern, but was more a function of priorities; for post-colonial countries, struggling with

\textsuperscript{27} Edwards, 1988, p. 1.  
independence or autonomy for the first time in centuries, environmental issues simply became secondary to more immediate needs. It is only now, as the politics and economies in the region stabilize, that a broader range of issues, including environmental, are being given full attention.

In addition to environmental concerns, the issue of diversification in the amenities offered to the tourist have been largely overlooked. Most of the island nations have focused on promotion of the sea, sun and sand vacation. This type of offering has been successful, but acts to make each island the same as the next- a beach resort island. In the words of Erik Blommestein, Economic Affairs Officer with the United Nations, "The predominant style of tourism in the region is that which is based almost exclusively on the attraction of the climate and of beaches. This style of tourism blurs the differences which exist among the various islands. All become similar and interchangeable. In effect, each island competes worldwide with all the other destinations catering to the same type of tourism."\(^29\) In order to avoid this direct competition with other destinations, there is a need to diversify tourism development to compete based on the uniqueness of each site, island, and country. Each development project will add a unique component to the regional mix of tourism offerings.

As basic economics show, a specialized product is not substitutable, while a standardized product is. The more unique a product, the closer to a monopoly situation, which allows the charging of a premium for the product, or the ability to extract "scarcity rent" from it. A nature tourism destination based on unique natural amenities is more differentiated than a beach resort, and the demand is therefore less "elastic," i.e. changes in the price charged for the product have a small effect upon the number of people willing to purchase it. Research in the Caribbean has substantiated this assertion. Referring again to the airport survey conducted by the World Wildlife Fund, nature tourists spend more

\(^{29}\) ibid, p. 60.
money in less time in a location than the average tourist. A study by Kreg Lindberg for the World Resources Institute (WRI) concluded that foreign travelers have a higher willingness-to-pay for a unique, unspoiled amenity, than for a traditional destination, because the premium charged for a single attraction is minimal when figured into the total expenditure for the vacation. Further, the study found that many tourists will pay a premium toward conservation of the area that they've come so far to see. This may be due to an environmental consciousness or a fatalistic view, as discussed earlier, but it is important to note here that there is a higher willingness-to-pay for this type of product or experience.

The WRI study also concluded that the majority of the nature attractions surveyed could charge higher, often much higher, entry fees without a significant drop in the number of visitors, i.e. they had inelastic demand curves. Increased fees raise the question of pricing equity (which will be dealt with at greater length in the public policy implications section of Chapter Six); multi-tiered pricing structures have evolved as the solution to potential fee inequities in many locations, resulting in maximized visitation, and maximized revenues from each visitor group. If a large portion of the fees collected are reinvested in conservation and enhancement of the landscape and facilities, the environmental sustainability, financial viability, and social stability of the destination are secured.

Even with the best planning, development, and pricing, tourism is an unstable source of income. The industry is greatly influenced by factors beyond the control of any individual Caribbean country, or even the region. Fashion and fad, political instability, bad publicity, weather, international economic cycles, and currency fluctuations are just some of the factors that can cripple the industry. The industry in the Caribbean tends to be very seasonal, inversely related to temperatures in the North. This creates great inefficiencies as

30 Boo, 1990, p. 35.
32 ibid, p. 13.
tourism labor and capital equipment sit idle or underutilized part of the year. All of these factors are exaggerated as tourism's share of the region's economies increases.

Another economic inefficiency of tourism is revenue leakage, the percentage of tourism expenditure that is spent on imported goods, materials and labor, 'leaking' back out of the economy. The World Bank estimates average leakage to be 55%. This number is even higher for countries with a weaker natural resource base, which are forced to spend a greater share of tourism revenue on imports. The USAID Latin America/Caribbean office is currently conducting a study of tourism leakage in the Caribbean. Although the data are not fully compiled and analyzed, Vernita Fort, USAID's Chief Economist, has taken a preliminary look at the results. It appears, she said, that there are actually places in the Caribbean where leakage exceeds 100%; when all costs are considered, including environmental costs, tourism may be an economic liability to the host area.

Does ecotourism hurt more than it helps? Cost/benefit analysis has long been used to measure the effects of a project on an area, using any number of criteria. These criteria might include financial, social or environmental impacts. Most often in tourism development, the cost/benefit analysis has looked at only the financial issues. A 1981 study by the Island Resources Foundation comprehensively measured the cost/benefits of the Virgin Islands National Park. The costs used for the study included direct costs such as operations and maintenance, and indirect costs such as interest on debt, and taxes lost due to park areas being removed from local tax roles. The benefits used for the study were direct outlays by the Virgin Islands National Park and its concessionaires in the local economy, and indirect benefits such as the business generated for the boating industry, and increased land values for adjacent properties on St. John. The total benefit to total cost ratio was calculated at 11.1 to 1. While most attractions will probably not be able to come close to this type of return, the study does provide justification for further exploration.

33 ibid, p. 13.
34 Boo, 1990, p. 16.
of ecotourism. Within the context of increasing awareness of the environmental and social impacts of tourism development, many people I spoke with in the Caribbean argued that the costs and benefits on these fronts need to be addressed in any comprehensive analysis of tourism.

Comprehensive cost/benefit analysis must also consider opportunity cost. Very often, when considering conservation, preservation, or protection of areas for ecotourism, the benchmark against which these options will be compared is the value that could be extracted if the area were opened to logging, agriculture, fishing, residential development, higher density tourism development or other consumptive uses. Opportunity cost may also have to consider the cost of doing nothing; leaving an area alone is not the same as conservation. Damage that has already been done, or the pressure of encroaching development, may leave ecosystems and habitats vulnerable to degradation, even if simply left alone; in conservation terms, doing nothing has associated costs. Conversely, if there is no profitable alternative use for a site, the opportunity cost may be very low, or nonexistent.

The costs of major initiatives, including conservation efforts, have sometimes been borne by foreign aid, long a source of needed capital to Caribbean economies. Although most aid money does not go to pay for tourism facilities per se, it is often used for major infrastructure projects on which tourism depends, such as roads, airports, sewage treatment facilities, and water supply systems. Indirectly, all of these projects have a tourism component. It is fair to say that most foreign aid-funded projects greatly encourage tourism development.

The potential reliance or dependence on foreign aid opens the door for the politicization of aid dollars, as some countries in the region have displayed. This is done in at least two ways; first, developed nations providing aid are increasingly demanding more attention to environmental issues as a condition of the aid. As explained by Douglas Wilson, Environmental Officer of the CARICOM Secretariat, "Some countries are using
the environment as a bargaining chip with the developed countries. 'You want us to protect our environment? Well, okay, but we'll need more aid to do it.'

A second type of aid that has been politically maneuvered is disaster relief funds. Mark Kurlansky, in his 1992 book *A Continent of Islands*, observed that Caribbean nations have learned how "post-hurricane winds blow in aid dollars. There is disaster relief money, insurance money, and contractor money. In countries with a lack of hard currency, like Jamaica, Haiti, and the Dominican Republic, it makes for a better short-term cash infusion than most deals with the I.M.F.."

"Part of good hurricanemanship is to initially estimate the damages as high as possible because the government must go out in the world and raise disaster relief funds. After Gilbert [a 1988 hurricane], the Jamaican government announced more homes destroyed than there were households on the island." 35 While most Caribbean governments are not guilty of such "hurricanemanship," the point is that foreign aid money can be, and has been politicized.

In addition to conditional aid money, analysis of tourism in Caribbean economies is also considering the other issues discussed here, including stability of tourism revenue, diversification, pricing equity, leakage, and opportunity costs. "A reliance on narrow economic criteria is no longer necessary as justification for preserving parks and protected areas. Instead, broader social, environmental, and developmental benefits and costs are considered as well." 36 As the field of ecological or environmental economics emerges, these broader issues are being drawn into the discussions of Caribbean economies, tourism's role, and more specifically, the potential for ecotourism.

35 Kurlansky, 1992, p. 35.
3.4 FINANCING PRESSURES

Development for ecotourism requires capital investment just as does conventional development. In today's tight lending market, ecotourism may be an attractive investment because of the lower absolute capital requirements, though as a new, unproven product, it may also deter many potential investors. To date, the latter appears to be the case. The difficulties in obtaining financing that have crippled the real estate industry since the late 1980's have acted to stifle the fledgling ecotourism industry as well; the Ecotourism Society's 1993 Ecotourism: A Guide for Planners and Managers observed "that ecotourism has not reached its potential as a tool of conservation or economic development, in part because many worthwhile projects cannot find financing." 37 Lending sources have been wary of new development because of the risks involved in pre-development, construction, and ongoing operation of any project.

Financial institutions have been reluctant to lend to the tourism industry, and hotels in particular, due to non-performance of loans in this sector according to Jean Bell, Tourism Project Officer for the Caribbean Development Bank (CDB). Exogenous factors including the economic downturn in the West, as well as regional factors such as overbuilding of hotel rooms in the 1980's, led to the failure and foreclosure of a number of hotel and resort properties. The result has been a drop in values in this sector, leading to still more failures. This situation has caused lenders to become wary of these properties in the Caribbean. Further, the great number of failed properties in nearby Florida, and even as far away as California and Hawaii are perceived as competition for the fun-in-the-sun market. Properties in those locations can be picked up at fire-sale prices from banks, the Resolution Trust Corporation, and the Federal Deposit Insurance Corporation. Financial institutions have therefore been reluctant to get involved with existing properties due to

37 Lindberg and Hawkins, 1993, p. 82.
falling values and bad loans, and are also unwilling to finance new ventures, because "substitutes" can be purchased at less than replacement cost.

Institutions that are lending to the tourism sector in the region are doing so with intense scrutiny of the pro-formas of projects, and increasingly of the environmental aspects of the projects as well. The potential expense and delays that a project faces in addressing environmental issues and securing the necessary permits are risks that lenders are unwilling to share. Liability on environmental site problems is also something from which lenders have sought to distance themselves. These factors have led lending institutions to a new level of scrutiny of environmental concerns.

Jean Bell of the CDB explained that, "Most projects of late that we're involved with require an Environmental Impact Assessment (EIA), to be paid for by the owner. We have two environmentalists on staff who do an initial screening of a project to determine the level of scrutiny it warrants." Having the EIA process at all is something new within the past five years. She agreed that potential liability, past bad loans, and a lengthy, risky permitting process are factors that have led the CDB to this level of environmental review. They are not, however, the main reason for this new requirement. "It is due to our sensitivity to environmental issues more than the others," she said.

The Caribbean Development Bank was established to assist in the physical and economic development of the region, and to help the member governments of the English-speaking Caribbean (including Belize and Guyana). Assistance to these countries is in the form of direct financing to governments and the private sector, and indirect financing in the form of government guarantees, lines of credit, and loans to smaller, local development banks to be lent out on smaller projects ($200-$500K). Most of the money loaned to governments goes toward the construction of infrastructure projects, which normally have a tourism element or overtone, but are not tourism projects per se such as hotels. Most direct tourism projects are done by the private sector. The governments tend to be the facilitators of tourism development by providing the infrastructure, marketing and
promotion, policy and regulation, tax incentives, etc. that attract private investment and development.

The U.S. Agency for International Development (USAID) also assists in financing development projects in the region through its Latin America/Caribbean Bureau. This regional office does not get involved in funding at the project-specific level, but rather provides grants and loans to the area's governments, which then have discretion over prioritizing the use of the funds, with USAID approval. "In other parts of the world, in larger countries, tourism development is on the agenda as such. Projects here [in the Caribbean] often have a tourism component, and almost always have an environmental component, but tend to be broad-brush, larger projects" such as major infrastructure projects, according to USAID-Latin America/Caribbean's Chief Economist, Vernita Fort.

Private sector lenders such as Interlink Assets of Key Biscayne, FL directly finance tourism projects such as hotels. According to Managing Director Mark Ellert, Interlink focuses on innovative tourism developments, projects with a hook or theme that will differentiate them from "the standard hotel." Specifically, Interlink looks for projects unique to their settings, which integrate and enhance the natural and cultural amenities of the locale. Ecotourism projects often share these goals.

From the private sector, "ecotourism projects that are financially viable may attract funding from local banks or investors. When these sources are not available, funding may often be obtained from governmental development programs, international development banks, or bilateral aid agencies. These sources often provide capital to promising private sector enterprises," according to Kreg Lindberg and Richard Huber, Jr. in Ecotourism: A Guide for Planners and Managers. "Projects that are not financially viable, but are economically viable because of the broader benefits to society, may be able to attract grants or concessionary loans from government agencies, bilateral aid agencies, or conservation organizations and foundations in industrialized countries...Governments seeking funding for ecotourism and conservation projects can explore similar sources, such as conservation
foundations, as well as sources available only to governments...Major financing agencies, such as the World Bank or the International Environmental Investment Fund of the U.S. Overseas Private Investment Corporation (OPIC), are increasingly funding ecotourism infrastructure."

Governments of the Caribbean nations have access to funding sources that the private sector cannot access. Most often, they do not have the expertise or entrepreneurial spirit to put that potential funding to use on direct tourism development projects. Private development and conservation interests, on the other hand, often have the expertise and desire to develop tourism facilities, but limited ability to secure the necessary financing. The obvious potential is a form of public/private joint venture for project specific development. Though this form of joint venture has not been widely used in the Caribbean to date, ecotourism projects may be the ideal venue for public/private partnerships.

Private sector financing of tourism development projects in the Caribbean region certainly could be, and should be, the topic of a comprehensive study. A survey of funding sources, their criteria and requirements, what each will fund and would like to promote, and how the development industry can work with the lending community in the next decade are all burning issues in tourism development today. I have not begun to scratch the surface of this vast, complex topic. Suffice it to say in the context of this thesis that environmental consciousness and caution on the part of lending institutions has become an added consideration in the financing of any venture, specifically tourism development in the Caribbean.

38 ibid, page 100
3.5 GOVERNMENT POLICY AND REGULATION

The forces that have shaped a new environmental awareness among the residents of, and visitors to, the Caribbean islands have also reached the governments and regulatory bodies of the respective jurisdictions. Translating this environmental ethic into policy is proving a lengthy task as ecotourism per se is very difficult to legislate. As a result, little, if any, regulation exists to encourage or even address ecotourism. "There is no legislation covering this sort of thing [ecotourism], no zoning or planning that currently covers it," according to developer Stanley Selengut. "Governments are still wary of [setting policy to regulate] ecotourism, in fact of all tourism in some cases. They're only jumping on now because they think they have to," said Vera Brereton of the Caribbean Tourism Organization. Policy and regulation are tools that can be used by the governments of the region to guide tourism development toward environmental sensitivity, toward a model of sustainability.

Martin Nicholson, Vice President and General Manager of Caneel Bay Resort on St. John, is an advocate of environmental sensitivity, as is evident at Caneel. However, he urged caution in the translation of this ethic into policy. "Well-meaning legislation can sometimes be overlegislation. Take the ADA [Americans with Disabilities Act, 1990] for example. It had good intentions, but it means I have to look at every vehicle we use on this property for compliance. There has to be access not just to the beach, but all the way down to the water." The intention was right, but the implementation missed the mark when it came to writing the law. The same type of mislegislation could easily happen with ecotourism policy and regulation, given that ecotourism is less understood and its principles less agreed upon than the rights of the disabled.

If a government today is not addressing legislation of environmental issues and ecotourism, it is de facto deciding to maintain the status quo. In some jurisdictions, current policy and regulation actually discourage environmental sensitivity and ecotourism
development. The U.S. Virgin Islands provide an example of such a situation, where federal legislation written and intended for mainland U.S. development, applied by default to this island territory, actually acts counter to environmental concerns. According to St. Thomas land use attorney Maria T. Hodge, the Virgin Islands Coastal Zone Management Plan (CZMP) and the government Department of Power and Natural Resources (DPNR) have been far more aggressive in the past five years on environmental issues. However, this increased legislation has also led to larger scale projects due to the need for a critical mass to make the required studies and surveys feasible. Ironically, concern for the environment led to greater impact assessment requirements, which led to development of larger, rather than smaller, sites and projects. Further, since the U.S. Virgin Islands fall under U.S. jurisdiction, all island roads must comply to federal standards, which were written for stateside purposes, meaning wider earth cuts than would otherwise be made. Again, it is ironic that concerns for runoff and drainage have resulted in requirements that actually do more harm than good to the environment. In the words of Vernita Fort of USAID, "governments have not put in the correct incentives yet, or the correct regulations and standards, to ensure that the private sector respects and enhances, rather than destroys the environment. They are starting to realize, however, that the macro-economic policies of growth as the most important goal have the seeds of environmental destruction. This means reassessing the assumed models."

Other islands in the Caribbean are similarly impacted by legislation intended for the parent, or protectorate homeland. Along with the U.S., France, the Netherlands, and Great Britain also have territories, departements, or colonies in the region. Several of the newly independent nations in the region still operate under colonial legislation.

Regulation in the U.S. Virgin Islands, specifically the CZMP, has been called anti-development by some in the development industry, and inadequate, even non-sustainable by the environmental side. Asked about the current level of regulation, Nicholson of Caneel Bay thought it "adequate, maybe about right." Attorney Hodge agreed, saying that
although the regulation has increased the time and cost of development, "it is now a much more thoughtful process." She said that five years ago, projects were reviewed and often required some changes for approval, but today, project proposals are being turned down entirely, even projects of $10 million scale, if they don't address environmental issues. Such rejection was unheard of five years ago in the interest of economic development.

There has been a realization among governments in the Caribbean that policy development might best be accomplished on a regional level. CARICOM, the Caribbean Community, is an organization of the English-speaking Caribbean nations, formed specifically to study issues affecting the region which might most effectively be addressed by a regional body. The environment and tourism development are certainly two such issues; the environment is a regional issue in that the ecosystems are interconnected; tourism is a regional issue in that all members will maximize benefits with a regional mix of complementary, rather than competing, tourist offerings. Environmental concerns in tourism development are regional issues because without regional standards, the 'weakest link' will always be exploited by unprincipled developers. CARICOM's role is in information compilation, review, and recommendation at the policy level of the member governments. According to Enid Bissember, Economist with the CARICOM Secretariat, the organization hasn't taken an official stand or position on ecotourism yet. It has instead followed the trend of its member countries, many of whom are now actively pursuing ecotourism. CARICOM has recognized the need to lead rather than follow this trend, and according to Douglas Wilson, Staff Environmentalist with CARICOM, has set up a task force on the environment, with a mandate to develop and coordinate a regional position on environmental policy as it relates to development. To this end, the task force is meeting with all of the member governments to begin creating regional policy.

Has public environmental consciousness pushed governmental regulation, or has increased regulation acted to heighten the public's awareness of environmental issues? Perhaps it is the chicken and egg question, but my sense is that environmental awareness
among the public came first, as a result of the factors described in sections 3.1 "Tourism Trends" and 3.2 "A New Consciousness," and the governments of the Caribbean followed suit. The awareness has reached all levels, but in terms of action, the rate of change in the private sector has outpaced changes in government regulation. As developer Stanley Selengut explained, "It takes a while to institutionalize [the concepts of ecotourism], to get from one good example to putting the ideas into codes and zoning." As the trend toward ecotourism gains recognition, the governments of the Caribbean nations will have no choice but to address the issue through policy and regulation.

3.6 SUMMARY OF MARKET FORCES BY TIER

Each of the market forces described above is a factor at each level of tourism, but their order of relative importance varies level to level. Pervading all levels, according to the industry professionals I interviewed, is an increased awareness of environmental issues, a new consciousness or ethic. Everyone at every level, including governments, developers, and the general public, is more aware of environmental issues today than even a few years ago.

TYPE 1 projects were defined as those which make the minimum necessary environmental gestures necessary to secure financing and permits. Marketing this product type to a perceived nature tourist segment might be part of a diversified marketing approach, but the ecotourist niche is not the primary target of this tier's advertising, nor the motivation for addressing environmental standards. Projects that fall within this tier are motivated to take action on environmental issues by necessity, in response to regulatory mandate.
For TYPE 2 projects, defined as traditional development moving toward greater environmental sensitivity, land use policy and regulation such as zoning and permitting were repeated as primary motivating forces. According to Shawn Hurwitz, V.P. of Operations for Palmas del Mar Resort in Puerto Rico, the sensitivity seen at this level is "regulation driven, no question. You can't get away from it. When a lot of developers say they have a dedication to environmental issues, it's bullshit. It's marketing, public relations. 99% of the developers would build right up to the maximum density if not restricted." The result of being forced in this direction, he said, is a better project, and of late, a realization of the marketing potential of this 'new sensitivity.' There are exceptions, including Laurence Rockefeller's efforts at Caneel Bay, and Charles Fraser's vision for Palmas del Mar. Neither regulation nor marketing opportunity drove those projects toward ecotourism some 35, and 20 years ago, respectively. Rather, there was a conservation or ecotour ethic at work.

Financing of tourism projects is difficult, at best, in today's lending market. Lenders are now giving intense scrutiny to the environmental issues of a project due to the risks of the permitting and development processes, and concerns about liability. Many banks, including the Caribbean Development Bank, have environmentalists on staff to conduct the environmental reviews.

For most TYPE 2 projects of late, regulation is primary, and financing and an environmental ethic are secondary, as shaping forces.

For TYPE 3 projects, which include overnight accommodations, an educational component, and a rustic experience, the order of importance of the factors is not as apparent. The distinctions are less clear because each tier, especially TYPE 3, encompasses a range of projects, and the lines between tiers are points on a spectrum. Martin Nicholson, Vice President and General Manager of Caneel Bay, said, "Developments are sensitive to the extent that not doing so will destroy the attraction."
Maho Bay, though developer Stanley Selengut approached the development with a concern for the environment, some of the features employed were almost by default— they were the cheapest or easiest way to do things at the time. This is true of the boardwalk system as well as the semi-permanent tent structures. The success of the project (i.e. market demand factors) has fueled the almost constant expansion of the facility. It could be argued that these approaches are driven by demand factors or by an environmental ethic. Although tertiary, there may also be underlying regulatory pressures.

At the TYPE 4 tier, the national parks, nature reserves, botanical gardens and aquariums, the primary factor appears to be market and consumer demand. Leona Bryant, Assistant Commissioner of Tourism for the U.S. Virgin Islands, and a member of the Ecotourism Council, said about demand, "All of the travel industry meetings and groups are talking about people who want an environmental component to their holiday. A very definite market exists. It's not a question any more if there's a market; there is. The question is whether the opportunities available will fit the demand." In mature markets, such as the U.S. Virgin Islands or Puerto Rico, a TYPE 4 ecotourism attraction is a new product which diversifies the tourist offerings. In new markets, such as Dominica or Guyana, it is an opportunity to turn the lack of development to date into an asset.

Some nature attractions such as the National Park in St. John and Las Cabezas in Puerto Rico are concerned not so much with attracting the numbers, but with managing and limiting the visitors they already receive. Both have established limits and reservation systems for large groups. Mark Koenings, Superintendent of the Virgin Islands National Parks, said, "We're sitting on a giant. For areas that haven't been over-exploited, this is an unbelievable opportunity." These types of projects have been done in response to a perceived demand.
For TYPE 5 projects, the treks, tours, and adventure travel to remote areas, the motive is simply a market demand for this experiential type of product. These hard-core nature tourists have a strong environmental ethic and an interest in being a part of an exotic, unspoiled scene. There may be an element of fatalism present, an attitude that such areas should be seen before they disappear. But for the majority of tour operators in this tier, the motivation for ecotourism is the exposure and education of visitors to the environment, and a positive contribution to conservation.
The principles and concepts of ecotourism are developing from a very embryonic stage. The greatest response to date from the tourism development industry and governments of the Caribbean region has been in the form of "planning and preparation." There have been meetings and seminars held, committees and task forces formed, articles and papers written, but little in the way of actual implementation or development. There are, however, places in the Caribbean where the concept has been applied and implemented. I was interested to see how this theoretical concept has actually been manifest in the built environment, and, where available, how successful these attempts have been to date.

Individual countries in the Caribbean that have made a commitment to ecotourism as a strategy for development are the subject of the first section of this chapter. Whether as a new niche or amenity to add to an existing tourism market, or as a first foray into tourism, these nations' governments are seriously looking to foster ecotourism development on their islands. Ecotourism offers opportunity, but also potential traps for these countries. The second section shifts from the public to the private sector, and examines industry responses at the project level. It is a survey of developments, highlighting the approach and ethic each has taken and the innovations that have resulted. Finally, the bandwagon response of the marketing, advertising, and promotion industries is explored in the third section.

4.1 COUNTRIES PURSUING ECOTOURISM

There are countries in the Caribbean that have embraced the concept of ecotourism. Among those taking this approach are Dominica, Guyana, and Belize. These governments
have committed themselves to pursuing and promoting this niche of travel as the staple of their tourism offerings. Each has a different product and experience to offer the ecotourist.

**Dominica.** Dominica is a small island nation in the Eastern Caribbean, which has been largely dependent upon agriculture, primarily bananas and coconuts, which account for about 27% of its GDP. The tourism industry has remained relatively undeveloped, and it is precisely the lack of physical development that Dominica is using in its self-promotion as "the Nature Isle of the Caribbean." About 60% of the island is covered with dense rainforest, making it a paradise for botanists, bird watchers, ornithologists, hikers, and nature lovers.

Dominica is just beginning to get into the tourism game. The island was devastated in 1979 by Hurricane David, and again in 1980 by Allen, prompting major new construction including a new airport, a jetty and facilities for cruise ships, and a number of hotels. Tourism arrivals have been increasing about 3% per year, reaching nearly 50,000 in 1992.39 Elizabeth Boo, in her 1990 study for the World Wildlife Fund, observed that Dominica was "the least developed nature tourism destination [of the five countries studied]. Its parks do not even have entry gates or park guards to monitor visitors."40

Attention to tourism development is on the rise in Dominica. With the opening of Morne Trois Pitons National Park, much of the island is now protected, and being developed with roads and hiking trails to accommodate visitors. The island also boasts a 40 acre botanical garden and arboretum, and plans for a major aviary. The marine resources are also being protected and developed for tourism; a marine park conservation area has been established, scuba diving is now regulated, permitting diving only through a registered dive operator, and permanent moorings have been installed to avoid anchor damage of reefs. A relatively new player in Caribbean tourism, Dominica appears ready to take the lead in nature tourism development.

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40 Boo, 1990, p. 34.
Guyana. Had it been included in the World Wildlife Fund study, Guyana would have taken the prize for least developed nature tourism destination. Although geographically not part of the Caribbean (Guyana sits on the Atlantic coast of South America), Guyana has long been considered part of the regional community; cut off from mainland South America by dense rainforest, the population center along the coast has always been tied to the Caribbean in trade, language, and culture. Tourism has been almost non-existent in Guyana to date, and the potential for tourism largely ignored, partly in reaction to the problems tourism has brought the neighboring West Indies, including crime, prostitution, drugs, and envy within the native population. According to Richard Humphreys, General Manager of Hotel Tower/Emerald Tower in Guyana (a TYPE 3 ecotour resort), ecotourism is being considered differently because it can be done on a small scale, and the traveler in this niche is seen as educated, and genuinely interested in the natural and cultural attributes of the site and country. The recent success of nature travel in neighboring Brazil and Costa Rica has inspired the development of a very small, but growing ecotourism industry in Guyana.

Tours of the hinterland, the rainforest, savannah, and jungle outside of Georgetown, are the focus of travel promotion for Guyana. Six or eight small resorts have been developed, including Timberhead, Shanklands, the Gazebo, and the Emerald Tower, offering eco-travel to the hinterland. Some of these destinations can be reached by car, some by plane, while others are accessible only by boat via one of Guyana's several rivers (Guyana is an Amerindian word meaning 'land of many waters'). Ecotourism in Guyana is being promoted as an experience in the virgin, unspoiled interior, where indigenous cultures still thrive, the native language is English, and all with ease of access to the capital of Georgetown.

Unfortunately, transportation to, from, and within Guyana is difficult (no major international airlines serve the destination), and tourism infrastructure within the country is
non-existent. The airport is small, customs and immigration is frustrating, currency exchange is a lengthy and difficult process, and its location is nearly an hour drive, on a very poor road, to Georgetown. This type of access is not conducive to tourism, especially for an unknown destination such as Guyana.

**Belize.** By contrast, Belize has perhaps the best of everything to offer the ecotourist. It has the sea, with beautiful, undeveloped beaches for traditional tourism, an extensive, pristine reef system, and an interior that boasts the flora and fauna of unspoiled rainforest. According to Douglas Wilson, Environmental Officer for CARICOM, Belize as a "country has all you could ask for in terms of environmental attributes." This allows promotion of a variety of tourism products and experiences, from the traditional beach and sun, to nature and adventure travel. Wilson noted that infrastructure in Belize is well developed, including the physical infrastructure, as well as the economic and social structures needed to support tourism. The government, recognizing the potential of this strategy, established a Ministry of Tourism and the Environment, responsible for developing ecotourism and conservation policy.

The strategy appears to be paying off. The 1990 WWF airport survey showed that of the international travelers to Belize, 51% responded that natural attractions were an important motivating factor in choosing the country as their destination. The survey also revealed that 63% had actually visited a nature attraction or protected area. 41 Belize has gained an international reputation as an ecotour destination.

Other Caribbean countries pursuing ecotourism include Costa Rica, Grenada, Trinidad, and St. Lucia. There are several non-Caribbean examples as well, such as Nepal, Ecuador, and even Alaska. "At a time when the word 'ecotourism' had yet to be uttered, nature tourism in Kenya proved to be a success." 42 Countries (or states) pursuing

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41 ibid, p. 29.
ecotourism are wise to weigh the benefits it promises, such as employment, direct revenues, and spin-off or multiplier revenue, against the hard and soft costs of the strategy, including infrastructure needed, environmental impacts, and social costs. The examples here will prove a jumping off point for such analysis.

4.2 PROJECT LEVEL RESPONSES

While ecotourism as a national strategy has taken hold in the few examples mentioned above, most development of ecotourism in the Caribbean region has been at the project level, in the private sector. Following is a survey of some of the major projects; the projects reviewed are not the ‘model projects’ that define each tier, as every site, hence every project, is unique. "The level of economic activity that can be generated, the fragility of the resources, the consequent environmental impact of tourism, and the opportunities for environmental education will vary from one area to another." To The projects are included here because they manifest one or more of the principles described above, have been shaped by one or more of the forces discussed, and because they embody amenities and innovations that can be translated to other potential developments. Each project can be measured by a number of different criteria, including environmental impact, social sensitivity, developer intent, economic effect, financial success, and conservation effort. I have classified these example projects using the criteria set forth in Chapter Two. The reader may disagree with the classification of a project based on the criteria applied; the tiers are not meant to be hard and fast, nor the lines between them absolute.

TYPE 1 projects will not be the focus of this section, but are important to keep in mind as the benchmark against which the other tiers and projects can be measured. This approach of addressing environmental issues to the extent necessary to get financing and

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43 Boo, 1990, p. xviii.
permits is still being taken by major developments throughout the Caribbean, and may continue to be the operating norm for large scale projects. However, intensified regulation by governments and financing institutions is bringing even this end of the scale closer to an environmental ethic. In the words of Megan Epler Wood, Executive Director of the Ecotourism Society, "Most of the Hiltons and big travel companies are not remotely doing anything ecotourism by our criteria. It's not that they aren't doing something, because largely they are." Carla Hunt, a writer who has followed the ecotourism trend, said, "The establishment is coming around. A Hyatt planted a tree and suddenly you had the first ecologically sensitive hotel. You wanted to put your finger down your throat. But they really are trying to do something now. Hilton, for example, now has an ecologist on staff for new projects." Many of these developments are finding that programs for conserving water and energy, recycling, and enhancing indigenous landscaping all make good business sense. The TYPE 1 product caters to the mass tourism which is the mainstay of many Caribbean economies, and makes up the bulk of Caribbean tourism literature.

Similarly, projects of TYPE 5, the treks, tours, and adventure travel, will not be reviewed here. The focus of this thesis is real estate development, and most projects at this end of the spectrum have a very small, or nonexistent development component. There are a number of excellent sources of information on these types of tourism, including The National Geographic Traveler, and Ecotravel by Buzzworm Publications of Boulder, Colorado. Ecotravel is a guide "...to 100 unforgettable adventures throughout the world, where the new ecotraveler will find the rewarding delights of travel with the Earth in mind." Among the 100 trips listed, there are four in the Caribbean, and eleven in Latin America.
4.2.1 TYPE 2 Projects

This tier has been defined as traditional development making a serious attempt to address environmental issues, and minimize impact. It would be a stretch to call this level "ecotourism," but an environmental ethic is clearly at work on these projects.

**Palmas del Mar.** A good example at this level is Palmas del Mar Resort on Puerto Rico. Palmas del Mar is a 2,750 acre mixed-use resort development on the Caribbean side of Puerto Rico, 45 minutes from San Juan. The project was envisioned, and the site assembled, in the late 1960's by an investment group headed by Charles Fraser. His vision was for a master-planned resort. Long before it was fashionable, and long before "ecotourism" was coined, Fraser set out to build an environmentally sensitive project. To minimize impact, development would be lower density than the allowable maximum, clustered to leave large tracts of open space between clusters, and the open space would be the natural terrain and landscape, enhanced.

Palmas del Mar has been developed in phases over the past twenty years. Currently, there are about 3,000 residential units (villas, condominiums, and time shares) in clusters or "communities," ranging in numbers from 25 to 175, most being about 100 units. There are two hotels with a total of 275 rooms, an 18-hole golf course, a tennis center, marina, retail shops, restaurants, a tropical forest on site, and 3 1/2 miles of Caribbean beach front. Ground will break in November of 1993 on a 450 room Marriott Hotel with convention facilities, and an additional 18 holes of golf. There are many opportunities for visitors to take nature-type excursions, including scuba diving, day-tours to El Yunque National Park (the only rain forest in the U.S. National Park Service), and a boardwalk nature walk through the tropical forest on site.

Development had stopped by the mid-1970's because of difficulties with the REIT financing of the project. After foreclosure in 1975, the development sat idle. In 1986, MAXXAM Properties acquired Palmas as part of a larger deal, and development began again in 1990. The president of Palmas for MAXXAM was, and is, Brian McLaughlin,
who had been part of the original Fraser group, and who shares in the vision of an environmentally sensitive resort. The master plan went through some revisions, but only within the parameters of the approvals and permits which had already been secured by Fraser. To completely rework the master plan would have meant going through the lengthy approval process again. However, major changes were made in the planned density of development on the site. A decision was made by MAXXAM that at Palmas, no structures would be built above the height of the highest palm trees on the site, minimizing the visual impact of the developments. The tallest building on site is 6 floors, even though the current zoning would have allowed heights of up to 15 stories. The number of units on the site, approved, was about 8,000. MAXXAM also decided to decrease this density even below what Fraser had designed and gotten approved, to about 5,000 units, and keep more open space. Further, the new golf course, as now planned, will wind around wetlands areas of the site, yet leave the wetlands themselves totally untouched.

It is clear that Charles Fraser, and later MAXXAM Properties, incorporated an environmental ethic into the planning and development of Palmas del Mar Resort. It has all of the amenities of a traditional resort, including golf, tennis, and beaches, but it has gone beyond the traditional in addressing environmental issues. Whether approach has been entirely due to an ethic, or is at least partially market driven is unclear.

**Sandals Resorts.** The marketing potential of an environmental ethic has certainly been recognized at Sandals Resorts of Jamaica. Sandals has seven beach-oriented, all-inclusive resort properties on Jamaica, with plans to open two more in the next two years. One of the Sandals properties is Ocho Rios, "A Nature Lover's Paradise." The promotional material claims site sensitivity, "All buildings were sited and built to accommodate the shrubs and flowers which run rampant about the property and the trees that loom majestically overhead. Not one was removed to put up the resort's cozy love nest." A promotional article in *Sandals, The Magazine*, #2 is titled "Taking Care of the
"Sandals in its environmental thrust will also ensure that all future properties are built to environmentally-conscious standards.

"Mr. Bloomfield [Sandals' environmental specialist] outlined the great appreciation of the guests, particularly eco-tourists, when they discover the programmes put in place designed to conserve and preserve the existing environment. An eco-tourist, he explains is someone who is conscious of his environment and welcomes all efforts to protect it. He has come to the Caribbean to escape the growing degradation of the world around him, a nature lover whose ideal is wide open spaces, natural surroundings, unpolluted rivers and beaches, and clear skies.

"Sandals recognises the need for this type of visitor and strives to provide an environment conducive to his and her wishes.

"For visitors who demand developments which enhance rather than destroy the environment and actively encourages environmentally-friendly behaviour, Sandals is indeed the place to vacation." 44

There are other examples of TYPE 2 projects in the region, such as the Four Seasons Resort on Nevis, a new 350 room beachfront development with 18 holes of golf. Jumby Bay Resort on Antigua, and Curtain Bluff on Antigua are also examples.

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4.2.2 TYPE 3 Projects

TYPE 3 projects are characterized by a 'rustic' experience in overnight accommodations; a hospitality product, but also an experience is being sold. This may include an educational component, or opportunities for visitors to observe and interact with the natural attractions of the site. The physical project has been developed with great site sensitivity to minimize impact. One of the first, and still one of the best examples at this tier is Maho Bay Camps on St. John, U.S. Virgin Islands. There are other good examples, as well, including Caneel Bay Resort on St. John and The Tower Hotel / Emerald Tower in Guyana.

Maho Bay. One of the most profitable resorts in the Caribbean, according to its owner and developer Stanley Selengut, is Maho Bay Camps. Beginning in 1978, Selengut transformed these 14 waterfront acres into "a sustainable resort development prototype." The project currently has 114 units, interconnected by a system of raised boardwalks. Each unit is a semi-permanent tent structure, detached and private. Bathrooms are shared facilities. The units do not have amenities that might be expected of a conventional hotel, such as telephones, televisions, and air conditioning, though each unit is better equipped than might be expected of a camp, with lighting, power, and permanent, if simple, furniture. The result, in the words of Maho Bay's Skip Benvie, is a development which appeals to "campers who consider this luxury, and hotel types who are looking for a rustic experience."

The boardwalk system was one of the first environmentally conscious innovations Selengut employed at Maho. By constructing the walkway first, and following with construction, erosion, silt and runoff were minimized. By elevating the walk slightly above the ground, impact on the flora and fauna of the site was also minimized. The raised boardwalks were less expensive to build than the equivalent sidewalks would have been, given the site work required for on-grade walkways. They also provided cover for
utilities, which otherwise would have been buried. Utilizing the raised boardwalk approach actually increased the sustainable carrying capacity of the Maho Bay site.45

From a capital investment perspective, the semi-permanent tent structures and system of raised boardwalks has proven very flexible, and profitable. The original development at Maho consisted of just 18 units. As demand increased, it was a quick, simple and inexpensive decision to extend a boardwalk and build a few new units, a process that has been ongoing since 1978, up to the current 114 units. The cost of building a single unit is under $10,000, compared with the approximately $100,000 per room price tag for conventional hotel rooms on St. John. While the cost of building a unit at Maho Bay is less than 10% of a room at an upper end hotel, the revenue stream from a Maho unit is 25% to 35% of the per room revenue at the hotel. Average per night rates at Maho are about $75, while room rates on St. John run from $200 to $550 per night, averaging about $250 per night.

Occupancy rates at Maho Bay have been consistently among the highest in the region. In 1992, for example, peak season occupancy was above 95%, while in the lowest month, off season, it was 68%. These levels are higher than for the neighboring large hotels on St. John. These numbers are unprecedented considering that Maho Bay does not market or advertise, with the exception of an ongoing ad in Brides magazine (in an attempt to capture the summer, off season, travelers). The unique approach to resort development has earned Selengut a great deal of media attention over the years, i.e. free advertising. Word of mouth, and a large percentage of repeat visitors (nearly 40% of the guests are return visitors) keep the units full.

Calvin Howell, Executive Director of the Caribbean Conservation Association has been helping spread the word: "What makes Maho Bay different? The simple answer is: 'the will of the developer to respect the ecological integrity of the landscape he was about to

transform. Maho Bay is in better ecological balance today, due to conservation efforts, and very profitable."

**Caneel Bay.** Another example of a TYPE 3 project is Caneel Bay Resort, also on St. John. Arguably, Caneel Bay may better fit into TYPE 2; it is a traditional resort, with most conventional amenities. The accommodations are simple, yet definitely upscale; it would be a stretch to call them rustic. I include Caneel here because of the development's commitment to site sensitivity. Current zoning on St. John would allow the 170 acre Caneel site to accommodate between 10,000 and 12,000 resort hospitality units. Caneel Bay Resort has just 171 units. In my opinion, developing to a density of 1 unit per acre, when regulation would allow over 70 units per acre, is going far beyond the "serious effort to address environmental issues" that defines TYPE 2 projects.

The Caneel Bay site is a privately held parcel located completely within the boundaries of the Virgin Islands National Park. It is the original Rockresort, owned and developed by Laurence Rockefeller some 35 years ago. The accommodations are permanent structures, semi-detached, connected by a network of landscaped pathways/sidewalks. Each has a private bathroom, private terrace, power and light, and ceiling fans. Furnishings are simple, upscale Caribbean style. To enhance the impression of retreat, the rooms do not have telephones, televisions, or air conditioning. "We were the quintessential ecotourism resort without those amenities. Laurence Rockefeller built the type of place that he'd like for himself and his friends to vacation [low density, richly landscaped grounds, exclusive], to get away from it all," explained Martin Nicholson, V.P. and General Manager of Caneel Bay.

Caneel Bay does offer most amenities of a traditional resort, including tennis, restaurants and shopping, beaches, and watersports. It also has nature offerings such as scuba diving and snorkeling, sea kayaking, hiking trails, and tours of the Virgin Islands.

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46 ibid, p. 10.
National Park. A fee, based on concessions, and on visitation from Caneel to the offshore reefs or the Park, is paid by Caneel Bay Resort to the National Park for maintenance and conservation efforts.

The market has changed since Caneel Bay opened. In 1983, Rockefeller sold out. The land was deeded to the National Park Trust at the end of a long term, restricted use land lease with the new owners. Average occupancy rates through 1988 ran at about 71%, and the development appeared to be financially healthy. Three almost simultaneous events occurred in 1989 to change the course of Caneel. Hurricane Hugo passed over St. John with a fury unseen in decades, causing widespread damage to the landscaped grounds, and the interiors of the structures. The resort was shutdown for over two months for repairs. The second event was the opening of a new 280 room Hyatt Hotel on St. John, a major new competition for the upper end tourist to the island. And third, the general state of the economy in the U.S. had visitation and tourism revenues falling below expectations. Caneel Bay was a non-performing loan until June, 1993 when Banker's Trust foreclosed. A major renovation is slated to begin in 1993 which will equip the units with telephones and air conditioning for the first time. Nicholson explains that adding these amenities is simply due to changing market demands, as someone paying $500 per night expects to have what is generally considered a basic amenity like air conditioning. Most guests will not actually use the air conditioning, Nicholson says, since the idyllic temperatures and trade winds of St. John generally keep the rooms within the comfort zones, but they want to know that it is available.

Did the Caneel investors in 1983 simply overpay then get caught by the market, or is a destination like Caneel Bay an unworkable product today? If the former is the answer, then Caneel Bay serves as an example of a 'resort with a green heart,' a tourism development which provides the amenities required by mass tourism, yet takes great steps to be environmentally sensitive. If the latter is the case, there is a question as to whether a middle ground exists between resort tourism in any traditional sense, and environmental
concerns. Nicholson, perhaps not surprisingly, feels that there is a viable middle ground product. "The common ground is in small, exclusive-type development projects like this [Caneel Bay]."

Emerald Tower. A third example of a TYPE 3 project comes from Guyana. Guyana is struggling to capture a part of the Caribbean travel market, and in particular the ecotourism niche. A number of small scale ecotourism resorts are the beginning of a growing effort to build Guyana's reputation as a nature destination. One of the newer and more successful of these eco-resort ventures is the Emerald Tower. It is owned and operated by the Hotel Tower, a premier business traveler hotel in Guyana's capital city of Georgetown. Hotel Tower is attempting to capture a slice of the ecotourism market while capitalizing on its name and reputation. The result is Emerald Tower, an eight-unit, full service resort in the jungle, about 1 1/2 hours from Georgetown. Transportation is provided, and guests are assured of the "standards of service, food and comfort that distinguish Hotel Tower itself. Accommodations consist of 8 tree-level cabins with individual balconies, privately located, and with their own bath facilities." The resort is run locally by a native Amerindian family who live on site, offering visitors a cultural, as well as natural, experience. Opened in September, 1992, the resort is sited on 165 acres on the banks of river, boasting a white sand beach, hiking trails, and animal observation shelter, as well as activities such as boat exploring, spear fishing, and guided tours. Despite low occupancy rates at Emerald Tower during its first year of operation, general manager Richard Humphreys was confident that there is a market for this type of product in Guyana, but felt that a critical mass of ecotourism destinations is needed to attract this niche. Hotel Tower is planning development of four additional ecotour resorts akin to Emerald Tower, with a combined price tag of over U.S. $5 million. Each project will be situated near a different type of natural attraction, resulting in a diversified selection of destinations.
**Harmony.** The final TYPE 3 example is currently under development by Maho Bay's Stanley Selengut. It is Harmony, adjacent to Maho Bay on St. John, intended as a prototype sustainable resort development and research center. Four units are being developed, using many of the concepts from Maho such as raised boardwalks, enhanced landscape, and site design sensitivity. It is independent of the island's utility system, relying instead upon cisterns for rainwater collection, solar power (passive and active) for hot water and electricity, and passive features such as wind scoops. All systems and energy usage will be monitored for use by researchers of sustainable design, but also to make visitors aware of their usage at all times. The buildings are detached, permanent structures, unlike the semi-permanent tents at Maho Bay, and all units will have plumbing, hot water, and ceiling fans. The building materials will be largely recycled, including lumber laminated from wood scraps (minimizes cutting of new trees), roofing and decking from recycled rubber tires, carpet from plastic bottles, and tile from recycled glass.

The cost to build the units at Harmony is expected to be about $125 per square foot, which is nearly average for construction on St. John. If the costs of building this way are slightly higher, in the long run they will probably be cheaper, according to Selengut. The cost savings will come in the form of less problems with drainage and runoff erosion, and other problems associated with environmental degradation.

Room rates at Harmony will run approximately $175 per night, one third to one half the rate for a comparable room at one of the large hotels on St. John. Harmony is scheduled for completion by Thanksgiving of 1993. Upon my visit to Harmony in early June, 1993, there were already numerous reservations for these four unique units.
4.2.3 TYPE 4 Projects

TYPE 4 projects are natural attractions with visitor centers and interpretive tours, such as nature reserves, national parks, botanical gardens, and aquariums. This level is characterized as day-trip destinations, nature-as-entertainment. There is an emphasis on education of the visitor through exposure- a quick impression. The focus is the experience, with the physical development component of the project intended to deliver and enhance that experience. The project is, either in and of itself, or through off-site field work, involved in conservation and preservation efforts.

I visited three very different examples of projects at this tier of ecotourism. They were the Virgin Islands National Park, The Barbados Wildlife Reserve and Grenade Hall Forest in Barbados, and Las Cabezas de San Juan Nature Reserve in Puerto Rico.

Virgin Islands National Park. The Virgin Islands National Park, to which I have already made numerous references, is part of the U.S. National Park Service. The park is 1,900 acres, nearly one third the island of St. John. The majority of the park was donated to the National Park Trust by the Rockefeller family, which assembled the private parcels over a number of years. This piecemeal assembly resulted in numerous "holes" in the park, privately owned land wholly within the park's larger boundaries. The National Park has been a model, not only for the Caribbean, but for parks throughout the system, of accommodating a very large number of visitors, while maintaining nearly pristine environments. Annual visitation to the park has topped one million people. While the numbers have stabilized at this level, the cruise lines are pushing to double their visitation into the area. A comprehensive study of the ecological carrying capacity of the park has yet to be completed, but according to Marc Koenings, Superintendent of the National Park, the capacity has not nearly been reached yet. Increased visitation will require more regulated visitation, however, including staggering of large groups (as from cruise ships), limited access to certain areas, etc.
Increased regulation of a site like Virgin Islands National Park is not without its drawbacks. As Marc Koenings explained, access to particularly sensitive areas may have to be very limited or completely denied. Although 99% of the visitors are respectful of the amenity, the 100th will not be, and can do irreparable damage. Unfortunately, the asset has to be managed, and access limited, to account for, as he called it, the "lowest common denominator, the 100th ignorant visitor." This is most unfortunate, of course, for the 99 visitors who should have the right to visit and enjoy the site.

A second means of managing the ecological impact of such large numbers of tourists is use of a specific area, with greater carrying capacity, to absorb the brunt of the impact. On St. John, Trunk Bay is something of the sacrificial spot on the island. It is still very good snorkeling and swimming, but in order to preserve the other bays on the island, Trunk is most heavily used, and as a result sustains "acceptable levels of damage." Large groups can visit only this area, as the smaller bays are much more vulnerable to damage. Efforts have been made to minimize the impacts on Trunk Bay, as well. Snorkeling is a very popular activity throughout the park, but in Trunk Bay in particular. An "underwater trail" has been set up for visitors to follow, which highlights the flora and sealife of the bay, while carefully guiding snorkelers away from the most sensitive areas. As a result, Trunk Bay is a healthy marine environment, "a C+" says Koenings, while the other bays are ecologically pristine, "A's and A+'s."

In addition to direct visitation to the park, the development and use of the private land parcels within the park's boundaries, and adjacent to park property, increases environmental impact. The National Park Service has no jurisdiction over the use of these parcels, but has taken a very proactive role in guiding their development. In 1992 the National Park Service published suggestions and guidelines for development titled "Sustainable Design." The publication came out of a 1991 National Park Service Symposium on Challenges and strategies for the next century. On the local level,
Koenings is also quite active as consultant to the architects, developers, and owners of these sites.

The efforts of Koenings and the National Park Service to preserve the ecosystems of St. John in the face of increasing tourism pressure appear quite successful. I include the Virgin Islands National Park here as an example of successful, sustainable tourism to a sensitive natural area.

**Barbados Wildlife Reserve and Grenade Hall Signal Tower & Forest.**

A second example of a TYPE 4 project is found on Barbados. The Barbados Wildlife Reserve was opened in 1985 as a project of the Barbados Primate Research Centre, with seed money from the Canadian International Development Agency. Grenade Hall Forest Nature Trails and Signal Tower, adjacent to the Reserve, opened to the public in 1993. The Reserve's founder and director, Jean Baulu, set out to create a center that would balance the demands of conservation, education, tourism, and research of the natural environment. Many of the species of flora and fauna found in the Reserve and Forest are not actually indigenous to Barbados, but are either species from other countries in the Caribbean, or that had been introduced to the region by colonists. This includes the lush mahogany forest which provides the canopy for the Reserve and the Forest.

The Wildlife Reserve alone receives nearly 100,000 visitors annually. With the recent opening of the Grenade Hall Forest and Signal Tower, visitation is expected to increase greatly in the next few years. The carrying capacity of the attractions, according to Mr. Baulu, has not been precisely determined, but is clearly double, at least, the current level.

With the new additions, the attraction now offers flora (the Grenade Hall Forest Nature Trails), fauna (the Wildlife Reserve), and history (the Signal Tower). Underlying all of the attractions is a heavy educational component. The education is interactive, intended to be fun for the visitor. For example, at the Forest, there are cleverly designed...
Q&A signs posted (about 40 of them), with corresponding markers on trees or plants. The sign has a question written on it. The answer is concealed, and is revealed by sliding the question panel upward. A visitor can go along and look at the answers to question that intrigue him/her, but the choice is there to participate or not, to the level desired. One such sign reads, "Would you like a cup of bay rum, mate?" A plant nearby, a bay rum plant, has a corresponding number. The questions are intended to be intriguing. A curious visitor will slide the panel to reveal the answer, "Bay rum is a plant whose bulb, when boiled for about 10 minutes, was used by the slave population to relieve toothaches." The answers include history and trivia, and attempt to link the information to something the visitor relates to. By making the experience interactive ("Make them work for the answers a little bit," says Mr. Baulu), visitors may actually retain the information.

The Forest Nature Trails are on a hillside, shaded by centuries-old mahogany trees. Much of the surrounding land was cleared for sugar cane production by the colonists, but this site, due to the steepness of the slope, was left untouched. It had long been used as a dumping ground for old machinery, cars, household garbage, and agricultural waste. Baulu began a cleanup effort, then began developing the site as a botanical attraction several years ago. Through the conservation efforts, the forest is once again thriving.

The Wildlife Reserve is an enclosed area where the animals and visitors interact, without cages or barriers. The animals are not tame, but are obviously accustomed to people. It offers a very close-up experience with monkeys, tortoises, Guinea fowls, peacocks, wallabies, snakes (including pythons), iguanas, pelicans, cockatoos, and many more. Questionnaires, crossword puzzles, signage, and informational literature encourage the visitor to not only observe, but to learn about the wildlife.

Grenade Hall Signal Tower is a historic structure, was part of the communications system of the island in the mid nineteenth century. It has been restored for visitors, and also houses artifacts from the earliest settlers of the land, through the colonists and slave populations.
The Barbados Primate Research Centre is a non-profit organization. It receives very little grant funding. Operating costs, including conservation, preservation, and educational efforts are funded by admission revenues (admission is U.S. $5 for one attraction, or $7.50 for all), a healthy concessions business, donations, and primate research income. The Reserve was originally funded by outside sources, but is now financially self-sufficient. The number of visitors it currently hosts, and the expected increase in those numbers, testify to the attraction of this type of project. Mr. Baulu's efforts at the Barbados Wildlife Reserve and Grenade Hall Forest and Signal Tower exemplify ecotourism's goals of education, conservation, and recreation.

Las Cabezas de San Juan. The final example at this level is Las Cabezas de San Juan Nature Center in Puerto Rico. It is owned and operated by Conservation Trust (Fideicomiso de Conseravcion), a non-profit organization. The Trust has acquired and preserved thousands of acres in Puerto Rico since its creation in 1970. Las Cabezas is a major project is on the northeastern tip of Puerto Rico, 316 acres acquired in 1975, and opened to the public in 1986. It is a peninsula that is promoted as having 7 different ecosystems, a lighthouse, and a historical component in the form of a museum. The Nature Center offers boardwalks through the mangrove, an observation deck, and a petting pool so visitors can see the marine life up close. Visitation has been heavy, but is by reservation, and in guided groups to minimize impact, and maximize the learning experience. This type of visitation allows close regulation of visitors' movements and activities. The focus of the Conservation Trust at Las Cabezas, as well as at its other projects, is on conservation and preservation. Tourism is the means to achieving these goals.

There are numerous other projects in the Caribbean that illustrate TYPE 4, including the Asa Wright Nature Center on Trinidad and El Yunque National Park in Puerto Rico (the only rainforest in the National Park System).
4.3 MARKETING ECOTOURISM

For many islands in the Caribbean, the response to the ecotourism trend has been most visible in marketing and promotion. For example, in the U.S. Virgin Islands, advertising campaigns in the past two years have gotten away from traditional beach fare to include other natural attractions of the islands. Marketing of ecotour-type amenities is taking up an increasingly large share of the U.S.V.I. advertising budget, according to Leona Bryant, Assistant Commissioner of Tourism for the U.S.V.I. government. "We've come to realize that enhancing the environment is good for business. It's a source of pride for the local community, it's good publicity, and it's good for marketing."

Throughout the industry, words such as "unspoiled," "natural," and "exotic" are being employed (or exploited?) more than ever before in the advertising copy of a spectrum of destination types. Endangered species, threatened habitats, and vulnerable ecosystems are being promoted as 'must see' destination experiences. The Bahamas recently created a 5 person staff within the governmental tourism division dedicated exclusively to the development and promotion of ecotourism in those islands. At Palmas del Mar, marketing efforts play up the environmental sensitivity, the siting of structures, the open space and density, the trees and natural amenities of the site. Palmas' Vice President of Sales and Marketing Allen Anderson said, "It's not an artificially created environment. It feels real because it is. You won't find the rock formations and waterfalls here that you see elsewhere. We're not marketing the natural beauty of the site to be hokey, but because it's real."

Stanley Selengut, developer of Maho Bay, admitted that free publicity (read, 'marketing and promotion') about Maho Bay has fueled its success. "If you're willing to go a little farther out on the leading edge, you get this incredible P.R. value. It's free advertising." The Conservation Trust of Puerto Rico also uses the free advertising route. The Trust holds a number of visible special events throughout the year at its facilities,
which get covered by the newspapers, television, and perhaps most importantly, by the 
tourism promotion industry.

The media hype may be an attempt by the marketing and promotion industry to 
capture a new trend. In Central America, "the prefix 'eco' is featured in almost any ad 
dealing with tourism these days. When Costa Ricans want to sell something, they paint it 
green." Calvin Howell, Executive Director of the Caribbean Conservation Association 
was skeptical about some of the marketing that is being done. "A lot of people will tell you 
they're doing it [ecotourism], but it's still very much a cliché. Everyone's jumping on a 
new marketing angle." Vera Brereton of the Caribbean Tourism Organization agreed. "In 
some places around the world, the [ecotourism] label is just being tacked on as a marketing 
catch-phrase." Angie Comas, Product Development Manager (ecotourism is considered a 
"new product") for the Tourism Company of Puerto Rico was also skeptical. She is 
dedicated to promoting ecotourism on Puerto Rico, without compromising the conservation 
intent of the term. She carefully screens the Tourism Company's promotional materials to 
ensure that "ecotourism," or other eco-tour jargon, is not being misused. "Preparation is 
being done so that we actually do it right. We're not in a hurry to be the first doing it," 
Comas says.

The advertising industry is clearly jumping on the ecotourism bandwagon. This 
response may have resulted in further confusion, within the industry and among tourism 
consumers, over the meaning of "ecotourism." (See Chapter Two on definitions of the 
term.) If so much effort and expense are going toward marketing ecotourism, the 
important question here is not whether the term is being used or misused, but whether so 
much attention to the issue at all points to the existence, or at least perception, of a 
significant ecotourism market. Is this blanket approach a shot in the dark, since the 
industry has admittedly not yet identified the most appropriate demographic group to target 
for ecotourism? It is too early to know, but is the "high ground" being taken by Puerto

Rico going to pay off in the long run, when consumers become educated to what is, and what is not ecotourism? Or, by not joining the attempt to apply the ecotourism label anywhere it might stick, will the Tourism Company look back at 1993 as a lost opportunity to capitalize on an emerging trend?

Development of ecotourism facilities in the Caribbean has clearly not kept pace with the growth of advertising and promotion of ecotourism. The danger with this disparity, as Ms. Comas from the Tourism Company of Puerto Rico expressed, is the dilution of the perception of "ecotourism." Consumers will soon come to see the word as a new label on an old wine, yet another marketing angle. However, with increasing awareness among tourists, groups like the Ecotourism Society 'certifying' green tourism, and the industry itself checking its use of the term (as Ms. Comas is attempting in Puerto Rico), the current gap between the marketing and the reality of ecotourism should narrow.
This is an exciting and challenging time to be involved in tourism development in the Caribbean region. The growing tourism market and large areas of yet-undeveloped land create great opportunity for real estate development. Conversely, the large areas of yet-undeveloped land and the growing tourism market create great opportunity for land conservation and preservation projects. The middle ground for these oft-opposing activities, the ground on which development and conservation can work to enhance one another rather than compete, is ecotourism.

It is clear from the economic data that tourism is a growing industry in the Caribbean, and most likely will continue to be. That such growth will occur seems intuitive, even absent these data; islands, especially tropical islands with a year-round idyllic climate, have a universal, primal appeal for people everywhere. A glance at a map reveals that the islands of the Caribbean are geographically located within easy access of the major population centers of North, South, and Central Americas, as well as those of Europe and Africa. Add to this the culture and history of the region, which includes a chapter and an influence from each of these locations, and visitors to the region from almost any home port can feel a part of the history of the region. Transportation to and within the Caribbean, perhaps the greatest obstacle to full development of tourism in the region to date, has been greatly improved, and continues to improve with the commitment of major international air, land, and sea transportation providers. Infrastructure within the region, long a major drawback to many tourist destinations, has been significantly developed, and continues to be so through government programs, and outside assistance from international development agencies. These agencies have also been active in promoting environmental cleanup and protection projects. This encouragement, along with an increasing general awareness of environmental issues globally, has turned the attention of the region's governments to the necessity of sustainable environmental planning.
With inter-island transportation and communication improved, infrastructure in place to serve tourism's needs, a dedication to environmental sensitivity, and greatly increasing political cooperation between the governments of the Caribbean nations, tourism development is, for the first time in the region's history, being looked at on a regional level. Sophisticated systems for collecting and analyzing data on tourism, and its role in the overall economies of the region, will allow the island countries to meet market demand, promote efficiently, and cooperate to develop a sustainable mix of tourism offerings. This new capability also puts the region in a position to identify, and hence prepare for new trends in tourism market demand. The latest trend to be identified is ecotourism.

The first four chapters of this thesis have objectively presented information on the trends, forces, and projects that have shaped ecotourism to date. This chapter addresses important questions which are still somewhat subjective:

- Is ecotourism a passing fad?
- Is it a financially viable approach to tourism development?
- Can it truly be environmentally sound, or ecologically sustainable?
- Is ecotourism vulnerable to external forces?
- What role does or should education play in ecotourism, and at what level(s)?
- How far can an environment be enhanced before it is no longer 'real'?
5.1 IS ECOTOURISM A FAD?

The industry professionals that I interviewed in the Caribbean shared their opinions about ecotourism, the depth and size of this market niche, and its place, if any, in the tourism industry's offerings in the region. The opinions vary considerably; it is precisely this lack of agreement, even within the industry, that I want to highlight. Responses ranged from very positive about the size and potential of the market. Marc Koenings, Superintendent of the Virgin Islands National Parks proclaimed, "We're sitting on a giant." Others like economist Enid Bissember of CARICOM were cautious, if not pessimistic. "For ecotourism, I can't see it taking off on a large scale," she said. Most respondents fell closer to the former, optimistic view of ecotourism's future. It is important to read these responses with a grain of salt, as there may be some degree of rationalization, self-justification, or public relations work included, depending on the position and interest of the respondent.

Stanley Selengut, developer of Maho Bay, St. John, speaking on the depth of the market, said, "Nobody asks about the depth of the market for zoos or botanical gardens. Ecotourism is really just an extension of that. You're not talking about a fad, but a lifestyle, a set of values that is changing."

Martin Nicholson of Caneel Bay Resort, speaking on environmental consciousness, said, "I don't think it's a fad, because the reality of the direction this planet has gone in the past 50 years has touched a core within almost everyone. It's more than a fad. It's now being taught throughout the education system. The basic value, the morality, if you will, is being instilled in the new generation. They've bought into that premise, they're being raised on it."

Marc Koenings of the Virgin Islands National Parks said, "We're just knocking on the door of this trend."
Angie Comas of the Tourism Company of Puerto Rico commented, "I used to think this whole thing [environmental tourism] was a fad. Then I started attending international seminars, etc. that involved developers, international organizations, governments, and environmentalists, and now I know it's here to stay. We realize that it has to be. The name may change, but the concept will remain the same."

Vernita Fort, ecologist and economist with USAID-Latin America/Caribbean responded, "I don't see it going away. It's a question of how to do it, and the opportunity cost of not doing it. No, it's here to stay. It has to be. The writing's on the wall in terms of the ecological, AND economical realities. With an area as large as the U.S., you can just keep moving on if you make mistakes. On an island, we look around, and are constantly reminded of the finiteness of what we have."

On the other hand, some people in the industry felt that ecotourism is a fad, a catchphrase, a very limited niche. For example, Enid Bissember, Economist with the CARICOM Secretariat said, "The appeal of it is just not as grand as people going to the beach to have some fun. You have to have a certain mindset to go out and look at lizards and bushes for your holiday. Will the experience justify the cost and trouble? For most people, no...Even this market segment [ecotourists] is a fad. They [ecotourists] are few and far between...For ecotourism, I can't see it taking off on a large scale." However, she added that this held true only for currently undeveloped islands and countries, such as Guyana and Grenada. "For countries that already have the tourism infrastructure and facilities, where ecotourism can be added as a new component to it [the tourism product mix], they should go for it."

Shawn Hurwitz, Vice President of Operations for Palmas del Mar Resort on Puerto Rico, felt that ecotourism is "...a very small niche, way overplayed. The industry has overreacted." He went on to say, however, that "Our business is made up of niches. You have to cater to those. It's a question of the size of the niche, and how much to put into it. My feeling is there aren't a whole lot of those people [ecotourists]." He agreed with Ms.
Bissember that as an add-on tourist offering, it was a workable product, but not as the answer for all tourism in newly developing countries. "I don't think they [developing countries] can survive on that kind of thing alone [ecotourism]. It's definitely an additive thing, not the main course."

The success of Maho Bay and other early ecotourism ventures, the recent proliferation of nature attractions and ecotour destinations, and the fundamental changes being witnessed at policy and institutional levels suggest that ecotourism has the staying power of an emerging trend rather than being merely a fad. Time will be the ultimate determinant of the duration of this niche, but indicators point to the market permanence of conscientiously planned, well-positioned ecotourism projects.

5.2 VIABILITY OF ECOTOURISM

Is ecotourism a viable product? From a development standpoint, the most critical question of an ecotourism venture is the feasibility and profitability of the project. Regardless of the level of commitment to environmental sensitivity, the developer's bottom line has to be positive, the numbers have to work; the return that any given developer, investor, or lender demands will vary, commensurate with the perceived risks and potential upside of each project. Tourism projects in general are considered risky, and the rates of return demanded on these ventures might therefore appear high. There are examples of viable, in fact very profitable projects; in the 1970's, the World Bank made a direct investment in tourism development at Kenya's Amboseli National Park. This was in part due to environmental concerns, but also because of the potential return on the investment. The pro forma for the project showed an internal rate of return (IRR) of 20 -25%.48

If an ecotourism project cannot pass the test of financial viability, it will be unable to attract the institutional financing necessary for development; no bank or lending institution will lend money to a project that won't at least break even. There are exceptions to this rule, however. Projects that in and of themselves operate in the red, but either serve a critical public need, or create great spin-off economic activity (the multiplier effect), may be find support from local or national governments, or international development agencies. This support can take the form of streamlined permitting, tax holidays or other tax incentives, provision of infrastructure, marketing and promotion, direct equity investment, and public/private partnerships. Generally, for strictly private sector development, which makes up the majority of direct tourism projects, financial viability is a requirement.

The demand for, and positioning of a tourism venture are the two critical questions for a project's feasibility analysis. The data suggest that the demand for ecotourism exists; positioning of a project is the remaining issue. Ecotourism currently enjoys a specialized niche position. Maho Bay Camps, for example, has among the highest occupancy rates of any tourist accommodations in the Caribbean. It seems almost inevitable that clones of Maho Bay will be developed. The relatively low capital cost of building this way and the ability to build in stages lower the barriers to entry into this market. The success of the prototype and the apparent demand justify development of more of this type of resort.

Following the demand curve, suppose that all Caribbean islands decide to follow the success of Maho Bay and develop their own- a Maho in every port, as it were. The product and experience that each has to offer will certainly be unique, based on the unique flora, fauna, ecology, history, and culture of each site/island, but as a product class or type, the uniqueness will be largely diminished, and the free advertising and publicity that have partially fueled Maho Bay's success will drop off. Revenues may fall, and each Maho will have to compete for the ecotourist. Profit margins will shrink to the developers' break-even point, i.e. to the point of market saturation, and development of this type of resort will stop. This is basic market theory of supply and demand. Positioning this
product type in the mainstream is antithetical to selling it as a unique, niche opportunity. The ecotourism resort appears viable as a unique product, but comprehensive market analysis must determine the slope and peak of the demand curve.

The viability, in fact profitability of Maho Bay, as an example, has been due at least in part to the flexibility of the resort to develop incrementally in response to demand, from the original 18 units to the current 114. While the high degree of flexibility displayed at Maho is probably not a requirement for success of an ecotour venture, some flexibility is certainly necessary to react to the emerging market. Does this requirement of flexibility, along with the smaller scale development generally associated with ecotour projects, exclude the large tourism developers? Is this product type antithetical to corporate culture? If so, ecotourism will remain the product of small, nimble developers, as opposed to the Hiltons and Hyatts.

The capital cost of building a unit at Maho Bay has been less than one tenth the cost of building the average hotel room on St. John, yet the rack rates at Maho are 25 - 35% of those at the neighboring hotels. The return on investment appears considerably higher for the ecotourism venture. As a new venture, therefore, as a developer with an unrestricted site, which type of project will maximize financial returns? The Maho Bay example doesn't tell the whole story; the capital costs discussed are for improvements, excluding costs of acquiring the land, predevelopment market and feasibility studies, legal work, etc. Given these costs, especially for a premium waterfront site in 1993, building a TYPE 1 conventional project with 500 rooms may be more attractive than a 50 room ecotour facility, because it allows those costs to be spread over a greater number of units. In fact, a large project may be the only way to make a development on that site financially viable. There is an economy of scale realized with large projects that may not be captured by the smaller, lower density projects that characterize ecotour development. This is obviously a generalization, as each site specific project is unique. The important observation is that returns may initially appear higher for an ecotour venture like a TYPE 3 Maho Bay, but
upon closer examination, TYPE 1 and TYPE 2 projects, in the case of many sites, may not only be justifiable, but may be the only financially viable option.

The World Wildlife Fund conducted a study in 1990 on the viability of public and private ecotour destinations. The sites used were reserves and national parks, all TYPE 4 projects. The study found that none of the publicly owned protected areas were financially self-supporting, though this was largely due to ineffective pricing. "In sharp contrast to the chronically low or nonexistent fees at public areas, the private protected areas seem to charge adequate entry or user fees...Privately operated protected areas in the five countries surveyed show significant promise for development of nature tourism. The Community Baboon Sanctuary in Belize, Trafalgar Falls in Dominica, and Monteverde Reserve in Costa Rica demonstrate this potential." Studies conducted by the Organization of American States (OAS) of marine parks in Jamaica and St. Vincent & the Grenadines indicate that with efficient pricing structures, these parks are economically viable. The Saba Marine Park in the Netherland Antilles, according to Sherman and Dixon, was expected to be financially self-sufficient after five years of subsidized operation.

Jean Bell, Tourism Project Officer for the Caribbean Development Bank (CDB) made a cautious observation. She said that CDB has received requests for funds to develop national parks or nature reserves, but most of these proposals have not been financially viable with conventional financing (in June 1993 the commercial lending rates CDB charged were about 9.5%). These types of projects need grant funding, soft funding, or a large base of government equity to make them work. CDB doesn't provide any forms of soft financing, and has had to deny financing to these projects.

Government incentives might act to make ecotourism a viable development option. "Ecotourism destinations are viable as a privately developed product, but government incentives need to be reconsidered. Incentives now are generally geared toward traditional

49 Boo, 1990, p. 42.
50 ibid, p. 18.
development. For example, the minimum number of rooms needed for a project to be eligible for incentives should be lowered," said Vera Brereton of the Caribbean Tourism Organization. Policy, regulation, and tax incentives were put in place in many parts of the Caribbean to encourage conventional tourism facility development, before "ecotourism" had been uttered in the region. All Caribbean governments need to make a comprehensive review of their tourism development incentives to assess how they can be revised or supplemented to not just accommodate, but encourage ecotourism development.

5.3 ENVIRONMENTAL SUSTAINABILITY OF ECOTOURISM

As the financial viability of ecotourism is the most critical question for developers, so ecological sustainability is the most critical question for environmentalists. Sustainability is difficult to determine, and is therefore often subjective, as an environmentalist and a developer are likely to draw the sustainable-level line at very different levels. Human activity will have an impact upon the environment, and development, by definition, transforms the landscape. Included in the concept of sustainable development, therefore, is an acceptance of some level of environmental impact. Marc Koenings of the Virgin Islands National Park refers to "acceptable levels of damage." By this he certainly does not condone environmental degradation. To the contrary, as he has shown through his management of St. John, all steps should be taken to mitigate human impact on the environment. However, unavoidable degradation of one area, although it can never be compensated for, is being accepted as somewhat, in a macro sense, offset by preservation and enhancement of other areas.

This type of impact offsetting is the concept behind mitigation banking. Although it has not taken hold in the Caribbean, mitigation banking is akin to the idea of a land bank, in which an organization or landowner restores a degraded wetland or other environment, and
creates a bank account of this land. If a developer has a proposed new project that has unavoidable negative impacts on the environment, "credits" can be bought from the mitigation bank to offset the effects. Also similar in intent are linkage programs, which are fees paid by a developer, to be used for a preservation or conservation project at an off-site location, in an effort to mitigate the impacts of a new development. Explicit linkages have also not been used to date in the Caribbean region.

Mitigation banking and linkage payments raise a difficult question: From an environmental viewpoint, are these tools for selling developers the right to destroy natural resources? It is an exaggeration to suggest that these programs are simply ways of selling environmental quality to any buyer who can afford it, but the troubling question remains. Is environmental sensitivity something that can or should be sold, traded, or negotiated? These two measures are intended to minimize environmental impact, and ensure long-term ecological sustainability. For the areas that are beneficiaries of these programs, such sustainability may well be secured. But for the areas from which these benefits are drawn, i.e. the development sites, even the possibility of sustainability has been sold, traded, or given away. Whether such trade-offs are a sustainable solution to development remains a debate.

The first, most important step to achieving environmental sustainability of tourism development, indeed of all human activity, is to determine the ecological carrying capacity of an area. A site's actual carrying capacity can be very subjective, however, based on the level of technical analysis, the acceptable degree of alteration or degradation of the environment, and the extent of politicization of these criteria. Clearly, both Yellowstone Park, with nearly 10 million visitors annually, and Guyana, with less than one tenth of one percent of that number, must critically assess their relative sustainable levels of tourism. The question of sustainability takes on a different significance at each tier of tourism.
5.4 CAVEAT- EXOGENOUS ECONOMIC VARIABLES

There are exogenous economic variables that impact the tourism industry in the Caribbean, some quite volatile. There are a number of looming events, each of which could have a negative effect on the region's economy. If all were to occur in the worst case scenario, the results could be devastating. These variables include the North American Free Trade Agreement (NAFTA), the opening of Cuba, shipping accidents, political instability, natural disasters, and the world economy in general (specifically North America's). It is important that governments, developers, and investors in the region follow the development of these. Each variable is the subject of widespread analysis and speculation elsewhere, so I will touch just briefly on each.

5.4.1 North American Free Trade Agreement

The North American Free Trade Agreement (NAFTA) may well hurt the Caribbean region in the manufacturing employment sector. Using tax incentives and low wages, Caribbean countries have been able to attract manufacturing, assembly, and data entry employment to their shores. If enacted, the NAFTA will open Mexico, which has far lower wages than the Caribbean region, to take these types of jobs. In a relatively short period of time, these sectors of employment, which often add diversification and stability to small tourism- or agriculture-dependent economies, will leave the area for Mexico. There has been discussion at CARICOM and elsewhere in the Caribbean about inclusion of the Caribbean nations in the NAFTA talks and agreements. To date, there has not been serious consideration by the U.S. of such inclusion.

Very hard hit by implementation of the NAFTA may be Puerto Rico, which currently struggles to keep employment on its island; Puerto Rico is a commonwealth of the U.S., with wages lower than in the mainland, which has encouraged U.S. companies to use Puerto Rican labor in manufacturing and assembly. The wages there are higher,
however, than the average for the rest of the Caribbean, putting Puerto Rico in competition with its lower-wage neighbors to keep jobs. The average wage in Mexico is lower still. Tariffs and trade barriers on international partners have been the only obstacles keeping employment from leaving Puerto Rico for other parts of the Caribbean, Latin America, and Mexico. It is clear that the NAFTA could lead to the flight of employment from Puerto Rico to Mexico.

5.4.2 The Reopening of Cuba

Cuba is an issue on everyone's mind in the Caribbean. Prior to its closing in 1959 Cuba had been the top 'overseas' destination for Americans. A glance at a map of the Caribbean reveals why the other islands have reason for concern about Cuba; it is a massive island compared to most in the region, and lies just 90 miles from Florida. Cuba has history, culture, and a diversity of natural attractions, including beautiful beaches. The infrastructure in place, while it may require renovation or completion of deferred maintenance prior to accommodating heavy volumes of traffic, lends itself to tourism; there are potentially five international airports with great capacity for cargo and passengers, and several deep water ports, which can accommodate cargo and cruise ships alike.

There is debate as to the speed at which Cuba will be able to develop the service industries of a mass tourism market. Even now however, development of this sector is a priority of the Castro government. In 1989, over 250,000 tourists from Canada, Latin America, and Europe visited Cuba, accounting for 10 percent of Cuba's foreign exchange. With former Soviet financial support dwindling, Cuba has been looking to tourism as a major source of much-needed foreign capital. The government goal is to quadruple the tourism sector to 1 million annual visitors by the year 2000.\(^{52}\) If the U.S. law restricting Americans from traveling to Cuba is lifted, there will be an influx of tourists to this forbidden land. If nothing else, the curiosity factor alone will inspire many Americans to

take a trip to exotic Havana; it is a political endangered species, a social 'black box.' It is close and inexpensive, lending itself to the short get-away vacations that have become so popular among American tourists. The cruise industry, according to Peter Whelpton, Executive Vice President of Royal Caribbean Cruise Lines, is poised to add Cuba as a new stop on Caribbean cruises almost immediately upon the country's reopening. He indicated that extensive research into Cuba has already been undertaken by the cruise industry, including scouting of potential ports and packaging.

Will the opening of Cuba increase the number of travelers to the Caribbean region, or will Cuba simply take a larger piece of a relatively fixed tourism pie? The fear among the governments and tourism industry in the Caribbean is that, at least initially, the latter will be the case. Again, Puerto Rico has a great deal to lose. It may lose a share of its tourism along with the rest of the Caribbean, but it will also have to compete for the share of the market seeking a Latin-Caribbean experience. "Prerevolutionary Cuba had cornered the Caribbean market. Only when the revolution ended Cuban tourism did mass tourism take root in Puerto Rico."53 Although Cuba and Puerto Rico are culturally worlds apart, the common perception of the Latin Caribbean makes them readily interchangeable to most American tourists.

Cuba's political system has created one of the best socialized medicine programs in the West. Less clear is the country's environmental record. As countries in Eastern and Central Europe opened to democracy and capitalism after decades of communist rule, the widespread environmental horrors uncovered exceeded even the worst expectations. It seems contradictory that a government as dedicated to public health as Castro's would condone or allow these levels of environmental degradation to have occurred in Cuba. If, however, pollution and contamination are as rampant in Cuba as in many parts of central Europe, the tourism potential of the island will be seriously curtailed, as any public health risks and negative reputation would make ecotourism a particularly hard sell.

5.4.3 Shipping Accidents

Oil, gas, plutonium, and other untold materials are shipped through the blue Caribbean waters every day. It may be only a matter of time before a catastrophic mishap jeopardizes beaches, fisheries, water supplies, and public health. Long term or permanent environmental damage may be wrought. Perhaps most damaging and most enduring will be the publicity. Tourism tends to drop precipitously in response to a major disaster. This may be crippling to the Caribbean, which is viewed by the vast majority of American travelers as one place, "I'm going to the Caribbean." This perception will lead to cancellations in St. Thomas, for example, in response to an accident in Barbados, regardless of the great distance between those destinations.

5.4.4 Political Instability

Many countries of the Caribbean are newly independent, and struggling with building political and economic systems. News of a political overthrow, a coup attempt, an uprising or insurrection, or violence during political elections have very damaging effects upon the perception of a place by the traveling public. Social instability is also a concern that falls under political uncertainty. Poverty, crime, and issues of personal or property safety at a destination are not enticing tourism brochure material. They are, however, problems that can quickly cloud the reputation of an area. Witness the drop in European visitor arrivals after the much publicized murder of the German tourist in south Florida. Or the 1972 incident in St. Croix, U.S. Virgin Islands; in a freak incident, five men went on a rampage there, killing eight tourists. There were scores of immediate cancellations. The bad publicity had such an effect that it took nearly five years to regain the lost business. A U.S. State Department warning about the safety of a destination can be a death warrant for tourism there, with lasting effects.
5.4.5 Natural Disasters

"Hurricane is a Caribbean word. It comes from hurakan, which was the name of a god in the language of the Arawaks [one of the two indigenous tribes of the Caribbean]. There is a similar-sounding word in most pre-Columbian languages of the Caribbean basin, always signifying a demonic force, an evil spirit, and always one of the most important gods."^54 Hurricanes are a part of life in the Caribbean, but are not very conducive to tourism, as Gilbert and Hugo demonstrated in 1988 and 1989, respectively. Damage ranging in the billions, crippling of services of facilities, and destruction of natural attractions are all risks that face a region that lies in the path of regular hurricanes. Unfortunately, there is little that can be done to protect against these risks. Marc Koenings, Superintendent of Virgin Islands National Park remembered visiting St. John in 1989, just after the eye of Hugo had made the same visit. "I cried. I literally cried. I've seen destruction by careless visitors. But the destruction, the debris. I didn't know whether the park would ever recover. It will, of course, but it may take decades." Accounts of this sort filled the news, resulting in cancellations and postponed plans to any destinations in the Caribbean that might have been negatively affected.

Ecotourism offers some relief from hurricane risk. The designs of the physical structures that characterize ecotourism development are generally better equipped to withstand the elements than conventional development. Densities tend to be lower, natural terrains more closely adhered to, and styles more closely modeled after indigenous styles, which were developed over centuries in these locations. After Hugo passed St. John in 1989, damage at Maho Bay Camps was substantial, but not relative to the damage sustained by neighboring developments; Maho was the first on St. John to reopen, after being closed for six weeks of repairs, largely site and landscape damage. The accommodations at Maho Bay are wood-frame, fabric-covered tent cottages. Hugo had its way with many of the coverings, but the frames remained intact. In the long run,

^54 ibid, p. 33.
ecotourism-type designs, which tend to be more organic and indigenous than conventional
development, may very likely prove a significant cost savings.

5.4.6 The World Economy

Caribbean economies are largely dependent upon tourism, as discussed earlier. Tourism, in turn, is dependent upon the economies of the traveling countries. In 1991, 53% of the arrivals in the Caribbean were from the United States, 16% were from Europe, 9% were from within the Caribbean, and 6% came from Canada. Arrivals from these home countries, and the money spent by the visitors, are functions of the health of the home economy. The percent increase, year over year, in number of arrivals to the Caribbean peaked in 1987 at 13.4%. It then dropped to 8.4% in 1988, 7.4% in 1989, and 6.1% in 1990.55 This trend line very closely corresponds to the state of economies in the U.S. and Western Europe during those years.

Each of the factors mentioned here is a potential threat to the Caribbean economies, especially to the tourism sector. And each is beyond the control of the governments of the region, individually or collectively. They are variables that must be tracked as part of any long-term planning for the region.

5.5 AN EDUCATIONAL COMPONENT TO ECOTOURISM

The education of nature attraction visitors to the necessity of environmental sensitivity and conservation is a critical component of the visit, and hence one of the major objectives of ecotourism. The ethic that compelled the visitor to choose an ecotourism vacation lends itself to such education. A survey by the World Wildlife Fund found that "while nature tourists are less demanding in terms of accommodation standards, they are

more demanding in seeking information sources about their destinations. Nature tourists want to read material and learn from tour guides about the flora and fauna of the area. [They] would also like more educational material than is currently available at most attractions."56 Upon leaving a destination, "when asked what could be improved, a majority of tourists in all parks mentioned technical information, guide books, promotional material, maps, transportation, and signs... This stresses the importance of [ecotourism destinations] as sources of technical information and as centers for outreach in environmental education."57 Provision of such materials carries great potential for concession revenues.

Education is a means by which the visitor's experience can be enhanced and his/her environmental consciousness raised. The enhanced experience will lead to word-of-mouth advertising, and development of a reputation for a unique and valuable experiential product. This works toward financial sustainability of the attraction. A visitor with a new environmental awareness will support the ecological sustainability of the attraction. Education not only increases awareness, but leads to greater donations and contributions toward conservation efforts. The Nature Conservancy, for example, sent an appeal for donations to visitors who had signed the log book at the Darwin Research Station in the Galapagos, resulting in $150,000 in contributions (Warner, 1989).58

The educational component of an ecotourism destination increases from TYPE 1 projects through TYPE 5 projects. This is consistent with my earlier observation that at the TYPE 1 end of the spectrum, traditional resort development, the emphasis is on the physical product. As we move toward TYPE 5, the tours and treks, the focus of what is being offered the tourist shifts toward the experience, and away from the physical development.

56 ibid, p. 13.
57 ibid, p. 45.
At Palmas del Mar, Puerto Rico, a TYPE 2 development, there is a tropical forest on site. Palmas is currently developing a boardwalk system for visitors, and is working with the University of Puerto Rico to create signage about the flora and fauna of the site. This educational effort is a very small, but important component of the array of offerings at Palmas. The strategy here is to use this nature attraction as an add-on to the mix of amenities. As Shawn Hurwitz, V.P. of Operations at Palmas said, "It's more a factor as a return thing, but not as an initial attraction. People won't come just because we have a nature attraction or because we've been environmentally sensitive. They come for the golf, for the beach and sun. If we can offer a nature experience as another amenity and they go away more satisfied as a result, then it's worth doing. It's definitely an additive thing, not the main course."

At the Barbados Wildlife Reserve and Grenade Hall Forest, a TYPE 4 project, education takes a much greater role. The education component is interactive, intended to be fun for visitors. This approach will keep the visitor's attention longer, and increase retention of the information, says Jean Baulu, founder and director of the project. The Reserve and Forest is also active in community outreach and education, regularly inviting groups of school children to visit, publishing a number of interactive educational guidebooks for follow-up teaching, and working with local farmers on monkey population monitoring and control measures.

These levels of education are typical at the TYPE 4 tier; the Virgin Islands National Park, and Las Cabezas de San Juan both have similar levels of commitment to an educational component. Both are involved in outreach to the local communities and schools. Both bring school groups for regular visits. Common to all three example projects at this tier is the proactive role each is taking in its role as educator. Projects toward the TYPE 1 end of the spectrum tend to take a less active role in education.

It is an education component that "makes the circle complete" in ecotourism, in Stanley Selengut's words. In addition to visitors and potential visitors (i.e. potential
ecotourists), education is necessary at other levels as well, including travel agents and tour promoters, on-site tour guides and staff, governments and management agencies, and local residents and communities. Education of this latter group is crucial to the success of an ecotour venture, as a number of cases have illustrated the necessity of community support of a project for its success. The locals, if they feel positive about the attraction, the visitors, and the benefits ecotourism brings, will work to protect the asset, and assist in the education of visitors. They are also an invaluable source of information about the site, its ecology, flora, fauna, and history. Insensitive tourism development and tourist visitation, on the other hand, will lead to resentment, poor relations between residents and visitors, and possible degradation of the asset, which may come to be viewed by the locals as more of a liability. Education of the visitor, and the inclusion and education of the local residents must be viewed by the governments and tourism industry of the Caribbean as priorities in the development of ecotourism.

5.6 REALITY VS. THEATRICS. OR PRESERVATION VS. ENTERTAINMENT

When does preserving, recreating, and enhancing the environment become the creation of something that never really existed? When does it cease being a natural environment, and become a Disneyland version of an environment? How far should tourism development go to satisfy a visitor's expectations of what the natural environment should be like? This last question was raised in the box office hit, Jurassic Park:

"You want to replace all the current stock of animals?" Hammond said.
'Yes, I do."
'Why? What's wrong with them?'
'Nothing,' Wu said, 'except that they're real dinosaurs.'
"That's what I asked for, Henry,' Hammond said, smiling. 'And that's what you gave me.'

'The dinosaurs we have now are real,' Wu said,...'but in certain ways they are unsatisfactory. Unconvincing. I could make them better.'

'But, Henry, these are real dinosaurs...Nobody wants domesticated dinosaurs. They want the real thing.'

'But that's my point,' Wu said. 'I don't think they do. They want to see their expectation, which is quite different...You said yourself, John, this park is entertainment,...and entertainment has nothing to do with reality. Entertainment is antithetical to reality."

While Jurassic Park takes the concept of ecotourism to the extreme, it does force the question of where the line should be drawn between real reality and expected reality. Does it matter? If, in the end, it serves to educate the visitor and increase his or her awareness of the environment, what is the harm in embellishing the truth a bit? An environmental purist would argue that native flora and fauna species, and naturally occurring terrain, combined in a way found in indigenous ecosystems, are the only acceptable answer. Anything beyond that perpetuates the misconception that the visitors had about the place prior to arrival. This raises the question of what is truly native, indigenous, and natural. Mahogany, for example, is not indigenous to the Caribbean, but has been thriving since its introduction to the islands some 400 years ago. Should a preservation effort there include mahogany trees?

The Barbados Wildlife Reserve certainly goes beyond reality; less than half of the 40 plus species of animals and birds found at the Reserve are native to Barbados, or even to the Caribbean. In this sense, it is a zoo, a form of entertainment rather than an authentic reserve of any regional habitat or ecosystem. That these activities support research and conservation efforts brings us back to the question of whether it matters that this is not entirely real.

At Palmas del Mar in Puerto Rico, V.P. of Sales and Marketing Allen Anderson said that Palmas tends toward the reality end of the spectrum. "This type of approach [environmental sensitivity in design and building] gives people more of an opportunity to be part of the terrain. It's not an artificially created environment. It feels real because it is. You won't find the rock formations and waterfalls here that you see elsewhere. They might be impressive, but there's nothing real about them in the location. We're not marketing the natural beauty of the site to be hokey, but because it's real." The site at Palmas is very real in its terrain, while substantially enhanced in its landscaping.

At Maho Bay, Stanley Selengut has also carefully developed and enhanced a natural site. "Ecotourism requires a strong sense of theater. The stage is the natural wonder of the location. It is enhanced by indigenous plant landscaping, wildlife management, and site-sensitive architecture." The level of environmental enhancement at Maho Bay is certainly less than at Palmas del Mar, yet greater than in the National Park in which Maho sits. Gray water is used to feed a drip irrigation system on the Maho site, for example. When asked about how far the theatrics could be taken and still remain natural, Selengut responded, "It has to do with the skill of the director. You create entire habitats. It has to do with having a sense of what the customer wants to see. If you introduce bats to keep the insect population down [a strategy employed at Maho], don't hide the bat houses. Make them visible to the visitors. It's not fake, it's just making it visible to the visitor. It's all theater, it's just a question of good theater vs. bad theater."

The question is rhetorical, and the lines drawn between reality and theatrics, between preservation and entertainment, can only be arbitrary and subjective. The question to keep in mind when considering the preservation and enhancement of the environment for tourism is "how real is real?"

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The focus of this thesis is ecotourism in the Caribbean. It is timely because of the simultaneous pressures currently facing the region to develop tourism, and at the same time protect the environment. Ecotourism projects are unique, because each site is unique. It is precisely this attention to the natural amenities of each site that sets ecotourism apart from so much of traditional tourism development, which often has worked to standardize its products; a Holiday Inn was a Holiday Inn was a Holiday Inn, regardless of location. Ecotourism is a broad term that encompasses a number of levels or tiers of development types, so there is no single model of ecotourism. This was illustrated in Chapter Two on definitions of ecotourism, and again in Chapter Four on industry responses. Further, no project can be exactly replicated on other sites, as the requirements, carrying capacity, and attributes of each site will be different from the first. The principles, concepts, innovations, and ethic of each project, however, can be carried and applied to other sites, other islands in the region, and indeed, to other parts of the world.

6.1 PUBLIC POLICY IMPLICATIONS

"The tourist wants to experience the totality of a new place - a different experience. Clearly, it means that government must be prepared to protect, conserve, and enhance its resources. Neglect them and you will in time wave good-bye to your tourism. A more positive [proactive] role has to be played to raise the level of consciousness to the importance of the environment, with government acting as catalyst."

Luther Gordon Miller, Tourism Development Specialist, Caribbean Tourism Research and Development Centre

The establishment of national parks and development of protected natural attractions has been encouraged of the island countries of the Caribbean by international environmental

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organizations, other NGO's, and quasi-government organizations such as CARICOM and OAS. There has been a great deal of misunderstanding and hence resistance from communities and landowners to such initiatives. "Even where governments felt inclined to make such decisions, community objections and fears have often dissuaded their actions. [T]he community's lack of support stems mainly from uncertainty about the degree of control to be exercised over privately owned land."62 The solution to such resistance is education and awareness of the local population to the benefits, or even necessity of protecting their resources. However for a landowner with no potential income except exploitation of the land, these 'higher standards' may mean little.

An example of a regional government taking steps toward designation of areas as protected comes from the Miskito Coast, on the Caribbean shores of Nicaragua. In 1991, the Chamorro government set up a protected area Commission, designating 5,000 square miles of estuaries, lagoons, coral reefs, and mangrove islands as protected. This created "the largest and biologically richest coastal reserve in Latin America,"63 with the intention of developing the area to limited ecotour-type visitation. The fallacy of this initiative is that "protected area" has yet to be defined, creating confusion and exploitation of the ambiguity.

Should nature attractions have open access? Should an amenity like a rainforest or coral reef be privately owned and controlled? If so, who should be given access to it, and by what means of regulation? If it is publicly held, how should access be limited? Currently, "most natural attractions are owned by governments, which generally permit open access as a service to the public. There is thus a tendency to overuse popular attractions to the point where their value is reduced or eliminated."64 For popular attractions, there is a need to set up quotas or pricing to limit visitation, and minimize environmental damage. The simplest solution is to raise access or use fees.

62 ibid, p. 51.
64 Edwards, 1988, p. 42.
Increased access fees bring up the question of pricing equity. If visitation is to be controlled, and if some visitors have a higher willingness to pay than the current cost, there will be a temptation to raise the price of the amenity until revenues are maximized. From a strictly financial view, this is the ideal situation. From an economic view, it is the most efficient solution. From an ecological point, it minimizes visitation and impact on the resource. But from a social cost position, it is not equitable. The result is the pricing out of the market of the poorer groups, who are essentially outbid for the product by the wealthier groups. If the product in question is a national park, for example, which theoretically belongs to all citizens, then pricing out lower income groups is not an acceptable solution. The inequity is furthered when the product is in a developing country with a fledgling economy, and the bidders for the amenity include outside visitors from developed economies. The result, as many islanders know, is that the most desirable beaches, the best tracts of land, and the finest facilities effectively become the property of foreign tourists. Overlay this with the very visible racial lines of predominantly white American visitors, and Caribbean populations predominantly of African and Hispanic descent, and the social and political ramifications should be rather obvious. What is clear from taking this scenario to the extreme is that single fee pricing as a strategy for limiting visitation or maximizing revenues is not a wise course to take.

Multi-tiered pricing structures have evolved as the solution to these potential inequalities in many locations, including Costa Rica and Mexico. Nationals, students, and researchers, for example, pay a lower usage fee than foreign visitors, maximizing visitation, and maximizing the revenues collected. This strategy, in turn raises the potential for price discrimination. Suffice it to say that a balance needs to be drawn in pricing for all groups competing for a product. Assuming that at least a portion of the revenues are put into conservation and enhancement of the area and visitor facilities, the environmental sustainability, financial viability, and social stability of the destination are secured.
Is the public or private sector better equipped to own and manage ecotourism facilities? The answer to this clearly changes by tier of ecotourism being discussed. TYPE 1 through TYPE 3 projects are the domain of the private sector. The specialized nature of the hospitality industry, the expertise and operating efficiencies required to manage tourism accommodations have overwhelmingly been vested in private interests. This sector is more market driven and flexible in responding to market changes than a government bureaucracy. If we accept that tiers 1 through 3 are the private sector realm, what should the government role be? Policy setting, regulation through zoning and building codes, certification of operators, permitting of concessionaires, and monitoring of impacts (economic and environmental) are roles that most governments are structured to perform.

Who should determine public policy on ecotourism issues? Given the range of interests and the depth of impact of tourism, effective policy that will have to be the product of discussion, debate, and consensus building among all of the players. This includes the governments, developers, environmentalists, local communities, hoteliers, tour operators, NGO's, and development agencies. Kenya, for example, has established a national nature tourism board, a planning committee with interdepartmental government membership, as well as outside members from the development and tourism industries, and environmental organizations.

This consensus building approach to policy setting was the subject of a 1992 publication by the Lincoln Land Institute titled Policy & Growth Management. Author John DeGrove reviewed seven systems of land use and growth management that had recently been, or were currently being, set up in different states, beginning with Florida's in 1985, and ending with Maryland's in 1992. There are variations in the systems he reviewed, but typically the approach is to bring all interest groups together, to assert their priorities and concerns. Through a combination of bartering, compromise, and discussion of these issues, policy is formed that everyone can live with. Each of the systems emphasized actual implementation and enforcement of the adopted planning and policy.
For developers and environmentalists alike, policy created through this type of inclusive forum is preferable to policy simply handed down from a regulatory agency; the risks are less because all parties know in advance who and what the other interests are. Development proposals will fall within the parameters set forth, with knowledge of the potential opposition.

Perhaps the two most important players to bring face to face in this decision-making process are the age-old adversaries, developers and environmentalists. As an ecologist, and Chief Economist with USAID Latin America/Caribbean, Vernita Fort is a veteran of the development vs. environment debate; "I often go into these meetings and play interpreter, or traffic cop. I have to stop them and say, 'I think you're all ultimately trying to get to the same place.'" It was her opinion that the environmental groups have made better strides toward speaking the private sector language of money and economics. But the private sector, she felt, is waking up, partly because of regulation, or because they know they're being watched by these groups, and their finance sources. The Caribbean Conservation Association's Executive Director Calvin Howell saw this as the critical step, "Successful ecotourism development depends on developers learning a new set of environmental ground rules." Marc Koenings of the Virgin Islands National Park agreed that development needs to be sensitized to environmental issues, but said that the environmental interests need to make even more of an effort. "The mistake most environmentalists and environmental groups make is that they're talking about genetic pools and biodiversity, species counts, etc., which are in fact the environmental issues, but not the language of the decision-makers. We need to frame the argument in terms that are in their language: dollars, revenues, marketing potential, niches, promotion, and sustainability of the asset. I think we're at the point where we have the information and evidence that we can start to have that conversation." Regardless of "which side" has made the most efforts to date, or which needs to do more, the important result is that both sides recognize the need to include the other in any dialog on the topic of tourism development.
Policy must be formulated at the regional level, then further refined on the national level. The DeGrove book showed systems of concentric levels of jurisdiction, with the local level subordinate to the policy of each larger region. Such a system could be imagined for the Caribbean, which consists of sixteen independent countries, three French départements, five British colonies (with varying levels of autonomy), a U.S. Commonwealth, a U.S. unincorporated territory, and six semi-autonomous members of the Kingdom of the Netherlands. Unless policy and regulation in some framework is developed on a regional level, the result will be a bidding contest by island countries for development projects. The currency for "bidding" by the competing islands will be incentives, possibly including loosened environmental standards and review, leading to perpetuation of the current situation. A unprincipled developer might take advantage of this situation by playing the islands against one another to cut the "best" deal. A regional approach to environmental policy is necessary to avoid exploitation of the weakest link.

A second objective of developing policy on a regional level is to create a mix or diversity of attractions Caribbean-wide, to minimize direct competition between neighboring islands and attractions, and "to encourage intra-Caribbean flows of tourists between islands, as part of the 'packaging' of new activities." If the types of attractions within any subregion of the Caribbean offer a complete range of tourism opportunities, including all levels of ecotourism, it will position itself to attract the broadest mix of tourists, and keep them in the region for the maximum possible duration. Each product type is unique, i.e. the niche for each is not taken mainstream. This strategy is not only the most efficient approach to tourism development, but is also the safest; by diversifying the product mix, over-reliance on any given niche or submarket is avoided. A downturn in one submarket may hurt an economy with a diversified mix, but will not devastate it.

In addition to diversifying the tourism offerings, ecotourism, by promoting conservation of environmental resources and involving local communities in the efforts,
plays into sustainability in its broadest sense. Ecological, financial, and social sustainability together are best addressed by an ecotourism approach.

But how much is too much? The future of ecotourism in the Caribbean region appears bright, but over-reliance upon it as the panacea would be a mistake. I agree with Enid Bissember, Economist for the CARICOM Secretariat who said, "For countries that already have the tourism infrastructure and facilities, where ecotourism can be added as a new component, well, they should go for it.". Again, over-reliance on ecotourism, or any segment of tourism, or even tourism in general is a risky prospect for a small island nation's economy.

This is not to discourage ecotourism development. To the contrary, as a new component to the tourism segment, or a new framework within which to develop, ecotourism is a strategy that should be adopted in the Caribbean. The key is to develop ecotourism to the "appropriate" level as a component of tourism in each of the region's states. This level will have to be determined using market studies and evaluation, environmental assessments (carrying capacities), and economic analysis (including cost/benefit analysis). It seems clear that the ultimate level of ecotourism is far greater than the small number of ecotour-type attractions that currently comprise this fledgling industry. This presents a great opportunity for development, and also a great challenge to the governments of the region, which must create policy and regulation to meet these objectives.
A number of questions which are important to ecotourism development in the Caribbean remain unanswered here as they are beyond the scope of this paper. There is a need for comprehensive study of each of these topics:

- the actual data for the ecotourism market in the Caribbean today, including the number of tourists in this niche and the revenues generated by this type of tourism (This will require the drawing of clear lines between what is, and what is not ecotourism. A multi-tiered classifying system such as the one I've developed here provides such a framework.)
- the demographics of the ecotourist today, and the potential, possibly as yet identified target demographic groups in the future
- a thorough ecotourist spending survey, such as the airport surveys done in 1990 by Elizabeth Boo for the World Wildlife Fund
- a comprehensive cost/benefit analysis (as that conducted by Island Resources Foundation on the Virgin Islands National Park) of projects at each tier of tourism
- detailed financial analysis of individual projects at each defined level
- the extent of economic leakage from the region, and ways to minimize it, while at the same time creating jobs and diversifying the region's economies
- an econometric model analysis, using multiple regression, to determine the variables which impact tourism, specifically ecotourism, and the strength of each variable
- a close look at public/private partnerships and joint ventures to date in the area, and where such strategic alliances might have the most potential
- the role of the Caribbean in the ongoing North American Free Trade Agreement negotiations

Some of these questions will require the passage of time, and others, the development of a greater number of ecotour ventures for use as case studies. The
graduation of ecotourism from a small niche to a larger tourism submarket will require the resolution of still other questions listed here. The continued growth of the ecotourism market will see developers, governments, NGO's, financing institutions, and the tourism industry grappling with these questions. The successes of the limited number of ecotourism ventures reviewed in this paper, and the visible trend in the tourism market data certainly justify the undertaking of these types of studies.
CONCLUSION

Is the ecotourism strategy appropriate for all islands and all countries of the Caribbean? Probably not. The success of ecotourism in any given location will depend upon a number of factors, including:

- the quality of the natural attractions of the destination, and the accessibility of the location;
- the sustainable carrying capacity of the attraction, including
  - the ecological carrying capacity (the level of visitation above which irreversible damage will occur),
  - the social carrying capacity (the level of visitation above which the local community way of life is disrupted), and
  - the experiential carrying capacity (the level of visitation above which the visitor, due to contact with other visitors, no longer feels (s)he is getting a unique, away-from-it-all experience);
- the existing reputation of the country or island as a tourist destination, and its reputation socially, politically, and physically (geographically);
- the level of infrastructure in place to serve tourism needs, including
  - the physical infrastructure such as airports, roads, water and sewer,
  - the institutional infrastructure such as banking, customs and immigration, and
  - the social infrastructure such as community education and support, safety and security concerns, and cultural sensitivity;
- the product mix, or the diversification of the tourism offerings of a destination;

"There is a need for a comprehensive study of the levels of ecotourism in the region, the actual implementation of ecological strategies, the pace of this type of development, and what is actually being done," said Vernita Fort, ecologist and economist with USAID - Latin America/Caribbean. This thesis has been one step toward that end,
and has introduced a framework within which such a comprehensive study might be conducted. Such a study would be a valuable tool for the tourism development industry, government planning, conservation interests, and the tourism consumer. Ms. Fort added that "there may not be many examples of implementation, but there is a great deal of planning and preparation going on [for ecotourism development]." Granted there are very few prototypes of ecotourism development, but there are numerous examples of projects at each level that demonstrate at least some of the principles and ethics of the ecotourism concept. The attempts, the innovations, and even the mistakes of these examples can serve collectively as a starting point, or a framework for this type of development.

"The opportunity is ripe. The need is great, the awareness is growing, initiatives are being launched, and major funding sources are considering sizable projects in this area. The time has come to make ecotourism a workable concept."

Karen A. Ziffer, Conservation International, 1988
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