

SUSTAINING OUR SPIRIT: ECOTOURISM ON PRIVATELY-OWNED RURAL
LANDS AND PROTECTED AREAS

by

GAIL YVONNE BRUNER LASH

(Under the Direction of David H. Newman)

ABSTRACT

Economists say that the way to correct the “tragedy of the commons” is to privatize the commons. Does this really work? While lands may be privately-owned, wildlife is not – in most places it is a common pool resource (CPR) owned by government. Can private, rural landowners protect CPRs, such as wildlife and their habitats? Ecotourism is well-known for its ability to provide benefits to local people while sustaining forests and other natural resources that it relies on. Are these perceived benefits enough to engender community support for wildlife and ecotourism? This dissertation examines successes and challenges associated with sustaining both natural resources and rural communities through landowner involvement in ecotourism. This research contains a synthesized model of successful community-based ecotourism (SCBE), two CBE case study articles and a philosophical epilogue. The first article is a longitudinal study, conducted in 1992 and 2000, which focuses on sustaining both monkey populations and the well-being of local people by examining distributions of perceived and actual ecotourism benefits and management strategies over seven villages of a private reserve, the Community Baboon Sanctuary (CBS), in Belize. Inequitable distributions of income and ineffective management hindered support of the CBS. The second article examines the conservation attitudes and practices of women living in Santa Marianita village adjacent to the privately-owned La Reserva Maquipucuna, in Ecuador. It examines women in the crafts industry versus non-craft women, and their support of the Reserve. Expectations of Reserve programs, and the private property status of the Reserve, influenced support. The epilogue introduces a new paradigm, “Connecting with Spirit” and the concept of “spiritual economics” as a method and mindset to accomplish equity, local empowerment, and unity between rural communities, protected areas, economics and God. Common themes throughout this research are: 1) private property rights, 2) common pool resources (CPR)/public goods, 3) community attitudes and perceived benefits, 4) use versus preservation of natural resources, and 5) human spirit.

INDEX WORDS: Ecotourism, Private lands, Protected areas, Common pool resources, Rural community development, Belize, Ecuador, Conservation, Human spirit, Management, Crafts

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DEDICATION

I dedicate this work to Bahá'u'lláh, who made the miracles happen to produce this dissertation and the papers within it. May it be the shining light that it is meant to be. I also dedicate this nine-year effort and joy to Nevin, my husband, for his constant love and support of me, my academic and spiritual journeys, and for his love of all peoples and desire for Peace on Earth.

“Immerse yourselves in the ocean of My words, that ye may unravel its secrets, and discover all the pearls of wisdom that lie hid in its depths.” Bahá'u'lláh

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“Each and every heart it seems is bounded by a world of dreams.”
The Voice by The Moody Blues

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TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS.....	v
LIST OF TABLES	xii
LIST OF FIGURES.....	xv
CHAPTER	
1 INTRODUCTION TO ECOTOURISM: SUCCESSES OF THE FIRST 25 YEARS	1
Summary.....	1
I. Introduction	2
II. Literature Review Of Ecotourism	9
III. The Gleaned Model.....	32
IV. Objectives of Research.....	49
Bibliography	53
2 A LONGITUDINAL STUDY OF COMMUNITY PERCEPTIONS: PRESERVING PUBLIC GOODS ON PRIVATE LANDS IN THE COMMUNITY BABOON SANCTUARY, BELIZE	67
Summary.....	68
Introduction	70
Methods	83
Results	85
Discussion.....	136
Conclusions	159

	Acknowledgements	164
	References	166
3	WOMEN, CRAFTS AND CONSERVATION ATTITUDES: CREATING ALLIANCES BETWEEN COMMUNITIES AND PROTECTED AREAS IN ECUADOR	176
	Summary.....	177
	Introduction	178
	Methods	187
	Results	191
	Discussions	213
	Acknowledgements	221
	References	223
4	CONCLUSION: OUR FUTURE	228
	Summary.....	228
	I. Current Cases: CBS & Marianitas	230
	II. Future Directions: “The Good Deal”	245
	Bibliography	254
5	EPILOGUE: THE SPIRIT OF DEVELOPMENT: A NEW PARADIGM UNIFYING PEOPLES, ENVIRONMENT, ECONOMICS AND GOD	258
	Summary.....	259
	I. Our 20th Century Journey	260
	II. New Paradigm – Connecting With Spirit	277
	III. The Philosophy Of Community-Created Ecotourism (CCE)	301
	IV. Conclusions	306

Bibliography	310
APPENDICES	316
A 1992 SEMI-STRUCTURED INTERVIEW GUIDE – CBS BELIZE	317
B 2000 SEMI-STRUCTURED INTERVIEW GUIDE – CBS BELIZE	320
C 2000 KEY INFORMANT INTERVIEW GUIDE – BELIZE	323
D CBS MUSEUM VISITOR RECORDS – BELIZE	324
E 2000 INTERVIEW CONSENT FORM – BELIZE	328
F 2000 CBS LANDOWNER BASE MAP WITH NUMBERED PARCELS..	329
G 2000 CBS LANDOWNER LIST – MAP KEY	330
H RECOMMENDATIONS FOR THE CBS, BELIZE	337
I 2000 JOURNAL WRITINGS, STORIES FROM BELIZE	342
J ADDITIONAL DATA TABLES, BELIZE	343
K 1998 SEMI-STRUCTURED INTERVIEW GUIDE – ECUADOR	348
L 1998 KEY INFORMANT INTERVIEW GUIDE – ECUADOR	353
M 1998 INTERVIEW CONSENT FORM (ENGLISH) – ECUADOR	355
N 1998 INTERVIEW CONSENT FORM (SPANISH) – ECUADOR	356
O 1998 JOURNAL WRITINGS, STORIES FROM ECUADOR	357
P ADDITIONAL DATA TABLES, ECUADOR	358

LIST OF TABLES

	Page
Table 1.1: Definitions of ecotourism.....	13
Table 1.2: Case studies and their factors of success	45
Table 2.1: CBS pledged landowners, April 2000	88
Table 2.2: CBS number houses and population in 1992 and 2000, by village.....	90
Table 2.3: Comparison of land tenure status of CBS lands, 1988 and 2000, by percentage of villagers interviewed	92
Table 2.4: Villager attitudes of the ways that the CBS protects monkeys	97
Table 2.5: Village attitudes towards interest in monkeys.....	99
Table 2.6: Villager attitudes towards protection of monkeys.....	100
Table 2.7: Benefits to local people in general from CBS.....	102
Table 2.8: Personal benefits from CBS.	103
Table 2.9: Who benefits most from CBS?.....	105
Table 2.10: Costs to CBS villagers	106
Table 2.11: CBS villagers personal costs	108
Table 2.12: Tourist services offered by CBS villagers.	112
Table 2.13: Average income from tourism, earned per villager, in 1992 and 2000	117
Table 2.14: Attitudes of CBS villagers on future benefits from the CBS	118
Table 2.15: CBS villagers' attitudes toward CBS management.....	124
Table 2.16: CBS villagers' problems with CBS management.....	128
Table 2.17: Other development/ improvements recommended by CBS villagers.....	131

Table 3.1:	Training seminars attended by women in Marianitas, by percentage.	192
Table 3.2:	Training seminars related to the Reserve attended by women in Marianitas, by percentage.....	193
Table 3.3:	Gross earnings per month by women in Marianitas, by percentage.	194
Table 3.4:	Number of children alive, by craft (LC) and non-craft (Other) women, 1998.....	195
Table 3.5:	Perception of Reserve benefits, by craft (LC) and non-craft (Other) women, 1998.....	196
Table 3.6:	Perception of Reserve protecting the environment, by craft (LC) and non-craft (Other) women, 1998	197
Table 3.7:	Attitudes towards outsiders buying lands, by craft (LC) and non-craft (Other) women, 1998	198
Table 3.8:	Conservation attitudes and practices, by craft (LC) and non-craft (Other) women, 1998	201
Table 3.9:	Knowledge of Reserve goals, by craft (LC) and non-craft (Other) women, 1998.....	205
Table 3.10:	What women used to do (before Reserve), by craft (LC) and non-craft (Other) women, 1998	207
Table 3.11:	What women do now (after Reserve), by craft (LC) and non-craft (Other) women, 1998	207
Table 3.12:	Impact of Reserve on lives of women, by craft (LC) and non-craft (Other) women, 1998	208
Table 3.13:	Criticisms about the Reserve, by craft (LC) and non-craft (Other) women, 1998.....	210
Table 3.14:	Development needs of women in Marianitas, 1998	211
Table 3.15:	Improvements that should be made to the Reserve, 1998.....	212
Table 4.1:	Case study evaluation of SCBE Model.....	243
Table 5.1:	Timeline of human society and environment.....	263

Table 5.2: Future of human society and the environment.	282
Table 5.3: Renaissance political principles	300

LIST OF FIGURES

	Page
Figure 2.1: Map of Belize River Valley	80
Figure 2.2: CBS Landowner Base Map with “lost pledge” parcel, April 2000.....	87
Figure 2.3: Howler monkey troop territories in Bermudian Landing, CBS,1997	111
Figure 2.4: Percentage of total number of tourist served per CBS villagers from five tourist services, by village, in 1992 & 2000	114
Figure 2.5: Percentage of total income earned by CBS villagers from tourist services, by village, in 1992 & 2000.....	115
Figure 3.1: Location Map: Maquipucuna Reserve in Ecuador	184
Figure 3.2: Location Map: Maquipucuna Reserve and Marianitas Village	186
Figure 3.3: Women’s attitudes towards protecting the village’s water source.....	203
Figure 3.4: Women’s attitudes towards access clean water	204

CHAPTER 1

INTRODUCTION TO ECOTOURISM: SUCCESSES OF THE FIRST 25 YEARS

“Ecotourism means many things to many people. In my view it should mean travel to enjoy the world’s amazing diversity of natural life and human culture without causing damage to either...A vital requirement is that visitors should show respect for both the environment and the people who live in it...Above all, the tourist industry has to remember a central precept: do not kill the goose which lays the golden eggs.”

Sir Crispin Tickell (Cater and Lowman 1994)

SUMMARY

Ecotourism has earned a place on the world stage, from non-governmental organizations (NGOs), governments, and development agencies alike, as one of the viable ways both to conserve natural resources under pressure and to uplift the economy and conditions of local people living with and using these resources. As the ecotourism industry matures from adolescence to adulthood, we see mixed reviews about its potency and indeed about its success as a whole. In the International Year of Ecotourism 2002 (IYE), proclaimed by the United Nations (UN), ecotourism was both hailed for preserving dwindling cultures and biodiversity, and blamed for degrading both environments and human dignity. What is missing to bring these dichotomies together for success? Why do some projects fail or succeed, and why is there a large professional segment of detractors, as well as proponents, of ecotourism?

The answers to these questions lie not only in the wealth of ecotourism literature and its numerous guidelines, case studies, conference papers, articles and books, but also in the emerging multi-disciplinary connections between dissenter and advocate, agency and community, government and God (see Chapter 5, Epilogue).

This chapter's goals are four-fold. First, it explores three ways of thinking dichotomously about "development": a) development vs. underdevelopment; b) private vs. public property; and c) use vs. preservation of natural resources. Second, ecotourism is a) introduced and defined, and literature is examined relating to dissertation topics of b) protecting biodiversity; c) providing economic and social benefits for local people; and d) stakeholder roles, particularly women, in ecotourism. Third, it presents case studies from literature and a synthesized model of factors that are key to ecotourism's success, particularly from community-based ecotourism (CBE). Fourth, it outlines the objectives of this dissertation research and introduces the three case articles written here.

I. INTRODUCTION

People of the world live in various states of well-being. Abstractly, these states can be analyzed and placed on a development continuum, with 20% of the populace (1.2 billion) at the "abject poverty" end and another 20% (1.2 billion) at the "extreme wealth" end. The remaining 3.7 billion people, or 60% of world population, all live in "less developed" countries (LDCs). More concretely, 1.3 billion people lack access to safe drinking water, 2.4 billion people are without basic sanitation, and 1.1 billion people lack adequate housing (United Nations Populations Fund 2002). It is fruitful that we remain conscious of these people in misery, and that we dialogue for solutions on how to close these distances between states of well-being in reality.

There is no denying that the earth's environment has been severely compromised in the last 200 years since the beginning of the Industrial Revolution. Ironically, this era of mass production and amassed wealth can account for much of the poverty in the world today. Agrobusinesses have displaced family farms; indigenous and communal lands are

transferred or sold to corporations and other foreigners; and rural residents migrate to urban centers – about 160,000 people every day – where they face crowded and unhealthy conditions (United Nations Populations Fund 2002). Concern is extremely high among people living in developed nations over protecting, cleaning, and healing our sick environment, but in order to solve the environmental problems of the world, we will have to first solve the inequities in all areas of human life (Hargrove 2000).

Three dichotomies which influence our ability to promote equity through development, and in particular, in using ecotourism to unify rural communities and protected areas, are worth introducing here. These concepts are: 1) “development” versus “underdevelopment”, 2) private versus public property, and 3) use versus preservation of natural resources.

DEVELOPMENT VS. UNDERDEVELOPMENT

“Development” is a concept of Western society (Davidson 2000; Escobar 1995). It was America’s love of technology and science that prompted President Harry Truman to offer the world a “‘fair deal’ ...to solve the problems of the ‘underdeveloped areas’ of the globe” (Escobar 1995:3). “By connecting the modern concept of poverty with peasant life, the majority of development agencies and sectors of society...have neglected the appreciation of values in the primal cultures...[T]he dominant discourse of modernity promotes skepticism towards primal cultures,...concealing cultural plurality as well as the centrality of peasant agriculture in the food of non-modern peoples...Instead it promotes the notion of a single vision of a world led by the corporations” (Vásquez 2002: 82).

Fifty-one of the world’s 100 largest economies are corporations (CorpWatch 2002).

Development, in its broader sense, includes the view that indigenous cultures, things ‘old’ and traditional, and unrecognized, minority religions are worthless and require changing and developing (Dove 1988; Davidson 2000; Escobar 1995). So, too, the unruly, overgrown landscapes of forest, bush, and jungle are thought to be ugly and best cleared for use in agriculture (Dove 1988; 1992). An ancient law “(‘The Code of Gentoo Laws’), [reads,] ‘Land waste [viz., unworked] for five years is called jungle’” (Dove 1992: 236). Today, many LDCs have laws mandating that the land be cleared and “worked” for the person to receive ownership title (Lash 2003). This concept of “working the land” and “improving the land” is not confined to LDCs – it is one method by which “developed” nations became developed. These values of using and transforming land were imported to LDCs by way of colonization, and come directly from Judeo-Christian Bible’s viewpoint of man as dominant over Nature (Hargrove 1989; Ponting 1991).

Rural lands have always provided food for the world. Parameters are changing, as nearly one-half of all people (three billion) now live in cities (United Nations Populations Fund 2002). Technology and urbanization are linked. As technological advances permeate rural farms, costs increase and smaller farmers find it harder to compete with larger commercial operations. Children of farmers move to cities; farmlands are sold. Rural land’s “highest and best use” changes from pastoral farmland to residential and/or commercial use. Prices of rural lands are typically lower than “developed” housing tracts and industrial parks. It is a circular concern – a “catch-22” – that developers buy cheap rural lands and convert them into residential subdivisions with commercial amenities, thereby driving up prices and forcing developers to seek more

rural lands to convert to urban sprawl. The United States (US) alone loses 400,000 hectares of farmland per year to urban sprawl (United Nations Populations Fund 2002).

Rainforests and other natural resources in developing countries are considered as the “new frontier” for short term profiteers, from mining to cattle farming (Ryel 1991). This frontier exists only in minds of non-natives. Residents consider the land that they use to already be “developed”; to the Westerner, it is pristine new territory. Many people living in LDCs have unique cultures and distinct ways of living which they want honored, and do not need nor want to become Westernized (Johnston 2001).

PRIVATE VS. PUBLIC PROPERTY

Modern private property rights were transcribed in 1690 by Englishman John Locke in his philosophical and political document, *Two Treatises of Government*. Locke believed that 1) all the earth was given to man by God to “improve it”; 2) a man’s body is his own property, and his labor is his property as well; 3) therefore whatever man labors at in Nature is also his property. The improvements man creates are what are valuable, not the land by itself. Jefferson, following Locke’s example, wrote, “each individual of the society may appropriate to himself such lands as he finds vacant, and occupancy will give him title.” Land was considered “occupied” when there was evidence of a person working it, even something as small as putting up a fence (Hargrove 1989: 64-67).

Granting of title for working the land, usually by clearing trees and instituting farming, is now law in many countries, due to the importation and acceptance of these European views. However, these laws can cause severe damage to private reserves and protected areas (PAs) by encouraging squatters to move in and to claim a piece of land. Even if privately owned by others, land can still attract squatters if the owner appears

absent – examples of this are illustrated in both the Belize and Ecuador cases studies presented in Chapters 2 and 3. In the case of public land, squatters can become very difficult to remove once they have occupied the land for a length of time (Ursa International 2000).

Public lands, as common pool resources (CPR), lack exclusionary systems due to the high cost of restricting access (Ostrom, *et. al.* 1999). Public lands are also paid for by public taxes and therefore, many people believe that public lands are theirs by right, and treat them as open access (Vail and Hultkrantz 2000). Unlike fully titled private property, public lands and lands leased by government to an “owner,” are more likely to be invaded, even though these lands are held by government with all the same rights as a private landowner.

As example, when the congressional bill passed in 1872 creating Yellowstone National Park, “many Americans naturally felt that the bill must be the first step in a political scheme to rob deserving Americans of their natural right to western land” (Hargrove 1989: 50). Congressmen and the public had difficulty understanding how Yellowstone could be at the same time “worthless” and “valuable beyond compare,” as well as “need protection from use” and “could not be used” because it “was not fit for cultivation” (Hargrove 1989: 51).

Common property in the US is public land held by government as a public trust, such as national parks and PAs (Adams 1993). Systems of commonly-held lands work well only when users work together for a common good including the good of the commons, as in some indigenous communities (De Lacy and Lawson 1997). When individual interests are paramount, as in the Lockean point of view, common lands and

resources can be overused and destroyed. Garrett Hardin's famous essay, *The Tragedy of the Commons* (1968), written on the problem of an ever-growing population in a finite world, is applicable to PAs globally. He asserts correctly, under the assumption that individuals work only in their own self interest, that the commons will cease to exist.

Examples of this tragedy can happen when governments lease common property lands below market value to private individuals or firms to provide some service on the commons, such as extraction of timber, grazing rights, or concessions in parks. These government subsidies skew benefits in favor of the leasee and away from not only government coffers but also local livelihoods. Results are that "[c]ommercial agriculture and timber operations by individuals on common land can be highly profitable as long as inputs are available and resources last, but the benefits rarely go to local communities. The rural poor are often using, and overusing, whatever land, water and timber resources are left over from commercial operations" (United Nations Populations Fund 2002).

Degradation of CPRs can occur and escalate when new migrant users begin to not only exceed the carrying capacity of the resource, but also to arrive with different values and sense of responsibility than those of local users (Vail and Hultkrantz 2000). When "rules and norms are [not] shared by others, [m]embers of the initial community feel threatened and may fail to enforce their own self-restraint, or they may even join the race to use up the resource" (Ostrom, et. al. 1999: 280).

USE VS. PRESERVATION OF NATURAL RESOURCES AND PROTECTED AREAS

Yellowstone National Park was the world's first national park. Convinced by a handful of idealists, policy-makers realized that this young nation's expanding drive to conquer the frontier was beginning to severely impact many of the unique landscapes of

the West. Signed by President Ulysses S. Grant, the Act established "2 million acres 'as public park or pleasuring ground for the benefit and enjoyment of the people.'...

Considering the fact that to reach the borders of the new park would require a couple of weeks' tough travel by horseback from the nearest rail line, the possibility that many people would ever reach Yellowstone must have seemed extremely remote in 1872" (Everhart, 1972: 8).

But reach they have. "A record-setting 2.6 million people visited Yellowstone in 1989... They didn't see the sewage treatment plants, water chlorination systems, gravel pits, water line and asphalt plants -- all shielded from view -- needed to accommodate the increasing numbers of tourists, seasonal workers and permanent employees. 'Every single person who comes into the park has an impact on it...We've sacrificed a large area at the expense of wildlife, yet you never hear anyone talk about limiting the number of visitors'" (McCarthy 1990:10).

In 2001, Yellowstone received almost 3.7 million visitors, out of the 424 million visitors to US parks nationwide (NPS 2002). This mandate to both use a resource and preserve it at the same time has managers scrambling over who to please first, the visitor or the ecosystem's wildlife and intrinsic beauty? "The key...is to strike a balance between resource enjoyment and resource protection...Nobody's expecting us to put up a Taj Majal winter resort in the middle of the Old Faithful geyser area...It is...a philosophical question of providing use that is consistent with preserving natural values (Wilkinson, 1990: 34).

Ironically, this "Yellowstone model" protects wild lands by denying or limiting use by indigenous and local residents, while promoting use by tourists and scientists

(Stevens 1997a). Indigenous leaders possess a different reality on the “use and preserve” debate. Land is sacred to many indigenous peoples. Their use of land is to maintain lifestyles and culture, not for Western development and economic gain. “[T]he way that conservation is practiced in the West is viewed as conservation-for-development and that is not necessarily consistent with our traditional view of guardianship and protection. We [indigenous peoples] wouldn’t even use the word conservation” (McLaren 1999: 30). The need to derive revenue from parks has many times compromised ecosystems, and more often compromised local cultures.

Parks and PAs around the world have inherited this dilemma. When preservation is combined successfully with development – the preserve and use mandate – sustainable development is achieved. Sustainable development is defined as “improving the quality of human life while living within the carrying capacity of supporting ecosystems” (IUCN, *et. al.* 1991). By acknowledging and incorporating indigenous property rights, local uses, and local understandings about “the commons” into user management systems, both traditional knowledge and resources can be preserved and used. This is our challenge for the future.

II. LITERATURE REVIEW OF ECOTOURISM

ECOTOURISM INTRODUCED AND DEFINED

Ecotourism was born out of the marriage between leisure travel to wilderness areas and the desire to protect the world’s dwindling biological diversity (Ceballos-Lascuráin 1996). It is an industry that touches almost every other, embodying a synthesis of goods and services, materials and markets, employment and education, politics and ideals. At its best, it empowers women, local communities, diverse cultures, and

travelers; supports partnerships between governments, NGOs, private sector, and global funding agencies; blends the high technology of transcontinental flight and internet communications with ancient dances and sacred sites. At its worst, it robs people of land, dignity, culture, and control over their lives (Ling, *et. al.* 2001; Tchamie 1994; Johnston 2001; Maikhuri, *et. al.* 2000; McLaren 1999).

Some of the wide range of ecotourism topics include: Designing and building sustainable ecolodges (Selengut and Simon 1991; Mehta, *et. al.* 2002; Hawkins, *et. al.* 1995; Sanders and Halpenny 2001; Anderson 1993); Economics of ecotourism (Lindberg 1991; Lindberg and Huber 1993; Lindberg, *et. al.* 1998); Certification and “green” tourism (Honey and Rome 2001; Issaverdis 2001); Indigenous cultures (Johnston 2000; Schalken 1999; Stevens 1997); Markets (Eagles and Higgins 1998; Wight 2001); PAs and biodiversity (Borrie, *et. al.* 1998; Bookbinder, *et. al.* 1998; Ceballos-Lascurain 2001); Indicators and sustainability (McCool, *et. al.* 2001; Stankey, *et. al.* 1985; Hammitt and Symmonds 2001); and Community-based ecotourism (CBE) (Brandon and Margolius 1996; Ashley and Roe 1998; Lash 2003; Horwich, *et. al.* 1993a; Drumm 1998; Wesche and Drumm 1999; Epler Wood 1998; Ashley 2000).

International tourism arrivals have climbed steadily from 420 million arrivals in 1989 to over 664 million arrivals ten years later in 1999, equaling more than 10% of the global population (Ceballos-Lascurian, 1991; Epler Wood 2002). In 2001, tourism worldwide recorded 693 million international tourist arrivals, producing \$463 billion in international tourism receipts (WTO 2002). As the fastest growing industry in the world (WTTC, 1992), tourism is looked upon by many governments of emerging countries as a way to develop their natural resources and preserve them at the same time.

The concept to involve local people as beneficiaries and stakeholders in the ecotourism process was voiced by the World Bank in 1986 as it promoted “rural development investments that provide farmers and villagers in the vicinity of [wildland management areas with] an alternative to further encroachment” (Honey 1999:16). Ecotourism had finally found its niche – helping the world’s rural and underdeveloped peoples to enter into the mainstream market economy. LDCs grasped at ecotourism as a way to assist their struggling economies, foreign debt, and precious resources (WTO and UNEP 1992; Western 1993). The potentials of ecotourism became recognized at the highest levels of government, academia, and in the private sector.

“When the UN General Assembly in December 1998 declared 2002 the International Year of Ecotourism (IYE), it clearly stated that the activities related to the Year should be taken within the broader framework of sustainable development of tourism, with four main motivations:

1. Sustainable use of biodiversity and natural resources;
2. Impact minimization, especially in terms of climate change and energy consumption;
3. Empowerment and fully informed participation of local stakeholders, particularly local communities and indigenous people;
4. Awareness raising and environmental education of travelers and hosts” (Hillel 2002:1).

Ecotourism, in these contexts, joined the ranks of other sustainable industries which were called to meet global challenges and affect change. The UN had the foresight and courage to place ecotourism on a larger backdrop with global climate change and

energy issues, and to promote “fully” informed participation of local communities to ensure equity in decision-making. The UN stopped short, though, of including ecotourism in the language of addressing poverty, access to services such as water, and health for communities. Poverty, water, and health were the key topics of the UN Earth Summit 2002, the IYE; ecotourism could have been presented as a partner in this light.

Definition of Ecotourism

Debate over the definition of the new term “ecotourism” began in the mid-1980s and still continues to distract the field today. Many professionals insist that we need to move beyond mere definitions and concentrate on action (Mader 2002). Even when basic definitions are agreed on, dialogue over what this product is, how to create it on site, how to sell it, who are its users, and what are its responsibilities, comprise much of the ecotourism literature and conference proceedings (Bornemwier, et. al. 1997; Kusler 1991; Brandon 1996; Epler Wood 2002). Numerous guidelines on how to accomplish ecotourism have transformed ecotourism from a product into a philosophy (Manidis Roberts Consultants 1997; Australian Heritage Commission 2000; WTO and UNEP 1992; Bacon 1996; Ceballos-Lascurain 2001). Ecotourism is continually evolving as evaluations of successes and failures are incorporated into the knowledge base of worldwide ecotourism practices. “Like all forms of sustainable tourism, it [ecotourism] is a dynamic field, with new techniques and approaches...every year.” (Epler Wood 2002: 7-8).

A chronological listing of ecotourism definitions is presented here to note the change in emphasis over the years from biological conservation to also include an

increasing commitment to the empowerment of local people and the education of the traveler and other stakeholders (Table 1.1).

Table 1.1 Definitions of ecotourism		
Year	Author (<i>reference</i>)	Ecotourism is:
1987	Hector Ceballos-Lascuráin (<i>Ceballos-Lascuráin 1991</i>)	That segment of tourism that involves traveling to relatively undisturbed or uncontaminated natural areas with the specific object of admiring, studying, and enjoying the scenery and its wild plants and animals, as well as any existing cultural features (both past and present) found in these areas. Ecotourism implies a scientific, esthetic, or philosophical approach, although the ecotourist is, of course, not required to be a professional scientist, artist or philosopher. The main point here is that the person that practices ecotourism has the opportunity of immersing him or herself in Nature in a way that most people cannot enjoy in their routine, urban existences. This person will eventually acquire an awareness and knowledge of the natural environment, together with its cultural aspects, that will convert him or her into somebody keenly involved in conservation issues.
1989	Karen Ziffer (<i>Ziffer 1989</i>)	A form of tourism inspired primarily by the natural history of an area, including its indigenous cultures. The ecotourist visits relatively undeveloped areas in the spirit of appreciation, participation and sensitivity. The ecotourist practices a non-consumptive use of wildlife and natural resources and contributes to the visited area through labor or financial means aimed at directly benefiting the conservation of the site and the economic well-being of the local residents. The visit should strengthen the ecotourist's appreciation and dedication to conservation issues in general, and to the specific needs of the locale. Ecotourism also implies a managed approach by the host country or region which commits itself to establishing and maintaining the sites with the participation of local residents, marketing them appropriately, enforcing regulations, and using the proceeds of the enterprise to fund the area's land management as well as community development.
1991	The Ecotourism Society (TES) (<i>Epler Wood, et. al. 1991</i>)	1) purposeful travel to natural areas, 2) to understand the culture and natural history of the environment, 3) taking care not to alter the integrity of the ecosystem, while 4) producing economic opportunities that make the conservation of natural resources beneficial to local people.
1993	The International Ecotourism Society (TIES) (<i>Western 1993; Epler Wood 2002</i>)	Responsible travel to natural areas that conserves the environment and <i>improves the welfare [sustains the well being]</i> of local people. <i>[italicized words exchanged in mid-1990s]</i>
1996	IUCN (<i>Ceballos-Lascuráin 1996</i>)	Environmentally responsible travel and visitation to relatively undisturbed natural areas, in order to enjoy and appreciate nature (and any accompanying cultural features – both past and present) that promotes conservation, has low negative visitor impact, and provides for beneficially active socio-economic involvement of local populations.

1999	Martha Honey (<i>Honey 1999</i>)	Travel to fragile, pristine, and usually protected areas that strives to be low impact and (usually) small scale. It helps educate the traveler; provides funds for conservation; directly benefits the economic development and political empowerment of local communities; and fosters respect for different cultures and for human rights.
2002	UNEP (<i>Hillel 2002</i>)	focused on three basic aspects: 1) positive contribution to the conservation of sensitive ecosystems and protected areas, through financial and political support; 2) active participation from, and economic benefits to, local communities and indigenous people; 3) environmental education of hosts, professionals, and guests.

In essence, ecotourism encompasses three components: 1) ecosystem conservation, 2) local benefits, and 3) environmental education. The weight of emphasis has shifted over the years from biological concerns to socio-cultural issues, recognizing that if people have their wants and needs met, then natural resources are likely to be conserved (Dugelby and Libby 1998). The educational component ties together human and environmental connections and is critical in teaching these lessons. When rural workers are introduced to conservation biology, human/environmental connections become clear, and destructive land practices are seen in a new light (Western 1994).

The concept of ecotourism stands alive and well after being tested in 2002 at two major world fora, the World Ecotourism Summit (WES) and the World Summit on Sustainable Development (WSSD), and numerous preparatory conferences. More than just a definition of a segment of the travel industry, ecotourism emphasizes “a set of principles and how to put them into practice” (Honey 1999: 21). It espouses the same principles of sustainable tourism, but simply on a smaller localized human scale, while remaining committed to the larger ecological scale.

These principles of benign/beneficial development and preservation are important. Ecotourism contains links to almost all major industries as well as to all areas of our natural environment. Additionally, ecotourists have the opportunity to become

“ambassadors of peace” by interacting peacefully with and learning from people of many cultures (IIPT 2003). However, if developed badly, ecotourism can promote dissension and strife. In truth, ecotourism is a foot soldier for global change. It has the power to promote either imprisonment of the world’s non-Western cultures in the iron fist of the market’s invisible hand by conforming to Western-style development, or freedom in the open heart of the human spirit by recognizing and empowering diverse cultures and socio-economic systems (King and Stewart 1996). Ecotourism can ultimately destroy or heal the human and non-human connections to the earth.

ECOTOURISM FOR BIODIVERSITY

Nature-based tourism is centuries old. Explorers from the European continent spread out all over the world to catalog, map (and conquer) the world that was unknown to them; in a sense they were nature tourists. Certainly naturalist Charles Darwin, on his famous voyage around the world on the *H.M.S. Beagle*, was a nature tourist, just as today scientists are considered tourists as well as researchers.

Many current PAs began as research sites for some endangered species or ecosystem (Horwich and Lyon 1990; Rabinowitz 1986). Scientists became the first ecotourists, opening the doors for small businesses to emerge with needed services and for dialogue to create reserves and parks (Epler Wood 2002). Conservation NGOs rely on science to determine parameters of habitat and species health, and territory size for an individual or social group of animals under study, thereby determining, along with topographic features, the boundaries of a PA. Ecotourism offers an opportunity to bring non-scientists into an area, with economic and social benefits for both PA managers and surrounding communities (Wright and Andriamihaja 2002).

However, simply “letting people in” is not easy. Borrowing from population biology, park managers use the concept of “carrying capacity” to determine visitation limits. One method for determining these limits is called, “Limits of Acceptable Change,” (LAC) and is used by the US National Park Service (USNPS). LAC is not about numbers of people; it is about what parameters of change are acceptable, *e.g.*, acceptable trail width, noise levels, etc. LAC is based on the premise that the first people to an area affect the greatest change, and that it is not the numbers of people, but their impact, that must be measured and controlled (McCool and Stankey 1994).

Visitor facilities, trails, and tourism programs are best designed to be “low-impact” (Lillywhite and Lillywhite 1991). An ecosystem has the capacity to regulate its “energy, space, and waste disposal...[but] the act of [people] ‘joining in’ causes costs to, and changes in, the system. Sustainable use, planning, design, and development all attempt to minimize these costs so that the system will continue to function indefinitely within an acceptable limit of change” (USNPS 1993:17).

Success in ecolodge design began with, most notably, Maho Bay. Maho Bay was the brainchild of Stanley Selengut, who saw the need to develop an “ecotourism resort” that truly protected the environment, blended in with the natural surroundings, and provided desired amenities for guests. Many “eco” aspects, from recycled materials and water conservation to elevated walkways which not only protected ground vegetation but also provided hidden access to pipes and electrical wiring for the cottages, were considered and incorporated (Selengut and Simon 1991). This project led to more advanced designs at various other sites and to the beginning of guidelines in the field of ecolodge design and construction.

National governments, such as the United States and Australia, have created guidelines for the sustainable development of their parks, and so implemented a “greening” of their parks development industry (South Australian Tourism Commission 1994; USNPS 1993). It is important that each national government develops its own management guidelines using local talents, as no two places are alike (Ceballos-Lascuráin 1996). Long-term sustainable development includes maintenance and monitoring of impacts as an essential component. Impact assessments can be conducted on camping areas, access roads, paths, vegetation growth, water quality and quantity, weather, animal counts, weed counts, visitor stays, and energy use, just to name a few (South Australian Tourism Commission 1994:126-127).

Monitoring and maintaining an area becomes more critical if areas are managed as open access; “without significant restriction by price or numerical limits [t]his structure [open access] leads to overuse” (Lindberg 1991:11). Even with high prices, some parks, such as Maasai Mara Game Reserve in Kenya, are so popular that they have become a destination for the “mass tourism” market, bringing in significant amounts of income to the area and to government (Dixon and Sherman 1990). In 1997, Kenya’s tourism industry collected over \$500 million, and boasted 750,000 tourist arrivals (Honey 1999: 296), with 15% of that revenue coming from Maasai Mara National Reserve alone (Ojanji 2001).

Income generated from ecotourism has contributed greatly to saving species and habitats, notably Rwanda’s mountain gorillas, parks in Costa Rica, the Galapagos islands, land through concessionaires in Zimbabwe and Botswana, and Kenya’s “Big Five” – rhino, lion, buffalo, leopard, and elephant (Hillel 2002; Vedder & Weber, 1990; Metcalfe

1994). Biological conservation is a global concern primarily because wildlife and habitats do not have an intrinsic value in an economic market. Their value lies in their destruction, such as poaching, Oriental medicines, timber, and mining. Ecotourism can provide the economic incentive for preservation. Dr. Richard Leakey, former director of Kenya's Wildlife Service, declared, "The era of free-ranging game in Africa is finished...It's no more realistic to have wild animals running loose here than it is in your American farmland or suburbs. Wildlife, if it's to survive in Africa, must pay its own way from now on. If we can demonstrate that revenues from wildlife -- from tourism, hunting, hides, meat, and the like -- are greater than from the plow, then we can save it" (Jones, 1990: 75). The "it stays because it pays" approach has met with success (Hillel 2002: 3).

Problems arise when PAs are created based on solely biological data. When sociological and historical information is absent, severe mistakes can be made when drawing lines for park boundaries. This not only leads to such injustices as impounding sacred sites, preventing access to water supplies, building materials, and food for local communities, or trapping local residents within the park, but also to potential hostilities and retribution from angry residents (Tchamie 1994; Ite 1996; Sutherland 1998).

As poaching and other illegal and retaliative behaviors increase, many public park officials face the reality of spent revenues, little equipment, and limited personnel. When governments are unable to manage and maintain parks effectively, privatization of concessions and fee collections can provide relief. The Mara Conservancy was granted management of a 180-square-mile portion of the Reserve, and is subcontracting the fee collections. So far, it is a success. In its first 18-months, "the Mara Conservancy has

collected more than \$730,000, of which 60 percent has been given to Masai communities and government councils” (Kaufman 2002: 44). Much of this success can be attributed to the Conservancy’s commitment to financial transparency, where financial distributions of funds are published in the local newspapers, to ensure honesty (Kaufman 2002).

Success comes from honest business practices, and from including local communities in substantial benefits from an ecotourism product. More than providing jobs and revenue from tourism services, ecotourism can offer communal benefits which improve livelihoods, like schools, health clinics, and sports fields. Most importantly, governments can recognize that local residents, particularly indigenous peoples, own PA or preserved lands and therefore deserve to control it and the benefits they reap from it (Honey 1999).

Our ever-increasing human population is in direct conflict with most non-human life on earth. If we are to preserve biodiversity, then we need to address and take action on alleviating human population pressures on many levels. Harmon and Brechin (1994) declare, “In short, making the economy sustainable is a protected area issue. Family planning is a protected area issue. Getting a better education for girls and women is a protected area issue. Human development is a protected area issue” (p.113).

ECOTOURISM FOR COMMUNITIES

“Pro-poor tourism” is an organization and a management strategy which has emerged to address the growing links between poverty and global businesses, particularly tourism. “Pro-poor” means that an action is aimed at benefiting poor people; it does not mean that one is “for poverty.” In this world of multi-national corporations, and with billions of poor people worldwide, connections can be made to use tourism businesses to

help reduce poverty. Roe, Goodwin and Ashley (2002) identify several ways in which tourism companies can affect the lives of the poor for the better. Here are a few:

- Roads improved for tourism can benefit locals with access to water, health facilities;
- Improved security for tourists also helps locals, particularly women, to safer areas;
- Tourism can provide access to information and contact with the outside world;
- Assist community in getting money from tourism for community schools, wells, etc.;
- Assist community in participating in tourism planning; this promotes local optimism by starting a dialogue between operators and poor people through meetings and training.

In order to receive meaningful assistance, the poor must be an integral part of the planning and implementation of development. Rapid rural appraisal (RRA) and participatory rural appraisal (PRA) are research methods designed to gather knowledge from local residents which can be fashioned into beneficial programs and policy (Chambers 1995; Pretty 1994). Solutions for the improved well-being of the poor can be found in “putting people before things, in putting the poorer before the less poor, in learning from people and not just teaching them, in decentralizing instead of concentrating power, and in valuing and supporting diversity instead of standardization” (Chambers 1995: 533).

Including the poor in negotiations and developing on a scale appropriate to rural communities is contrary to much of the standard development mindset of major foreign investors. “Multinational development projects often exclude local peoples. For example...in the development of Mesoamerica’s Plan Puebla Panama, ecotourism development favors large hotel corporations and not the indigenous federations or small

scale initiatives” (Mader 2002: 9). This is a great challenge which local communities face – where to receive the capital for CBE enterprise investment?

In planning for ecotourism at the community level, support and strength comes from local talents, businesses, and capacities – the local human capital. “The link between communities and private business should be nurtured from the beginning and sustained throughout the ecotourism development process...for what is a community other than the people, institutions, culture, natural resources, and commerce which give life to it?” (Northwest Arkansas Resource Conservation and Development Council, Inc. 1997: 33).

Definition of Community

The question of “what/who is the community?” is an important one. When designing projects, who gets to participate in the planning process and how much weight is given to various stakeholder-views in the final analysis? What is the highest and best use for the land and, even more importantly, who determines what the highest and best use of the land is? These are questions that every development project necessarily faces.

Cochrane evaluates “community” based on the concept of whether individuals in the group will give precedence to community needs over individual needs, pointing out that “[e]ven if they form one administrative unit, any large group of people cannot automatically be considered a homogenous entity” (1997:154). Curry (2000) argues for a concept of community which incorporates criteria from both human communities and ecological communities. He emerges with a new term, “ecological republicanism” which acknowledges that community members must not only know one another and have connections between members, but also “that integrity must surely assume pride of place

in its definition. [This integrity] is only maintained by practices and duties of active ‘citizenship’” (p.1067). It is this factor of acting “as good citizens” (*ibid.*, p.1067) that plays an integral part in whether community-based enterprises are successful or not (see Chapter 5, Epilogue).

Abdullah (1999) defines community by releasing the concepts of “self” and “the other” – that community must let go of separatist, dualistic notions and be inclusive and “recognize that everyone they see or experience, directly or indirectly, is a part of their community” (p. 80). Orr elucidates, “By community I mean, rather, places in which the bonds between people and those between people and the natural world create a pattern of connectedness, responsibility, and mutual need. Real communities foster dignity, competence, participation, and opportunities for good work. And good communities provide places in which children’s imaginations and earthy sensibilities root and grow” (Orr 1993: 428).

Clearly communities are made up of people who are acquainted with each other and have some common ties and goals, with the degrees of acquaintance and ties/goals as variable. Community studies of ecotourism generally group people living together in a geographic or political area as being “a community.” In CBE, community members are all impacted or influenced in some way by ecotourism development, and therefore many studies focus on the attitudes of community members towards ecotourism, conservation, and land use (Hartup 1994; Ite 1996; Tosun 2001; Andereck and Vogt 2000; Sirakaya, *et. al.* 2002). With recognition that communities are composed of individuals, families, and households, studies use qualitative research techniques with these classification of actors

as units of analysis. Focus groups, key informants and group meetings are also surveyed to determine prevailing opinions of and influences on “a community.”

Community leaders can be surveyed, but caution must be taken when using solely a sample of leaders’ responses as representative of the community at large (Bernard 1995). This trap of projecting leaders’ opinions as definitive of community opinions can catch development agencies, non-local NGOs and private developers when a quick approval or input is required from “the community” for specific developments. Tourism plans, and land use plans in general, can be hurried into advocating only leaders or prominent entrepreneurs’ opinions and recommendations for community building, zoning, and designation for land use (Lash and Austin 2003).

Including the ecological community into development and CBE plans is also important. When land is examined for its highest and best use, its inherent characteristics and capacities must be considered on an equal basis with the needs of the human community. McHarg explains, “Land, air, and water resources are indispensable to life and thus constitute social values” (1969:104). When designing with nature, the scale of building and appropriate building technologies are determined by the land. Each piece of ground has an optimal architectural style and characteristic, and appropriate building materials. If harmonizing with the land means building out of sticks, then build out of sticks. But what if some people want to upgrade to concrete? When building parameters are based on building codes, it is a policy issue. But when the ecological community and land characteristics are considered, then building parameters are determined by the site. Soil conditions will dictate what can be built, and if concrete is appropriate. Economic studies may tell a developer to build on the beach so that his returns on investment will

be maximized, whereas the beach land will tell him to not go close to the water and to build on piers (McHarg 1969). CBE development best takes into account both the human needs and the ecological needs of these two interconnected communities.

Social Impacts and Community Roles

Rapid change in tourism services from informal sector to formal sector can happen in PA and buffer zone communities, bringing an increasing number of infrastructures and amenities, such as roads, water systems, electricity, improved schools, increased density of housing and populations (Cochrane 1997). Communities may see not only their physical surroundings changing substantially, but also their social and cultural ways of life as well. Residents may desire not to change their community characteristics and lifestyles, but may feel powerless to prevent it (Lash and Austin 2003).

Ecotourism for communities presents the challenge of not only creating marketable ecotourism ventures, but also of respecting the unique characteristics of local cultures and the wishes of rural communities. Imposed changes made to the lives of local communities, such as the creation of a national park or private reserve, can produce resistance by the local residents -- resistance that can take the form of simple uncooperation to all-out revolt, where poaching (Stegeborn 1996) and attacking tourists (Bruner 1993) become feasible options. For any ecotourism development to be carried out successfully, it must have local people's input and backing to make beneficial changes. Residents may not realize all the consequences of change, but without using a local or community "cognized model" instead of purely a "Western mindset" of

development, projects will fail to preserve and improve their natural and cultural heritage (Nazarea-Sandoval, 1995; Tchamie 1994).

How can beneficial changes be accomplished? What kind of involvement lies within cultural norms, time-constraints, and traditional social hierarchies? These are questions that CBE members posit and entrepreneurs seek to address. Three main types of CBE enterprises are defined in literature (Wesche and Drumm 1999; Epler Wood 2002). First is the solely community-owned and operated enterprise, where benefits, labor, and other costs are borne equally by all members of the community. The greatest amount of revenue from ecotourism stays in the community with this type of communal organization. Second is the family or group-owned enterprise, where family or group members may work for lower wages, with the main goal of bringing prosperity to the group as a whole. Third is a partnership or joint venture between community members and outside investors, where the community or part of the community teams up with an NGO, government, or private sector representative for a specified term or project. This type of enterprise can promote leakages of revenue away from the community, but it also allows for the greatest exchange of experiences, training, and links with markets and outside capital.

On the one hand, some development professionals take the extreme stance that local communities are unable to manage biological resources and commercial ecotourism enterprises in a sustainable way, and must be extracted from parks (Terborgh and Peres 2002). This is an obsolete and naive view. While it can be true that without commercial training or access to capital, “local communities, for the most part, do not have the skills or the resources to take full advantage of their tourism potential” (Norris 1995: 3), rural

residents worldwide have the ability to not only learn new ways of business, but also to teach new ways of interaction and to create successful enterprises from within their own culture and capacity (Baba 1997; Brass 1997).

On the other hand, many ecotourism professionals feel that communities must take charge in order for resource protection to succeed (IUCN 1996, Kutay 1989, Robinson and Redford 1994, Vedder and Weber 1990). Empowering local people who have traditionally exploited wildlife is one of the “most effective means of conserving areas of high biological diversity” (Robinson and Redford, 1994: 300). “What counts is not the ‘expert understanding’ of a few, but a social process by which people and institutions communicate and understand together” (IUCN 1996: 5).

Partnerships

Many guidelines for protected area management also include concerns over community involvement. The need for protected area managers to address and design for ecotourism prompted the WWF (World Wildlife Fund for Nature) to produce ecotourism diagnostic and planning guidelines (Boo, 1992). These guidelines enable managers to rate the tourism potential in their area and create a formula to implement that level of tourism. Since then, numerous agencies have produced sets of guidelines for their field workers and various stakeholders (Brandon 1996; Sweeting, *et. al.* 1999; Steck, *et. al.* 1999; Ceballos-Lascurain 2001; TNC In Press; CI and GWU In Press).

Stakeholder analysis, and any resulting joint management schemes, can bring a false sense of equity among “stakeholders” involved in development negotiation and implementation. David Hughes (1996:36) explains, “The needs and rights of tourism firms, for example, appear to be comparable to those of resident communities. In real

situations, the residents' stake is often basic subsistence and adequate nutrition. Private firms need only worry about an increment of their profits. Not only does stakeholder analysis disguise these differences in the scale of opposing stakes, it also ignores the ways in which non-resident parties got their stakes in the first place...often...in those areas from which previous residents have been expelled.” In addition, although a joint management or co-management scheme is “intended to empower the residents, it more frequently locks them into an inferior, minority position...Joint management and other attempts at consensus may actually give outside parties (private firms and government agencies) the ability to thwart local inhabitants' plans for the use of resources” (*ibid*: 37).

Fruitful partnerships for all parties can be formed and executed between residents and outside agencies/NGOs when the “means of empowerment [of local communities] is largely through strengthening social and human capital” (Ashley 2000: 22). NGOs have long looked at CBE as a means, albeit a somewhat shaky means at times, to implement their biological programs. To this end, many local and national NGOs provide coordinative, overseeing services, assistance in writing and obtaining grants, attracting training for community members, and enhancing local knowledge of wildlife and natural resource use, along with political, technical, and financial support as well. By empowering communities, conservation NGOs and agencies can fulfill their missions.

As the primary target of CBE, local community residents must be rewarded and protected by acknowledging their gains and losses in any success or failure of an ecotourism enterprise. When planning ecotourism for communities, decision-making control and the most influential voice are best given to local residents, in order for “success” to occur (Stevens 1997). In CBE, success on a local level includes both

sustainability of an enterprise and its resources, and improving the livelihoods of local people in a manner which is important to the people themselves (Ashley 2000).

But ecotourism for communities cannot succeed without the support of government. When CBE is not recognized and promoted as national policy, local communities lack the authority and means to compete in the marketplace and attract both clients and investors. As John Akama observes in Kenya, “‘Probably, the main reason why community-based wildlife tourism programmes fail is the lack of coherent policies and legislation which delegate responsibility and authority for tourism development and wildlife conservation from powerful stakeholders (the state, conservation organizations, tourism groups and local elites) to rural peasants’” (Honey 1999: 393).

Government support includes not only rural community control over development decisions and wildlife management, but also control over land use and titles to local lands. With title, local residents have a legal property claim to lands that may have been in their families for generations or designated as common property for their community. Legal ownership protects rural owners from squatters and government lease applicants, as well as enables enforcement of best practices, cultural norms and values, and local laws. Recognition of title by government allows communities to negotiate with developers on an equal level and to decline development options if necessary.

This important value of private ownership, the ability to say “no” to potential development schemes, is offset by the opportunity to sell lands to investors who may not develop in keeping with the best interests of the community in mind. The tragedy of the “private commons” happens when poor rural residents, who manage their private lands in the traditions of the community, succumb to the rising demand for land and capitalize on

high price sales to outside developers, helping not only to drive prices out of reach of local markets, but also to change the character and lifestyles of the area residents (King and Stewart 1996; McLaren 1998; Lash 2003; Lash and Austin 2003).

Economic Impacts

Economic benefits for local community members are crucial. When economic benefits are perceived to be spread fairly throughout the community, residents can feel that costs from the intrusion of PAs and ecotourism into their lives are offset and balanced (Dixon and Sherman 1990; Metcalfe 1994; McLaren 1998). When economic benefits are perceived to be unequal or unfairly distributed, support from residents for CBE and PAs can diminish and threaten the future success of the project (Lash 2003; Alexander 2000; Ite 1996; Bookbinder, *et. al.* 1998). Leakages of revenue from the community to outside investors and agents can contribute to local dissatisfaction with a tourism product. In order to realize maximum benefits from CBE enterprises, residents must actively participate in the evolution of their villages or towns, and make their wishes heard (Mader 2002). The greater the local control over a CBE product, the greater the economic value realized by local residents (Pye-Smith and Borrini Feyerabend 1994).

Commodification of culture, as in tribal dances or rituals for example, can be seen as an economic tourism attraction and a way to keep cultural traditions alive. Yet it can also produce degrading effects, promoting fantasy and enacting out periods of colonial history which question the dignity and worth of the “noble savage,” and put control of the “wild” firmly in the hands of the colonialist (Bruner and Kirshenblatt-Gimblett 1994). This is in distinct contrast to local, indigenous control over a tourism product, to which

the current concept of CBE subscribes. Ecotourism at the community level has come full circle from the theatrical and choreographed tourism of Western ideals of a very separate and savage Nature, to the community-initiated and managed tourism programs, businesses, markets, and mindsets of unique, non-Western cultures. CBE has taken the civilized savage and turned him into the tribal businessman, blending Western and non-western cultures for both economic gain and educational stimulation. In this regard, as with tourism for the masses by multinationals, CBE must avoid falling into the role of creating “a new form of colonization over the poor of the world” (McLaren 1998: 26).

ECOTOURISM FOR WOMEN

Women in developing countries are among the poorest and most marginalized sector of society (Bullock 1994). Tourism jobs provide an avenue for women to begin as unskilled labor, gain education, and to rise into skilled positions. In most countries, women make up a greater percentage of the tourism workforce than the workforce in general, and comprise more than 90% of service occupations such as, “in catering and lodging, as waitresses, bartenders, maids, babysitters, cleaners, housekeeping helpers, launderers, dry-cleaners, and the like” (Hemmati, *et. al.* 1999: 188).

Women can be extremely effective in ecotourism enterprises. Although less likely to get loans than men, when women form small groups and start a self-employed micro-business, they are dedicated to paying back the loan, building profits and making the venture succeed (Vickers 1994). Women not only build self-confidence with these small business successes, but they also spend their income on “better nutrition, home improvements, and children’s education,” unlike men’s expenditures for “less essential consumer items, including visits to vendors of local brew” (Huston in Vickers 1994:73).

Women can be key players in CBE ventures by offering rooms, cooking meals, and making crafts (Lama 1999). Handicrafts are particularly beneficial, as they can be produced episodically, easily allowing a woman to work part-time and to be based at home with her children (Healy 1994; Lash, *et. al.* 1999). While in general, part-time work is seen as lower pay, non-career, and non-unionized, in rural societies, part-time work can be an advantage (Bullock 1994). As teachers of the next generation, it is important that women have opportunities to learn skills, enhance their education, and become empowered as equal members of society (Dankelman and Davidson 1988).

Crafts can give women access to tourism markets, as well as encouraging sustainable production and resource use (Basgall 1997; Rodda 1994). Like any successful business, making and selling crafts can also bring a sense of pride and confidence, as well as financial independence to women (Healy 1994; Scheyvens 1999). Women's groups and cooperatives provide an opportunity for women to socialize and build solidarity, as well as learn entrepreneurial and management skills (Scheyvens 1999; Lash, *et. al.* 1999).

With income from ecotourism, the status of women in a village can change, sometimes not to the liking of relatives and neighbors (Hemmati, *et. al.* 1999). "Although in some villages men have heckled, harassed, and obstructed women's groups, women have generally persevered and in some communities now have very active programs" (Stevens, 1997c: 257). In this dissertation's Ecuadorian study, women from the local women's artisan group were harassed to quit by their husbands. Finally, husbands saw the benefits (income) to the family from the group and supported the craft enterprise (Lash 1998, Lash, *et. al.* 1999).

Long-standing and documented women's groups include the Maya Centre Women's Group in Belize, and the Siyabonga Craft Cooperative in South Africa (Norris, *et. al.* 1998; Scheyvens 1999). Both of these groups began as local initiatives and point out the need for governments to support skills training for women to better compete in the ecotourism market and thereby uplift their livelihoods and communities.

III. THE GLEANED MODEL

What is "successful community-based ecotourism" (SCBE)? The key word in this phrase is "successful." Wilson's, *et., al.* (2001) definition of "successful rural tourism" emphasizes a combination of effective marketing with packaging attractions to create longer tourist stays, thereby increasing the amount of revenue that stays in the community. Others would emphasize the sustainability of the ecological product, *e.g.* conservation of local natural resources (McNeely and Thorsell 1988). Both parts of this equation for success are necessary – its biological and human components. Successful also implies "sustainable" and the two terms will be equated here. Sustainability of a CBE enterprise or product can be described as a long-term adherence to a community-supported mission statement and to goals which provide for both future as well as present generations.

Although ecotourism literature contains no complete, predictive scientific models of SCBE, there exist numerous lists of necessary components, action plans, methodologies of study and guidelines for SCBE. Primary influencing factors from published plans, guidelines, and case studies are listed here and incorporated, in some nested fashion, into this study's model. There is an underlying assumption here that SCBE can only take place in a politically and economically stable environment.

Literature on CBE identifies the following criteria for success:

- conservation of biodiversity and ecological systems;
- enlistment and continuity of local support, including local participation;
- local partnerships (with NGOs, private sector, agency and/or government);
- autonomy of community and local control over development decisions;
- majority of economic and other benefits to local communities;
- strong leadership and community organization;
- ability/access to market attractions appropriately;
- tourism packages of marketable attractions, natural and/or cultural;
- sufficient capital (public and/or private) for development;
- sufficient infrastructure and services for visitors to enjoy attraction;
- appropriate scale of development for resource and community;
- honesty, transparency, good communication, cooperative relationships;
- clear, local land ownership;
- education (of residents, visitors, and partners).

SUCCESSFUL COMMUNITY-BASED ECOTOURISM CASE STUDIES (SCBE)

Many case studies exist which address whether communities, NGOs, private sector, parks, and governments are effective at conducting ecotourism for both communities and nature. Most are descriptive and are used to convey the state of a project for a conference audience, agency report, or book chapter. Case studies address a complex matrix of interdependent issues, as opposed to one or two independent factors as

examined in refereed academic journals or edited volumes. This said, these case studies can provide valuable information as to the workings and underlying premises of SCBE.

Studies of some prominent CBE efforts are examined here in order to glean factors that contribute towards overall success.

1. The Koroyanitu Development Program – Fiji

The Koroyanitu Development Program (KDP) from Fiji illustrates a successful community-based development initiative (Baba 1997). When Koroyanitu National Park (KNP) was proposed, villagers in the areas zoned for the park were able to design and implement a development program to preserve their village and agricultural livelihoods. Fijian traditional culture is based on the concept of *vanua*, which means “all that belongs to a person including land, fishing areas, tradition, relatives and culture...[and] which provide[s] all the needs of the villagers” (p. 106).

In the face of a growing cash market, landowners began to sell trees, gravel, and rights to mine “their natural heritage” (p. 106). *Vanua* could not provide both needs and wants (cash items) of the people. Recognition of this problem was the first step in the community process. Once this was realized, the next important step was to develop a shared vision for sustainable village/park development, with participation from the whole community, not only leaders. Multi-village meetings were planned, along with trips to inspect development options occurring in other areas (logging, mining). Important lessons learned here were to work within the existing political and religious structures and to reach consensus on the KDP vision, and on new roles and responsibilities for all residents. Another lesson learned was to take the time to let community members

understand these new visions and roles in order to change their behaviors, and not have results forced in the short-term.

A crucial result was that villagers decided to separate welfare projects (those that support the basic needs of all community residents) from commercial projects (those that bring in cash and support wants of the community). *Vanua* is only responsible (as before) for meeting needs, while a new concept, *bisinisi* or commerce was created to satisfy wants (p. 109). By agreeing on basic needs and having them met with a communal welfare fund, commercial projects are given a better chance of becoming prosperous at a smaller scale, because individual cash is used only for wants. Expanded, this system is a noble model for sustainable development and elimination of poverty worldwide. The KDP created “an asset which did not exist before – a sustainable community capable of adapting to a changing and competitive world” (p. 109). This case points to the importance of communication and consultation at every stage, and of working from within the existing systems of community governance and traditions.

2. Annapuruna Conservation Area Project (ACAP) – Nepal

The Annapurna Conservation Area Project (ACAP) is a unique PA system in Nepal which is coordinated by a national NGO and run by local residents. It was established in 1986 as an effort to conserve forests and other natural resources, and to mitigate negative impacts from trekking tourism in the area. It makes up an area of 7600 square kilometers with 118,000 residents living in 300 villages as of 1997, up from 40,000 residents in 1991 (Stevens, 1997c; Stevens and Sherpa 1993). Most lands in Annapurna are privately or traditionally owned (Stevens and Sherpa 1993). Its 250 small

lodges see over 43,000 tourists per year, bringing in one million dollars annually to the ACAP organization (Stevens, 1997c).

Keys to its success are its conservation education programs (to understand sustainable use and conservation of resources), its hospitality and business training (to promote locally beneficial and marketable ecotourism development), and its alternative energy installations (hydro-electric power, new solar and wood-efficient boilers and cookers) that residents receive. Additional needs such as health clinics, water supply, tree plantations, and other programs were conceived and built with the help of ACAP.

Also key, is its bottom-up, grassroots, participatory approach which utilizes village committees for village development, forest management, conservation, and lodge management. Crucial to success are the well-established lines of communication and cooperation between these village committees and with ACAP staff. The emphasis of ACAP is on people and improving their livelihoods, not on conserving nature. The ACAP model postulates that if the quality of people's lives is improved and if residents are given alternatives to degrading resources (such as back-boilers) and to generating income (such as opening a lodge), villagers will support the project, use alternatives, and ultimately conserve nature.

Indeed, this experiment in a collaborative people's PA has achieved a high degree of success: over 200 back-boiler water heaters are in lodge use, saving "40 per cent of fuelwood consumption" (Cater and Lowman 1994:186), and eighteen tree nurseries are operating, distributing 100,000 seedlings per year (Stevens 1997c). Although much is written about ACAP as a success story (Gurung and De Coursey 1994; Gurung 1992;

Stevens 1997c; Cater and Lowman 1994; Ceballos-Lascuráin 1996; Stevens and Sherpa 1993; Pye-Smith and Borrini Feyerabend 1994), the project still battles with challenges.

Some of these challenges include: changing villager attitudes toward the traditional behavior of cutting wood for fuel and embracing new alternatives; concerns that many tourism employees (guides, porters) are brought from outside the region and that the only local employees are the lodge owners; the uncertainty whether the current 70% local ACAP staff will be replaced by government personnel in 2003 when the NGO's ten-year contract runs out; and whether, in the long-run, government co-management can be converted to entirely local control (Stevens 1997c).

3. *Community Baboon Sanctuary (CBS) – Belize*

The Community Baboon Sanctuary (CBS) was formed in 1985 as a grass-roots conservation initiative to protect a locally thriving population of black howler monkey (*Alouatta pigra*) in central Belize. Over seventy landowners from seven villages along 33 kilometers of the Belize River pledged to voluntarily preserve a 20-meter strip of riparian habitat, monkey food tree species, and trees along adjacent property lines, creating aerial corridors for the monkeys. Initially, the benefits landowners participating in the sanctuary received were a written acknowledgement of their pledge, a survey of their land, and recognition and pride that they were preserving black howler monkey populations (Horwich and Lyon 1990).

As the CBS grew in popularity with tourists, some landowners began to offer rooms for tourists and to guide tourists in various activities. A small, natural history museum was built in the central village of Bermudian Landing (BL) to serve as a visitor's center and guide post. A national NGO, the Belize Audubon Society (BAS), agreed to

assist locals with management of funds. The challenges of the CBS has been that while landowners in BL were benefiting from the arrival of tourists to the museum, villagers in the outlying six villages of the CBS received very few tourists and little revenue from tourism. This caused a perceived comparative deprivation between landowners, and the beginning of lack of support for the CBS (Bruner 1993; Lash 2003). Coupled with an evolving management of local residents learning to run a community-wide enterprise, landowners talked of breaking away from the CBS as a whole (Lash 2003; Alexander 2000). By 1998, a local NGO women's group (Women's Conservation Group) gained control of the museum and management and began to distribute income more equitably to all villages. Monkey populations grew to such an extent, to almost double in ten years, that 14 troops were translocated to a national PA in southern Belize to re-populate the area there (Horwich, *et. al.* 1993b). Local residents have been quick to protect the howlers from poaching by outsiders, and although rare, it has been recorded (Lash 2003, Jones and Young 2002).

As tourism persisted and became an integral part of community life, villagers added tourism components, such as small hotels, bars, grocery stores, clearing trails, and crafts to their farming and ranching incomes. Tourism revenues for the seven villages rose from US\$8,500 in 1992 to over US\$99,000 in 2000 (Lash 2003). Innovative ideas, such as the establishment of a Creole Heritage Center (CHC) in one of the outlying villages, have brought more income to residents in the six non-central villages than in previous years. Additionally, CBS management one year distributed US\$62 to every participating landowner, providing much-appreciated, tangible benefits for simply participating in the program.

The key successes of the CBS are: 1) the conservation of howler monkey populations in the area (Horwich, *et. al.* 2001; Marsh 1999), 2) the economic opportunities that ecotourism has brought to the villages (Lash 2003), and 3) the persistence of the villagers' continued optimism towards receiving future benefits (Alexander 2000; Lash 2003).

The CBS has continued to exist for over 18 years and is now instilled in the culture of local residents. Everyone is aware of the sanctuary, even if all do not receive benefits from it. Local management of the CBS has proven to be a difficult challenge over the years, and its leadership has not always both won people's trust nor efficiently collected and distributed revenue, information, and jobs. Most of its difficulties stem from inconsistent communication with villagers and an initial lack of business and hospitality training and skills. However, the CBS' voluntary nature and its continued existence provide a long-term example of grassroots conservation and community commitment. The Ministry of Tourism and the Environment puts it best:

“In 1985, with the establishment of the Community Baboon Sanctuary which includes seven villages along the Belize River, Belize's rural area underwent a revolution in thinking. The establishment of this experimental sanctuary on the private lands of rural subsistence farmers and under their own control, stimulated a vitalization of rural Belizean communities to take control of their rural environments to conserve their natural resources for themselves and the country as a whole...

“This popular effort...has made Belize as a country a unique destination for adventurous traveler tourists who wish to see the country's natural areas from one end to the other. More importantly, these rural Belizeans are beginning to take an active role in protecting their own lands and natural resources for both local and national benefit and pride. This conservation trend makes real sense because who but the people who live on the land, who know its secrets and desire to live and work on it fields, forests and waters, and who appreciate it as their home, can best protect their natural resources. These rural Belizean are helping to shift the center of environmental conservation to the countryside.” (Ministry of Tourism and BEST 1994).

4. *Kapawi – Ecuador*

The Kapawi Ecological Reserve is a CBE model of collaboration between the private sector and indigenous communities. The Achuar people inhabit the Amazonian jungles of Ecuador and Peru, and have only had contact with outsiders since the 1960s. The Federation of Ecuadorian Achuar Nationalities (FINAE) agreed to partner with a private tour operator, CANODROS S.A. to develop an up-scale 40-person ecolodge complex on the riverfront, surrounded by jungle and real indigenous culture.

Opening in 1996, the lodge boasts of eco-friendly technology, from recycling, raised boardwalks, solar systems and electric canoe motors. Tourists have the opportunity to visit with local families, buy local handicrafts, canoe, hike, learn about shamanic rituals, eat traditional foods, see wildlife, and much more. Local residents are employed at the lodge, as well as being trained in business, management, expectations of tourists, and language. The plan is to turn the lodge and all operations over to the Achuar association by the year 2011 (Wesche and Drumm 1999; Rodríguez 1999).

The Achuar land where the lodge is located is rented for \$2000 a month, increasing over time, totaling over \$600,000 paid by 2011. A \$10 fee per visitor goes to the community, contributing \$150,000 additionally by 2011 (Rodríguez 1999).

Tarnishes to its success have been the commodification of the local people as tourists visit this remote village and culture. Lack of training and limited funding have inhibited formation of exclusively local enterprises. In some regards, the model follows an old pattern of the past, “give the Indians the least possible, obtain the most, and do not teach them too much, lest they become hard to control” (Rodríguez 1999:43).

Contrary to that statement is that training is occurring, in preparation for the Achuar to take control. Kapawi represents a partnership where solutions are found through open dialogue with community members. Its success lies in its transparency, win-win attitude and practice, recognition of local sovereignty, and the need for a quality tourism product and local training to draw visitors, now and in the future.

5. Zimbabwe CAMPFIRE Program – Africa

The CAMPFIRE (Communal Areas Management Programme for Indigenous Resources) in Zimbabwe began as a way for local people to profit from wildlife through safari hunting and sale of animal skins, ivory, etc., and at the same time, conserve wildlife by managing the land and its resources themselves. National parks were having difficulty controlling poachers, and so they gave wildlife conservation control over to the local villagers. Participating communities are from very diverse cultures, and include: the Shona, with many clans, the Ndebele people, and smaller groups of Tonga, Venda, and Shangaan peoples (Metcalf 1994).

Born in the 1960s of the idea that “[a]s long as wildlife remained the property of the state...no one would invest in it as a resource” (Metcalf 1994:163), CAMPFIRE actually came into existence with the 1975 Parks and Wildlife Act. By 1990, 12 of 55 districts in Zimbabwe were active in campfire. In 1991, 322,000 local people in 12 districts were making US\$1.1million in gross revenue, for a per capita of \$3.45 (Metcalf 1994:177).

The twelve districts, composed of many wards each, have differing habitats and wildlife opportunities, therefore each creates and receives very different benefits and are managed in unique ways. Some areas, like Nyaminyami, are managed in a “top-down”

manner, with decisions being made at the district level, offering little incentives for communities to participate in the planning and management of the CAMPFIRE programs. This has caused an apathy among villagers, with no participation in the process. All benefits distributed are equal, and not dependent on numbers of wildlife in the area. Communities do receive benefits, but it is in the form of projects decided on by district managers, not local people (Metcalf 1994).

Unlike, Nyaminyami, Guruve district involves local people in management and “allows revenue to be distributed according to the natural – and hence unequal – distribution of wildlife...wildlife can be seen now as economically beneficial, a resource to be nurtured rather than eliminated” (Metcalf 1994: 180).

The beauty of CAMPFIRE is that it has engaged over 250,000 people in learning how to conserve wildlife. “Campfire is about freedom; about the rights of communities to work out their own destiny and manage the resources around them” (Pye-Smith and Borrini Feyerabend 1994: 52).

CONTRIBUTING FACTORS FROM CASE STUDIES

What are the common attributes and lessons learned from each of these cases? The factors shown in Table 1.2 were extracted from the case studies and all contribute to CBE success at a basic level. These cases highlight seven factors as all important concepts to include when planning a CBE sustainable enterprise.

- Culturally-Fit
- Broad Grassroots Participation
- Local Sovereignty
- Communication

- Training
- Marketable Products
- NGO/Private Sector Partners

First, Culturally-Fit. To achieve success, a CBE project works best within existing cultural institutions, beliefs and traditions. Each case and enterprise is site-specific. Honoring existing lines of power and cultural values helps to mitigate negative cultural impacts from outside development, as well as to create cohesive community groups which are both functional and representative. It is also important that the project meets the basic needs of the local people of the area and assists in uplifting the livelihood of these community members through economic and social benefits.

Second, Broad Grassroots Participation. When people are invested in a project, they put their energies and talents (labor and capital) into it. Support for a project is derived from local participation, as well as from distributing produced wealth among many. As projects integrate into the lifestyles of all residents, impacts can be best mitigated and benefits distributed with broad participation from, and cooperation between, local residents.

Third, Local Sovereignty. Local communities benefit best when they have “full sovereignty, self-determination, and decision-making authority” over the land and its resource use (Stevens 1997b: 279). Local management of both CBE enterprises and PAs is the ultimate form of sovereignty. To make this work, local/indigenous land tenure requires recognition by government agencies and NGOs as full, “private property” status, and to be upheld by law. Whether PA or CBE development is run exclusively by local communities or in a co-management agreement with governments or NGOs, sovereignty

is honored when veto power of development lies within local/indigenous community options.

Fourth, Communication. Communication is key to the success of any project, but particularly when organizing stakeholders with differing visions and agenda. Communication must also include consultation, and preferably be generated from a bottom-up, grassroots approach. CBE projects require that all parties understand outcomes, risk, costs, and benefits, as well as determine individual and group responsibilities and goals. Steady and transparent communication (both written and oral) eases tensions from uncertainty about these agreements and alleviates potential animosity which stems from misunderstandings.

Fifth, Training. A multitude of skills are needed at the local level to run CBE businesses and manage PAs. Many of these skills already exist in communities, and where lacking, training is essential to bridge the gap in knowledge or practice. Because most rural communities are initially ignorant of tourism needs, both from the user and supplier sides, training in tourist expectations, hospitality, bookkeeping, marketing, and producing a sustainable and marketable product are necessary. Techniques and knowledge of conserving species, forests and other habitats, may also be enhanced through training.

Sixth, Marketable Products. Unique attractions, amenities, infrastructure, a marketable product AND access to the appropriate tourism market (through the internet – the great equalizer) are necessary for successful CBE. This is a primary reason why so many CBE ventures have failed – lack of marketable products or access to tourism markets.

Seventh, NGO/Private Sector Partners. Partnerships with NGOs and/or the private sector are useful, particularly when initially planning and implementing CBE enterprises. Partnerships ensure that the project is sufficiently funded, local participants are skilled and trained and, the project is promoted in regional and international markets. If the long-term goal is local sovereignty, then after sufficient time, NGOs will dissolve their partnerships with the community, or renew contracts on merely a short-term consulting basis.

These factors are rated on a scale ranging from: "yes" it does exhibit this factor, factor is "well-established", factor is "emerging" in the project, factor is "barely apparent", to "no" it does not exhibit this factor.

Table 1. 2 Case studies and their factors of success					
SCBE Criteria	Koroyanitu, Fiji	ACAP, Nepal	CBS, Belize	Kapawi, Ecuador	CAMPFIRE Zimbabwe
Culturally Fit	yes	yes	yes	emerging	yes
Grassroots Participation	yes	yes	yes	no	emerging
Local Sovereignty	yes	emerging	yes	yes	yes
Communication	yes	well-established	emerging	yes	well-established
Training	emerging	yes	emerging	well-established	no
Marketable Products	no	yes	emerging	yes	yes
NGO/Private Partners	yes	yes	well-established	yes	yes
Scale	yes	well-established	emerging	barely apparent	no

THE SCBE MODEL

In forming this theoretical SCBE Model, perceptions of well-being and benefits by community residents serve as proxy for economic values of well-being and ecotourism benefits, which equal the “success” of SCBE. In this synthesized, theoretical model, the dependent variable, SCBE, is specified as a function of all its contributing factors, which have been distilled into seven main factors from the case studies described:

$$SCBE = f(F, G, S, C, T, M, P), \text{ where}$$

SCBE = successful community-based ecotourism

F = culturally-fit

G = grassroots participation

S = local sovereignty

C = communication

T = training

M = marketable product

P = partnerships

DISCUSSION OF MODEL

The required SCBE factor, “culturally fit,” inherently clashes with the standardized, methodological mentality of modern, western style, technological development. A culturally-fit development program demands site-specific, tailor-made components and is not culturally-fit if applied without adjusting for the uniqueness of local customs and traditions involved (Kottak 1995). Therefore, any reluctance on the part of corporations and funding institutions (which are entrenched in western values and practices) to design new parameters each time a new project is started is understandable

in this light – there is an inherent perceived risk with implementing an “untried” program over a “proven” one. The irony is that this perceived risk factor is actually its greatest asset, for when a program is culturally-fit, then it will prove a success, at least on the social end of the spectrum. It is when this risk is eliminated with standardized methodologies that the true risk occurs and failure can be predicted per Kottak’s (1995) hindsight reviews of World Bank and USAID (U.S. Agency for International Development) case studies. Diversification in project methodology and implementation is required for long-term SCBE.

As with this first dependent factor, “culturally-fit,” hindsight of a project often tells us what was missing, or what could have been included more thoroughly. It is well-documented that grassroots participation makes for a more holistic product, although generating support at the grassroots level, and achieving consensus, usually takes much more time and effort than a top-down approach. Local sovereignty is an extension of grassroots involvement – local people need to be able to take control of their own lives and feel empowered. Exercising veto power over inappropriately-scaled development in the homelands of rural and indigenous peoples is a right of life, particularly when lands are privately-owned by rural residents.

Communication and training are also key to the success of a CBE venture or community-wide program. Sharing ideas, motives, dreams, realities between all stakeholders is so very important, that not enough emphasis can be placed on effective, open, and honest communication. Training is also imperative, particularly when guest and host cultures differ widely, and when expectations of both resident and visitor need to be clarified and agreed on. All of these aspects require excellent communication.

Ecotourism cannot happen without a marketable product, even if the product is only enjoyed by area residents. The product has to be an attraction! And for a SCBE enterprise to work outside of one's own community, the ability to market the attraction is key. Many projects have failed at this crucial point – the attraction is ready, but few to no guests show up. This is where partnerships can step in – to help advertise to their contacts the virtues and irresistibility of the site and its ecotourism opportunities. Local people have many skills which can create, plan, and implement projects from start to finish, but it is usually good to have outside assistance to network with and to help find the best tourists for each specific attraction and community.

CONCLUSION -- FUTURE EVOLVEMENT

In celebration of the International Year of Ecotourism (IYE) 2002, the World Tourism Organization (WTO) and The International Ecotourism Society (TIES) held the World Ecotourism Summit (WES) in Montreal, Quebec 19-24 May 2002. Over 1300 delegates came from 130 countries to network, discuss, and expand the concept of ecotourism (Essakow 2002). Prior to the Summit, six regional preparatory meetings were held by TIES and UNEP (United Nations Environment Programme) in Mesoamerica, South Asia, Andean South America, Southeast Asia, East Africa, and the Arctic. These were sponsored by Conservation International (CI), the Ford Foundation, and other supporters. These meetings were used as fora to solicit negative and positive feedback from local residents on local impact issues related to ecotourism development.

At the Summit, an agreement was formed, the “Chutes Montmorency Declaration” by representatives from each of these six areas, as well as other delegates. Primary principles for “sound ecotourism policies and practices” were listed as: conserve

biodiversity; sustain well-being of local peoples; interpret the experience; act responsibly; benefit small groups and businesses; lower consumption of non-renewable resources; and to stress local participation (Maclaren 2002: 2). Regional actions were developed, such as to “strengthen local platform for civil society,” “capacity building,” and “small business support” (*ibid.*). The Declaration resolved to “ensure that local NGOs, small- and medium-business practitioners, and local and indigenous peoples have an active voice in the development of ecotourism in their regions” (*ibid.*).

In keeping with the world’s ability to be linked by internet, a “Sustainable Development of Ecotourism Web-Conference” was held over 4 weeks in April 2002 just prior to the WES. This allowed thousands more individuals and agencies to participate prior to the Summit and to have their voices heard. Ecotourism is an all-encompassing topic, affecting many disciplines and areas of business, industry, policy, livelihoods, and social fabric of diverse people and cultures. All must need come to the table to consult, and most importantly, local, rural residents in “poor, developing” countries need to receive benefits from the natural assets under their feet. May we all work together to achieve success (SCBE).

IV. OBJECTIVES OF RESEARCH

The overall objectives of this research are: 1) to document the attitudes and perceptions of local residents in rural communities with regard to ecotourism and the development that inevitably follows in its wake, 2) to tell the community story in such a way that local voices can be the glue that unifies all stakeholder decision-making in the economics of protected area development (*e.g.* “smart growth”) and protected area management policy, 3) to open discussions about the “heart and essence” of ecotourism

in order to create a world vision of ecotourism's role in conservation and sustainable development of both human and ecological systems, and 4) to propose a method to implementing this vision by chronicling the emerging paradigm of "Connecting With Spirit" and by introducing and defining its integral concepts of "Spiritual Economics" and "Community-Created Ecotourism."

This dissertation research consists of three case study articles. All three articles examine community-based ecotourism and factors that contribute to its success.

Chapter 2 – A Longitudinal Study Of Community Perceptions: Preserving Public Goods On Private Lands in the Community Baboon Sanctuary, Belize – focuses on how benefiting local residents through ecotourism can conserve biological habitats. It is a longitudinal study of rural people who are voluntarily designating their farmlands as the private reserve, Community Baboon Sanctuary (CBS). This study examines the distribution of ecotourism benefits and re-evaluates management strategies of ecotourism enterprises between the seven villages associated with the CBS. Surveys document a change between 1992 and 2000 studies in perceived and real benefits from primarily altruistic to economic in nature. Additionally, benefits are accrued disproportionately to one of the seven villages. In response, one village seceded from the CBS to form their own tourism/sanctuary opportunities., and "rejoined" in order to cross-market with the sanctuary. Changes in local support for wildlife and habitat conservation are examined with implications to the future success of the CBS and privately-owned reserves as a whole.

Chapter 3 – Women, Crafts and Conservation Attitudes: Creating Alliances Between Communities and Protected Areas in Ecuador – presents a case study from

Ecuador of women living in a village adjacent to a privately-owned PA, La Reserva Maquipucuna, and examines correlations between participation in crafts production and conservation attitudes, practices, and benefits. The study focuses on two groups of women from the rural village of Marianitas, 1) those who have been trained in the crafts guild, “Los Colibrís,” (LC), and 2) those who have not. Results show that women in crafts exhibited only a slightly greater (non-significant) amount of concern and appreciation for the reserve and its natural environment than women not in crafts. LC women had more conservation training, but exhibited behaviors and attitudes which were consistent with the non-LC women. Explanations for this homogeneity stem from the constant presence of Maquipucuna in village life – its staff, education programs, workshops, and enforcement of its private borders. Transferability of lessons learned and implications for future success are discussed.

Chapter 4 – Conclusion: Our Future – presents conclusions which unite the articles, discuss their limitations, and summarize this dissertation’s key messages. Overriding themes of this research are: 1) public vs. private; 2) use vs. preservation; 3) global vs. local; and 4) material vs. spiritual. It puts forth ideas for future research and how the field of ecotourism, and more broadly sustainable development, can continue to be a force in alleviating the ills of humankind and bring about world unity and peace.

Chapter 5 – Epilogue: The Spirit Of Development, A New Paradigm Unifying Peoples, Environment, Economics and God – chronicles the historical development of a new social paradigm, “Connecting with Spirit,” which enables sustainable and just development for both natural environments and people. This philosophical paper introduces a new and more equitable concept of “Community-Created Ecotourism”

(CCE), which gives local inhabitants control over development and implementation decisions, so as to create ecotourism products in the best interests of local communities. CCE's umbrella theory of "Spiritual Economics" is also introduced.

The expected outcomes of this research are that these studies will amplify the dialogue on holistic approaches to creating and implementing CCE projects, particularly in rural villages of non-western cultural origins, as well as assign greater control and creativity to local peoples when developing for ecotourism on their home lands.

BIBLIOGRAPHY

- Abdullah, Sharif, 1999. *Creating a World that Works for All*. San Francisco: Berrett-Koehler Publishers, Inc.
- Adams, David 1993. *Renewable Resource Policy: The Legal-Institutional Foundations*. Washington, DC: Island Press.
- Alexander, Sara, E. 2000. Resident attitudes towards conservation and black howler monkeys in Belize: the Community Baboon Sanctuary. *Environmental Conservation* 27 (4): 341- 350.
- Andereck, Kathleen L. and Christine A. Vogt 2000. The Relationship between Residents' Attitudes toward Tourism and Tourism Development Options. *Journal of Travel Research*, Vol. 39, p. 27-36.
- Anderson, David L. 1993. A Window to the Natural World: The Design of Ecotourism Facilities, In *Ecotourism: A Guide for Planners and Managers, Volume 1*. North Bennington, VT: The Ecotourism Society, p. 116-133.
- Ashley, Caroline 2000. *The Impacts of Tourism on Rural Livelihoods: Namibia's Experience*, Working Paper 128. London: Overseas Development Institute.
- Ashley, Caroline and Dilys Roe 1998. *Enhancing community involvement in wildlife tourism: issues and challenges*. London, UK: International Institute for Environment and Development (IIED).
- Australian Heritage Commission 2000. *Protecting Local Heritage Places: A guide for communities*. Canberra.
- Baba, Jale O. 1997. Towards Sustainable Livelihoods: The Koroyanitu Development Program, In *Ecotourism for Forest Conservation and Community Development: Proceedings of an International Seminar*. Bornemeier, J., Victor, M. and Durst, P. (eds.) 1997, held in Chiang Mai, Thailand, 28-31 January, 1997. FAO/RAP Publication: 1997/26; RECOFTC Report No. 15. Bangkok, Thailand, p. 103-116.
- Bacon Bob, ed. 1996. *Guidelines and Recommendations for Nature-Based Tourism Planning and Practice in South Carolina*. Walterboro, SC: S. C. Nature-Based Tourism Association.
- Basgall, Monte 1997. "Ecology and the Tourist Marketplace: Conserving Parks and People," *Duke Magazine* 83 (6): 8-13.
- Bernard, H. Russell 1995. *Research Methods in Anthropology: Qualitative and Quantitative Approaches*. Walnut Creek, CA: AltaMira Press.

- Boo, E. 1992. *The Ecotourism Boom: Planning for Development and Management*. Washington, DC: World Wildlife Fund.
- Bookbinder, M. P., E. Dinerstirn, A. Rijal, H. Cauley, and A. Rajouria 1998. Ecotourism's Support of Biodiversity Conservation. *Conservation Biology*, Vol. 12, No. 6 p. 1399-1404.
- Bornemeier, J., Victor, M. and Durst, P. (eds.) 1997. *Ecotourism for Forest Conservation and Community Development: Proceedings of an International Seminar held in Chiang Mai, Thailand, 28-31 January, 1997*. FAO/RAP Publication: 1997/26; RECOFTC Report No. 15. Bangkok, Thailand.
- Borrie, William T., Stephen F. McCool, and George H. Stankey 1998. Protected Area Planning Principles and Strategies. In *Ecotourism: A Guide for Planners and Managers, Volume 2*. North Bennington, VT: The Ecotourism Society, p. 133-154.
- Brandon, Katrina 1993. Basic Steps Toward Encouraging Local Participation in Nature Tourism Projects. In *Ecotourism: A Guide for Planners and Managers, Volume 1*. North Bennington, VT: The Ecotourism Society, p. 134-151.
- Brandon, Katrina. 1996. *Ecotourism and Conservation: A Review of Key Issues*. Global Environment Division, Biodiversity Series, Paper No. 033. Washington, D.C.: The World Bank.
- Brandon, K. and R. Margolius 1996. Structuring ecotourism success: Framework for Analysis. Paper presented at *The Ecotourism equation: Measuring the Impacts*, International Society of Tropical Forester Yale University, 12-14 April 1996. New Haven, CT: <http://www.ecotourism.org/tessrsfr.html>
- Brass, Jane L., ed. 1997. *Community Tourism Assessment Handbook*. Corvallis, OR: Western Rural Development Center (WRCD) and Bozeman, MT: Montana State University (MSU) Extension. <http://www.montana.edu/wwwwrdc>
- Bruner, E.M., and B. Kirshenblatt-Gimblett. 1994. Maasai on the Lawn: Tourist Realism in East Africa. *Cultural Anthropology* 9(4): 435-470.
- Bruner, G.Y. 1993. *Evaluating a Model of Private-Ownership Conservation: Ecotourism in the Community Baboon Sanctuary in Belize*. M.S. Thesis (School of Public Policy), Georgia Institute of Technology.
- Bullock, Susan, ed. 1994. *Women and Work*. London: Zed Books, Ltd.
- Cater, E., and Lowman, G. 1994. *Ecotourism: A Sustainable Option?* Chichester, England: John Wiley & Sons.

- Ceballos-Lascuráin, Hector. 1991. Tourism, Ecotourism, and Protected Areas. IN *Ecotourism and Resource Conservation: A Collection of Papers, Vol 1*. Selected papers from 1st International Symposium: Ecotourism, April 17-19, 1989, Merida, Mexico and 2nd International Symposium: Ecotourism and Resource Conservation, November 27- December 2, 1990, Miami Beach, Florida. Kusler, Jon A., ed., pp. 24-30.
- Ceballos-Lascuráin, Hector. 1996. *Tourism, Ecotourism, and Protected Areas*. Gland, Switzerland: IUCN.
- Ceballos-Lascuráin, Hector. 2001. *Integrating Biodiversity into the Tourism Sector: Best Practices Guidelines*. A Report submitted to UNEP/UNDP/GEF/BPSP, June 2001. Web site: <http://www.ceballos-lascurain.com>
- Chambers, Robert 1995. Shortcut and Participatory Methods for Gaining Social Information for Projects, In *Putting People First: Sociological Variable in Rural Development, 2nd Edition*. Michael M. Cernea ed. New York: Oxford Press, p. 515-537.
- Cochrane, Janet 1997. Factors Influencing Ecotourism Benefits to Small, Forest-Reliant Communities: A Case Study of Bromo-Tengger-Semeru National Park, East Java, In *Ecotourism for Forest Conservation and Community Development: Proceedings of an International Seminar*. Bornemeier, J., Victor, M. and Durst, P. (eds.) 1997, held in Chiang Mai, Thailand, 28-31 January, 1997. FAO/RAP Publication: 1997/26; RECOFTC Report No. 15. Bangkok, Thailand, p. 151-168.
- Conservation International (CI) and George Washington University (GWU) In Press. *The Regional Tourism Assessment Manual: for development of ecotourism*. Washington DC: CI and GWU.
- CorpWatch 2002. Trade Statistics. <http://www.gatt.org>
- Curry, Patrick 2000. Redefining Community: Towards an Ecological Republicanism. *Biodiversity and Conservation* 9: 1059-1071.
- Davidson, Julie 2000. Sustainable Development: Business as Usual or a New Way Of Living? *Environmental Ethics*, 22:1, p.25-42.
- De Lacy, Terry and Bruce Lawson 1997. The Uluru/Kakadu Model: Joint Management of Aboriginal-Owned National Parks in Australia. In *Conservation Through Cultural Survival: Indigenous Peoples and Protected Areas*, Stan Stevens, ed. Washington, DC: Island Press, p. 155-187.
- Dixon, John A. and Paul B. Sherman 1990. *Economics of Protected Areas: A New Look at Benefits and Costs*. Washington, DC.: Island Press.

- Dove, Michael R. 1988. Introduction: Traditional Culture and Development in Indonesia. In M. Dove (ed) *The Real and Imagined Rose of Culture in Development: Case Studies from Indonesia*. Honolulu: Hawaii University Press.
- Dove, Michael R. 1992. The Dialectical History of "Jungle" in Pakistan: An Examination of the Relationship Between Nature and Culture. *Journal of Anthropological Research*, vol. 48, p. 231-253.
- Drumm, Andy 1998. New Approaches to Community-based Ecotourism Management: Learning from Ecuador. In *Ecotourism: A Guide for Planners and Managers, Volume 2*. North Bennington, VT: The Ecotourism Society, p. 197-213.
- Dugelby, Barbara and Michelle Libby 1998. Analyzing the Social Context at PiP Sites. In *Parks in Peril: People, Politics, and Protected Areas*. K. Brandon, K. H. Redford, and S. E. Sanderson, eds. Washington, DC: Island Press, p. 63-75.
- Eagles, Paul F. J. and Bryan R. Higgins, 1998, Ecotourism Market and Industry Structure, In *Ecotourism A Guide for Planners and Managers*, Lindberg, K. Epler Wood, M. and Engeldrum, D. (eds.), North Bennington, VT: The Ecotourism Society, p. 11-43.
- Epler Wood, M., F. A. Gatz, and K. Lindburg. 1991. The Ecotourism Society: An Action Agenda. IN *Ecotourism and Resource Conservation: A Collection of Papers, Vol 1*. Selected papers from 1st International Symposium: Ecotourism, April 17-19, 1989, Merida, Mexico and 2nd International Symposium: Ecotourism and Resource Conservation, November 27- December 2, 1990, Miami Beach, Florida. Kusler, Jon A., ed., pp. 75-79.
- Epler Wood, Megan 1998. *Meeting the global challenge of community participation in ecotourism: case studies and lessons from Ecuador*. American Verde Working Paper No. 2. Latin American and Caribbean Division. Arlington, VA: The Nature Conservancy.
- Epler Wood, M. 2002. *Ecotourism: Principles, Practices & Policies for Sustainability*. Paris: United Nations Environment Programme (UNEP).
- Escobar, Arturo 1995. *Encountering Development: The Making and Unmaking of the Third World*. Princeton, NJ: Princeton University Press.
- Essakow, Motti 2002. A Sustainable Impression: World Ecotourism Summit 2002. *TIES Newsletter*, 2nd and 3rd Quarters 2002, Burlington, VT: The International Ecotourism Society, p. 7.
- Everhart, William C., 1972. *The National Park Service*. Praeger Publishers, New York.

- Gurung, Chandra Prasad 1992. Annapurna Conservation Area Project, Nepal. In *Beyond the Green Horizon: A discussion paper on Principles for sustainable tourism*, Shirley Eber, editor. Godalming, Surrey: World Wild Fund For Nature, UK, p. 37-39.
- Gurung, Chandra P. and Maureen De Coursey, 1994. The Annapurna Conservation Area Project: a Pioneering Example of Sustainable Tourism? In *Ecotourism: A Sustainable Option?* Cater, Erlet and Gwen Lowman, editors. New York: John Wiley & Sons, p. 177-194.
- Hammitt, W. E., and M. C. Symmonds 2001. Wilderness. In *The Encyclopedia of Ecotourism*, Weaver, David B. ed., New York: CABI Publishing, p. 327-343.
- Hardin, Garrett 1968. The Tragedy of the Commons, *Science*, vol. 162, pp. 1243-1248.
- Hargrove, Eugene C. 1989. *Foundations of Environmental Ethics*. Englewood Cliffs, NJ: Prentice Hall.
- Hargrove, Eugene C. 2000. From the Editor: The Next Century and Beyond. *Environmental Ethics*, Vol 22: No. 1, p. 3.
- Harmon, D., and Steven R. Brechin, 1994. The Future of Protected Areas in a Crowded World. *The George Wright Forum*, Vol. 11(3): 97-116.
- Hartup, Barry. 1994. Community Conservation in Belize: Demography, Resource Use and Attitudes of Participating Landowners. *Biological Conservation* 69: 235-241.
- Hawkins, D. E., M. Epler Wood, and S. Bittman, eds. 1995. *The Ecotodge Sourcebook for Planners and Developers*. North Bennington, VT: The Ecotourism Society.
- Healy, Robert G. 1994. "Tourist Merchandise" as a Means of Generating Local Benefits From Ecotourism. *Journal of Sustainable Tourism* 2(3), pp. 137-151.
- Hemmati, Minu, Kishore Shah and Vasanti Gupta 1999. Summary, Conclusions and Recommendations. IN *Gender & Tourism: Women's Employment and Participation in Tourism*, UNED-UK Report for the United Nations Commission on Sustainable Development 7th Session, April 1999, Minu Hemmati, editor, p. 186-205.
- Hillel, Oliver 2002. Ecotourism as a tool for Sustainable Development: Trends and Challenges. *Sustainable Development of Ecotourism Web-Conference*, 1-26 April 2002; <http://www.world-tourism.org/sustainable/2002ecotourism/UNEP-base-document.htm>

- Honey, Martha. 1999. *Ecotourism and Sustainable Development: Who Owns Paradise?* Washington, D. C.: Island Press.
- Honey, Martha and Abigail Rome 2001. *Protecting Paradise: Certification Programs for Sustainable Tourism and Ecotourism*. Washington, DC: Institute for Policy Studies.
- Horwich, Robert H., and J. Lyon, 1990. *A Belizean Rain Forest: The Community Baboon Sanctuary*. Orangutan Press, Gay Mills, WI.
- Horwich, Robert H., Dail Murray, Ernesto Saqui, Jonathan Lyon, and Dolores Godfrey 1993a. Ecotourism and Community Development: A View from Belize, In *Ecotourism: A Guide for Planners and Managers, Volume 1*. North Bennington, VT: The Ecotourism Society.
- Horwich, R. H., R. Koontz, E. Saqui, H. Saqui, and K. E. Glander 1993b. A Reintroduction Program for the Conservation of the Black Howler Monkey in Belize. *Endangered Species UPDATE* 10:1-6.
- Horwich, Robert H., Robin Brockett, Roxie A. James, and Clara B. Jones 2001. Population Growth in the Belizean Black Howler Monkey (*Alouatta pigra*). *Neotropical Primates* 9(1), April 2001, p. 1-7.
- Hughes, David 1996. When Parks Encroach Upon People: Expanding National Parks in the Rusitu Valley, Zimbabwe. *Cultural Survival Quarterly*, Spring, Vol. 20, Issue 1. p. 36-40.
- International Institute For Peace Through Tourism (IIPT) 2003. *Credo of the Peaceful Traveler*. <http://www.iipt.org>
- Issaverdis, J. P. 2001. The Pursuit of Excellence: Benchmarking, Accreditation, Best Practice and Auditing, In *The Encyclopedia of Ecotourism*, Weaver, David B. ed., New York: CABI Publishing, p. 579-594.
- Ite, Uwem E. 1996. Community perceptions of the Cross River National Park, Nigeria. *Environmental Conservation* 23(4): 351-357.
- IUCN (The World Conservation Union), UNEP (United Nations Environment Programme), and WWF (World Wildlife Fund for Nature) 1991. *Caring for the Earth: A Strategy for Sustainable Living*. Gland, Switzerland.
- IUCN 1996. People in Charge: The emerging face of conservation. *World Conservation*. February 1996.

- Johnston, Alison 2000. Indigenous Peoples and Ecotourism: Bringing Indigenous Knowledge and Rights into the Sustainability Equation. *Tourism Recreation Research*, Vol. 25(2), p. 89-96.
- Johnston, Alison 2001. Indigenous Peoples and Tourism. In *Tourism and Host Communities*, Dallen J. Timothy, Shalini Singh and Ross Dowling, eds. Wallingford, England: CAB International.
- Jones, Clara B. and Jesse Young 2002. Hunting Restraint By Creoles At The Community Baboon Sanctuary, Belize: A Survey. *Neotropical Primates*. Unpublished manuscript.
- Jones, Robert. 1990. Farewell To Africa. *Audubon*, September, p.50-104.
- Kaufman, David 2002. Are the World's Monuments for Sale? *Condé Nast Traveler*, August 2002, p. 40-48.
- King, David A. and William P. Stewart 1996. Ecotourism and Commodification: Protecting People and Places. *Biodiversity and Conservation* 5: 293-305.
- Kottak, Conrad Philip 1995. When People Don't Come First: Some Sociological Lessons from Completed Project. In *Putting People First: Sociological Variable in Rural Development, 2nd Edition*. Michael M. Cernea ed. New York: Oxford Press, p. 431-466..
- Kusler, Jon, ed. 1991. *Ecotourism and Resource Conservation: A Collection of Papers, Vol 1 and 2*. Selected papers from 1st International Symposium: Ecotourism, April 17-19, 1989, Merida, Mexico and 2nd International Symposium: Ecotourism and Resource Conservation, November 27- December 2, 1990, Miami Beach, Florida.
- Kutay, Kurt. 1989. The New Ethic in Adventure Travel. *Buzzworm: The Environmental Journal*, Summer 1989.
- Lama, Wendy Brewer 1999. Valuing Women as Assets to Community-Based Tourism in Nepal. *Cultural Survival Quarterly*, Vol. 23, Issue 2, p. 45-47.
- Lash, G.Y.B. Lash 1998. Women, Crafts and Conservation Attitudes: Alliances Between Communities and Protected Areas. Paper presented at the *Adventure Travel Society 1998 World Congress*, Quito, Ecuador, November 1998.
- Lash, G.Y.B., S. Parsons, and R. Justicia, 1999. Los Colibrís Crafts Group: Empowering Women and Supporting Sustainable Development in the Tropical Cloud Forests of Western Ecuador. IN *Gender & Tourism: Women's Employment and Participation in Tourism*, UNED-UK Report for the United Nations Commission

- on Sustainable Development 7th Session, April 1999, Minu Hemmati, ed., p. 122-132.
- Lash, G.Y.B. 2003. A Longitudinal Study of Community Perceptions: Preserving Public Goods on Private Lands in the Community Baboon Sanctuary, Belize. In *Sustaining Our Spitit: Ecotourism On Privately-Owned Rural Lands and Protected Areas*. Ph.D. diss., University of Georgia, Athens, p. 67-174.
- Lash, G. Y. B. and A. D. Austin 2003. *Rural Ecotourism Assessment Program (REAP)*. Washington, DC: The International Ecotourism Society, In Prep.
- Lillywhite, Malcolm and Lynda Lillywhite 1991. Low Impact Tourism: Coupling Natural/Cultural Resource Conservation, Economic Development, and the Tourism Industry. In *Ecotourism and Resource Conservation: A Collection of Papers, Vol 1 & 2*. Selected papers from 1st International Symposium: Ecotourism, April 17-19, 1989, Merida, Mexico and 2nd International Symposium: Ecotourism and Resource Conservation, November 27- December 2, 1990, Miami Beach, Florida. Kusler, Jon A., ed., p. 89a-89r.
- Lindberg, Kreg 1991. *Policies for Maximizing Nature Tourism's Ecological and Economic Benefits*. International Conservation Financing Project Working Paper. World Resources Institute.
- Lindberg, K. and R. M. Huber, Jr. 1993. Economic Issues in Ecotourism Management. In *Ecotourism: A Guide for Planners and Managers, Volume 1*. North Bennington, VT: The Ecotourism Society.
- Lindberg, K., M. Epler Wood, and D. Engeldrum, eds. 1998. *Ecotourism A Guide for Planners and Managers, Volume 2*. North Bennington, VT: The Ecotourism Society.
- Ling, Chee Yoke, Anita Pleumarom and Meenakshi Raman 2001. Cancel the "Year of Ecotourism." *Earth Island Journal*, Autumn 2001, p. 47.
- Maclaren, Fergus 2002. World Ecotourism Summit Review: Not Your Usual Song and Dance Routine. *TIES Newsletter*, 2nd and 3rd Quarters 2002, Burlington, VT: The International Ecotourism Society, p. 1-4.
- Mader, Ron 2002. Sustainable Development of Ecotourism Web Conference 2002 *Final Report*. <http://www.world-tourism.org/sustainable/2002ecotourism/eng.htm> 1-26 April 2002.
- Maikhuri, R. K., U. Rana, K. S. Rao, S. Nautiyal, and K. G. Saxena 2000. Promoting ecotourism in the buffer zone areas of Nanda Devi Biosphere Reserve: an option to resolve people-policy conflict. *International Journal of Sustainable Development and World Ecology*, Vol 7, p. 1-10.

- Manidis Roberts Consultants 1997. *Developing a Tourism Optimisation Management Model (TOMM), a model to monitor and manage tourism on Kangaroo Island, Final Report*. Adelaide: South Australian Tourism Commission.
- Marsh, Laura K. 1999. *Ecological Effect of the Black Howler Monkey (Alouatta pigra) on Fragmented Forests in the Community Baboon Sanctuary, Belize*. Ph.D. diss., Washington University, St. Louis.
- McCarthy, Rebecca. 1990. Hand of man goes to heart of Yellowstone: Profit-seekers pitted against park guardians. In *The Atlanta Journal and Constitution*, June 17, p. A10-11.
- McCool, Stephen F., and George H. Stankey. 1994. Managing Tourism and Recreation in Protected Areas: Prerequisites, Principles, Strategies. Paper presented at *Second World Congress on Tourism for the Environment*, Margarita Island, Venezuela, September 27-October 2, 1993.
- McCool, Stephen F., R. Neil Moisey, and Norma P. Nickerson 2001. What Should Tourism Sustain? The Disconnect with Industry Perceptions of Useful Indicators. *Journal of Travel Research*, Vol 40, November 2001, p. 124-131
- McHarg, Ian L. 1969. *Design With Nature*. Philadelphia: Natural History Press.
- McLaren, Deborah 1998. *Rethinking Tourism and Ecotourism: The Paving of Paradise and What You Can Do to Stop It*. West Hartford, CT: Kumarian Press.
- McLaren, Deborah R. 1999. The History of Indigenous Peoples and Tourism, *Cultural Survival Quarterly*, Vol 23, Issue 2, p. 27-30.
- McNeely, Jeffrey A. and James W. Thorsell 1988. Jungles, Mountains, and Islands: How Tourism Can Help Conserve the Natural Heritage. In *Tourism – A Vital Force for Peace*. L. J. D’Amore and J. Jafari, eds. Montreal: First Global Conference, p. 109-120.
- Mehta, Hitesh, Ana Baez, and Paul O’Loughlin, eds. 2002. *International Ecotourism Guidelines*. Burlington, VT: The International Ecotourism Society (TIES).
- Metcalfe, Simon 1994. The Zimbabwe Communal Areas Management Programme for Indigenous Resources. In *Natural Connections: Perspectives in Community-based Conservation*. D. Western, M. Wright, and S. Strum, eds., Washington, DC: Island Press, p. 161-192.
- National Park Service (NPS) 2002. Public Use Statistics. <http://www.nps.gov>

- Ministry of Tourism and the Environment, Belize, and Belize Enterprise for Sustained Technology (BEST). 1994a. *Guide To Community-based Ecotourism in Belize*. November 1994, Belize.
- Nazarea-Sandoval, Virginia D. 1995. *Local Knowledge and Agricultural Decision Making in the Philippines: Class, Gender, and Resistance*. Cornell University Press.
- Norris, Ruth. 1995. Is Ecotourism Contributing to Conservation? *Ecotourism Society Newsletter* Fall 1995, Vol. 5, No. 4. Bennington, Vt.
- Norris, Ruth, J. Scott Wilber, and Luís Oswaldo Morales Marín 1998. Community-Based Ecotourism in the Maya Forest: Problems and Potentials. In *Timber, Tourists, and Temples: Conservation and Development in the Maya Forests of Belize, Guatemala and Mexico*. eds. R. Primack, D. Bray, H. A. Galletti, and I. Ponciano. Island Press: Washington DC, p. 327-342.
- Northwest Arkansas Resource Conservation and Development Council, Inc. 1997. *Ecotourism Development Manual*. Harrison, AR.
- Ojanji, Wandera 2001. New Threat to Kenya Tourism. *Contours*, Vol. 11, No. 1 and 2, p. 55-56.
- Orr, David 1993. Love It or Lose It: The Coming Biophilia Revolution. In *The Biophilia Hypothesis*. Stephen R. Kellert and Edward O. Wilson, eds. Washington DC: Island Press, p. 415-440.
- Ostrom, E, J. Burger, C. B. Field, R. B. Norgaard, and D. Policansky 1999. Revisiting the Commons: Local Lessons, Global Challenges. *Science*, Vol. 284, p. 278-282.
- Ponting, Clive 1991. *A Green History of the World: The Environment and the Collapse of Great Civilizations*. New York: Penguin books.
- Pretty, Jules N. 1994. Alternative Systems of Inquiry for A Sustainable Agriculture. *Institute of Development Studies (IDS) Bulletin* 25 (2): 37-48.
- Pye-Smith, Charlie and Grazia Borrini Feyerabend 1994. *The Wealth of Communities: Stories of Success in Local Environmental Management*. West Hartford, CT: Kumarian Press.
- Rabinowitz, Alan 1986. Jaguar: *One Man's Battle to Establish the World's First Jaguar Preserve*. New York: Anchor Books.
- Robinson, J. G., and K. H. Redford. 1994. Community-Based Approaches to Wildlife Conservation in Neotropical Forests. In *Natural Connections: Perspectives in*

- Community-Based Conservation*, D. Western and R. M. Wright, eds. Washington, D.C.: Island Press, pp. 300-319.
- Rodda, Annabel 1994. *Women and the Environment*. London: Zed Books, Ltd.
- Roe, Dilys, Harold Goodwin and Caroline Ashley (2002). *The Tourism Industry and Poverty Reduction: A Business Planner*. Pro-poor tourism briefing No. 2, March 2002. <http://www.propoortourism.org.uk>
- Ryel, Richard 1991. Ecotourism: An Economic Alternative for Natural Resource Destruction, In *Ecotourism and Resource Conservation: A Collection of Papers, Vol 1*. Selected papers from 1st International Symposium: Ecotourism, April 17-19, 1989, Merida, Mexico and 2nd International Symposium: Ecotourism and Resource Conservation, November 27- December 2, 1990, Miami Beach, Florida. Kusler, Jon A., ed., p. 31-44.
- Sanders, Edward A. and Elizabeth Halpenny 2001. *The Business of Ecolodges*. Burlington, VT: The International Ecotourism Society.
- Schalken, Wouter 1999. Where are the Wild Ones? The Involvement of Indigenous Communities in Tourism in Namibia. *Cultural Survival Quarterly*, Vol. 23, Issue 2, p. 40-42.
- Selengut, Stanley and Richard Simon 1991. Maho Bay: A Model for Environmentally-Sensitive and Economically-Successful Development: Ecological Restoration as a Component of Resort Development and Operation. In *Ecotourism and Resource Conservation: A Collection of Papers, Vol 1*. Selected papers from 1st International Symposium: Ecotourism, April 17-19, 1989, Merida, Mexico and 2nd International Symposium: Ecotourism and Resource Conservation, November 27- December 2, 1990, Miami Beach, Florida. Kusler, Jon A., ed., p. 725-732.
- Sirakaya, Ercan, Victor Teye, and Sevil Sönmez 2002. Understanding Residents' Support for Tourism Development in the Central Region of Ghana. *Journal of Travel Research*, Vol. 41, p. 57-67.
- South Australian Tourism Commission 1994. *Ecotourism: A South Australian Design Guide for Sustainable Development*. Adelaide, November 1994.
- Stankey, G.H., D. N. Cole, R. C. Lucas, M. E. Petersen, and S. S. Frissell 1985. *The Limits of Acceptable Change (LAC) System for Wilderness Planning*. USDA Forest Service General Technical Report INT-176. Intermountain Forest and Range Experiment Station, Ogden, UT.
- Steck, Birgit, Wolfgang Strasdas and Evelyn Gustedt 1999. *Tourism in Technical Cooperation: A guide to the conception, planning and implementation of project-*

accompanying measures in regional rural development and nature conservation.
Eschborn: Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ).

Stegeborn, Wiveca. 1996. Sri Lanka's Forests, Conservation of Nature versus People. *Cultural Survival Quarterly*, Spring 1996. pp. 16-20.

Stevens, Stan, ed. 1997. *Conservation Through Cultural Survival: Indigenous Peoples and Protected Areas*. Washington, DC: Island Press.

Stevens, Stan 1997a. New Alliances for Conservation. In *Conservation Through Cultural Survival: Indigenous Peoples and Protected Areas*, Stevens, Stan ed. Washington, DC: Island Press, p. 33-62.

Stevens, Stan 1997b. Lessons and Directions. In *Conservation Through Cultural Survival: Indigenous Peoples and Protected Areas*, Stevens, Stan ed. Washington, DC: Island Press, p. 265-298.

Stevens, Stan 1997c. Annapurna Conservation Area: Empowerment, Conservation, and Development in Nepal. In *Conservation Through Cultural Survival: Indigenous Peoples and Protected Areas*, Stan Stevens, ed. Washington, DC: Island Press, p. 237-261.

Stevens, Stanley F. and Mingma Norbu Sherpa 1993. Indigenous Peoples and Protected Areas: New Approaches to Conservation in Highland Nepal. In *Parks, Peaks, and People*, Hamilton, L. S., D. P. Bauer, and H. F. Takeuchi, eds. Honolulu: East-West Center, p. 73-88.

Sutherland, Anne 1998. *The Making of Belize: Globalization in the Margins*. Westport, CT: Bergin & Garvey.

Sweeting, J. E. N., A. G. Bruner, and A. B. Rosenfeld 1999. *The Green Host Effect: An Integrated Approach to sustainable Tourism and Resort Development*. Washington, DC: Conservation International.

Tchamie, T. T. K. 1994. Learning from local hostility to protected areas in Togo. *Unasylva* 176, Vol 45.

Terborgh, John and Carlos A. Peres 2002. The Problem of People in Parks. In *Making parks work: Strategies for preserving tropical nature*, ed. J. Terborgh, C. van Schaik, L. Davenport and M. Rao. Washington D.C.: Island Press, p. 307-319.

The Nature Conservancy (TNC) In Press. *Site Conservation Planning: A Framework for Developing and Measuring the Impact of Effective Biodiversity Conservation Strategies*. Washington DC: TNC.

- Tosun, Cevat 2001. Host Perceptions of Impacts: A Comparative Tourism Study. *Annals of Tourism Research*, Vol. 29, No.1, p.231-253.
- United Nations Populations Fund 2002. State of World Population 2001, <http://www.unfpa.org>
- Ursa International 2000. *Return to Hope Zoo: Development Plan*. Kinston, Jamaica. Atlanta, GA: Ursa International.
- U.S. National Park Service (NPS). 1993. *Guiding Principles of Sustainable Design*. United States Department of the Interior.
- Vail, David and Lars Hultkrantz 2000. Property right and sustainable nature tourism: adaptation and mal-adaptation in Dalarna (Sweden) and Maine (USA). *Ecological Economics* 35, p. 223-242.
- Vásquez, Grimaldo Rengifo 2002. Children and biodiversity in the Andes – An initiative in favor of cultural diversity, *Forests, Trees and People Newsletter*, No. 46, p. 81-82, translated by Jorge Ishizawa Oba.
- Vedder, A. and A. W. Weber. 1990. The Mountain Gorilla Project (Volcanoes National Park) -- Rwanda, in *Living with Wildlife: Wildlife Resource Management with Local Participation in Africa*. A. Kiss, ed. World Bank.
- Vickers, Jeanne, ed. 1994. *Women and the World Economic Crisis*. London: Zed Books, Ltd.
- Wesche, Rolf and Andy Drumm 1999. *Defending Our Rainforest: A Guide to Community-Based Ecotourism in the Ecuadorian Amazon*. Accion Amazonia.
- Western, David. 1993. Defining Ecotourism. In *Ecotourism: A Guide for Planners and Managers*. Lindburg, K. and D. E. Hawkins, eds. North Bennington, VT: The Ecotourism Society., pp. 7-11.
- Western, David 1994. Linking Conservation and Community Aspirations. In *Natural Connections: Perspectives in Community-based Conservation*. D. Western, M. Wright, and S. Strum, eds. Washington, DC: Island Press, p. 499-511.
- Wight, Pam A. 2001. Ecotourists: Not a Homogeneous Market Segment. In *The Encyclopedia of Ecotourism*, Weaver, David B. ed., New York: CABI Publishing, p. 37-62.
- Wilkinson, Todd. 1990. "Winter Paradox," *National Parks*, Vol. 64, No. 11-12, p. 31-35.

- Wilson, Suzanne, Daniel R. Fesenmaier, Julie Fesenmaier, and John C. van Es 2001. Factors for Success in Rural Tourism Development, *Journal of Travel Research*, Vol. 40:132-138.
- World Tourism Organization (WTO) and United Nations Environment Programme (UNEP) 1992. *Guidelines: Development of National Parks and Protected Areas for Tourism*. Tourism and Environment Series. Madrid: WTO.
- World Tourism Organization (WTO) 2002. Latest Data, Facts and Figures, June 2002. <http://www.world-tourism.org>
- World Travel and Tourism Council (WTTC). 1992. *The WTTC Report: Travel and Tourism in the World Economy*. Brussels, Belgium.
- Wright, Patricia C. and Benjamin Andriamihaja 2002. Making a Rain Forest National Park Work in Madagascar: Ranomafana National Park and Its Long-term Research Commitment. In *Making Parks Work: Strategies for Preserving Tropical Nature*. J. Terborgh, C. van Schaik, L. Davenport, and M. Rao, eds. Washington, DC: Island Press. p. 112-136.
- Ziffer, Karen A. 1989. *Ecotourism: The Uneasy Alliance*. Conservation International Working Paper.

CHAPTER 2

A LONGITUDINAL STUDY OF COMMUNITY PERCEPTIONS: PRESERVING PUBLIC GOODS ON PRIVATE LANDS IN THE COMMUNITY BABOON SANCTUARY, BELIZE¹

¹ Lash, G. Y. B. 2003. To be submitted to *Environmental Conservation*.

SUMMARY

Continued protection and sustainable use of many of the world's natural resources is dependent on voluntary conservation by private landowners. Studies have shown that preserving a public good on private lands is largely dependent on landowner perceptions of personal benefits and costs received from this conservation. This paper reports on a longitudinal study of one such example where private landowners have voluntarily agreed to conserve the black howler monkey, *Alouatta pigra*, and its habitat at the Community Baboon Sanctuary (CBS) in Belize since 1985.

Based on an initial study in 1988 (Hartup 1989, 1994), this study's purpose was to determine and compare 1) the attitudes of CBS landowners on wildlife conservation, ecotourism benefits, management success, and future development of the area in both 1992 and 2000, and 2) the actual revenue generated by ecotourism in each of the villages. All seven villages within the boundary of the CBS were surveyed. Although all residents endorsed protection of the howler monkeys, there were major shifts between 1988, 1992 and 2000 in the perception of personal benefits gained from this endorsement, from intrinsic to purely economic benefits. Because of this change in the nature of benefits, over two-thirds of landowners (69% in 1992 and 72% in 2000) declared they were receiving no benefits from the CBS, thus endangering the support and future of the sanctuary.

The underlying causes of these shifts are two-fold. First, is the almost complete capture of tourists and tourist revenue by one village, Bermudian Landing (BL), of the seven villages in the CBS. Beginning as a convenient location to both see monkeys and monitor tourists at a museum/visitor center, ecotourism ventures, both local and foreign,

quickly proliferated in BL, skewing distributions of income and jobs to residents of BL. In 1992, 70% of all tourists and 55% of all tourism income went to BL; by 2000, BL had captured 68% of tourists and 93% of all tourism revenue. Consequently, the voluntary pledges to preserve monkeys as a public good were of little value to pledged landowners.

Second, is the ineffective role that CBS management played in solving these issues of equity and efficiency. The multiple-years of training time for local managers to acquire skills of self-sufficiency, the little involvement of landowners in decision-making, and the local perception of financial corruption due to lack of CBS transparency, all contributed to dissatisfaction for and lack of confidence in CBS management. Positively, by 2000 the local CBS management had obtained its own NGO (non-governmental organization) status and began to receive national and international grants and other assistance to build communal ecotourism infrastructures and to provide training and jobs for residents from all CBS villages.

Two additional factors affecting future support were noted in 2000. The composition of CBS members has changed, with 41% of pledged landowners either having moved away, sold their lands, or died. A few sons and daughters of deceased landowners had renewed their property pledge, but this study found that over one-third (36%) of all pledged lands now resided in the hands of unsigned relatives or newcomers to the area. These newcomers included foreigners and developers, who might not possess the same conservation ethic towards monkeys and monkey habitat as the local Creole population. Simultaneously, large-scale housing developments and road, water and sanitation improvements were being built by government in the CBS area, greatly

accelerating property values, sale of land to non-CBS members, and the need for private landowners to re-evaluate their commitments to conserving existing monkey habitat.

As a result, the future of the CBS is at a crossroads. This longitudinal study concludes that continued success of the CBS and its ability to protect this public good, black howler monkeys, on private lands will depend in part on 1) re-structuring CBS management to reflect a more communal partnership with private landowners as appropriators of common pool resources (CPR), and on 2) local landowners receiving regular dividends in the form of revenue in future.

Keywords: Belize, public good, private lands, community support, ecotourism, landowners, benefits, local management, survey, conservation, monkeys.

INTRODUCTION

Private lands, particularly in forested, buffer-zone areas, are becoming increasingly important for biodiversity conservation (Alderman 1990, 1994; Langholz 2002). The future of forest policy is to incorporate non-industrial private forest (NIPF) landowners into wildlife management and protection as well as in agriculture, livestock, and timber production. Public goods, such as primates and other charismatic species, can be used as tools for conservation of tropical forests (Cuarón 2000; Vedder and Weber 1990; Rabinowitz 1986). With secure title and control over land resources, private landowners have the opportunity to capitalize on wildlife protection and minimize economic leakages outside the local community (Brandon 1996). Community-wide, however, private sector motives may be diverse and fail to benefit all stakeholders (Kramer, *et. al.* 2002). The differences in conservation ethic of diverse cultural groups may also influence the success of local private initiatives over a wide area (Heinen 1996).

Private landowners and rural communities are given responsibility to conserve wild lands, but they must also be given corresponding benefits to match. Conservation is inter-linked to livelihoods. Use of natural resources is a way of life for many rural communities, and in fact, in some countries, use (agriculture, logging, ranching) is mandated by legislation in order to receive title to private property. By requiring limits on use, conservationists are depriving locals of livelihood benefits, and perhaps even endangering recognized ownership of lands. Without accruing benefits to locals, support of a private reserve or protected area (PA) can be jeopardized, and conservation lost (Ite 1996; Tchamie 1994).

Support can be measured by surveying attitudes of local residents towards the benefits and costs received from: forestry/wildlife conservation (Hartup 1994; Götmark, *et. al.* 2000; Alexander 1999, 2000), creation of PAs (Tchamie 1994; Ite 1996), park staff and PA management (Lise 2000; Maikhuri, *et. al.* 2000) and, tourism and tourism development (Grekin and Milne 1996; Bookbinder, *et. al.* 1998; Andereck and Vogt 2000; Tosun 2001; Vincent and Thompson 2002; Sirakaya, *et. al.* 2002; Teye, *et. al.* 2002). Additionally, benefits must be equitable. “Attitudes can change quickly when some villagers gain benefits from a PA (*e.g.*, through employment or tourism)” (Srikosamatara and Brockelman 2002: 228). This does not mean that all users receive the exact same benefits, but that each person or household receives what is due her in accordance with her labor, time or other costs (Bookbinder, *et. al.* 1998; Teye, *et. al.* 2002).

Market institutions expect private landowners, as resource users, to maximize their individual assets with emphasis on quick returns (Dixon and Sherman 1990). When

assets are common pool resources (CPRs) such as forest habitat for wildlife, open access use can lead to Hardin's tragedy of the commons (1968). However, research on CPRs shows that user groups can create incentives and rules that benefit not only all participating individuals but also the viability of the resource over the long term (Ostrom 1992). Community-based management is simply "self-regulation by appropriators and local-level management" (McCay 2001:189). Appropriators are most likely to self-organize into a successful CPR governing body when they exhibit the following attributes (Ostrom 2001: 22).

Appropriators:

- are dependent on the resource system;
- have a common understanding of how the resource system operates and their effects on it;
- use a low discount rate when determining future benefits;
- trust one another to keep promises and reciprocate;
- are able to make their own access and harvesting rules;
- have leadership and organizational skills.

When forming an appropriator organization (AO), and rules to manage these CPRs, the importance of shared norms is high. Groups that are known to each other, have a trust-worthy relationship and good communication, are more willing to use reciprocity when developing rules to limit use of CPRs (Ostrom, *et. al.*, 1999). Thus the characteristics of both resource users and of management play a key role in the protection of the commons and public goods.

Heinen (1996) found that small user groups, with homogeneous values and low costs, may not need to receive economic incentives, but when groups become large and diverse, economic compensation, through various methods, is necessary and key to resource conservation. Functioning CPR management mechanisms are extremely important when economic benefits need to be distributed and CPR appropriators organized, thereby linking private landowners into a larger community (Langholz 1996). Private reserve managers “ranked management factors more important than geographic, social/political, financial, or stochastic factors for accomplishing the reserve’s objectives (Langholz 1996: 271). Clearly, management has a key role to play in conservation, particularly of CPRs. When examining local participation levels in forest management, Lise (2000) found social factors of the group, such as religious background, to be most important in promoting social cohesion. In essence, the extent of which communities are cohesive and homogeneous, at least in ideas and views, determines how well they will co-manage a resource, and derive benefits from it.

Local community benefits can come from various industry sources, but agreeing on ones that also benefit buffer-zones and PAs can be difficult. Community-based ecotourism (CBE) is documented as a particularly attractive and successful method of providing local incentives to private landowners for conservation of wildlife and wild lands (Vedder and Weber 1990; Robinson and Redford 1994; Kangas, *et. al.* 1995; Rodríguez 1999). However, the success of any CBE initiative is dependent on perceptions by community residents of the balance between received benefits and costs (Lindberg 1991; Sproule and Suhandi 1998). No community or site is static, and each will evolve as opportunities are presented to both landowners and wildlife. Each

community has its own set of preferences and attitudes towards tourism and each site must be considered independently when developing tourism programs (Andereck and Vogt 2000). Conversely, although each community, and indeed each person, has the right of self-determination (Stevens 1997), there are symbiotic relationships between communities, and the need for multi-community plans for tourism development, that must be addressed as well.

Ryan (2002:18) argues that, “every time a new development occurs, it may inhibit the future development of existing products located in places more marginal to the main streams of tourists, thereby affecting employment creation in those places.” As tourism opportunities are realized, care must be taken to assess that products agree with the shared vision of users (appropriators, community members) and desired allocation of benefits. Additionally, the dynamics of tourism are such that “continuous demand for a place changes the nature of the place as that initial demand is met...[in other words:] Growing demand leads to more building, more development, and in that development, that which was originally sought, disappears” (Ryan 2002:18).

As much as Ryan admits that this description is a cliché, the actualization of this development cycle can be seen in practice throughout many areas of the world. In Belize, these trends of escalating ecotourism development are turning local, small, grassy-street fishing villages (example: Monkey River Village) into local and foreign-owned B & Bs, restaurants-off-the-sidewalks snorkeling /diving villages (example: Placencia Village), to paved streets with golf carts and foreign-owned hotel beach towns (example: San Pedro town), to multi-national chain-hotels with an airport tropical cities (example: Cancun; Lash and Austin 2003).

Local community residents can prevent “Cancunization,” and retain their sovereignty over community development through privately-owned lands and collaborative AO development (Stevens 1997). Success in these multi-dimensional areas of conservation, livelihood enhancement, and CBE development, can best be measured by longitudinal studies which can test for causality, and produce useful guiding principles for resource and cultural protection (Salafsky and Margoluis 2002).

Belize, tourism, and conservation

In 2001, Belize received 196,000 international tourist arrivals, a significant drop from the over 300,000 visitors that arrived in 2000 (BTB 2003). Famous for its cayes and Barrier Reef – the second-largest in the world – Belize attracts divers and marine tourists from all over the world. Cruise ships began docking in Belize around 1997, and this segment of the tourism industry has risen steadily over the last few years, now comprising 25% of all tourism arrivals in Belize (BTB 2003).

Tourism development has taken place mostly on its cayes, supporting the reef-based tourism. Ambergris Caye, with its town of San Pedro, and Caye Caulker, are the most visited of the islands, being located close to Belize City. Equally important are Belize’s archeological sites from the great Mayan civilizations of Meso-America, its rain forests, diverse indigenous communities, and pastoral charm that only a land of small human populations and large areas of natural environments and resources can offer. On a small scale, Belize has accomplished what giants like Brazil are still trying to do: to develop their country as an ecotourism destination, which both protects biodiversity and brings in tourism revenue as economic incentives for government, private sector and local communities (Healy 1996; BTB 2003; BTIA 2000).

Belize has several national web sites available, among others: www.belize.com; www.belizenet.com; www.belize.net; www.travelbelize.org; and www.belize.gov.bz.

Although community-based ecotourism (CBE) is not marketed as a distinct segment of ecotourism at the national level (Blackstone Corporation 1998), the Belize government is conscious of CBE as a growing sector, and its potential as a rural development tool (Ministry of Tourism and BEST 1994). *A Guide To Community-based Ecotourism in Belize* was published in November 1994 for tourists, documenting 24 rural communities and their involvement in promoting nature conservation and ecotourism at the local level (Ministry of Tourism and BEST 1994a). With this guide came recognition of the roles that rural communities can play in developing and expanding the tourism industry in Belize, as well as how ecotourism at the community level can improve the lives of local residents.

In particular, one case of rural CBE, the Community Baboon Sanctuary (CBS), stands out as an international model of private landowner conservation in both popular and professional literature (Lipske 1992; Mahler and Wotkyns 1991; Boo 1990; Alderman 1990; Ministry of Tourism and BEST 1994a). The CBS offers a unique opportunity for long-term assessment, with an 18-year history of both landowner support and conservation of the black howler monkey (*Alouatta pigra*, “baboon” in Creole). Since its inception in 1985, the CBS has attracted studies of both its resident human communities (Hartup 1989, 1994; Bruner 1993; Horwich 1990; Alexander 1999, 2000; Horwich and Lyon 1995, 1999; Jones and Young 2002) and its monkey populations (Horwich and Lyon 1990; Horwich 1995, 1998; Lash and Horwich 1996; Horwich, *et.*

al., 1993, 2001a, 2001b; Silver, *et. al.*, 1998; Marsh 1999; Ostro, *et. al.*, 1999; Brockett, *et. al.*, 1999, 2000).

CBS successes have led to similar methods being employed at Gales Point, Ambergris Caye, and Monkey River Village in Belize (Horwich and Lyon 1995). Its challenges have led to focused studies of other community-based conservation initiatives in Belize: Gales Point Manatee Reserve (Belsky 1999; Horwich and Lyon 1998), Crooked Tree Wildlife Sanctuary (Johnson 1996, 1998), Possum Point Biological Station (Kangas, *et. al.* 1995), St. Margaret's Village/Five Blues National Park (Lyon and Horwich 1996; Holladay in prep.), and the Maya Forest (Norris, *et. al.*, 1998).

The unique characteristics of the CBS are: 1) its grass-roots, voluntary method by which private landowners are conserving a public good, the endangered black howler monkey, on private lands, 2) its success at conserving this species and riparian habitat, 3) the growth and success of CBE in the area, and 4) its ability to continue to exist despite an evolving management structure, and increased market/governmental pressures to develop these privately protected rural lands for non-agricultural uses.

Based on research conducted in 1988 (Hartup 1989, 1994), this paper presents a longitudinal study of the CBS, Belize, conducted at two points in time (1992 and 2000). The objectives of this study were to document the current organizational structure of the 15-year-old sanctuary, which villagers had elected to stay a part of the CBS, where ecotourism development had occurred, who was benefiting from ecotourism, and to assess attitudes towards ecotourism development in the seven-village area. The aim was to determine factors influencing local support of the sanctuary and distributions of benefits from the CBS. The tested hypothesis was that there was an increase in

fragmentation of ecotourism development and of villager support for the CBS since 1988, due to a decrease (or lack) of cohesive management of the CBS and lack of agreed distribution of tourism benefits over the seven-village area. This study also examined what kinds of incentives could promote stewardship of the CBS and its ecotourism development. Community perceptions of the CBS and associated changes, if any, were documented in these five interwoven topics: 1) pledged landowners, 2) local conservation attitudes, 3) ecotourism benefits, 4) management success, and 5) future development of the area. This study has implications not only for the future of CBS, but also for private landowner communities worldwide, as a template for organizing community conservation efforts.

Study area

Due mainly to its small population of 240,000 people in-country, (Belize Central Statistical Office 2001) and rough terrain (Healy and Newman 1989), Belize still has 59% of its forest cover and a great variety of wildlife species remaining, although forest cover along the Belize River is only at 31% (FOA 2000; Di Fiore 2002). Since its independence in 1981, the Belize government has set aside over 40% of its lands as nature reserves and PAs, making the country a haven for environmentalists, researchers, and tourists alike (Sutherland 1998).

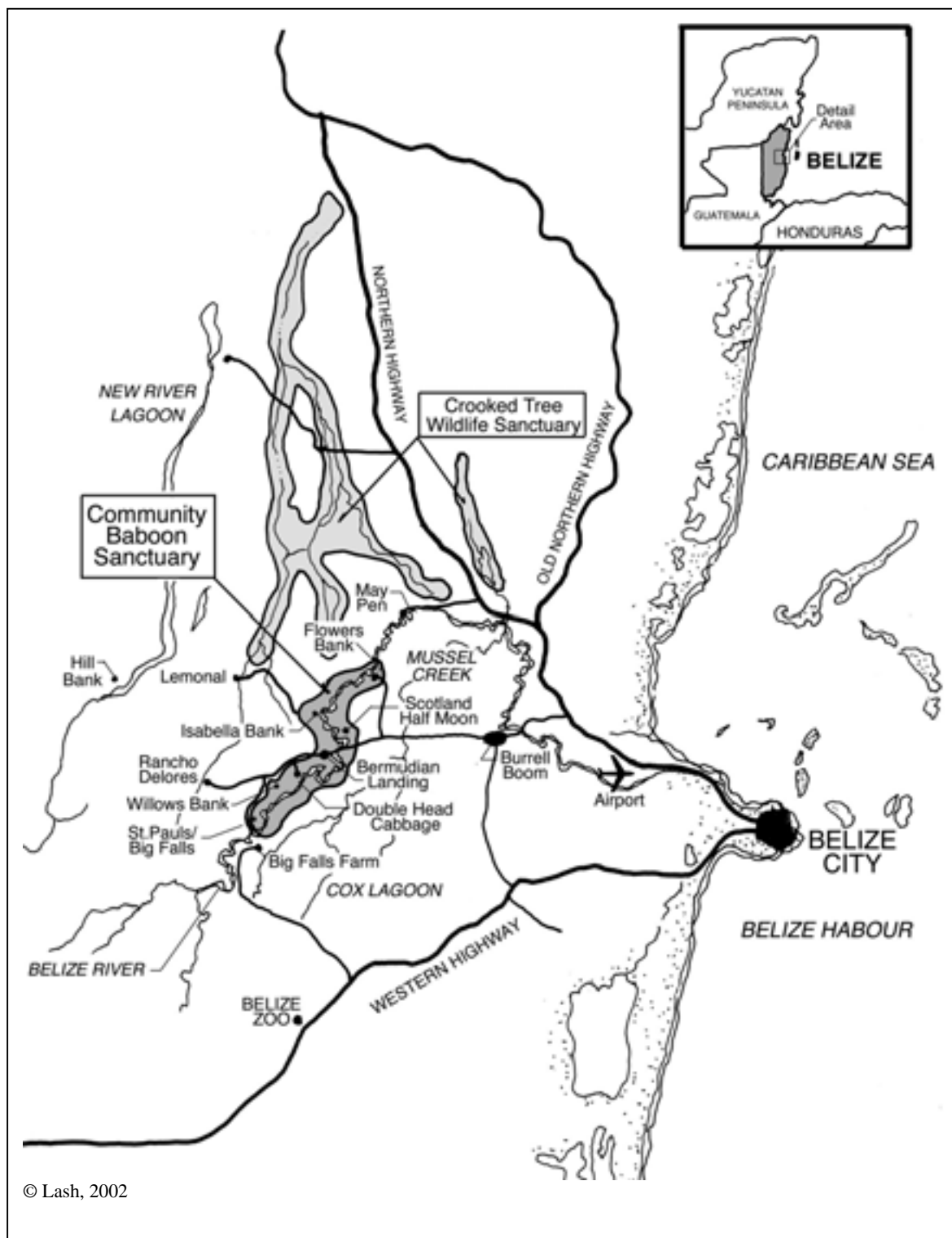
The Belize River Valley (BRV) area has a 300-year history of logging precious hardwoods, primarily logwood, used in dyes, and mahogany. These areas were settled by the English who brought in African slaves to help with logging; their descendents are the Creole people in the area today. Access to the area was by boat, using the Belize River and its numerous tributaries to float logs down to the sea. Villages sprang up along the

riverbanks, with such names as Scotland Half Moon, Bermudian Landing, and Burrell Boom. Residents turned to subsistence agriculture and hunting to support their families as logging declined. Today, these villagers are farmers and livestock producers, using slash-and-burn techniques to clear small plots of land (0.1 to 1-hectare plots) for their *milpas* (farms), which are “used for two to three years, then left fallow for fifteen to forty years” (Horwich and Lyon 1995: 237). The amount of pasture land has surpassed milpa clearing since a road was built allowing land access to the area in the 1960s (Lyon and Horwich 1996). Many land holdings go back at least two to three generations, and generally stem from large plots of estate lands from one to several main families in a village. The social composition of these rural communities is rooted in a few large, extended families.

The CBS is situated over a 47 sq. km area (4,700 hectares) in the heart of the Belize River Valley (BRV), with seven of the nine main BRV villages involved in the CBS (Figure 2.1). Located only 40 kilometers (one-hour drive) from Belize City, these rural areas of the CBS are an attraction for both tourists and Belizean urbanites. The seven villages of the CBS are all situated on the banks of the Belize River, and surrounded by adjacent waterways of the lower BRV – Mussel Creek, Cox Lagoon, Spanish Creek, the Southern Lagoon, New River Lagoon – all harboring tremendous wildlife and ecotourism potential. Crooked Tree Wildlife Sanctuary, a national PA only 25 km due north, envelopes many of these water systems and is a natural link to the CBS for establishing a biological corridor in the heart of the Belize District.

On the one hand, arriving at the CBS is like stepping back in time, to traditional rural villages with wooden houses built up on stilts, hand-made wooden *dories* (boats),

Figure 2.1 Map of Belize River Valley



monkeys that come to eat cashew fruit and mangos from the trees in the yard, and to newly arrived electricity into which the modern age is penetrating through television sets with American programs (Sutherland 1998; Hartup 1994). On the other hand, this area is a buffer zone for core wetlands habitat, situated in one of the country's largest system of waterways, and a future suburb of Belize City, with high-tech industrial parks built just 15 kilometers away, housing projects planned nearby, and the potential as an ecotourism center for the BRV.

Brief history of CBS

The CBS began as an opportunity for primatologist Dr. Robert Horwich and plant ecologist Dr. Jonathan Lyon to inform rural residents of the great biological assets of the area. Local residents established a grass-roots, voluntary sanctuary on private lands for the protection of the endangered, but locally abundant, black howler monkey, *Alouatta pigra* (Horwich and Lyon 1988, 1990, 1995). Local membership at inception in 1985 was comprised of eleven landowners with properties along 8 sq km (800 hectares) of the Belize River at the main village of Bermudian Landing (BL). These members pledged voluntarily to leave a strip of "bush" (wild forest/jungle) along the river, to not cut trees along property lines, to leave a strip of forest when large areas are cleared, creating an aerial corridor for the monkeys, and to save food tree species for the monkeys.

The sanctuary's four main goals were: 1) conservation of black howler monkeys and other wildlife, 2) education about local flora and fauna, including the opening in 1989 of the CBS natural history museum, interpretive trails, and a guidebook, 3) research on howler populations, including tagging and census as well as research on other local flora and fauna, and 4) tourism, by inviting tourists to the area to see the monkeys and

stay at villager's homes (Horwich and Lyon 1990, *pers. comm.* Dr. Rob Horwich, 2003). Management of the CBS pledges, museum, tour guides, and education programs was given to a local manager, under the guidance of the Belize Audubon Society (BAS), a national non-governmental organization (NGO).

By 1989, the voluntary membership in the CBS had grown to a total of 77 signed landowners from BL and six adjacent villages: Saint Pauls Bank/Big Falls (SP/BF), Willows Bank (WB), Double-Head Cabbage (DHC), Isabella Bank (IB), Scotland Half Moon (SHM), and Flowers Bank (FB), creating a protected corridor both north and south of BL along 33 km of the Belize River (Horwich and Lyon 1990). Howler monkey populations had also grown from the 1985 estimate of 800 monkeys within the expanded CBS' 47 sq km (4700 hectare) area, to over 1,000 monkeys by 1988 (Horwich and Lyon 1990), and to more than 1,500 monkeys by 1996 (Bruner and Horwich 1996), nearly doubling the howler populations in a little over ten years.

A landowner survey was conducted in 1988 to assess the demographics of CBS residents, land and natural resources uses, and conservation attitudes of the participating pledged landowners (Hartup 1989; 1994). Using this 1988 survey as a guide, longitudinal studies were conducted in 1992 and 2000 to re-examine the CBS model by similarly surveying pledged landowners and assessing 1) landowner attitudes towards conservation of monkeys, 2) participation in ecotourism services and distribution of tourism benefits, 3) the successes and/or failures of CBS management, and 4) the kinds of future development that were supported by CBS residents (Bruner 1993).

METHODS

Survey samples and study periods

All residents of the seven villages in the CBS area comprised the survey population.

Individuals were chosen as the units of analysis, instead of households, because the CBS was founded by individuals pledging both their private lands and their efforts for protection of the monkeys. In 1992, a sample of pledged landowners was taken from the sample frame of all recorded or known individuals who had pledged. The sample was based on the availability of pledged individuals in the CBS villages at the time of the study.

Additionally, residents who had not pledged but who either offered tourism services or lived in areas that might encounter tourists were included in the study, using snowball-sampling techniques (Bernard 1995). In 2000, the study sample was chosen to include as many of the same individuals as were interviewed in the 1992 study as available, as well as adult children of the original pledged landowners, and new tourism business owners. Data were collected in all seven of the CBS villages over a five-week period in August-September 1992 and over a four-week period in April 2000. In each study, two researchers were used (the author and an assistant). Researchers elected to concentrate on interviewing individuals in one village at a time, while staying at the home of a resident, if possible.

Data sources, landowner questionnaire, and analysis

Data sources were formal and informal interviews, on-site records, and published materials on the CBS (Bruner 1993; Hartup 1989, 1994; Horwich and Lyon 1990). In 1992, 126 individuals were interviewed in the seven-village area. In 2000, 100 people

(90 interviewees, 10 key informants) were interviewed; 56 people were the same in 1992 and 2000. In addition to these individual interviews, both studies included informal meetings with local residents, planned meetings with representatives from NGOs working in the area, such as Programme for Belize (PfB), Belize Audubon Society (BAS), Belize River Valley Association (BELRIV), and government officials, such as the Ministry of Rural Development and Culture. Corroborative data on landowner income, tourist numbers and services, and signed pledges were obtained from CBS museum records, BAS records, and previous and current village maps of households, infrastructure, and land holdings.

Semi-structured questionnaires were used to direct the formal personal interviews with residents and key informants. Interviews were usually given in a two-hour period at the resident's home or place of business. Most questions were open-ended to allow for a full range of responses by landowners. Survey questions addressed five main topics: 1) conservation attitudes towards monkeys and the CBS, 2) personal and community benefits from the CBS, 3) tourism activity and landowner participation, 4) knowledge of and feelings towards management and its success, and 5) future development issues and options.

Twenty-three of the 46 questions (50%) in the 1992 survey were identical to Hartup's 1988 survey questions (Hartup 1989; Bruner 1993), in order to assess changes in landowner conservation attitudes and benefits, and attitudes towards tourism in the four-year period. The 2000 survey instrument repeated the 1992 questions, and added 12 new questions on management and current developmental issues. As in 1992 (Bruner

1993), all economic data were recorded and are presented here in Belize dollars (B\$1 = US\$0.50).

Responses were grouped into pre-existing categories (Hartup 1989; Bruner 1993) or new categories, and frequencies totaled. Due to the open-ended nature of the questions, multiple responses were possible, and a percentage greater than 100% was common. Two-tailed t-tests were conducted, at the 95% confidence level, on selected responses to assess significant changes between study periods.

RESULTS

Key informants

In 2000, ten individuals were interviewed from the sample population of village leaders, wildlife researchers, and local NGO staff. Their responses provided a gage on the status of the communities, and helped to document current issues and conditions under local consideration at the time of the study. Some of these were: a large housing development in WB, the formation and goals of the Creole Heritage Center (CHC), the plans for BELRIV, the lack of jobs in the area, the absence of benefits from CBS to village residents, the accomplishments and goals of the CBS management, and the need to improve CBS management and its communication between CBS and landowners.

Key informant interviews were also used as a research training and testing opportunity for validity between the author and her assistant.

Pledged landowners and pledged lands

Pledges

Over the 15-year period between 1985 and 2000 of the CBS, 91 members joined the original eleven, for a total of 102 members (Table 2.1, Figure 2.2). Of these 102

members, 27 were deceased by 2000, 8 members moved away from the CBS, and 6 members had sold their pledged properties, for a total of 41 “lost” pledges. This left only 61 members from the total 102 living in the CBS area.

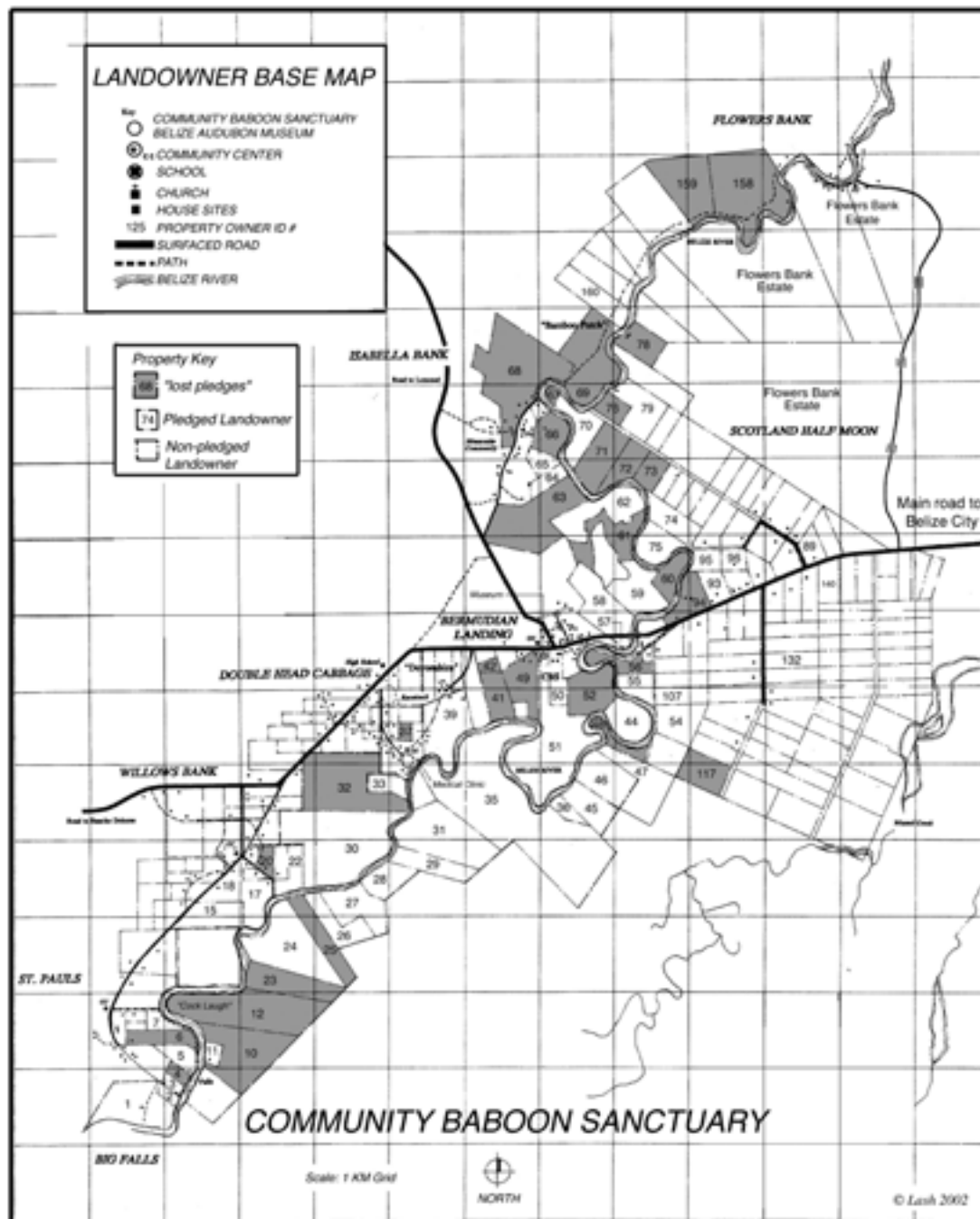
Bruner (1993) and Hartup (1994) both documented a greater number of pledged landowners moved away from the CBS to urban centers. By the 2000 study, several of these landowners had returned to the CBS or were still managing their lands from Belize City, and so were counted in the 61 total.

Additionally, four properties of deceased members passed onto adult children who then signed their own pledge, increasing the total to 65 members. Nevertheless, as of April 2000, 37 of 102 (36%) pledged lands were currently in the hands of unsigned relatives or newcomers to the CBS area, leaving large tracts of CBS forests unprotected and subject to unrestricted (by voluntary measures) development. See shaded parcels on Figure 2.2 for all known locations of “lost pledge” lands in 2000.

In 1992, 64 of 70 (91%) available pledged landowners were interviewed, ranging in ages from 27 to 90 years, with a mean of 55 years, s.d = 14.5 years, median of 55 (Bruner 1993). In 2000, 45 of 65 (68%) available landowners were interviewed, ranging from 31 to 90 years in age, with a mean of 59 years, s.d. = 16 years, median of 58. With 26% mortality of CBS members (over 15 years), it is a priority that pledges be obtained from the next generations, as well as new landowners, particularly those from other cultures such as the Chinese in BL, SHM, and WB, if the CBS is to remain viable. Yet there was concern voiced by interviewees that children may decide not to sign the pledge:

“Farming equals the older generation. With my generation there is a negative attitude towards farming. [We] send kids to schools so they won’t have to farm. Also, colonial slaves are equated with farming. [The] younger generation and Chinese have a different agenda” (Interviewee #156, 2000).

Figure 2.2 CBS pledged landowner map with “lost pledge” parcels, April 2000



[A composite drawing made by Mr. Nevin Lash. Property data were compiled from the Department of Land and Surveys' maps of the southern villages, and SHM properties from Mr. Ray Moody, Chairman, shown in Bruner (1993), with modifications in 2000. Flowers Bank properties were a composite of Lyon and Horwich (1996) and local residents' April 2000 drawings and input.]

Table 2.1 CBS pledged landowners, April 2000

#	Map #	Name	*	#	Map #	Name	*
1	1	Eddie McFadzean		54	50	Fallet Young	
2	3	Wallace Revers (wife Orma)		55	51	John Swift	D
3	4	Herman Williams	D	56	51	Roy Young (Alvin's son)/Nature Resort	
4	5	Kent Thompson (wife Kathleen)		57	54	Roy Joseph	
5	5	Matthew Thompson	D	58	117	Francis Baisar	M
6	6	Marta Rogers	M	59	55	Paul Joseph (wife Geraldine)	
7	7	(Marsella) Estella Cassasola		60	56	Sydney Russell	S
8	10	Basil Thompson (wife Olive)	D	61	57	Edna Baptist	
9	11	Bernice Cassasola		62	58	Elston Wade	
10	12	Eustace Pakeman	M	63	59	Alvin Young	
11	15	Oswald McFadzean (wife Vaicina)		64	59	Camille Young, Sr.	
12		Orlin Casasola (w. Keckdelia)		65	60	Bernard Herrera (w. Florita Baizer)	D
13	26,28	John McFadzean, Jr.	R	66	61,76	Vincente Herrera	D
14		Albert Ferman (w. Kristina)		67	62	Raymond Lord	
15		Manny McFadzean	D	68	63,71	Edward Herrera	D
16	17,18,24	Ruben Belisle	D	69		Ralph Flowers (wife Jean)	D
17	17,18,24	Wilward Belisle (Ruben's son)	R	70		Rudolph Joseph (wife Joyola)	D
18	20,23	Joe Roca (wife Olive)	D	71		Nicolas Baisar	
19		Clinton Roca (Joe's son)		72		John Perez, Sr.	
20	22	Albert McFadzean		73	52	John Link (sold to H.Monkey Lodge)	D
21	25	Leopold Pook (wife Annie)	D	74		Clifton Young	M
22	26,28	John McFadzean, Sr.	D	75	64,69	Walter Banner, Sr. (wife Matilda)	S
23	27	Gilbert Flowers		76	65	Orlando Salas (wife Zonia)	
24	29	Randolph Young		77	66	William "Buck" Hyde	M
25	30	Robert Stephenson (5 sons)	D	78	67	Eduardo Eck (wife Lucia)	D
26	30	George Stephenson (Robert's S.)		79	68	Allan Herrera (wife Nimi)	M
27		Harold Sutherland		80	70	Dan Lanza	
28		Charles McFadzean, Sr.		81	72	Emilio Lanza	S
29		Michele Belisle		82	73	Horace Hulse (wife Inez)	D
30		Lloyd Stephenson, Sr.	D	83	74	Joe Lanza	
31		Lloyd Stephenson, Jr.	R	84	78,160	Dudley Hendy	
32		George Flowers	D	85	78	Edwin Hendy (wife Dellis)	D
33	31	Peter Harris		86	79	Melford Hendy (Canadian Resort)	
34	32	Charles Wingo	S	87	75	Joseph Arana	
35	33	Roy Talbert (wife Rita)		88	89,140	Orlando Dawson	
36	35	Maud Armstrong		89	93,95	Recardo Flores	
37	36	Bert Young		90	94	Thomas Myvett (wife Idolly)	D
38	37	Casmore Martinez	M	91	96	Anastacio Soler	
39	37	Lloyd Martinez	D	92	132	Wain Moody (Sarita's son)	
40	39	Selvyn Jeffords		93		Harold Arnold	
41	41	Edwin Pitts	D	94		Thomas Flores	
42	42,48	Benjamin Baptist, Sr.	D	95	FBE+	Vallon Hendy	
43	44,107	Benjamin Baptist, Jr. (now Sr.)		96	458	Henry Dawson	S
44	45	Lloyd Flowers (wife Joyce)		97	FBE+	Linnette Rhaburn	
45	46	Cardinal Nicolas		98	FBE+	Cordell Robinson (wife Sharon)	
46	47	Charles Stump		99	FBE	Cecil Flowers (wife Daisy)	
47		Lawrence Flowers		100	FBE+	Egbert Robinson (wife Roselle)	
48		Randolph Baptist		101	FBE	Calbert Hinks	
49		Norris Harris		102	FBE+	Ruben Rhaburn	
50		Emmanuel McFadzean		103	FBE	Huson Baptist	M
51		Irma Nicholas Jones		104	FBE	Robert Mitchell	D
52		Winston Staine		105	FBE	Eleanor Mitchell (Robert's daughter)	R
53	49	John Humes	D	106	459+	Lincoln Flowers	S

* Notes: D= Deceased M= Moved away, S= Sold pledged property, FBE= Flowers Bank Estate, R= Relative

Forty-five additional residents were interviewed in 2000 who had not signed the pledge, or who had sold their pledged lands. Their ages ranged from 18 to 90 years, with an age mean of 54 years, s.d. = 18 years, median of 50 years. Of these 45 non-pledged residents, 51% said that they would sign a pledge, 33% said they would not sign, and 16% didn't know. Reasons such as a lack of information, current management was ineffective, and not seeing any personal relationship with CBS, were given for the "don't knows" indecision, but with changes in these areas, signing would be possible.

Chinese residents declined to be interviewed. It seemed to the author that they were much like the Mennonites in the area who simply wanted to live autonomously, following their own cultural practices and beliefs, and to not get involved in village politics or tourism (*pers. comm.*, Brother Benjamin Jackson, April 2000). Their land practices included rice farming, and seemed to be in accordance with the general management of the sanctuary. In contrast, their wildlife values differed from Creole villagers, as hunting of monkeys by Chinese residents was reported (see conservation results).

Village populations

The number of houses and roads recorded in each village increased dramatically from 1992 to 2000. What were foot paths and horse trails in 1992 became vehicular dirt roads by 2000, largely due to the expansion of electricity into the area, opening up areas for new housing and additional land clearing. Originally separate villages, Big Falls (BF) and Saint Pauls Bank (SP) were considered as one extended village of SP/BF by 1992. Improvement of the old trail between these two villages, as well as extensive annual flooding along the riverbanks, provided the incentive for most riverside residents of BF to

residents. This corresponds to a household mean of 5.4 residents in 2000, and can be applied to estimate the 1992 population at 1,166 people. Hartup (1994) recorded the seven-village population in 1988 to be 400 people, indicating a probable low estimate in 1988 and a steady population growth over the 12 year-period.

Land tenure

In 2000, 56% of CBS residents interviewed held multiple parcels of land, usually one parcel for their house and another parcel or more to farm or raise cattle on. Land can be held in two ways, either in freehold title or leased from the government. A comparison was done between 1988 (Hartup 1994) and 2000 results of the number of landowners holding parcels 1) all with titles, 2) all with leases, or 3) a combination of some titled lands and some leased lands (Table 2.3).

Of the 88 residents surveyed with lands in 2000, 72% held some or all of their parcels in title, a non-significant increase from the 59% of landowners in 1988 with some or all titled lands ($p > 0.05$). There was a significant increase from 1988 (16%) to 2000 (38%) of residents with only titled lands ($p = 0.01$, 2-tail t-test, $DF = 130$). This indicates that more landowners are obtaining title to their leased lands, or as is often the case, working with brothers and sisters on titled lands which have passed down from parents, have yet to be divided, and where the parent's (or grandparent's) name remains on the title. Correspondingly, there was a significant decrease in the percentage of landowners holding some or all of their parcels in lease from 84% in 1988 to 62% in 2000 ($p = 0.01$, 2-tail t-test, $DF = 130$).

Table 2.3 Comparison of land tenure status of CBS lands, 1988† and 2000, by percentage of villagers interviewed

†(Hartup 1994); *p-value is significant at 95% level, NS = not significant		
<i>Land Tenure Type</i>	1988† (<i>n</i> =44)	2000 (<i>n</i> =88)
Titled only	16%	38%*
Leased only	41%	28%
Combination of Titled & Leased	43%	34%
	100%	100%
Total with title	59%	72% NS
Total with lease	84%	62%*

One-hundred-forty-five parcels were recorded from interviewees in 2000, for a total land area of 2545 hectares. Parcels ranged in size from 0.04 ha to 202 ha, with a 17.6 ha mean (s.d. = 26.6 ha). Leased lands (66 parcels) made up 1252 hectares, and titled lands (79 parcels) totaled 1293 hectares. A one-way analysis of variance was applied to all 2000 land holdings to assess the relationship between size of parcels and land tenure status. As in 1988 (Hartup 1994), the 2000 study found no significant difference between leased versus titled lands and parcel size ($p > 0.05$).

What is noteworthy is that the average parcel size has decreased by 60% since 1988 (mean = 43 ha), although the range of parcel sizes has remained the same. This trend towards smaller lots supports 2000 data on the increasing village populations and the need for additional housing for adult children and their families, while the few remaining large lots are passed down from the older generation to be distributed among children or sold. It also points to the distinct probability of village encroachment into previous milpa and/or livestock lands, and an increased scarcity and cost of land.

Seemingly contrary to the findings were interviewees' indications that titles were not seen as necessary nor preferred. Residents shared that not only are taxes higher on titled land, but also surveys for title are costly and sometimes take years for the government to complete. One landowner explained, "Only reason people get title is if they want to sell it" (Interviewee #140, 2000). In the Belizean system, transferability of property is possible not only through formal title, but also through a simple application to government for leased land that has been "worked" (cleared for agriculture or livestock, according to a management plan). In this way, "idle" land is able to change hands, at times without the knowledge of the original owner. One example of this kind of leased land transfer "theft" was recorded during the 2000 study, and more were eluded to in the interviews.

Property values

Taxes on titled lands were raised in 1998 by the newly elected government from \$0.84 to \$1.83 per hectare per year. Taxes on leased lands from government are calculated at a lower rate than titled lands and remained in 2000 at their pre-1998 rate, providing an incentive for landowners to lease from the government rather than to buy. However, if the landowner wants to own the leased property (receive title), the government allows the leasee to deduct the total amount of land taxes paid on a property from the purchase price.

Property values increased dramatically in the CBS area from as little as \$49.50 per hectare for riverside land and \$18.50 per hectare for "pine ridge" land (drier lands away from the riparian corridor), and as great as \$1052.00 per hectare riverside land, to over \$3700.00 per hectare. Villagers reported selling parcels for \$495.00 per hectare,

\$1052.00 per hectare, \$3700.00 per hectare, and \$7400.00 per hectare with a concrete house. These increases in sale price are encouraged by the influx of foreigners with access to capital and willingness to pay. Though not confirmed, a third party reported that Chinese buyers were paying as much as \$49,380/ha. (Key Informant #8,2000). Eleven property sales to foreigners were noted in the CBS villages between 1992 and 2000, with two of these new owners opening tourist “resorts,” and a third resort /“eco-village” planned by a Belizean/USA partnership. The six pledged lands sold (listed in Table 2.1) totaled an estimated 391 hectares.

Flowers Bank case

Flowers Bank Estate (FBE) lands are a case and point, illustrating these dramatically changing issues between taxes, titles, and the influx of non-local buyers. FBE is a titled, one-parcel conveyance of 1010 hectares along five kilometers of the Belize River at FB. Originally, it was bought from an older and larger private, non-government land holding by 21 co-purchasers. Four of these original owners were alive in 2000, but only one, Mr. Cecil Flowers, resides in Belize. This parcel has yet to be surveyed, divided, and titled to descendents, although residents have knowledge of their acreage due. Because the village of FB consists of only 18 families, almost all village residents have a claim to FBE land. With the security of such a large land holding under title, residents have not concerned themselves with changing the status of the parcel, nor of the changes that dividing it would bring to village life. In 2000, there were conflicting reports as to the status of FBE land taxes – one resident claimed that the taxes were paid up-to-date, while another said that FBE owed back taxes of \$50,000. As explained,

“[We] haven’t paid in a while, but what happened before that was that the man people paid to take taxes to the land office pocketed the money, and then died! No one knows if government will take back the land and re-sell it...I’ve lived here all my life without title” (Interviewee #201, 2000).

There is evidence to suggest that the government has taken back and re-sold some of the FBE lands. A Belizean developer, who bought 202 hectares of adjacent titled lands, claims to have purchased FBE community land as well (ironically the same land on which the community had planned its cabañas, restaurant, and trails). He plans to build an “Eco-village,” a “sanctuary within the sanctuary,” capitalizing on the quaintness of this traditional village beautifully set on the winding Belize River, with access to multiple waterways and wildlife nearby. In developing his sanctuary, he acknowledged that “the 18 families in FB are worth \$1,000,000 each” with their FBE assets and prime ecotourism location and ambience (Interviewee #217, 2000). Additionally, he has brought investors from the United States as prospective partners in both the resort and in purchasing more lands nearby. The unique opportunities for villager employment and the potential vision of this pristine area as an ecotourism center is counterbalanced by the threats to village lifestyle and local control of future growth and development of CBE ventures.

Conservation attitudes

Hunting

Hunting game meat for family use is a tradition with CBS residents. In 1988, Hartup (1994) reported that 65% of villagers hunt, and over half of these more than once a month. By 2000, the government had enacted a fine of \$2000 for hunting without a license. Because licenses were difficult to obtain, landowners expressed dismay over the effective prohibition of hunting even occasionally for the family table. However, Jones

and Young (2002:8) report in their 2000 study that hunters in CBS still hunt from 1-3 times a week to “almost never,” and favor gibbon (paca) and deer. Their findings also support this study’s data that howler monkeys were never hunted for meat by the Creole people, hence their abundance in the area at the inception of the CBS.

While 52% of interviewees in 2000 reported that they had never seen or heard of someone hurting a monkey, 34% acknowledged that when they were young, prior to the formation of the CBS, children used to use monkeys as target practice with sling shots or guns, or take baby monkeys as pets (killing the mother). The only incidences reported since the formation of the CBS were either accidents (4%) or the hunting of monkeys by new Chinese residents (11%) who killed several monkeys for food, and after outcries by CBS members and learning monkeys were protected, ceased to harm them. Jones and Young (2002) report one CBS residents admitting to shooting a mother howler to obtain the baby to sell into the pet trade.

Protection of monkeys

CBS landowners enthusiastically support protecting howler monkeys. This support has increased slightly over time, from 94% in 1988 (Hartup 1989, 1994), to 98% in 1992 (Bruner 1993) and to an astonishing 100% in 2000. Conversely, when asked, “Does CBS help protect baboons?” residents responded “yes” 100% in 1988, 95% in 1992, and 94% in 2000.

Table 2.4 lists the ways in which landowners thought that CBS helps to protect monkeys. The major response from villagers in both 1992 (56%) and in 2000 (40%) was that CBS stopped hunting and enforced laws, thereby protecting monkeys. However, this was a significant decrease from 1992 to 2000 ($p = 0.02$, 2-tail t-test, $DF = 214$), possibly

indicating an increased security of howler populations. Second-highest was “Tourism/economic benefits” in both 1992 (17%) and 2000 (26%), a non-significant increase ($p > 0.05$). This is a category which was not even mentioned in 1988 (Hartup 1989, Bruner 1993). By this response, residents acknowledged that the CBS promotes monkey protection by making howler monkeys a marketable commodity for tourists.

Table 2.4 Villager attitudes of the ways that the CBS protects monkeys			
† (Hartup 1989, 1994); ‡ (Bruner 1993) *p-value is significant at 95% level, NS = not significant			
<i>How does CBS help protect baboons?</i>			
	% in 1988† (n=50)	% in 1992‡ (n=126)	% in 2000 (n=90)
Stop hunting/enforce laws	12	56.3	40.0*
Tourism/ Economic Benefit	-	16.7	25.6 NS
Awareness/education	22	15.1	21.1 NS
Keep trees for baboons	-	15.9	18.9
Research	-	-	10
Increased appreciation	4	7.1	5.6
\$BL Only	-	-	3.3
Locals Protect w/o CBS	-	-	3.3
Stop pet trade	2	4	2.2
Don't know	-	0.8	1.1
CBS Management Not Enough	-	-	1.1
Need secure Reserve	-	-	1.1
Monkey Area = Future Housing	-	-	1.1
No direct response	58	0	0

“Awareness/education” (which non-significantly rose between 1992 and 2000, $p > 0.05$) and “keeping trees for baboons” point to both the educational and practical components of the CBS pledge and how the pledge is positively protecting monkeys and their habitat.

Villager attitudes as to why there is an interest in monkeys and why they are protected by the CBS are listed in Table 2.5 and Table 2.6. When asked “Why is there an interest in the monkeys?” residents replied in 1992 with a new category not found in Hartup’s 1988 study, “conservation/protection,” identifying the primary goal of the CBS. This conservation ethic can be seen in other responses to “Why should monkeys be protected?”, such as “should not hunt or harm”, “rare, losing trees, possible extinction”, “have place in wild”, and “to stop pet trade” indicating an increased awareness by villagers of various conservation issues and laws pertaining to protecting monkeys and other wildlife in Belize. The response, “unique/strange” to why monkeys were interesting, significantly decreased from 14% in 1988 to 3% in 2000, indicating that these animals had become commonplace over the years in the sanctuary ($p = .0187$, 2-tail t-test, $DF = 138$).

In response to “Why should monkeys be protected?” two particular characteristics of monkeys are seen as important by villagers: that they are “humanlike” and “harmless.” All three studies reported a high percentage of respondents stating that monkeys are “harmless,” increasing from 15% in 1988 to a dominate 45% in 1992 and 39% in 2000. This harmless view of monkeys reflects the positive attitude of Creole Belizeans towards animals that do not disturb humans or crops, and therefore can be protected, as opposed to the jaguar or crocodile, which are not harmless (this distinction was made by interviewees in both 1992 and 2000). It is this view of the “harmless” howler monkey that made the founding of the CBS possible.

Table 2.5 Villager attitudes towards interest in monkeys

† (Hartup 1989, 1994); ‡ (Bruner 1993),

*p-value is significant at 95% level, NS = not significant

<i>Why is there an interest in the baboon?</i>	% in 1988† (n=50)	% in 1992‡ (n=126)	% in 2000 (n=90)
Tourist attraction	16	21 NS	28 NS
Humanlike	18	17	23 NS
Harmless	16	18	16
Rare species/many here	12	14	16
Don't know	8	9	12
Easy to see/Tame	6	2	11
Unusual call/noise	12	5	10
Natural behavior/Active		12	9
Conservation/protection		14	8 NS
Attractive	10	9	7
Part of wildlife	4	5	7
As pets/zoo animals	4	3	6
Increased awareness/education	6	2	6
Unique/strange	14	4	3*
Human relative	2	1	2
Jobs/\$/Development			2
Research	4	5	1

The most significant change for the CBS occurred between 1988 and 1992 when villagers began to link protection of monkeys to economic, not just intrinsic, values.

“Tourism/economic benefits” was scored as a reason for protection in almost one-quarter of the 1992 interviews, a significant increase from Hartup’s 4% ($p = .003$, 2-tailed t-test, $DF = 171$, Bruner 1993), and rose to 30% in 2000. “Tourist attraction” was the most cited response in both 1992 and 2000 for why there is an interest in monkeys. It is clear that interest in and protection of monkeys is tied not only to conservation goals but to economic goals as well. As one resident explained, “Sure they need it [protection]; [we]

used to kill them and then tourists came in and started to save them” (Interviewee #188, 2000).

Table 2.6 Villager attitudes towards protection of monkeys			
† (Hartup 1989, 1994); ‡ (Bruner 1993), *p-value is significant at 95% level, NS = not significant			
<i>Why should baboons be protected?</i>	% in 1988† (n=47)	% in 1992‡ (n=126)	% in 2000 (n=90)
Harmless	15	45	39
Tourism/economic benefits	4	24*	30
Losing trees/Rare/Possible extinction	13	24	23
Should not hunt or harm	21	16	18
Humanlike	-	5	10
Have a place in wild	2	8	8
Other (non-economic)	6	6	7
Save for next generation	-	-	4
To stop pet trade	6	0	2
Don't know	-	1	0
No direct response	38	0	0

Over the 12 years between studies, tourism has become a way of life for some residents and an expectation for others. This shift in values is clearly linked to the continued presence and growth of tourism in the CBS villages, and its associated economic benefits, and to the real commodity value that monkeys have in sustaining and promoting these tourism efforts.

Ecotourism – perceived benefits

Identifying benefits: community versus personal

In 1990, the BAS management of the CBS expressed concern that only landowners in BL were receiving benefits, from tourism and other sources. They questioned whether this (perception or fact) was creating a lack of support from pledged landowners, possibly

jeopardizing their continued participation in the CBS. These questions and concerns prompted the 1992 study, and the subsequent study in 2000. In order to discover if landowners felt that they were losing benefits, then what constitutes a “benefit” for local residents needed to be identified. Villagers were asked a series of questions on who receives benefits and what those benefits were.

When asked, “Are there benefits to local people taking part in the CBS?” a consistent 80% to 86% of interviewees responded positively in all three study periods (Table 2.7). This total positive response, however, varied significantly from study to study because the “yes” category was subdivided into two responses: “yes” and “only some people”, referring to villagers’ perception that only the people who live in BL get benefits. The 1988 response of 80% “yes” (Hartup 1989) changed into 64% “yes” and 22% “only some people” in 1992 (Bruner 1993). The gap widened further by 2000, when villagers responded “yes” only 43% of the time, a significant decrease from 1992 ($p = 0.001$, 2-tail t-test, $DF = 218$). Correspondingly, there was a significant increase in the response, “only some people” from 22% in 1992 to 40% in 2000 ($p = 0.0046$, 2-tail t-test, $DF = 214$).

Economic benefits, in the form of tourism, jobs, and income, have clearly become the major focus of villagers’ concept of benefits. When asked to identify benefits to local people (Table 2.7), the response of “tourism” significantly increased from 10% in 1988 to 53% in 1992 ($p = 0.0001$, 2-tail t-test, $DF = 164$), and remained high in 2000 (a non-significant increase to 64.8%, $p = > 0.05$). Also during this period, the response “education” as a benefit decreased significantly from 20% to only 6% ($p = 0.0033$, 2-tail t-test, $DF = 174$). In 1992, all interviewees responded directly to the question (0% “no

direct response”), indicating that they knew what benefits were, unlike the 40% “no direct response” in Hartup’s study in 1988 (Hartup 1989; Bruner 1993).

Table 2.7 Benefits to local people in general from CBS			
† (Hartup 1989, 1994); ‡ (Bruner 1993), *p-value is significant at 95% level, NS = not significant			
<i>Are there benefits to local people taking part in the CBS?</i>	% in 1988† (n=50)	% in 1992‡ (n=126)	% in 2000 (n=90)
yes	80	64.3	43.3*
only some people		22.2	40.0*
don't know	8	7.9	13.3
no	2	5.6	3.3
no, not yet	10		
<i>What are they? [benefits to locals]</i>	% in 1988† (n=50)	% in 1992‡ (n=126)	% in 2000 (n=90)
Income/jobs	15	13.5	76.1*
Tourism	10	53.2*	64.8 NS
LO Payment			11.1
Protect the baboons	12.5	9.5	7
Parties/meetings	2.5	4	7
Education	20	5.6*	5.6
None		1.6	5.6
Don't know		7.1	4.2
Good feeling/satisfy	5	0.8	2.8
Help families		0.8	2.8
CBS loans			2.2
National Pride			2.2
Personal contact	5		0
Development of area	2.5		0
No direct response	40		0

By 2000, villagers had solidified the distinction between “tourism” (direct participation in tourism services) and “income/jobs” (participation in CBS jobs or direct monetary payments to landowners). Seventy-six percent of respondents indicated that benefits to locals were “income/jobs”, a significant increase from 14% in 1992 ($p = 0.0001$, 2-tail t-test, $DF = 214$).

Table 2.8 Personal benefits from CBS

† (Hartup 1989, 1994); ‡ (Bruner 1993),
 *p-value is significant at 95% level, NS = not significant

<i>Can you describe any benefits you are personally receiving from the CBS?</i>	% in 1988† (n=47)	% in 1992‡ (n=126)	% in 2000 (n=90)
None	23.4	69.0*	72.2
Tourism/income	17	20.6	27.8 NS
Protect the baboons	2.1	7.1	0
Parties/meetings	8.5	6.4	0
Museum	4.3	3.2	0
Education	6.4	2.4	0
Good feeling/satisfy	8.5	2.4	0
T-shirt/Certificate	14.9		0
Personal contact	10.6		0
No, possibly future	10.6		0
LO Payment w/other benefit			4.4 (n=4)
LO Payment w/None			11.1 (n=10)

Connections between benefits and revenue were particularly clear from villager responses to “Can you describe any benefits you are personally receiving from the CBS?” (Table 2.8). While the 1988 study (Hartup 1989, 1994) listed “protect the baboons”, “museum”, “good feeling/satisfaction”, “T-shirt/pledge certificate”, “education”, and the annual “parties/meetings”, these responses were minimal in the 1992 (Bruner 1993) and absent altogether in the 2000. “Tourism/income” rose gently from 17% in 1988 to 28% in 2000 (not significant, $p > 0.05$), but the most telling response by landowners was “None”, indicating landowners believed that they received no benefits at all. This response increased sharply from 34% in 1988 (Hartup 1989) to 69% in 1992 (Bruner 1993; $p = 0.001$, 2-tail t-test, $DF = 171$), and remained high at 72% in 2000.

In 1998, for the first time in CBS history, the CBS management gave a monetary payment of \$125 to each pledged landowner. This landowner payment was mentioned as

a personal benefit in 2000 by 15% of the interviewees, 11% of whom received “no other benefits”, clearly making this payment an important contribution for continued landowner support.

In 2000, there was also a striking difference between villagers from BL and residents from all other villages in their responses of the “tourism/income” and “none” categories. In BL, where tourism is an integral part of life, 75% of respondents listed “tourism/income” as a personal benefit, with only 25% indicating “none” as their benefits. By contrast, residents in the other six villages of the CBS in total responded 67% with “none” and only 33% with “tourism/income,” illustrating the perceived disparity between BL and other villages.

This belief by landowners that all or most of the personal benefits (now monetary in nature) are only in BL, was seen also in responses to the question “Who benefits most from CBS?” (Table 2.9). This was not an open-ended question, and only provided four answers for interviewees to choose from: “just locals”, “all Belizeans”, “foreigners”, or “all equally.” In 1988 there was an altruistic tone to answers, with “all equally” at 59% and only 10% stating “just local residents” (Hartup 1989, 1994). By 1992, other categories such as, “only BL workers”, “don’t know”, and a combination of “foreigners and BL workers” were presented by respondents, illustrating that villagers could not express their beliefs in only the four provided.

In 2000 the “just local residents” category split even more into not only “only BL workers” but also “only one family”, “BAS”, and “unlicensed guides” – all of which are a part of BL and the checkered history of CBS and its management. This trend toward perception of local and BL benefits only was also illustrated by a significant decrease in

“all equally” from 59% in 1988 to 27% in 2000 ($p = 0.0001$, 2-tail t-test, $DF = 131$) and in “all Belizeans” from 24% in 1988 to 11% in 2000 ($p = 0.0392$, 2-tail t-test, $DF = 137$).

Table 2.9 Who benefits most from CBS?

† (Hartup 1989, 1994); ‡ (Bruner 1993)

*p-value is significant at 95% level, NS = not significant

<i>Who benefits most from CBS – just locals? all Belizeans? foreigners? or all equally?</i>	% in 1988† ($n=49$)	% in 1992‡ ($n=126$)	% in 2000 ($n=90$)
Only BL workers		26.2	30
All equally	59.2	31	26.7*
Just local residents	10.2	11.9	23.3 NS
All Belizeans	24.5	18.2	11.1*
Don't know		4	3.3
Only 1 Family			3.3
Foreigners	6.1	6.3	1.1
BAS			1.1
Unlicensed Guides			1.1
Foreigners/BL workers		2.4	0

Identifying costs: community versus personal

One villager stated in 2000,

“Yes [monkeys need protection]. I don’t think we should kill out all the animals. But if they’re destroying fruits you depend on for a living, the CBS should pay me for it -- whoever wants baboons should pay for it” (Interviewee #170, 2000).

Perceived costs to locals for pledging their lands to the CBS (Table 2.10)

expanded from simply “setting aside land” (14%) for the monkeys, and “time” volunteered to help with projects or meetings (27%) in 1988 (Hartup 1989) to include destruction of “crops/fruit” (26%) and a significant increase in cost of “setting aside land” (56%) in 2000 ($p = 0.05$, 2-tail t-test, $DF = 28$).

Table 2.10 Costs to CBS villagers

† (Hartup 1989); ‡ (Bruner 1993),

*p-value is significant at 95% level, NS = not significant

<i>What are the costs to local people for having the sanctuary here?</i>	% in 1988† (n=7)	% in 1992‡ (n=20)	% in 2000 (n=23)
Set aside land	14.3	25	56.5*
Crops/Fruit	-	-	26.1
No pledge = No income	-	-	8.7
Pledge = honor, not income	-	-	8.7
Anniversary work	-	20	4.3
Time	28.6	5	4.3
Pledge = tourists on land	-	-	4.3
Land taxes	-	20	0
Loans/business costs	14.3	15	0
Attending meetings	-	10	0
Don't know	14.3	10	0
Lack of privacy	-	5	0
Leasing land	-	5	0
Labor/personal	28.6	0	0

Other costs listed demonstrated a change in thinking by landowners about the value or meaning of the pledge. Landowners began expressing, not only in this question but in others as well, that the reason for the pledge in the first place was to allow tourists on their lands to see the monkeys, as seen by “Pledge = tourists on land” at 4%. As residents clearly stated,

“[Villagers] give permission for tourists to pass and monkeys to cross, and [my husband] signed the pledge, allowing people on his riverside pasture” (Interviewee #175, 2000).

“ I pledge they can come on land and see baboon anytime they are ready – I give them that” (Interviewee #209, 2000).

Conversely, 9% of respondents indicated that they still valued the voluntary, non-monetary nature of the pledge by answering “Pledge = honor, not income.”

With the mention of “No pledge = No income” residents lamented that if a landowner lives in the pine ridge (away from the river) and has no monkeys, then s/he is not able to sign the pledge and therefore not able to receive a landowner payment, such as the \$125 that was given to all pledgers. Non-members in both 1992 and in 2000 felt that the CBS should be made up of all residents from the seven CBS villages, not just landowners along the river. Whereas biologists see the need to protect monkey habitat, interviewees expressed that protection needs to be more than that – that the human community needs protection too. One villager put it into perspective, “We wonder why they protect them [monkeys] so much, more than people. Children don’t have food and clothes” (Interviewee #169, 2000).

Personal costs to villagers for living in the sanctuary are listed in Table 2.11. Over 80% of respondents replied, in both 1988 and in 2000, that they had no costs associated with the sanctuary. While “time/labor” decreased in importance over the twelve years, a new cost appeared in 2000, “fruit/crops”, indicating that the monkeys were now viewed by some villagers as competitors for resources. In 1992 and in 2000, villagers were asked if their benefits balanced costs. While only 18% said “no” in 1992, 42% replied “no” in 2000 (a non-significant increase; $p > 0.05$), most likely due to the decreased number of interviewees reporting personal benefits which could balance the costs (Table 2.9). Landowners were then asked, “What are the benefits that would balance costs?” In 1992 and in 2000, “tourism/income” was mentioned by 29% and 25% of the respondents. In 2000, all responses were monetary in nature, except for one educational response of do “school presentations” on wildlife conservation. One villager (12.5%) replied that there were no benefits (“nothing”) that could balance the costs.

Table 2.11 CBS villager personal costs

† (Hartup 1989, 1994); ‡ (Bruner 1993),

*p-value is significant at 95% level, NS = not significant

<i>What are your costs for having the sanctuary here?</i>	% in1988† (n=46)	% in1992‡ (n=126)	% in 2000 (n=90)
None	82.6		82.2
Fruit Crops			8.9
Set aside land	2.2		6.7
Time/Labor	16		5.6
Attending meetings	-		3.3
Indian Artifact need to be returned	-		2.2
Change the way farm	-		1.1
Pledge = tourists on land			1.1
Land taxes	-		0
Anniversary work	-		0
<i>Do benefits balance the costs?</i>		% in1992† (n=17)	% in 2000‡ (n=19)
yes		82.4	57.9 NS
no		17.6	42.1 NS
<i>If not, what are the benefits that would balance costs?</i>		% in1992 (n=7)	% in 2000 (n=8)
Tourism/income		28.6	25
Cooperative Agricultural Machinery			25
\$ to landowners			25
Nothing			12.5
\$ to communities			12.5
School presentations			12.5
Anniversary income		14.3	0
Fee for view baboons		14.3	0
Pay land tax		14.3	0
Help when in need		14.3	0
Set aside land		14.3	0

Ecotourism – actual benefits

Visitors

Tourism in the CBS is predominantly based on day-trips (71%) to view monkeys, and over half of all visitors arrive by private car (Hartup 1989). As more accommodations are built, this percentage will change to include more overnight stays and multiple-day activities. The museum in BL acts as a visitor center for all guests, who sign in and receive a guide to see monkeys. Some women in the village offer lunch as part of a package tour, and low-cost loans were given to a few families in the late 1980s to add rooms onto houses for overnight guests. BL has become the hub of tourism activity, due to its location at the Belize River bridge on the main road (where the old Ferry used to be), and because the CBS museum is located there. Other participating villages have similar if not better tourism assets (wildlife, scenery, marshes and lagoons), but few are well-organized into packages that attract tourists to these “outlying” areas (Bruner 1993).

Tourist numbers to the CBS have both grown and fluctuated over the years. CBS museum records indicate a total of 850 tourists in 1988 (Hartup 1989), 6000 in 1990, half of which were Belizean (Horwich 1998), 2700 tourists in 1992, half of which were Belizean visitors and school groups (Bruner 1993), over 4000 in 1995 (Horwich 1998) and 3500, 3100, and 3200 in 1997, 1998, and 1999 respectively (this study, from CBS Museum sign-in records). The Belize Tourist Board (BTB) reports an average of 4500 tourists per year from 1997 through 2001 (BTB 2003).

Tourism amenities

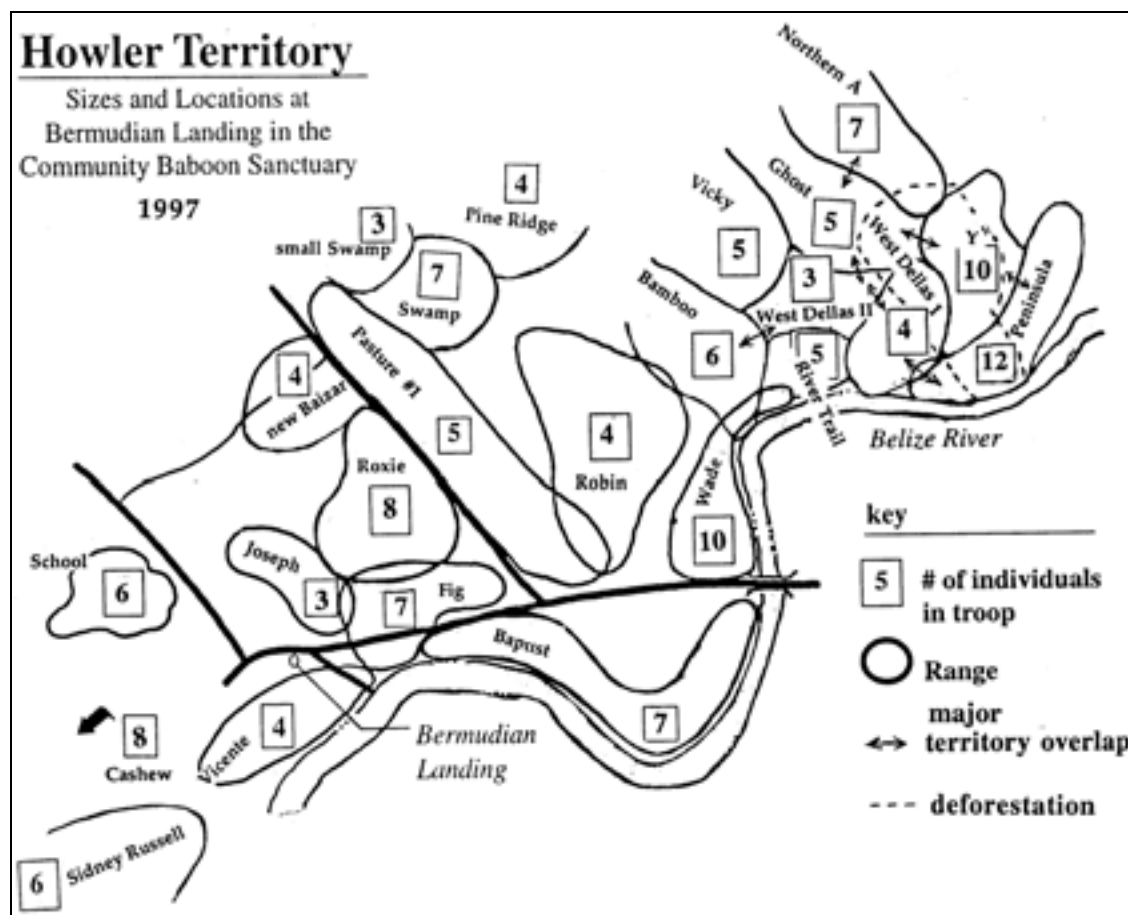
By 2000, accommodations and organized tourism activities had increased in both BL and some of the other villages. In 1992, there were only a scattering of small rooms in

people's houses to stay at, and three small cabanas in SP/BF. By 1997, an ecotourism lodge was open in BL, "owned and managed by a Belizean couple from outside the area" (Alexander 2000: 344). By 2000, this lodge had been sold to a U.S. owner who managed it on site. Additionally, another ecotourism lodge had opened close by, owned and operated by a Belizean family from the area. Both had six or seven cabanas each, and offered package tours. Additionally, a similarly-scaled "River Camp" opened in SHM (under foreign/ local partnership), and another was planned across the river in IB (by the same local extended family) to compliment the camp. The three cabanas in SP, run by one enterprising family in 1992, was down to one cabana, and had all but closed by 2000.

As for new attractions, a Jam Factory, processing cashew and mango fruit and nuts, was built in IB, and the Creole Heritage Center (CHC), a museum on the Creole culture, was built in 1996 in SP (opening in 1998), although both of these places were only open to visitors by appointment, thereby missing the passing tourists who were not with a group which called ahead. In 1992, there was a very popular Race Track for horse racing in DHC, but by 2000 it had closed and lay fallow. Unchanged was DHC's large sports playing field, where village and regional competitions were held. By 2000, new stores had opened in both BL and SHM with food, supplies, and cold beverages for both locals and tourists. A new pay phone was installed outside of one of BL's three main bars, virtually replacing the need to use the old community telephone.

The main monkey trails used by the CBS in both 1992 and in 2000 were across from the BL museum next to the school; the monkeys in this patch of forest were called "School troop" (Figure 2.3). The second choice for tourists in BL were trails in a large pasture leading to a cohune palm forest down near the bridge ("Wade troop"), although

Figure 2.3 Howler monkey troop territories in Bermudian Landing. CBS 1997



this troop and its trails were not being used in 2000 (Key Informant #2, 2000). In 1992, there also existed an extensive trail network in FB, and the CBS museum staff would send tourists to FB to see monkeys and to eat lunch made by the community women (Bruner 1993). By 2000, these trails were unused and overgrown, because the village was no longer marketed to tourists.

The 1992 study recommended that existing foot and horse trails between SHM, IB, and FB, and others along the river between WB and SP/BF be developed for tourists (Bruner 1993), but as of 2000 this had not been done. Instead, some of these had become full roads and lost much of their character for tourism. Additional services for tourists were guiding to see various wildlife and plants, canoeing, and horseback riding. In 1992

and in 2000, these services were offered in all villages (Table 2.12) but well-organized and marketed only in BL (by the CBS museum) and in SP (by the CHC).

Table 2.12 Tourist services offered by CBS villagers																
August 1992* (N = 126); April 2000 (N = 90)																
*(Bruner 1993)																
	TOTAL		BL		SHM		IB		DHC		WB		SP/BF		FB	
<u>Activities</u>	1992*	2000	1992*	2000	1992*	2000	1992*	2000	1992*	2000	1992*	2000	1992*	2000	1992*	2000
Offer Rooms	32	32	12	8	3	2	6	4	2	4	2	5	2	4	5	5
# of Rooms	58	72	25	24	3	2	10	12	3	14	4	8	5	4	8	8
# of Beds	66	81	28	28	4	2	11	12	3	17	6	7	6	6	8	9
Offer Meals	32	53	12	11	4	2	6	4	1	11	3	8	0	8	6	9
Offer Guiding	21	22	5	4	4	4	2	1	1	0	2	4	5	6	2	3
Offer Canoeing	23	27	5	5	2	0	1	2	2	3	5	4	5	5	3	8
# of Canoes	40	41	12	5	2	0	4	4	4	6	5	5	5	10	8	11
Offer Horse Rides	20	30	3	7	1	1	2	2	2	2	7	3	3	7	2	8
# of Horses	137	85	9	18	19	2	23	6	20	13	41	11	8	17	17	18
Stores/Pubs	17	7	6	4	1	1	2	0	4	1	1	1	1	0	2	0
Crafts	20	5	2	0	0	0	8	1	0	0	4	0	2	2	4	2

Tourist distribution

Both the 1992 and 2000 studies surveyed residents on their participation in tourism services. Interviewees were asked whether they offered accommodations, meals, guiding, canoeing, horseback riding, and if they were employed by someone in tourism. Details were obtained including the number of tourists that each resident had served in the last year and the income generated from those services. One participation in a service (e.g. canoeing) was counted as one tourist served. This number (in both studies) is most likely inflated as the same tourist may have participated in several services.

Figure 2.4 (graph with its table) illustrates the capture of the tourist market by residents from BL: 70% of all tourists served by interviewees in 1991-1992 (Bruner 1993), and 68% of all tourists served in 1999-2000. What is noteworthy is the increase in SP between 1992 and 2000 from 8% to 16%. This increase reflects the successful marketing of the CHC by Programme for Belize (PfB), a national NGO. Since 1998, PfB has routinely brought busloads of tourists to the CHC as a stop on their way to Hill Bank, a PfB project site. Much like BL and its museum, SP and the CHC are becoming a hub of tourist activity. These two villages illustrate that creating a tourist destination, and marketing it well, are keys to successful income generation.

The decline in numbers of tourists to FB was caused by the cycle of neglect of trails in the cohune forest by the FB village square and of its distance and difficulty of transportation from BL.

In 1992, villagers living farther away from BL received correspondingly less tourists, with two exceptions, the family with the cabanas in SP/BF and those involved in the working trail system in FB (Bruner 1993). As seen by these examples, individual or communal efforts at producing and marketing a tourist attraction has its rewards. By 2000, community attractions and individual tourism efforts were greater in number and varied by village, so that there was no apparent correlation to the distance from BL.

The positive change for all villages between 1992 and 2000 was that the total mean of tourists served by villagers who received tourists, increased from 23 to 52, with most village means higher in 2000 than in 1992. Whereas only 25% of people interviewed in 1992 were receiving tourists, 41% of interviewees reported receiving tourists in 2000.

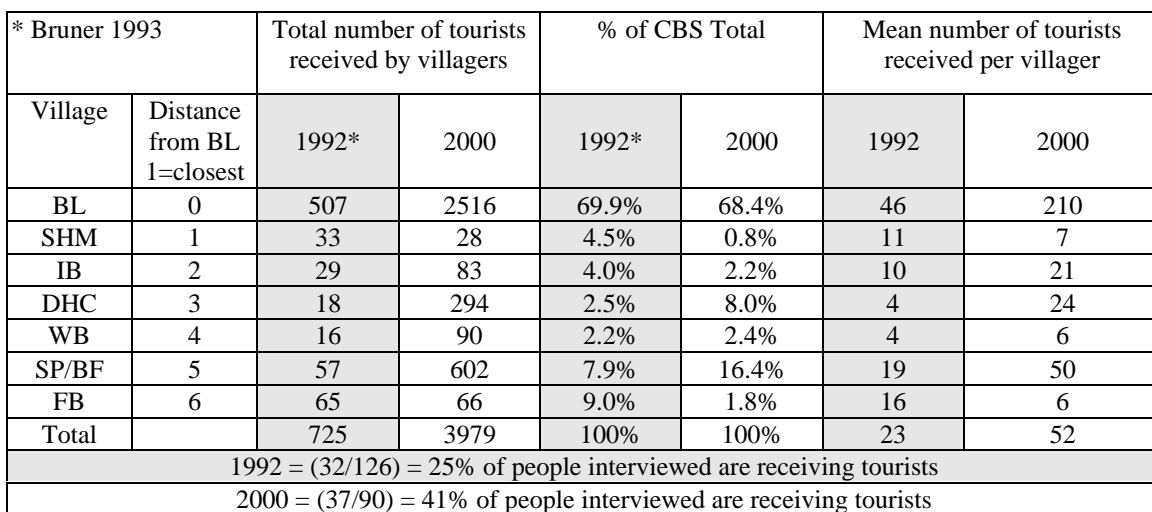
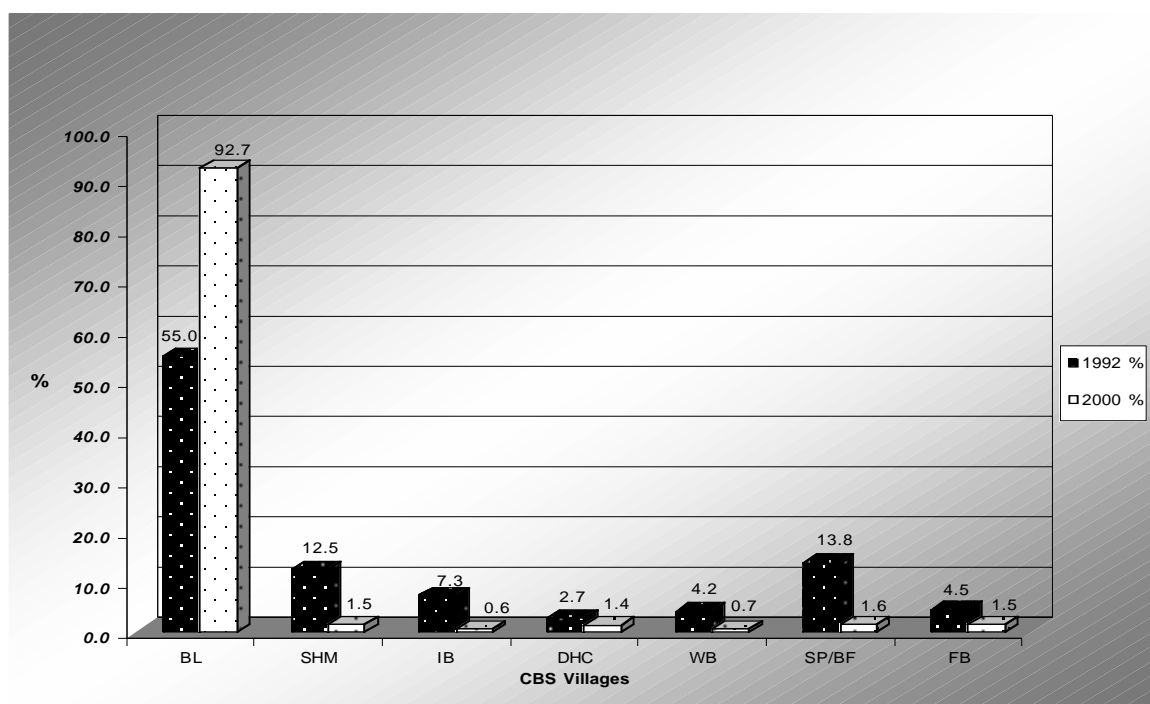


Figure 2.5 Percentage of total income earned by CBS villagers from tourist services, by village, in 1992 & 2000



* Bruner 1993		Total income received by villagers		% of CBS Total		Mean income received per villager	
Village	Distance from BL 1=closest	1992*	2000	1992*	2000	1992	2000
BL	0	\$5,151	\$176,501†¥	55.0%	92.7%	\$468	\$17,650¥
SHM	1	\$1,168	\$2,785	12.5%	1.5%	\$584	\$928
IB	2	\$683	\$1,095	7.3%	0.6%	\$228	\$365
DHC	3	\$256	\$2,769	2.7%	1.4%	\$85	\$554
WB	4	\$400	\$1,354	4.2%	0.7%	\$133	\$226
SP/BF	5	\$1,293‡	\$2,958	13.8%	1.6%	\$323	\$422
FB	6	\$421	\$2,881	4.5%	1.5%	\$105	\$576
Total		\$9,372‡	\$190,343‡¥	100%	100%	\$312	\$4880¥
1992 = (30/126) = 24% of people interviewed are receiving tourism income							
2000 = (39/90) = 43% of people interviewed are receiving tourism income							
‡ SP/BF= minus \$7462 (Museum staff salary) = \$1,293, and makes CBS = \$9,372 instead of \$16,834. ‡ BL = minus \$7800 (Museum staff salary) = \$176,501, and makes CBS = \$190,343 instead of \$198,143. ¥ BL \$176,501 minus large hotel \$147,780 = \$28,721. This changes the BL mean to \$3191. The total 2000 income becomes \$42,563 and the total mean income = \$1091. The 2000 total income for all villages other than BL = \$13,842, or a non-BL mean income of \$477.							

Revenue distribution

Figure 2.5 (graph with table) illustrates the percentage distributions of revenue in both 1992 and 2000 to CBS villagers offering, and receiving pay for, any of the five tourist services plus employment in tourism. Tourism revenue followed the tourists, and as expected, tourists spent most of their money on activities and services in BL. In 1992, BL residents earned 55% of all tourist revenue (Bruner 1993), increasing to an astounding 93% in 2000. This almost exclusive capture by BL of tourist expenditures demonstrates the differences in the readiness of the other CBS villages for tourism. The scale of revenue earned in 2000 is roughly two to ten times what was earned in 1992 for villages other than BL, and 34 times higher in BL. All of these revenue figures are low, as only submissions from one of the two hotels in BL are reflected, and none of the other “resorts” in the CBS area.

Unlike in 1992, the average dollar amount received by villagers was not associated with distance from BL. In fact, the income mean earned in 2000 was at a similar scale across villages, excepting BL. However, effects of distance were still felt by landowners, as one remarked, “[When you live in] villages farther away from the sanctuary, the less benefits you get” (Interviewee #214, 2000).

The number of people actually receiving tourists almost doubled in 2000. Whereas only 24% of residents interviewed in 1992 received income from tourism, by 2000, 43% of people interviewed were working in tourism. Total income earned by villagers receiving tourists increased from an income mean of \$312 to \$4880, with all village means in 2000 higher than in 1992.

This inflated 2000 average is better compared when data from the large hotel in BL are removed from BL and CBS totals. Of the \$176,501 BL total, \$147,780 was from the hotel, leaving \$28,721 as a total for all other BL residents interviewed who received tourist revenue. The BL income mean for 2000 then drops to \$3191, and the CBS total income mean becomes \$1091 – a much more comparable number, but still a significant increase from the 1992 total income mean of \$312.

Table 2.13 Average income from tourism, earned per villager, in 1992 and 2000.				
Bruner 1993	1992	2000 total	2000, split hotel owner	
BL	\$468 (n=11)	\$17,650 (n=10)	\$3191 (n=9)	\$147,780 (n=1)
Other six villages	\$222 (n=19)	\$477 (n=29)	\$477	

This can be further examined in Table 2.13, when BL income is separated from the other six village totals. The 2000 BL mean (without hotel) of \$3191 can be compared to the average income from tourism in all non-BL villages of \$477. Unlike the similar scale of average returns between 1992 BL and other villages (\$468 and \$222 respectively), the 2000 averages of \$477 to \$3191, with one landowner at \$147,780, are in stark contrast. These figures illustrate conclusively the frustration of residents in other villages than BL at not being able to receive a “greater piece of the economic pie.”

The bottom line is that more CBS residents are involved in tourism and getting paid for it (43% of interviewees). However, the inequities of the skewed distribution of tourists to BL not only allows for greater revenue to be generated in that village, but also creates incentives for entrepreneurs to erect hotels in this commercial center, which perpetuates a cycle of more tourists → more development → more tourists → more

development and creates a corresponding cycle of comparative deprivation or relative poverty of residents from non-BL villages (Ryan 2002).

Even though more people were benefiting from tourism, did these unequal distributions compromise residents' hopes of future benefits? Villagers were asked, "Do you think you will get benefits in the future?" (Table 2.14). Affirmative responses ("yes" and "maybe") declined since 1988, from 92% in 1988 (Hartup 1989), to 83% in 1992 (Bruner 1993) to 76% in 2000. Significantly, the "no" responses rose from 2% in 1988 to 17% in 2000 ($p = 0.01$, 2-tail t-test, $DF = 136$). When examined by village, 83% of people interviewed in 2000 in BL said "yes", they thought they would get benefits in the future, while only 40% of people interviewed in the other six villages said "yes" to future benefits. All "no" responses in 2000 were from villagers living in the other six villages.

Table 2.14 Attitudes of CBS villagers on future benefits from the CBS			
† (Hartup 1989, 1994); ‡ (Bruner 1993), *p-value is significant at 95% level, NS = not significant			
<i>Do you think you will get benefits in the future?</i>			
	% in 1988† (<i>n</i> =48)	% in 1992‡ (<i>n</i> =125)	% in 2000 (<i>n</i> =90)
yes	38	54	45
maybe	54	29	30
no	2	5	17*
don't know	6	12	8

As the tourism infrastructure has evolved from the simple in-home accommodations and voluntary hospitality towards tourists (*e.g.*, free canoe trips; guiding tourists on their lands) to riverside resorts and packaged tours, entry costs into tourism have risen, leaving rural landowners hard pressed to find the necessary capital (both

economic and human) to provide certified tourism opportunities. As one landowner lamented,

“You have to have a license [to be a guide]. At first, I used to take them [tourists] to my farm, carry them on my boat. Until three years ago. It was free then. It was a friendly trip. I didn’t collect one cent. Now it’s paid“ (Interviewee #146, 2000).

There is a question in the minds of non-BL villagers as to whether tourism will become established in their village. The main reasons stated by villagers for “no” projected future benefits were associated with the management of the CBS and its lack of interest to help distribute tourists and revenue to all villages. “If they put people in [my village]” was one person’s reply (Interviewee #195, 2000), and “the way the program is going, instead of improving, it’s getting worse” was another’s (Interviewee #194, 2000). On a more positive note, one villager replied that future benefits were, “ Maybe just preserving the baboons” (Interviewee #172, 2000). This resident summed it up,

“Well, I think tourists will always come to the area – they are not interested in local management and politics, and I think there will always be baboons, so [I will get future benefits] from tourists, yes, and from CBS, no” (Interviewee #155, 2000).

Management success

Revenue distribution by CBS management

Landowner perceptions that little or no revenue was being distributed by the CBS management to non-BL villages was checked for accuracy. Accounting records of the CBS management in 1997-1998 and in 1999-2000, told a somewhat different story.

In April 1997, a newly elected CBS Management Committee recorded an account balance of \$6,263.19. During the next year, it paid \$200 for the training of four tour guides (two from BL, one from DHC, one from SHM), \$880 in donations to nine ill

members, \$600 in donations to six members with a death in their families, and a \$100 donation to the Rancho Delores School (RD), totaling \$1,780 in payments. The inclusion of RD in these distributions is an indicator that the CBS management intended to expand the original seven villages to include all nine villages (by adding RD and Lemonal) of the BRV. On May 2, 1998, this same administration distributed \$125 to each of its recorded pledged members. Sixty nine people received payment, including some of the relatives of pledge landowners who had died, for a total of \$8,625. According to this 2000 study, 31 pledged landowners were missed, indicating the need for updated pledge records. Distributions for this administration totaled \$10,405 to residents (not all of whom were pledged landowners) over approximately thirteen months.

In October 1998, after Hurricane Mitch came through and severely flooded the BRV communities, there was a peaceful takeover of CBS management by the Women's Conservation Group (WCG), and the former committee was asked to resign (WCG 1999). Hence began the current management of the 2000 study. The WCG, an appointed seven-member committee, registered as a non-profit, community-based NGO, immediately sought grant funding from national agencies. It received a \$31,850 grant from PACT (Protected Areas Conservation Trust, a collaborative Ministerial and NGO conservation funding agency) for telephone, computer, email and internet services, printer, and other communication equipment and training, not only for the museum staff, but also for training and paid services to at least 44 community members as well.

In 2000, WCG books listed direct monetary benefits paid to residents, by village. These payments were for various jobs, such as cleaning trails, transportation, repairs,

food, guide training, facilitators, and medical expenses. The following totals were calculated for the 16-month period January 1999 – April 2000.

Flowers Bank	\$2310 for 8 people	=	\$289/person/average
Double Head Cabbage	\$2247 for 16 people	=	\$140/person/average
Scotland Half Moon	\$1916 for 22 people	=	\$274/person/average
Bermudian Landing	\$1481 for 22 people	=	\$67/person/average
Isabella Bank	\$1289 for 11 people	=	\$117/person/average
St. Paul's Bank	\$781 for 6 people	=	\$130/person/average
Willows Bank	\$455 for 5 people	=	\$91/person/average
Total	\$10,479 for 75 people	=	\$140/person/average

Like the previous administration, this \$140 for each of 75 people is on the same scale as the \$125 payment made to 69 pledged landowners in 1998. Totals for both administrations are almost identical. These payments show that residents from each villages were, between 1997 and 2000, receiving monetary benefits, and that donations and jobs from the CBS were spread out over all seven villages.

Additional revenue not accounted for in these WCG village totals were payments made to guides at the museum in BL, nor the amounts for over 600 person-days referred by the CBS management to the *Nature Resort* in BL. The CBS museum brought in over \$24,000 from entrance fees and walk-in donations between August 1999 and March 2000, with \$5475 paid to ten guides during this eight-month period. Of the ten guides, two were from SHM, one from FB, and seven from BL. However, in examining the numbers of times each person guided, data showed that two people from BL did 72% of all guiding jobs, equaling \$3942. These totals support landowner perceptions that CBS management was distributing revenue preferentially to BL personnel and tourism owners.

Knowledge and perceptions of CBS management

The management of the CBS has changed at least seven times in its first thirteen years, with various combinations of the Belize Audubon Society (BAS), a local committee, and managers, in charge (Bruner 1993; Horwich and Lyon 1995, 1998). The only consistencies have been 1) pledged landowners as the body of the CBS, 2) the BL museum as CBS headquarters, and 3) the fact that the Young family, whose members were selected as the first managers of the CBS, has been involved to some extent. CBS management has progressed from a single local person in charge, to a local committee overseen by a national NGO, to solely being run by a local voluntary committee. The effects of these transitions and the learning curve for locals to achieve a level of managerial efficiency were examined in 1992 and in 2000 through landowner knowledge and perceptions.

When asked, “Who runs the CBS?” 44% of residents interviewed in 2000 were either incorrect or not sure about how the CBS was run or who was in charge. All people interviewed in BL described the correct managing entity, the WCG. As one resident explained, “they change it so much, I don’t know” (Interviewee #142, 2000). This lack of consistent management has perpetuated the need for good and constant communication between management and all landowners, a recurring theme found in the 1992 study (Bruner 1993) as well as in 2000.

Seventy-one percent of landowners interviewed in 1992 declared BAS was a benefit to the sanctuary (Bruner 1993), with 61% agreeing in 2000. In both studies around one-quarter of villagers responded “don’t know” to whether BAS was a benefit (24% in 1992 and 31% in 2000), indicating a continued lack of knowledge of the

workings of the CBS. This was particularly apparent among residents of outlying villages (8% “don’t know” in BL and 34% in other villages in 2000).

When BAS left in 1994, the local committee assumed all accounting and marketing responsibilities, as well as the day-to-day running of the museum and guides. Could the local management body accomplish this successfully? In exploring this question in 1992, while BAS was still overseeing the finances, 76% of villagers interviewed said that a NGO should have a role in managing the CBS, mainly either by being in charge (20%) or by offering guidance and advice (18%; Bruner 1993). After six years of experience with local management, 66% of residents interviewed in 2000 replied that a NGO should have a role, but that its role should only be advisory or to offer guidance (34%). Additionally, a NGO should be conservation-oriented and “protect the baboons” (18%), “cooperate together with CBS” (15%), and “handle money/records” or provide “honest management” (15%). This last issue of transparency of records and honest handling of revenue reflects BAS’s fiduciary role and CBS’s history of alleged mismanagement of funds. A new role of “train CBS staff and landowners” (7%) appeared in 2000, echoing the existing training support received by PFB, PACT and other agencies.

Landowners were polled as to what they would consider to be the “best management” for the CBS. Results are shown in Table 2.15. In 1992, over one-third of responses indicated that the CBS advisory committee was good, one-fifth responded that local people should be in charge, and 16% that the manager should be in charge, reflecting the preparation for the upcoming transition from BAS to local management, scheduled for 1993 (Bruner 1993).

Table 2.15 CBS villagers' attitudes toward CBS management.

‡ (Bruner 1993) *p-value is significant at 95% level, NS = not significant

What type of management is best?		% in 1992‡ (n=124)	% in 2000 (n=90)
Don't know		11.3	20
Local people manage		20.2	17.8
Honest people		6.4	16.7*
Committee is good		36.3	15.6*
Better communication with landowner		10.5	12.2
Status quo		12.1	8.9
Improve management		4	8.9
Need new manager		2.4	8.9
NGO/Committee Combo		8.1	7.8
Need monthly report		1.6	5.6
PR other villages		1.6	5.6
NGO/local/govt. combo		2.4	4.4
Outside board manage/fund		2.4	4.4
No direct response		0.8	4.4
Need new elected committee		-	3.3
To keep CBS working		3.2	3.3
Landowners benefit		3.2	3.3
Manager in charge		16.2	2.2
NGO in charge		8.1	2.2
Committee/manager combo		4	2.2
Wildlife expert in charge		2.4	2.2
American involvement		1.6	2.2
Protect monkey/wildlife		-	1.1
Bring in tourists		1.6	1.1
New pledge/membership for all			1.1
Need more security/police		4.8	0
Rehire original manager		2.4	0

By 2000, residents shared that they needed more information before making a decision on what would be the “best” management for the CBS and its members, as indicated in the highest percentage response of “don’t know” (20%). They did know that local people should be in charge (18%). Other qualifications of “best” management were “honest people” (17%), a significant increase from 1992 ($p = 0.017$, 2-tail t-test,

DF = 212), reflecting the continual concern of landowners over appropriate revenue management. Respondents indicated “that a committee is good” (16%), but not as “good” as in 1992 (36%), when committee representatives were elected by members and not appointed by the president; this decrease was significant ($p = 0.0007$, 2-tail t-test, DF = 212). One villager explained,

“[CBS needs] elected representative from each village instead of hand-picked. When committee is elected, then [landowners] have more control. NGO should have advisory role” (Interviewee #163, 2000).

Villagers also wanted better communication between management and landowners (12%) and to have input in decisions.

The preference for the concept of “manager in charge” in 1992 had almost disappeared by 2000, pointing out that residents both disagreed with the current manager, and agreed with the need to diversify responsibilities and power from one person to a representative body of people from each of the villages of the CBS. As one resident concluded, “Best management? 1) Active committee [that] represents people. 2) Committee [should] hire competent manager on salary and fire him if don’t do job description” (Interviewee #151, 2000).

Challenges to the CBS

The management of the CBS has been faced with several major challenges throughout its history. Villagers were asked, “Do you see any problems with CBS management in the future?” and in all three studies the majority response (71% to 73%) was “no” (Table 2.16). The percentage of villagers stating “yes” to problems rose significantly from 8% in 1988 ($p = 0.03$, 2-tail t-test, DF = 174; Bruner 1993) to 21% in 1992 and remained at 20% in 2000.

Each study identified its own set of possible future problems (Table 2.16). In 1988, the major concerns of landowners were lack of landowner input into decision-making and what the ultimate structure of management would be. Concern was expressed in 1988 that overriding influences by Americans and non-local Belizeans in charge would result in losing landowner support and control (Hartup 1989). This response decreased (non-significantly) in 1992 and 2000 as local management took charge, and more specific concerns affecting landowner support were voiced.

By 1992, several concerns were expressed, the main issue being a “power struggle” within the communities between villager support for the previous manager who was fired by BAS, and for the current manager hired under BAS (Bruner 1993). Four other related issues echoed the 1988 concerns, 1) lack of communication with landowners, 2) concern over losing landowner support, 3) poor organization, and 4) management not working. A new, fifth concern appeared, “no equal benefits” hailing the recognition of monetary benefits and the disparity between BL and other villages (Bruner 1993).

A result from these management problems was made manifest in the break-away of SP/BF from the CBS in 1995. These villagers saw the lack of benefits to their area and decided to open their own museum in order to draw in tourists. They realized that another “baboon museum” would not be competitive, so they identified the need to teach children about their Creole heritage, and thus was born the Creole Heritage Center (CHC). The building went up in 1996, but was abandoned until 1998, when villagers teamed up with PfB to make the CHC a marketable tourist attraction. Because of its

success, the CHC is now marketed by the WCG, establishing an exchange between the two centers, and “re-instating” the landowners in this area to their original CBS pledges.

In 2000, the main problem identified by villagers was the inequitable distribution of economic benefits from tourism (30%). The same 1992 concerns resurfaced, 1) lack of communication with villagers, 2) concern over losing landowner support and 3) poor organization of the management. Respondents clarified,

“[There are] no organized tours to other villages or awareness of other villages...After 15 years it should be elsewhere and management intentionally failed to do that [promote other villages]” (Interviewee #163, 2000);

“CBS operates like a private business, not the way people would want it to go” (Interviewee #194, 2000);

“The Youngs are claiming too much ownership of CBS” (Interviewee #135, 2000);

“Perception is one family – [even] the Minister said that...transparency is everything. A Public Relations Officer would dispel this ‘one family’... dispel the shadow of mismanagement of funds” (Key Informant #8, 2000).

“We have great potential, need more objective management. Can’t rely on favoritism and seek personal gain” (Interviewee #156, 2000).

A new concern was voiced here, although it was documented in 1992 and by other studies as well (Bruner 1993; Horwich and Lyon 1998; Marsh 1999). This was the need to stop the use of drugs, particularly crack cocaine, in the CBS. The increase in tourism income to some residents has allowed a greater access to purchase drugs, perpetuating this problem. With the increased dependence of CBS villages on tourism, residents responded with recognition that if drug use was not removed from the area, that it would adversely affect tourism and therefore their livelihoods. One landowner explained the social difficulties of eliminating drugs,

“I think the women [WCG] are trying, but can’t get rid of drug use...Those people should be put in rehabilitation. It’s addictive. Families don’t want to turn [them] in” (Interviewee #151, 2000).

On a positive note, the WCG has included the need to address drug and alcohol abuse in the community development portion of their grant proposal to the United Nations Development Program (UNDP; WCG 2000).

Table 2.16 CBS villagers’ problems with CBS management			
† (Hartup 1989, 1994); ‡ (Bruner 1993), *p-value is significant at 95% level, NS = not significant			
<i>Do you see any problems with CBS in the future?</i>	% in1988† (n=50)	% in1992‡ (n=126)	% in 2000 (n=90)
no	72	73.8	71.1
yes	8	21.4*	20
don’t know	20	2.4	5.6
maybe		2.4	2.2
No direct response			1.1
<i>Describe the problems:</i>	% in1988 (n=14)	% in1992 (n=51)	% in 2000 (n=27)
No equal benefits		23.5	29.6
Communication		25.5	14.8 NS
Lose landowner support	42.9	21.6	14.8 NS
Stop Drugs			14.8
Poor organization	14.3	23.5	11.1 NS
Power struggle		39.2	7.4
PR other villages		15.7	7.4
Wildlife/Private property restrictions	7.1	2	7.4
Management not working	14.3	25.5	5.5*
Independent/unlicensed guides		11.8	3.7
Negative outside influence	14.3	0	0
Lose trees to development	7.1	0	3.7
How far program goes?	7.1	0	0
Need more security/police		7.8	0
Need more tourist facilities		5.9	0
Improve educational equipment		2	0
Cattle rustling		2	0
Pay land tax		2	0

Opportunities for the CBS

The CBS management has transitioned successfully from under the tutelage of the BAS to a self-sustaining entity. Opportunities for growth have occurred over time and with experience. The 1992 study found the CBS management in operational flux, with undefined roles and relationships between the advisory committee, BAS, and the manager (Bruner 1993). By 1997, the CBS Management Committee had become increasingly sophisticated in its goals, objectives, and handling of finances. It had written job descriptions of all staff and committee positions. Its goals for 1997 were, “1) accountable business, 2) yearly returns to landowners, 3) write projects to get support for the Sanctuary, 4) attract more people to the Sanctuary, 5) influence the primary and secondary school curriculum, 6) next year...to have a renewal of pledges, 7) compile all studies done on the Sanctuary.” (CBS General Meeting Minutes, April 13, 1997).

By 2000, the WCG, as an NGO, had written a mission statement, grant proposals, received computer and business training, distributed revenue, and was in the process of planning future community tourism opportunities and classes, school programs, and ways to support sustainable cottage industries. Future proposals are to address issues of “monkey ecology, land management, financial management of the CBS, ecotourism, community development, cultural revitalization, and education and health” (WCG 2000).

One resident summed it up:

“Right now, I think that the women’s group is doing a really good job. For the first time in five years there is a real possibility of it getting better. I think it will happen; don’t think it’s too late” (Key Informant #2, 2000).

Future development

Internal CBS development

In 1992, CBS residents were asked, “Are there other forms of development besides tourism that you think would benefit the local residents of the sanctuary/area?” and “What are they?” (Bruner 1993). In the 2000 study, the words, “or improvements” were added, changing the character of some of the responses (Table 2.17). Villagers indicated the need for large infrastructure items, such as water systems and better roads, at consistently high percentages in both 1992 and 2000. Significantly more residents in 2000 mentioned the need to “improve agriculture” and offer mechanized machinery for all to use (from 1992’s 15% to 26%; $p = 0.0356$, 2-tail t-test, $DF = 214$). By 2000, all CBS villages had received electricity except FB and outlying parts of some other villages, so “electricity” response dropped to 12%. Similarly, pay phones were installed in most villages, decreasing the 1992 need to replace or supplement community phones.

Tourism related responses were seen in 2000, such as “better accommodations”, “PR/develop all villages”, “better trails”, “develop market plan.” Management related responses were also present, “equal benefits”, “cooperation/unity”, “improve management”, and “more jobs.”

Housing was not mentioned as a need, but it certainly created controversy. With the increasing “urbanization” of CBS villages, through additional roads and houses, some areas used for tourism were suddenly affected. The forest of the “School troop” of howler monkeys in BL was bifurcated when a landowner decided to open up streets for housing in the middle of the monkey habitat and trails (Key Informant #2, 2000; WCG 1999). As one villager explained,

“Lands here are already set aside to build houses...Streets were on map 20 years ago and no one protested then, but because troop is so convenient to CBS they protested. In future these are going to be housing” (Interviewee #134, 2000).

Table 2.17 Other development/ improvements recommended by CBS villagers
(only categories with >10% in 2000 shown)

‡ (Bruner 1993) *p-value is significant at 95% level, NS = not significant

<i>What kinds of development or improvements, besides tourism, do you want to see?</i>	% in 1992‡ (n=126)	% in 2000 (n=90)
Water systems	48	67
Better roads	30	28
More/improved agriculture	15	26*
Better tourist accommodations	-	26
Equal benefits for all	-	19
PR/ develop all villages	-	19
Cooperation/ unity	-	16
More jobs/ \$	8	14
Improvement management	-	14
Fruit factories/ markets	8	13
Telephones	18	13
Electricity	23	12
Better/More Trails	2	11
Develop market plan/ package	-	11

Another resident clarified that this “School troop” land is leased from government and that the leasee/owner was letting it lay fallow for the monkeys, and not working it. Thus he needed to be compensated, and CBS was to pay him \$100 per year rent for its use as tourist trails. If he was not paid, then he said that he might as well clear the land. The resident suggested that it would be best if this land was bought by CBS and declared a nature reserve, and other lands granted to the owner for lease and residential development (Key Informant #8, 2000). After this incident, there was additional talk about the need for a dedicated Reserve for the howler monkeys. One villager declared,

“[We] need a large sanctuary...identify an area outside the village and have government declare it as a reserve – put trails, cabanas, and [center for] researchers... 200 to 500 acres [81 to 202 hectares] in jungle by river....Another benefit is that if government changes then they couldn’t touch that land” (Interviewee #155, 2000).

A key informant summarized that as long as land is leased, and legally owned by government, title can be transferred for political favors by government representatives to anyone at any time. Private, titled lands are much more stable, but landowners can sell land. “CBS cannot exist without land” (Key Informant #8, 2000).

By 2000, another community service-oriented NGO, BELRIV, had opened its doors in BL. BELRIV was established in 1996 to assist the residents of the nine Belize River Valley (BRV) communities with health care, computer training, reforestation of mahogany trees, farming, tourism operations, fruit factories, and the overall self-sufficiency of the people. In 1999, BELRIV teamed up with Programme for Belize (PfB) on a grant proposal supporting the Meso Americas Biological Corridors Program, of which CBS is part, to equip “the BELRIV Center to become a community/tourist message and resource center providing coordination, communication and backup accommodation services and infrastructure for community eco-tourism...and [build] community capacity for eco-tourism” (BELRIV 1999).

This could be seen as direct competition to CBS, particularly with ecotourism efforts. “BELRIV will buy tents to rent out to tourists and buy canoes to rent to tourists...and [they have] 3 rooms in BELRIV building used for tourists to stay and eat food” (Interviewee #152, 2000). “[BELRIV Director] knows doctors in US and ambassadors, and [has] access to funding – [they] just got \$250,000” (Key Informant #8).

However, BELRIV and CBS WCG have great potential to work together with the same goals of improving livelihoods, ecotourism, and conservation in the BRV.

External CBS development

From key informants, and other sources, this 2000 study learned that the BRV area was scheduled to receive from government (through private development companies) several large development projects, and wanted to find out what resident's attitudes were towards some of the ones that would affect directly the CBS villages. The government of Belize has actively searched for ways to improve the country's infrastructure, such as more efficient electricity, housing, and garbage disposal, so that it could better service its citizens and the almost 200,000 tourists who visit each year (BTB 2003).

Some of the major projects close to the CBS area included:

1) 7.5 mega-watt power plant, built and operated in the capital of Belmopan (by a USA company) using cohune palm (*Orbigyna cohune*) nuts for fuel. A study assures that there are more than 134,817 hectares of cohune palm forest within a 50-kilometer radius, and that this venture would be sustainable and provide over 1000 new jobs (*The Belize Times* 2000b). Cohune palms are the dominant tree species found in CBS forests and provide abundant structures for strangler fig trees, which are an important part of the howler diet (Lyon and Horwich 1996). Cohunes line tourist trails, as well as provide cooking oil for home use and sale, and palm fronds for thatch roofs;

2) New "Satellite Village" of 2,000 to 10,000 homes, set between Mile 31 and Mile 42 of the Western Highway (Key Informant #2, 2000);

3) Regional sanitary landfill to service 60% of the country including: Belize City, Belmopan, all villages along the Western Highway, and both Ambergris Caye and Caye

Caulker, proposed on an 81-hectare site at Mile 27 on the Western Highway (MNREI, 1999). This is within one kilometer of the Belize Zoo's Tropical Education Centre and according to Hershkowitz and Lee (2000) would adversely impact the Zoo and the Sibun River and its surrounding watershed, affecting both people and wildlife (Amandala 2000). Many of these projects will use lands under current protection, which will be "de-reserved" for development.

4) Additionally, between 752 to 1000 new houses are planned to be built on lots along the six kilometers of road between Willows Bank village and Rancho Delores village (*pers. comm.*, Permanent Secretary, Ministry of Rural Development and Culture April, 2000; Key Informant #3, 2000). Areas for service amenities, such as grocery stores, gas station, post office, entertainment, etc. are planned as well. At the time of this study (April 2000), the land was already cleared of trees and shrubs in preparation for this venture. As of January 2003, approximately 300 of these houses have been built (*pers. comm.* Robin Brockett 2003).

"Willows Bank [WB] is doing a housing project out there on the road. Roads, water, complete town. About 1000 new houses. The whole way of life will have to be restructured. The main moneymaking in this village is to raise cattle on open range. People will have to move cattle. There will be nothing to back the people up to change to something else. Most are old., and the place [town] is about to start. It's on WB land – [WB Chairman] requested it...Government will build buildings for whoever want...Business will benefit. Construction jobs; people put up stores. The more people, the more consume and sell the beef" (Key Informant #3, 2000).

5) These developments would be enhanced with an improved road connections between the Northern Highway and Western Highway. The Ministry of Works and Transport planned to upgrade approximately 11 miles of existing road between Burrell

Boom and Hattieville, connecting the Northern and Western Highways, “serving motorists, farmers, and the tourism industry” (*The Belize Times* 2000a).

6) Additionally, there was discussion about opening up the 10-mile long Big Falls Rice Farm (BFRF) road at Western Highway Mile 24 to public traffic, building a bridge across the Belize River at Big Falls, and paving the road up to Willows Bank village, connecting all of the CBS and its new housing developments in WB directly to the Western Highway and the new “satellite village” (*pers. com.* Howard Hunt, 2000).

Interviewees were questioned about two of these developments, 1) the Western Highway landfill (garbage dump) by the zoo, and 2) paving the connection road to WB, with bridge over Big Falls. Residents interviewed said that even though they usually burn and bury their garbage now, 71% agreed that garbage dumps were a good idea, and many promoted one for each village. When asked about the proposed dump and its proximity to the Belize Zoo, 53% of people interviewed thought that was a bad idea, due to the probable danger to the zoo’s animal collection.

As for the paved road and bridge, 79% of those interviewed supported paving the road and putting a bridge over to SP/BF. Residents said that paving would stop the dust problems in the dry season and make transport easy in the wet season. Even though supported, because it would make direct CBS access to the Western Highway possible, concerns were voiced over building the bridge. Villagers expressed that a bridge would: 1) destroy the tourist attraction of the “the Falls,” (large rocks in the river which create rapids or “falls”), 2) change the character of the village by increasing settlement of new people, 3) increase crime and drugs in the villages, 4) promote cattle theft, and 5) that speeding trucks would hurt children and increase the number of traffic accidents.

DISCUSSION

CBS residents, in this longitudinal study of 1992 and 2000, reported four areas of concern: 1) continued conservation of howler monkeys and habitat, 2) distributions of benefits and tourism revenue from CBS, 3) management organizational structure and duties, and 4) future of CBS pledges and development of the CBS area.

Conservation attitudes towards howler monkeys

One of the greatest accomplishments of the CBS in its 18 year-history has been the increased awareness of howler monkeys and other wildlife by residents of the seven villages, solidifying a conservation ethic in the minds of rural residents (Horwich and Lyon 1995). This conservation ethic is passive – residents simply leave the monkeys alone.

“I don’t think Belizeans in this area are interested in the baboons; they accept them and live with them. We pass them and don’t even think about them twice. Example: parrots fly over and we don’t hear them – if there is conservation movement then we get more conscious of them – oh parrots! Likewise for the monkeys. Only when study them [do research] do we become aware. There is no movement to conserve them – just that they are there and you don’t do anything to [harm] them.” (Interviewee #156, 2000)

This “harmless” nature of howler monkeys was cited as the primary reason in 1992 (45%) and 2000 (39%) why monkeys should be protected. Additionally, howler monkeys are seen as “humanlike” (23%) and therefore not an animal that would be shot and killed for food. Although it was reported in 1988 that two-thirds of CBS villagers hunt wild game (Hartup 1994), landowners in 2000 expressed that their hunting was severely curtailed by a new law requiring a hunting license, bringing state control into a natural activity of their lives. Landowners responded that howler monkeys are not eaten

by Creoles, but that the Chinese residents used to shoot them for food before they were made to stop by authorities and Creole residents; this hunting restraint by Creoles was also found by Jones and Young (2002) in their 2000 survey of CBS hunters.

Fifty-two percent (52%) of interviewees in 2000 said that they had not seen or heard of anyone hurting a howler monkey since the beginning of the CBS. Thirty-four percent (34%) of landowners acknowledged, however, that when they were children (prior to CBS), they used to shoot howler monkeys for target practice, or kill a mother howler to obtain the baby monkey as a pet. There was a recent, unconfirmed report of one CBS resident killing a monkey to sell the baby into the pet trade (*pers. comm.* Dr. Rob Horwich 2003).

Despite a few complaints in 2000 of howler monkeys eating crops (a real concern of some residents), 100% of CBS residents interviewed supported protection of the howler monkeys, and 94% believed that CBS helped to protect the monkeys. This was a slight increase in landowner support over the 12 years, and a slight decrease over time in the belief that the CBS helps to protect monkeys. “Stop hunting/enforce laws” was the primary reason given in both 1992 and 2000 for how the CBS protects the monkeys, but this response was significantly less in 2000 (40%) than in 1992 (56%), suggesting that people, in general, were hunting less and abiding laws more by 2000, with a greater conservation awareness. These results are most likely a combination of 1) residents’ genuine desire to conserve monkeys because they are harmless and humanlike, 2) the ease of protection by just ignoring monkeys, and 3) the knowledge that healthy populations of monkeys bring tourists and tourism revenue.

In both 1992 and in 2000, “tourism/economic benefits” was stated as the second highest reason in both questions on why monkeys should be protected (24% in 1992; 30% in 2000) and how CBS protects them (17% in 1992; 26% in 2000). This response was significant, as in 1988 it was mentioned in reference to protection either slightly (4%), or not at all (0%). Clearly, the commodity value of monkeys in promoting tourism is recognized by residents, as tourism grew in the four years between 1988 and 1992. By 1992, tourism was well established in the minds and lives of villagers. Despite the increase in tourism businesses by 2000, this “tourism/economic benefits” response stayed fairly constant, only increasing slightly. Landowners chose to recognize that habitat loss was also a concern (“keeping trees for monkeys” and “losing trees”) and therefore, by protecting monkeys, this issue could be addressed.

Lyon and Horwich (1996) point out the extreme importance of landowners leaving large-diameter remnant trees in large clearings, promoting aerial corridors but, more importantly, acting as seed reserves, perches for seed-dispersing birds, and facilitating animal crossings of wide patches of land. Fragmented forests, or island habitats, are common in disturbed forests where human impact is significant and constant. Unlike oceanic islands which create increased biodiversity, forest islands can promote species extinction, as the resource biodiversity that species co-evolved with is destroyed (Harris 1984).

The record of the success of CBS landowner protection of howler monkeys is impressive. From the late 1980s to the mid-1990s, howler monkey populations in CBS increased at a staggering rate of 11% per year. Consequently, fourteen troops, for a total of 62 monkeys, were translocated from CBS to Cockscomb Basin Wildlife Sanctuary in

southern Belize, and are thriving there as well (Bruner and Horwich 1996; Ostro, et. al. 1999; *pers. comm.* Dr. Rob Horwich 2002).

The habitat protection that occurred from the pledges of CBS landowners clearly has had a positive effect on the already healthy population of monkeys. Before CBS, howlers and humans co-existed easily, and traditional slash-and-burn clearings for farms and ranching were still supportive of the monkeys. As fallow periods now decrease from 15-40 years (Horwich and Lyon 1995) to 5-10 years, ranching surpasses agriculture (Hartup 1994), and an increasing population of people reside in the area (building riverside hotels, restaurants, and other amenities for tourists), the continual balance of howler/human use of forested and riverine lands is questioned, by residents and researchers alike.

Landowners' perceptions of benefits and actual revenue from ecotourism

“[The] concept to leave anything is not there. Pledge was to leave strip [of trees for monkeys]. Outsider says tracks of land are left, but not intentionally, [only] because they don't want to farm [it all]. A test -- Ministry leases tractor for \$2/hr. -- how many people will say ‘No, we want to conserve baboons’?! It's good that land is left. But things could change. What do you suggest? If people don't see benefits then they wouldn't be interested. If getting benefits, direct or indirect, then motivation will be there. People are interested in some small benefit when they need it. How convince them [to conserve]? Benefit has to be continuous”(Interviewee #156, 2000).

CBS is in the midst of a potential Tragedy of the Commons dilemma. “Whether or not a commons dilemma arises in a particular case of a common pool resource depends on the behavior of users, which in turn depends upon the structure of their situation and the incentives they face” (Brown and Harris 1992: 73). CBS has historically avoided this tragedy by taking a “non-institutional” approach where individuals use “communication, information, altruism, morality, and trust” to facilitate cooperation (*ibid*, p. 71).

The initial shared vision of voluntary monkey protection, and of the private CBS “commons” as a public service for conservation, has changed to economic incentives due to revision in both landowner attitudes towards benefits, and landowner populations. Whereas in 1988, benefits from the CBS were linked to its intrinsic value such as education (Hartup 1989, 1994), the 2000 study documented a change in villager attitudes towards the CBS to purely economic values. When asked for personal benefits from CBS, landowners listed the same categories in 1992 as in 1988: “protect monkeys,” “education,” “museum,” “good feeling/satisfaction.” The major change from 1988 to 1992 in perceived benefits was seen when 69% of landowners said that they had received no benefits, or “none” (a significant increase from 34% in 1988 (Hartup 1989, 1994; $p < 0.001$). “Tourism/income” was listed at 21%, a slight increase over 1988 (17%).

By 2000, only two response categories of benefits were listed: “tourism/ income” (28%) and “none” (72%). All other benefits mentioned in the past studies were absent. In 1998 only, CBS pledged landowners were given a \$125 payment by management for belonging to the CBS. This payment was listed as part of the 28% who responded with “tourism/income” as a benefit, 11% of whom received no other benefits. If the CBS management had not sent this payment, 83% of residents interviewed would have answered “none” and only 17% with “tourism/income.”

Benefits to local people in general from the CBS also showed a significant rise from 15% “income/jobs” in 1988 to 76% in 2000 ($p < 0.0001$). “Tourism” also increased significantly ($p < 0.0001$) from only 10% in 1988 to 53% in 1992, to 65% in 2000. This acknowledges conclusively the importance of tourism and jobs to the local people of the CBS.

As illustrated by Heinen (1996), education programs can serve as sufficient benefits to preserving a natural resource only when local conservation costs are small and user groups are homogenous in ethnic values and degree of economic disparity. When population density, heterogeneity, and economic disparity increase, economic incentives become necessary. Such is the case with the CBS. Conservation education and pride in protecting howler monkeys were the only benefits to landowners in 1985. As ecotourism grew, so did the economic disparity between residents of BL versus the other six villages.

Villagers also changed their beliefs in who benefited most from the CBS. In 1988, 59% of residents interviewed believed that local residents, foreigners, and all Belizeans benefited “all equally” from the CBS, and 24% responded “all Belizeans” as their choice. By 2000, both those responses had fallen significantly, to 27% and 11% respectively ($p < 0.0001$ and $p < 0.0392$). Instead, “only BL workers” and “just local residents” made up over half of the responses (53% combined total). The feeling by non-BL residents was that most (if not all) CBS benefits were being distributing to BL villagers.

By 1992, pledged landowners began to demand that their CBS Management Committee allocate jobs, benefits, and resources more equitably. By 2000, discontent over selective participation, lack of general economic benefits and transparent records was evident. Landowners were polled for their personal costs in belonging to the CBS. Eighty two percent (82%) responded with “none,” indicating they had no perceived costs associated with the sanctuary. A new category of costs, “fruit/crops,” (9%) was seen. Previous studies had not reported any concerns about monkeys eating crops (corn and a variety of fruits), but by 2000, these losses could no longer be ignored without beneficial

compensation. “Setting aside land” for the protection of the monkeys was only a 2% cost in 1988 and 7% in 2000, indicating that, on a personal level, saving trees was not a major issue for most people.

Costs to local people in general reflected the main categories of “set aside land,” “crop/fruit,” “time/labor,” and others. In 1988, “time/labor” made up over half of the responses (57%) and only 4% in 2000, indicating less participation by locals in CBS, and a cessation of many volunteer services that residents performed for CBS, such as work on a volunteer committee, build items, clear trails, cook for guests. Now these jobs are paid.

The value of land has increased in the minds of CBS residents, as setting aside land for conservation practices has become a greater cost over the years. In 1988, 14% of villagers responded that “set aside land” were costs for local people; in 1992, this rose to 25%, and in 2000 increased significantly to 56% ($p < 0.05$). It could also be argued that “setting aside land” is simply so well-known as part of the mandate of the CBS, that this is an automatic response for some. Clearly, when listing their personal costs, land was rarely listed as a cost factor.

The new category, “crops/fruit” (26%) appeared in 2000 as a general cost to locals, indicating that some residents were seeing howler monkeys as competitors for resources. Like land, this cost is higher for local residents in general than as a personal cost.

Although residents’ perceptions of benefits were low to none, and costs existed, actual benefits received by villagers interviewed in 2000 were substantially higher than in 1992. The 1992 and 2000 studies documented villager participation in tourism services (supplying accommodations, meals, guiding, canoeing, horseback riding, and wages). In

1992, 70% of tourists and 55% of tourism revenue went to residents in the central village of BL. Villagers, who participated in tourism in 1992, received an average of 23 tourists, and an income mean of \$312.

By 2000, 68% of tourists, and 93% of tourism revenue went to BL. Residents received an average of 52 tourists, with an income mean of \$1091 to \$4880, depending on whether the lodge in BL (income of \$148,000) was included in the total. These increases document a growing tourism industry in the CBS villages.

When BL totals are compared with those of the other six villages, skewed distributions of revenue become clear. In 1992, the average income for BL residents serving tourists was \$468, with the six other village mean at \$222. In 2000, BL average income rose to \$3191, whereas the average income among the six other villages was only \$477. This capture of the tourism industry by BL identifies this village as the commercial center of CBS. It also explains the creation and perpetuation of economic disparity between villages, and a real comparative deprivation between the residents of BL and the other pledged villagers of the CBS.

Even after disincentives such as skewed distributions of revenue were present in 1992 (Bruner 1993), CBS users still abided by their voluntary pledges and supported the sanctuary. By 2000, unlike previously documented studies which recorded no villagers actually removing themselves from CBS membership, or deliberately destroying CBS “property” (Alexander 2000; Horwich and Lyon 1995; Bruner 1993), large tracks of riverside land clearings were documented, one village (SP) had broken away from CBS and created their own museum/tourist attraction (CHC), and one landowner had

bulldozed through the “School troop” monkey habitat, the main monkey-viewing area for the CBS museum in BL.

The story of CBS is much like the case of Maasai Mara Game Reserve, where “Maasai landowners were found to ‘have a positive attitude towards tourism’ ...[but where] ‘problems have always centered around money, and how money is spent’ (Honey 1999:310-311). In the Maasai Mara, three factors were shown to influence discontent over the allocation of revenue: 1) the political issue of which project and in which communities funds ought to be spent, 2) the social issue of corruption of funds, permits, and land titles by local officials or persons in charge, and 3) the social issue of transparency of membership lists, council elections, and records (Honey 1999).

This privatized CBS “commons” has been influenced by these same three factors of policy and management. Skewed distributions of benefits have acted to erode cooperation and promote a reversion to the maximization of individual income and a growing disregard for the well-being of the commons. Over the years, non-transparent and aloof management has dissolved communication and trust between CBS leadership and pledged members, and the villagers at large.

In evaluating the success of the CBS over the past years, some key points stand out. As shown by the successful ventures of a few individual entrepreneurs – in any of the villages – the philosophy of “Build it and they will come!” is the first key to success. Once attractions and amenities are in place, they can be marketed and added to package tours, bringing in tourists (Eagles 2001). Tourists will not come if there are no attractions or amenities to support them. In contrast, in both 1992 and 2000, most people in these rural villages expressed reluctance to provide services without a guarantee that tourists

would come and use it; they wanted the steady tourist visitations first and then would build or provide whatever services were needed.

“People like to sit back and wait for politicians to do things... We should start ourselves. Let us put our foot first, get it started. If we wait for the politicians, sometimes they don’t know what we need until we start it” (Key Informant #6).

This lack of willingness to take risks can be seen, not as a weakness, but as an efficiency that comes from rural living. As one villager explained, “I would perhaps go ahead and build cabañas. You have to come up with the finances to do those things. Why tie up some money in it when you’re not using it?” (Interviewee #185, 2000). When risk is minimized and resources are increased by spreading it out over many people, such as in building the CHC, the project receives support and flourishes.

The second key to success is to market the enterprise, so that the tourists receive information about the product. The CBS has already established itself over the last 18 years as an international attraction, so that initial marketing is in place. This was illustrated by BAS’ organizing and promoting the CBS, and by PfB’s commitment to market and support the CHC with tourists.

The positive expansion of BL as the commercial center and heart of the CBS has improved the livelihoods of many people in that village, but not all. Certainly, there is the perception that the CBS is now confined to the one village. When asked about benefits in the future, villagers expressed decreased expectations of receiving future benefits from CBS programs. In 1988, 92% said “yes” or “maybe” to benefits; in 1992 this combination dropped to 83%, and in 2000 it fell again to 76%. Correspondingly, the response frequencies for “no” increased significantly from 2% in 1988 to 17% in 2000 ($p < 0.01$). All of the “no” responses in 2000 came from villagers outside of BL.

The foundation of the CBS is empowerment of the people. Local residents started the sanctuary as a grassroots initiative, and gave part of their lands for a common good (monkeys). It was the local farmer who toured visitors to see monkeys on his private lands; farmers who added rooms in their homes to put up guests for the night. Local women cooked meals for tourists, and artisans produced crafts; neighbors would collect enough canoes or horses to provide rides for adventure-loving tourists to see the beauty of the CBS from the river or trail. Participation from all CBS members is the heart of the CBS message – everyone can benefit in some way. And, more importantly, tourism and protection of monkeys can fit easily into the rural farming/ranching lifestyle of the CBS residents.

This inclusive, integrative, voluntary “host and guest” concept has been pushed aside with required national certifications. Certification, and its associated ecotourism growth, increasingly excludes landowners in tourism efforts and brings commodification of product and players (King and Stewart 1996). Increased entry costs into tourism are imposed by government on local farmers in the form of guide licenses, hotel/B & B licenses, insurance, and more. At Gales Point, a similar village tourism venture to CBS, Belsky (1999) found that an increase in entry cost contributed to a decrease in ecotourism income of landowners, and a greater disparity between those who could afford these costs and those who could not (Belsky 1999). The same holds true now for CBS, as lodge owners earn \$148,000 a year in contrast to the average guide or cook of \$477. The beginnings of a “wealthy class” are evident in the CBS population.

Benefits from certification are increased standards and quality of product for the visitor, and enhanced marketability of the CBS area and Belize in general. It also

dramatically shifts the role of the landowner from volunteer protectorate and gracious host of his/her own lands, wildlife, and culture, to a service employee in an amorphous sanctuary whose sole purpose is to serve the tourist and generate revenue from doing so, thereby paying associated taxes and fees (King and Stewart 1996).

As the scale of economic benefits increases and widens the gap between villagers, less incentives exist for compliance with voluntary pledges. Landowners demand not only a monetary dividend, paid on an annual basis, but also alternative benefits in the form of jobs, training, scholarships, and landowner input into and control of what happens on their private lands.

Management of CBS common pool resources

Privately-owned reserves are both proliferating worldwide, and becoming increasingly dependent on tourism revenue (Langholz 1996). An important trend is the establishment of private reserves owned or operated by NGOs or communities, and their inclusion of ecotourism as a key element for operational revenue. Langholz and Brandon (2001) identify three categories of reserves with ecotourism: 1) NGO managed, 2) owners of contiguous, small-size holdings jointly managing their lands, and 3) communally-managed, by usufruct rights, leased or owned lands. CBS is cited as their prime example of the second category (Langholz and Brandon 2001).

While starting out under both local and NGO management, the CBS has weaned itself of its dependency on the need for NGO oversight and graduated to self-sufficiency. In the process, the CBS has undergone eighteen years of trial and error in its management style and structure, changing management at least seven times in its first thirteen years. The 1992 study encountered a weak local CBS advisory committee under BAS, made up

of volunteer village representatives who wanted to see CBS succeed, but were faced with a lack of resources, training, and a “power struggle” over who should control CBS (Brunner 1993). In contrast, the 2000 study encountered a strong management committee (WCG) which had achieved non-profit NGO status, had a mission statement, job descriptions, had applied for and received major grants upgrading the administrative capacity of the CBS, and had distributed jobs and \$10,479 in revenue in the previous year to at least 75 residents, from all villages.

Horwich and Lyon (1998: 358) identify the historical process of CBS formation as the cause of its weak management structure. With hindsight, they advise that a “legal committee or cooperative” of village landowners should have been created at the beginning to “increase community participation in the ground-level process of planning and implementation.” This participatory approach is advocated by numerous scholars of PRA (Participatory Rural Appraisal) and is considered a key to success of rural development projects (Chambers 1994; Pretty 1994; Brass 1997). Through the WCG (an appointed seven-member, CBS-resident, committee) and its Advisory Board (of outside authorities), the CBS management has finally achieved this legal status, but has missed landowners’ input from years past to present. It is now incumbent upon the WCG to develop a participatory process that will formally and efficiently establish communication with landowners for current and future planning and implementation.

Residents were asked, “Who runs the CBS?” Alexander (2000) reports that, in 1997, 28% of residents did know who was in charge, and 72% did not. At the time of her study, a local “advisory committee” (or management committee) oversaw the manager of the museum, who was in charge of day to day operations. By 2000, 56% of the residents

interviewed did know correctly who ran the CBS, and 44% did not know. This is a significant rise in knowledge of management from 28% in 1997 to 56% in 2000 ($p < 0.0027$). This points to several possible causes: 1) that the WCG was beginning to have a successful impact by its attempt to involve all landowners, 2) that the takeover of CBS management by the “women’s group” was unusual enough for residents to remember, and/or 3) the fact that WCG president was a member of the Young family and wife of the current manager.

Similarly, CBS landowner concerns in 2000 centered around the perception and reality of skewed distributions of monetary benefits, lack of communication between management and residents, and therefore a lack of knowledge and availability for landowner input into CBS decisions. Although over 70% of residents interviewed indicated “no” problems with CBS management in all three study years, the percentage stating “yes” rose significantly from 8% in 1988 to 21% in 1992, and 20% in 2000 ($p < 0.03$).

Common problem concerns were: 1) lack of communication with landowners, 2) loss of landowner support, 3) poor organization, 4) management not working, and 5) no equal benefits. Reflecting the current issues of the time, as well as the evolutionary process of management and landowner roles in ecotourism development in the CBS villages, various concerns received top priority in each study year. In 1988 (Hartup 1989), the major concern was that outside, foreign influences on CBS would cause loss of landowner support (43%). In 1992 (Bruner 1993), it was a “power struggle” (39%) between the current and previous managers, and a new category, the lack of equal benefits (24%). In 2000, the main concern was inequitable distribution of revenue (30%).

Landowners were polled as to characteristics of the “best” management for the CBS. In 1992, with a local advisory committee under BAS in place, including a sanctuary manager and staff at the museum, residents thought that the CBS committee was good (36%), local people should be in charge (20%), and 16% that the manager should be in charge. In 1994, the BAS dropped out of the CBS management, leaving it to the advisory committee, now management committee, to run.

In 2000, landowners indicated that they needed more information to determine the “best” management (20%), local people should be in charge (18%), honest people should be in charge (17%), a significant increase from 1992 (6%; $p < 0.017$), reflecting concerns over alleged corruption and mishandling of funds. A local committee was seen as good (16%), but not as “good” as in 1992 (36%), reflecting the desire for elected committees, not appointed ones ($p < 0.0007$). Overall, landowners indicated that they would support the CBS management if there was 1) full transparency of records and funds, 2) landowner knowledge of and input into CBS decisions and planning, and 3) a diversity of benefits, equitably allocated, including and beyond landowner payments.

These management-dependent benefits were detailed by residents as: a) guides from all villages actively working for CBS; b) an active manager, on salary, whose job it is to conduct school conservation programs, and to market the CBS regionally and nationally by interfacing with government and NGOs; c) development and promotion of integrated tourism ventures and package tours in the six other CBS villages; d) an overall tourism management plan for all villages in the CBS; e) support for schools and community projects; f) rehabilitation of drug users and cessation of tolerance of drug use (and associated crimes) in the CBS villages.

Two points are crucial here. First, CBS pledged landowners are behaving as if the CBS management structure is an “appropriator organization” (AO), with the task of distributing rights, uses, and benefits of a common-pool resource (CPR) – the howler monkeys and their habitats. “Because organizational arrangements frequently emerge from the patterns of behavior that are informally agreed upon over long periods of time, it is difficult to determine when user groups are latent and when they are organized” (Ostrom 1992:297). Second, it is the job of the AO not only to provide these benefits, but to also exhibit characteristics that promote cooperation among users, such as honesty, trustworthiness, and good communication (Ostrom, et. al. 1999; Ostrom 1992). These two points explain the underlying causes of landowner dissatisfaction with the CBS management – the “standard rules” of an AO are not being followed over its total history of operation.

Connected to the above expectations, is the fact that one family has been closely associated with CBS operations for almost all of its eighteen year history; this constant cord has been the Young family. Ritchie states that in creating a tourism vision for an area, “it is usually a few key individuals who make the difference” (1993: 389). In this context, it is the Young family that has kept the CBS vision alive, and indeed, progressed. Others in the communities would argue that the Youngs have deterred the growth of CBS and in fact, caused it to go askew. The truth lies somewhere in between. In running the AO of the CBS, the Youngs have become synonymous with the characteristics of the organization. Users demand trust, communication, shared vision, and honesty, and when users perceive failures in this regard, the management is seen to fail as well (Ostrom 1992).

The controversy that still holds grip over complete landowner satisfaction with CBS management is the fact that one or more of the Young family has been involved almost since the beginning of the CBS. Landowners perceive this fact as an ownership gain for the Youngs and as an ownership loss for the 102 pledged members, as well as for the general residents of the CBS villages. One resident expressed that the “Community” Baboon Sanctuary was not a “community” anymore, but a “Private” Baboon Sanctuary belonging to one family (Interviewee #155, 2000). Indeed, CBS management is operating with many characteristics of a private business (Langholz 1996).

In truth, the consistency of the Young’s involvement has both held the CBS together through the years and, through lack of distribution of information, revenue, and power to all landowners, caused divisions within the CBS, as this “public” coalition of private landowners saw their grassroots conservation effort evolve into a powerful tourism entity not under their control.

As McCay and Jentoft (1998: 25) assert, the Tragedy of the Commons of the CBS is not with market failure, but with “community failure,” where “resources users find themselves without the social bonds that connect them to each other and to their communities and where responsibilities and tools for resource management are absent.” Management has the role of bringing users together in a common bond to protect and distribute resources. To solve this dilemma successfully requires that the bonds of ownership be forged with all landowners, and an honest, trustworthy, transparent management be representative of the people, with good communication and input for all members (both riverside and roadside, Bruner 1993). The WCG has begun to do this, in the minds of CBS residents.

“Lost” pledges, changes in land use, and increased development

Of the 102 total recorded pledged CBS members, 41 had died, moved away, or sold their properties by the year 2000. Four family members of deceased relatives signed their own pledge, leaving 37 “lost” pledges, or a total of 65 CBS pledged members still living in the area. Thus, by 2000, over one-third (36%) of all pledged lands were lost from the CBS mission and voluntary control (Figure 2.2).

Land tenure also changed significantly from 1988 (16%) to 2000 (38%) with more residents holding all of their lands with title. The alternative is to lease lands from the government to work for a period of 5 to 10 years, with an approved management agreement. One landowner explained, “Only reason people get title is if they want to sell it” (Interviewee #140, 2000). If so, then this increase may mean that more landowners in CBS are preparing to sell their lands, when the price is right. Over half of residents (56%) held multiple properties, usually one or more parcels to work and another to live on. The total land area recorded from 88 individuals interviewed in 2000 was 2545 hectares, with 49% in lease, and 51% in title.

The average parcel size in 2000 had decreased 60% from Hartup’s study (1994) in 1988 from 43 ha to 18 ha, indicating fragmentation of large land holdings of the past, (such as FBE), and the splitting of lands among siblings and children. This decrease corresponds with the rising total number of CBS households from 216 to 301, and the increase in CBS village populations from approximately 1150 people in 1992, to 1600 total in 2000, highlighting the need of the next generation for plots of land on which to work and live.

Affecting the population and lifestyle of the CBS is a government plan to build as many as 1000 houses along the roadside in WB, to use as housing for villagers and for Belize City residents who are in need of housing. Some villagers see a great benefit in this influx of newcomers to the area, producing more demand for local services and goods. These housing lots will be small and, although similar to the building densities in current village centers, will be in great contrast to the forested, 18 to 200 hectare parcels still left in CBS.

Property values showed staggering increases by 2000, indicated an increased demand for CBS land. Riverside land prices rose from \$50 per hectare to over \$3700 per hectare, with rumors of thirteen times this much paid by foreign buyers. This rise, combined with large tracks of communal lands without secure, individual title (example: Flowers Bank Estates), facilitated foreign and urban buyers with access to capital, to purchase (at minimum) eleven properties between 1992 and 2000, and to plan and/or execute three “resorts” along the river, effectively driving prices beyond the reach of many rural residents.

Landowners continued to express the need for basic services such as water systems and better roads in both 1992 and 2000. Frequency of responses for telephones and electricity decreased in 2000 than in 1992, as most CBS villages had already received these services. Over one quarter (26%) of all residents interviewed expressed that they wanted “more, improved agriculture” with increased mechanization. This response was a significant increase from 1992 (15%), indicating that if landowners had access to farm machinery, they would gladly use it. More tourist accommodations were also cited

(26%), as residents realized the value of visitors staying overnight and the ability to capitalize on package tours and longer tourist stays.

Also, 79% of CBS residents interviewed supported paving the roads and putting in a bridge at SP/BF over the river to allow connection to the Western Highway.

Villagers did list concerns about crime, traffic, destroying the scenic beauty of the river/falls, and changes of lifestyle with the bridge, as it would allow many more non-resident people into the villages.

These trends of increased development, and diversity of new residents coming into the CBS either through housing, travel, or land purchase, testify to the development success of the CBS in general, and in particular to BL as a commercial center.

However, riverside development is also having an ecological impact on these BRV lands. Clearing land for multiple housing lots or tourist resorts, not only affects howler populations but also the natural cycles of annual flooding, encouraging erosion of the riverbanks and loss of property. These effects are already occurring in FB, IB, and BL where riverside land has been cleared and built; flooding was the chief cause of BF residents abandoning their riverside homes to move inland to SP.

Belize, with 59% of its lands in forest cover, experienced a greater deforestation rate (2.3% per year) than the rest of Central America (1.2% per year) during 1990-2000 (DiFiore 2002). Riparian forests covered 40% of land along the Belize River in 1989, but have since been reduced to only 31% cover by 2001, a 22% (7200 ha) loss of forest habitat over the period between 1989 and 2001, the most significant deforestation taking place within the first 90-meter-buffer area (DiFiore 2002). These findings are not to say that development cannot happen alongside the river and other waterways, but it is to

caution that rapid forest conversion along the Belize River is a serious problem that needs to be addressed by communities, developers, government, and NGOs.

The nature of pledges changed between 1992 and 2000, as landowners stated emphatically that pledges were not just about leaving trees for monkeys, but also were agreements to allow tourists to cross and use their lands. This new attitude, coupled with the practice of increased riverside clearings (DiFiore 2002), points towards landowners wanting to allow tourists on lands (for economic benefits) but not monkey habitat (cost of setting aside lands). Obviously, this combination “tourists/no habitat” will not work, as tourists only come onto lands with monkeys and monkey habitat. This combination is consistent with Alexander and Gibson’s (2000) findings that CBS residents valued monkeys but did not value riverine habitats. Ultimately, this coupling of opposing belief and practice is a key dilemma for the CBS and its future.

Fifteen years after conception, continued protection of monkeys and riparian habitat is questionable, particularly in the face of rising property values (from \$50 to over \$3700/ha), extensive development of BRV lands (1000 new houses in WB, whereas all of CBS only contains 300 houses), and a new generation of unsigned CBS landowners (36% of pledged lands).

“The financial success of private reserves runs the risk of attracting new entrants who are business people first, and conservationists second, people willing to make conservation trade-offs in the interest of making or saving money... Reserve owners can also be tempted to overbuild facilities. This includes constructing excessive roads, buildings and other infrastructure within the reserve” (Langholz and Brandon 2001:309).

Just as Langholz and Brandon (2001) suggest, Hartup (1994: 239) warns of CBS, that “urban flight by young rural residents...[and] migration of elderly residents...threaten

community and land use stability...by opening large areas to speculation and external control.”

Such speculation and marginalization of local control is already apparent in other areas of Belize such as San Pedro, Placencia Village, Seine Bight Village, and in Toledo and Cayo Districts. In these areas, ripe with natural beauty, wealthy Belizeans, U. S. expatriates, and foreign developers have perpetuated a cycle of escalating property values, pricing local residents out of the market (Lash and Austin 2003). This is consistent with Ashley, Boyd and Goodwin’s (2000: 3) assessment that “local residents [with private lands] are less likely to be forced out, but often sell up early in tourism development to outside speculators. As a result, they may end up as workers...but not owners or decision-makers.” Heinen (1996) states that PAs are open to greater resource depletion when heterogeneous interests from various ethnicities and economic groups are combined with high population densities.

Villagers interviewed talked about the possible need for a dedicated reserve for howler monkeys. Unlike the Jaguar Reserve of Cockscomb Basin Wildlife Sanctuary, the CBS does not incorporate a public area of land that is exclusively for the use of monkeys and other wildlife. One interviewee, recognizing that some landowners are cutting trees and clearing lands counter to CBS pledges, suggested the purchase of a private piece of land, around 200 ha in size, as a monkey reserve for CBS to manage and control.

In comparison, the CBS cooperative pledge agreement created a 4700 ha “sanctuary” for monkeys – a much larger area than could be easily purchased by an individual organization except government. Changes seen in 2000 in CBS landowner

attitudes towards protection and pledges may necessitate that a large area of land near the river or alternative waterways be found and set aside. In creating these large PAs, governments can move people out and create parks at will in a typical “eco-colonialism” manner, where the rights of local people are subjugated by the rights of the animal and/or environment (Sutherland 1998). This is exactly the type of marginalization that the CBS residents have sought to avoid by creating the sanctuary as “Conservation For the People, By the People,” as a CBS T-shirt reads.

The advantages, however, of an exclusive reserve for howler monkeys are many. There would be no competition for resources between the public good (the monkeys) and people. Private or public, the reserve’s property rights would be intact, and there would be no equity or efficiency issues to contend with. Landowners would be free to use and develop their lands as they see fit, adding houses and roads, and clearing their private lands for pasture. Urbanization of the BRV could continue and BL and other CBS villages could become gateway towns to the “Howler Monkey Reserve.” The CBS management could still oversee the reserve and create its tourism, education, and research programs with greater ease than under the current system of clusters of villager lands. Creating a reserve would be the “easy way out” (Sutherland 1998: 137).

However, the easy way out is not always the “best” way out. The opportunities for greater benefits to a greater number of people are present in the current, but flawed, CBS pledged landowner system. In 2000, it was estimated that approximately three-fourths of landowners still agree to pledge land for the monkeys and CBS (Key Informants #2, #6). However, this support has decreased from the 90% of landowners in

1997 who said that the CBS should continue (Alexander 2000). At this rate of decrease at 5% per year, by 2015, landowner support for the CBS will be lost.

A key challenge of the CBS is: How to stabilize development along the Belize River so that riverside lands remain protected habitat for howler monkeys, while still allowing increased land development, such as housing lots, roads, and infrastructure amenities in the savanna/pine ridge lands? Put another way: How can riverside landowners agree to limit their land development, while pine ridge landowners are allowed no restrictions to build houses, stores, roads, and to clear land? Clearly, the CBS pledged lands are of extreme importance to the survival of the black howler monkeys and other species, and therefore landowners require even greater incentives to invest in preservation than in the past (Vail and Hultkrantz 2000). Whether the CBS management can rise to this challenge is a concern.

Only if management takes the time to consult with landowners and derive benefits that would exceed perceived costs of membership, and if it creates a management structure that works for the people, will the CBS have a continued chance at succeeding using only the mosaic of locally-owned private lands as monkey refuge. If landowner satisfaction is not achieved, as is shown from this study to currently be the case, these lands have a better chance of sustaining monkeys and habitat by designating a large, publicly-owned, forested riverside reserve, than by independent landowner conservation, at the rate of current development and landowner dissatisfaction in the CBS area.

CONCLUSIONS

The CBS is a local people's initiative which protects the indigenous black howler monkey as a conservation byproduct of local livelihoods, within the parameters of private

property management and local control. In practice, like other community conservation programs preserving large habitats and various species, monkey protection and propagation in CBS is contingent on local people's welfare (Rodriguez 1999; Borman 1999; Götmark, *et. al.* 2000; Bookbinder, *et. al.*, 1998; Ite 1996). Belize has laws against hunting endangered wildlife, but multiple landowner clearings of riparian habitat, creating islands of fragmented forests, could essentially decimate howler populations as surely as any gun (Horwich and Lyon 1990; Lyon and Horwich 1996; Harris 1984). Landowner attitudes and perceptions of benefits received from monkey protection are key to conservation success (Ite 1996; Grekin and Milne 1996; Götmark, *et. al.* 2000).

One possible way to achieve both landowner benefits and conservation of wildlife is through CBE. Norris and her colleagues put it best:

Ecotourism "sponsored by private conservation organizations...seeks to preserve the resource by benefiting the local people, whereas community-based ecotourism seeks to benefit the local people by preserving the resource. Communities are willing to conserve nature, but only in a manner that permits them to continue to develop and improve their quality of life." (Norris, *et. al.*, 1998: 337).

Local livelihoods must benefit first and foremost, in order to sustain a natural resource base (Ashley and Roe 1998).

The purpose of this study was to examine landowner perceptions and associated changes in factors influencing the support of the CBS: 1) pledged landowners, 2) conservation of howler monkeys, 2) ecotourism benefits (both perceived and actual), 3) management success, and 4) future development of the CBS area, from three points in time in the life of the CBS, 1988, 1992, and 2000 (Hartup 1989, 1994; Bruner 1993). These longitudinal data demonstrate conclusively that the CBS residents have changed their attitudes about the voluntary nature of the original CBS pledge to one contingent on

economic benefits from tourism. Data also clarify that landowners believe that it is the role of the CBS management to distribute revenue and other benefits equitably to all participating villagers, and if not, then membership in the CBS has little meaning and can be dropped.

These sentiments are tempered, however, by the common bonds between villagers, both in lineage and in similarity of rural lifestyles, and by a willingness to believe that benefits will come in the future. By sharing a common heritage and a common view towards rural land use and protection of monkeys since 1985, CBS residents have approximated the homogeneity of values implicit in a successful “appropriator organization” in the form of its CBS Management Committee, and have run this sanctuary, even if by default, sustainably for years as a CPR (Ostrom 1992; McCay and Acheson 1987).

Current concerns over the future of the CBS are three-fold. First are the demands by pledgers for rent to compensate the cost of letting their lands lay fallow. This is complicated by the increasingly skewed distributions of tourism income to BL residents over members in other villages. By incorporating a possible method of revenue-sharing, where landowners could receive steady and equitable payments, incentives to over-harvest riparian habitats could be reduced (Feeny, *et. al.* 1990).

Second is the inadequate amount of transparent information available to landowners on the daily business of CBS management. Landowners acknowledge, at best, CBS international grant awards and hard working staff, and at worst, its perceived corruption and consequential loss of trust and unity among pledged landowners (Bruner 1993; Alexander 2000). Third is the embryonic, but rapidly growing, change in

demographics and homogeneous make-up of CBS landowners to include urban, foreign, and wealthy newcomers, which may in turn affect the density and character of development on CBS lands (Langholz and Brandon 2001). These concerns could be mitigated and, if addressed, could make the CBS a stronger and more viable organization (Lise 2000). Indeed, the WCG has begun to enhance knowledge via a local newsletter and an internet website, to spread benefits more widely and to involve community residents in CBS-wide business and tourism plans (Community Conservation 2002).

The overall goal of the CBS, as with any private landowner protecting a public good, is to achieve a sustainable balance of benefits for both humans and wildlife (Ashley and Roe 1998). When costs exceed benefits from conservation of CPRs, voluntary best management practices (BMPs) must be supplemented with incentives and binding regulations by local management in order to meet the needs of all users (Dixon and Sherman 1990). This is now unequivocally the case in the CBS. Conservation is now synonymous with economic returns – the voluntary nature of the CBS is no more. No longer can education about wildlife and natural history conservation be sufficient incentives to satisfy landowners in their understandable quest for improved livelihoods (Heinen 1996).

The previous results of Hartup 1994, Lyon and Horwich 1996, Alexander 2000, and others who documented the altruism of CBS landowners toward protection of howler monkey habitat are no longer valid for future planning. The voluntary method of establishing the CBS can be used as a formation model for other rural communities, but it must be followed up with concrete management plans which can implement not only educational and intrinsic benefits, but also equitable distributions of economic benefits as

well. Landowners demand to be paid for their costs. These longitudinal findings can serve as a template for others that, as projects grow and evolve, so does the need for tangible incentives to safeguard protection and limits on use of PAs (Heinen 1996).

These changes in benefits do not negate the overall success of the CBS in preserving howler monkeys. This sanctuary was formed as an experiment with no expectations other than farmers agreeing to preserve monkey habitat. It has existed over 18 years and achieved its goal of protecting howler monkey populations. There is an increased awareness on the part of all villagers of the value of monkeys, first as a “rare species, need to protect” and now as a “tourist attraction.” Farmers are willing to report incidences of harm to monkeys, support hunting laws, and in general, alter their farming practices to accommodate the needs of monkeys. From an outsider’s view, life has changed little in these rural communities; from an insider’s view, life is changing fast. The old ties to the land, the practice of communal farming, the trust and reliance on relatives in business transactions, particularly in the informal passing down of land ownership from one generation to the next, and the subsistence ways of life and thinking, are now housed with the older people, while the younger generation learns more modern concepts and occupations.

What is important to remember is that these lands, people, and wildlife are not static, and any agreements and solutions working well last month may need to be revised next month or next year (Vail and Hultkrantz 2000; Brass 1997). Just as landowner benefits need to be consistent and equitable, so does the communication, trust, shared vision, and evaluation of CBS between landowner and management, if full success, both biological and human, is to be achieved (Fukuyama 1995).

This longitudinal study has provided documentation and assessment of these dynamic changes. These results have implications not only for the CBS management and future planning, but also for other CBE privately-owned conservation programs elsewhere. As CBS residents indicate, without 1) re-structuring CBS management duties to reflect the diverse inputs and values of all users, and to provide transparent and frequent information, and 2) distributing regular and equitable dividends to all pledged landowners and providing community benefits of all villagers, support for the CBS will not continue (Ostrom 1992; Newmark, *et. al.* 1993; Teye, *et. al.* 2002).

Further research by local community members into values and perceptions of immigrant residents, as well as the establishment of agreed on and documented rules for CPR management of the CBS, is necessary. As tourism revenue in the CBS villages increases exponentially, it is imperative that a systematic tourism development plan be created by local residents, and implemented through legal means for the entire BRV, which could preserve monkey populations, benefit local human populations and their culture, and enhance the overall characteristics and attractiveness of the BRV villages as a rural tourism destination.

The CBS was formed to protect one of the largest remaining populations of black howler monkeys (*Alouatta pigra*) in Meso-America. It is crucial that steps be taken to address these inequities to landowners and to build sound management, if this private-ownership initiative is to remain an active participant in these conservation efforts.

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REFERENCES

- Alderman, Claudia L. 1990. *A Study of the Role of Privately-Owned Lands Used for Nature Tourism, Education and Conservation*. A Report for Conservation International, Washington D.C.
- Alderman, Claudia L. 1994. The Economics and the Role of Privately-Owned Lands Used for Nature Tourism, Education, and Conservation. In: *Protected Area Economics and Policy: Linking Conservation and Sustainable Development*. Munasinghe, M. and J. McNeely, eds. Washington, DC: IUCN and The World Bank, pp. 273-305.
- Alexander, Sara, E. 1999. The Role of Belize Residents in the Struggle to Define Ecotourism Opportunities in Monkey Sanctuaries. *Cultural Survival Quarterly*, Vol. 23, Issue 2, p. 21-23.
- Alexander, Sara, E. 2000. Resident attitudes towards conservation and black howler monkeys in Belize: the Community Baboon Sanctuary. *Environmental Conservation* 27 (4): 341- 350.
- Alexander, Sara E. and Jane W. Gibson 2000. Tourism Impact Assessment (TIA): Participatory Empiricism in the Measurement of Ecotourism. Paper presented to the *Society for Applied Anthropology*, San Francisco, CA, 21-26 March 2000. p.1-32, unpublished manuscript.
- Amandala, 2000. "SWA disapproves of proposed Mile 27 landfill." *Amandala Belize*, Sunday, May 21, 2000, p. 26.
- Andereck, Kathleen L. and Christine A. Vogt 2000. The Relationship between Residents' Attitudes toward Tourism and Tourism Development Options. *Journal of Travel Research*, Vol. 39, p. 27-36.
- Ashley, Caroline and Dilys Roe 1998. *Enhancing Community Involvement in Wildlife Tourism: Issues and Challenges*. London: International Institute for Environment and Development (IIED).
- Ashley, Caroline, Charlotte Boyd and Harold Goodwin 2000. Pro-Poor Tourism: Putting Poverty at the Heart of the Tourism Agenda. *ODI Natural Resource Perspectives*, No. 51: 1-6.
- Belize Central Statistical Office 2001. *Report No.1 National Population And Housing Census 2000 Population Count, September, 2000*. <http://www.cso.gov.bz>
- Belize River Valley Association (BELRIV) 1999. *Project Profile: Promoting Community Eco-Tourism in the Belize River Valley Communities, Section 3: Project Justification*. Belize City: Programme for Belize.

- Belize Tourist Board (BTB) 2003. Tourist Purpose and Activity Statistics.
<http://www.belize tourism.org/purpose.html>
- Belsky, Jill M. 1999. Misrepresenting Communities: The Politics of Community-Based Rural Ecotourism in Gales Point Manatee, Belize. *Rural Sociology* 64 (4), p. 641-666.
- Bernard, H. Russell 1995. Research Methods in Anthropology: Qualitative and Quantitative Approaches, 2nd Edition. Walnut Creek: AltaMira Press.
- Blackstone Corporation, 1998. *Tourism Strategy Plan for Belize*. Belmopan, Belize: The Ministry of Tourism and Environment.
- Boo, E. 1990. *Ecotourism: The Potentials and Pitfalls, Vol 1 & 2*. Washington, DC: World Wildlife Fund.
- Bookbinder, M. P., E. Dinerstirn, A. Rijal, H. Cauley, and A. Rajouria 1998. Ecotourism's Support of Biodiversity Conservation. *Conservation Biology*, Vol. 12, No. 6 p. 1399-1404.
- Borman, Randy 1999. Cofan: Story of the Forest People and the Outsiders. *Cultural Survival Quarterly*, Vol. 23, Issue 2, p. 48-50.
- Brandon, Katrina. 1996. *Ecotourism and Conservation: A Review of Key Issues*. Global Environment Division, Biodiversity Series, Paper No. 033. Washington, D.C.: The World Bank.
- Brass, Jane L.. 1997. Community Tourism Assessment Handbook. Corvallis, OR: Western Rural Development Center (WRCD) and Bozeman, MT: Montana State University (MSU) Extension. <http://www.montana.edu/wwwwrdc>
- Brockett, R. C., R. H. Horwich, and C. B. Jones 1999. Disappearance of infants following male takeovers in the Belizean black howler monkey (*Alouatta pigra*). *Neotropical Primates* 7: 86-88.
- Brockett, R. C., R. H. Horwich, and C. B. Jones 2000. Female dispersal in the Belizean black howler monkey (*Alouatta pigra*). *Neotropical Primates* 8: 32-34.
- Brown, Greg, and Charles C. Harris, Jr. 1992. National Forest Management and the "Tragedy of the Commons": A Multidisciplinary Perspective. *Society and Natural Resources*, Vol 5, pp. 67-83.
- Bruner, G. Y., 1993. *Evaluating a Model of Private-Ownership Conservation: Ecotourism in the Community Baboon Sanctuary in Belize*. MS Thesis, Georgia Institute of Technology, Atlanta, GA.

- BTIA 2000. *Destination Belize 2000, The Official Guide to Belize*. Belize City: Belize Tourism Industry Association (BTIA).
- CBS 1997. *General Meeting Minutes*, April 13, 1997, Dr. Roy Young, President.
- Chambers, Robert, 1994. Participatory Rural Appraisal (PRA): Analysis of Experience. *World Development*, Vol. 22, No. 9, pp. 1253-1268.
- Community Conservation Update. Fall/Winter 2002. 13(2) 1-4.
<http://www.communityconservation.org>
- Cuarón, A. D. 2000. "A Global Perspective on Habitat Disturbance and Tropical Rainforest Mammals." *Conservation Biology*, Vol. 14:6, p. 1574-1579.
- Di Fiore, Sonia Lucia 2002. *Remote Sensing and Exploratory Data Analysis as Tools to Rapidly Evaluate Forest Cover Change and Set Conservation Priorities Along the Belize River, Belize*. MA thesis, Columbia University, New York, NY.
<http://www.wildlifetrust.org/difiore.htm>
- Dixon, John A. and Paul B. Sherman 1990. *Economics of Protected Areas: A New Look at Benefits and Costs*. Washington DC: Island Press.
- Eagles, P. F. J. 2001. Information Sources for Planning and Management. In *The Encyclopedia of Ecotourism*, Weaver, David B. ed., New York: CABI Publishing, p. 611-626.
- Feeny, David, Fikret Berkes, Bonnie McCay, and James M. Acheson 1990. The Tragedy of the Commons: Twenty-Two Years Later. *Human Ecology*, 18(1), p. 1-19.
- Food and Agriculture Organization of the United Nations (FOA) 2000. *FRA 2000 Annotated Bibliography Forest Cover Change, Belize*. Forest Resources Assessment Programme, Working Paper 40, July 2000. Rome: FOA.
- Fukuyama, Francis 1995. *Trust: The Social Virtues and the Creation of Prosperity*. New York: Free Press Paperbacks.
- Götmark, Frank, Helena Söderlundh and Maria Thorell 2000. Buffer zones for forest reserves: opinions of land owners and conservation value of their forest around nature reserves in southern Sweden. *Biodiversity and Conservation* 9: 1377-1390.
- Grekin, J. and S. Milne 1996. Towards Sustainable Tourism: The Case of Pond Inlet, N.W.T. In *Tourism and Indigenous Peoples*, Richard Butler, Thomas Hinch and Tom Hinch. London: International Thomson Business Press, Chapter 4.
- Hardin, Garrett 1968. The Tragedy of the Commons, *Science*, vol. 162, pp. 1243-1248.

- Harris, Larry D. 1984. *The Fragmented Forest: Island Biogeography Theory and the Preservation of Biotic Diversity*. Chicago: The University of Chicago Press.
- Hartup, Barry. 1989. *An Alternative Conservation Model for Tropical Areas: the Community Baboon Sanctuary, Belize*. MS Thesis, University of Wisconsin, Madison.
- Hartup, Barry. 1994. "Community Conservation in Belize: Demography, Resource Use and Attitudes of Participating Landowners." In *Biological Conservation* 69: 235-241.
- Healy, R. G. and D. H. Newman, 1989. *Opportunity Costs in Establishing the Proposed Bladen Branch Nature Reserve, Belize*. World Wildlife Fund, U.S. Consultant Report, July 20, 1989.
- Healy, Robert G. 1996. Tourism Policy in Brazil: Development Alternatives and Environmental Consequences.
http://www.env.duke.edu/faculty/healy/BRAZIL_h.html
- Heinen, Joel T. 1996. Human Behavior, Incentives, and Protected Area Management. *Conservation Biology*, Vol. 10, No. 2, pp. 681-684.
- Hershkowitz, A. and G. F. Lee, 2000. *Comments of The Natural Resources Defense Council on the Public Health and Environmental Protection Issues related to the Proposed Belize Landfill at Mile 27*. Natural Resources Defense Council, New York: New York, February 16, 2000, pp. 1-14.
- Holladay, Patrick. In Prep. *Research for Masters on St. Margaret's Village and Five Blues National Park*. Biological Sciences Department, Eastern Kentucky University.
- Honey, Martha. 1999. *Ecotourism and Sustainable Development: Who Owns Paradise?* Washington, D. C.: Island Press.
- Horwich, Robert H. 1990. How To Develop a Community Sanctuary – An Experimental Approach to the Conservation of Private Lands. *Oryx* 24: 95-102.
- Horwich, Robert H. 1998. Effective Solutions for Howler Conservation. *International Journal of Primatology* (19) 3: 579-598.
- Horwich, Robert H. and Jonathan Lyon. 1988. Experimental Technique for the Conservation of Private Lands. *Journal of Medical Primatology* 17:169-176.
- Horwich, Robert H. and J. Lyon 1990. *A Belizean Rain Forest: The Community Baboon Sanctuary*. Orangutan Press, Gays Mills, WI.

- Horwich, Robert H. and J. Lyon 1995. Multilevel Conservation and Education at the Community Baboon Sanctuary, Belize. In *Conserving Wildlife: International Education and Communication Approaches*. ed. Susan K. Jacobson. New York: Columbia University Press, p. 235-253.
- Horwich, Robert H., and J. Lyon, 1998. "Community-Based Development As a Conservation Tool: The Community Baboon Sanctuary and the Gales Point Manatee Reserve. In *Timber, Tourists, and Temples: Conservation and Development in the Maya Forests of Belize, Guatemala and Mexico*. eds. R. Primack, D. Bray, H. A. Galletti, and I. Ponciano. Island Press: Washington DC, p. 343-363.
- Horwich, Robert H., and Jonathan Lyon. 1999. Rural Ecotourism as a Conservation Tool. In *Tourism Development in Critical Environments*, eds. Tejvir Singh and Shalini Singh. New York: Cognizant Communication Corp.
- Horwich, Robert H., Fred Koontz, Ernesto Saquil, Hermelindo Saquil and Kenneth Glander. 1993. A Reintroduction Program for the Conservation of the Black Howler Monkey in Belize. *Endangered Species UPDATE 10 (6): 1-6*.
- Horwich, Robert H., Robin C. Brockett, Roxie A. James, and Clara B. Jones 2001a. Population Growth in the Belizean Black Howling Monkey (*Alouatta pigra*). *Neotropical Primates 9(1)*, p. 1-7.
- Horwich, R. H., R. C. Brockett, R. A. James, and C. B. Jones 2001b. Population Structure and Group Productivity of the Belizean Black Howling Monkey (*Alouatta pigra*): Implications for Female Socioecology. *Primate Report 61*, November 2001 p. 47-65.
- Ite, Uwem E. 1996. Community perceptions of the Cross River National Park, Nigeria. *Environmental Conservation 23(4)*: 351-357.
- Johnson, Melissa A. 1996. People's Participation in Belize: A View From the Field of Conservation. Paper presented at the *IX Annual Studies on Belize Conference: The Culture of Tolerance and the Practice of Democracy in Belize*. October 24-27, 1995. University College of Belize, Belize City, Belize.
- Johnson, Melissa, A. 1998. *Nature and Progress in Rural Creole Belize*. Ph.D. dissertation, The University of Michigan, Ann Arbor, Michigan.
- Jones, Clara B. and Jesse Young 2002. Hunting Restraint by Creoles at the Community Baboon Sanctuary, Belize. p.1-28, Unpublished manuscript. Email: cjones@livingstone.edu

- Kangas, Patrick, Mary Shave, and Paul Shave 1995. Economics of an Ecotourism Operation in Belize. *Environmental Management* 19(5), p. 669-673.
- King, David A. and William P. Stewart 1996. Ecotourism and Commodification: Protecting People and Places. *Biodiversity and Conservation* 5, 293-305.
- Kramer, Randall, Jeff Langholz, and Nick Salafsky 2002. The Role of the Private Sector in Protected Area Establishment and Management. In *Making Parks Work: Strategies for Preserving Tropical Nature*. J. Terborgh, C. van Schaik, L. Davenport, and M. Rao, eds. Washington, DC: Island Press. p. 335-351.
- Langholz, J. 1996. Economics, objectives, and success of private nature reserves in sub-Saharan Africa and Latin America. *Conservation Biology* 10, 271-280.
- Langholz, Jeff 2002. Privately-Owned Parks. In *Making Parks Work: Strategies for Preserving Tropical Nature*. J. Terborgh, C. van Schaik, L. Davenport, and M. Rao, eds. Washington, DC: Island Press. p. 172-188.
- Langholz, J. and K. Brandon 2001. Privately Owned Protected Areas. In *The Encyclopedia of Ecotourism*, Weaver, David B. ed., New York: CABI Publishing, p. 303-314.
- Lash, G. Y. B. and A. D. Austin 2003. *Rural Ecotourism Assessment Program (REAP)*. Washington, DC: The International Ecotourism Society, In Prep.
- Lash, G. Y. B. and R. H. Horwich 1996. Successes and Problems of Community-Managed Ecotourism in Protecting Primates: A Case Study in Belize. Presentation at the *XIXth Conference of the American Society of Primatologists*, August 11-16, 1996, University of Wisconsin-Madison.
- Lindberg, Kreg. 1991. *Policies for Maximizing Nature Tourism's Ecological and Economic Benefits*. International Conservation Financing Project Working Paper, World Resources Institute, Washington, D.C.
- Lipske, Michael. 1992. How a Monkey Saved the Jungle. *International Wildlife* 22 (1): 38-43.
- Lise, Wietze. 2000. Factors Influencing People's Participation in Forest Management in India. *Ecological Economics* 34 (3): 379-392.
- Lyon, Jonathan and Robert H. Horwich 1996. Modification of Tropical Forest Patches for Wildlife Protection and Community Conservation in Belize. In *Forest Patches in Tropical Landscapes*, eds. J. Schelhas and R. Greenberg. Washington, D.C.: Island Press, p. 205-230.

- Mahler, Richard and Steele Wotkins, 1991. The Community Baboon Sanctuary. In *Belize: A Natural Destination*. Santa Fe, NM: John Muir Publications.
- Maikhuri, R. K., U. Rana, K. S. Rao, S. Nautiyal, and K. G. Saxena 2000. Promoting ecotourism in the buffer zone areas of Nanda Devi Biosphere Reserve: an option to resolve people-policy conflict. *International Journal of Sustainable Development and World Ecology*, Vol 7, p. 1-10.
- Marsh, Laura K. 1999. *Ecological Effect of the Black Howler Monkey (Alouatta pigra) on Fragmented Forests in the Community Baboon Sanctuary, Belize*. Ph.D. diss., Washington University, St. Louis.
- McCay, Bonnie 2001. Community-based and Cooperative Fisheries: Solutions to Fisherman's Problems. In *Protecting the Commons: A Framework for Resource Management in the Americas*, Burger, Joanna, Elinor Ostrom, Richard B. Norgaard, David Policansky, and Bernard D. Goldstein, eds. p. 175-194.
- McCay, Bonnie and James M. Acheson 1987. *The Questions of the Commons: The Culture and Ecology of Communal Resources*. Tucson: The University of Arizona Press.
- McCay, Bonnie J. and Svein Jentoft 1998. Market or Community Failure? Critical Perspectives on Common Property Research. *Human Organization* 57(1), p. 21-29.
- Ministry of Tourism and the Environment, Belize, and Belize Enterprise for Sustained Technology (BEST). 1994. *Report of the Community-Based Ecotourism Gathering*, 3 March 1994, Hopkins Village, Belize.
- Ministry of Tourism and the Environment, Belize, and Belize Enterprise for Sustained Technology (BEST). 1994a. *Guide To Community-based Ecotourism in Belize*. November 1994, Belize.
- Newmark, W. C., Nancy L. Leonard, Hashim I. Saniko, and Deo-Gratias M. Gamassa, 1993. Conservation Attitudes of Local People Living Adjacent to Five Protected Areas in Tanzania. *Biological Conservation* 1993,63: 177-183.
- Norris, Ruth, J. Scott Wilber, and Luís Oswaldo Morales Marín 1998. Community-Based Ecotourism in the Maya Forest: Problems and Potentials. In *Timber, Tourists, and Temples: Conservation and Development in the Maya Forests of Belize, Guatemala and Mexico*. eds. R. Primack, D. Bray, H. A. Galletti, and I. Ponciano. Island Press: Washington DC, p. 327-342.
- Ostro, Linde E. T., Scott C. Silver, Fred W. Koontz, Truman P. Young, Robert H. Horwich 1999. Ranging behavior of translocated and established groups of black

howler monkeys *Alouatta pigra* in Belize, Central America. *Biological Conservation* 87, p. 181-190.

- Ostrom, Elinor 1992. The Rudiments of a Theory of the Origins, survival, and Performance of Common-Property Institutions. In *Making the Commons Work: Theory, Practice, and Policy*. D. W. Bromley, ed. San Francisco: ICS Press, p. 292-318.
- Ostrom, Elinor 2001. Reformulating the Commons. In *Protecting the Commons: A Framework for Resource Management in the Americas*, Burger, Joanna, Elinor Ostrom, Richard B. Norgaard, David Policansky, and Bernard D. Goldstein, eds. p. 17-41.
- Ostrom, E, J. Burger, C. B. Field, R. B. Norgaard, and D. Policansky 1999. Revisiting the Commons: Local Lessons, Global Challenges. *Science*, Vol. 284, p. 278-282.
- Pretty, Jules N. 1994. Alternative Systems of Inquiry for A Sustainable Agriculture. *Institute of Development Studies (IDS) Bulletin* 25 (2): 37-48.
- Rabinowitz, Alan 1986. Jaguar: *One Man's Battle to Establish the World's First Jaguar Preserve*. New York: Anchor Books.
- Ritchie, J.R. Brent, 1993. Crafting a Destination Vision, Putting the Concept of Resident Responsive Tourism into Practice. *Tourism Management* 14(5), pp.379-389.
- Robinson, J. G., and K. H. Redford. 1994. Community-Based Approaches to Wildlife Conservation in Neotropical Forests. In *Natural Connections: Perspectives in Community-Based Conservation*, D. Western and R. M. Wright, eds. Washington, D.C.: Island Press, pp. 300-319.
- Rodríguez, Arnaldo 1999. Kapawi: A Model of Sustainable Development in Ecuadorean Amazonia. *Cultural Survival Quarterly*, Vol. 23, Issue 2, p. 43-44.
- Ryan, Chris 2002. Equity, Management, Power Sharing and Sustainability – Issues of the “New Tourism.” *Tourism Management*, Vol.23, No.1, pp.17-26.
- Salafsky, Nick and Richard Margoluis 2002. Breaking the Cycle: Developing Guiding Principles for Using Protected Area Conservation Strategies. In *Making Parks Work: Strategies for Preserving Tropical Nature*. John Terborgh, Carel van Schaik, Lisa Davenport, and Madhu Rao, eds., p. 409-423.
- Silver, S. C., L .E. T. Ostro, C. P. Yeager, and R. H. Horwich 1998. Feeding Ecology of the Black Howler Monkey (*Alouatta pigra*) in Northern Belize. *American Journal of Primatology* 45: 263-279.

- Sirakaya, Ercan, Victor Teye, and Sevil Sönmez 2002. Understanding Residents' Support for Tourism Development in the Central Region of Ghana. *Journal of Travel Research*, Vol. 41, p. 57-67.
- Sproule, Keith W. and Ary S. Suhandi 1998. Guidelines for Community-based Ecotourism Programs: Lesson from Indonesia. In *Ecotourism: A Guide for Planners and Managers, Volume 2*. North Bennington, VT: The Ecotourism Society, p. 215-236.
- Srikosamatara, Sompoad and Warren Y. Brockelman 2002. Conservation of Protected Areas in Thailand: A Diversity of Problems and a Diversity of Solutions. In *Making Parks Work: Strategies for Preserving Tropical Nature*. John Terborgh, Carel van Schaik, Lisa Davenport, and Madhu Rao, eds., p. 218-231.
- Stevens, Stan 1997. Lessons and Directions. In *Conservation Through Cultural Survival: Indigenous Peoples and Protected Areas*, Stevens, Stan ed. Washington, DC: Island Press, p. 265-298.
- Sutherland, A. 1998. *The Making of Belize: Globalization in the Margins*. Westport, CT: Bergin and Garvey.
- Tchamie, T. T. K. 1994. Learning from local hostility to protected areas in Togo. *Unasylva* 176, Vol 45.
- Teye, Victor, Sevil F. Sönmez, and Ercan Sirakaya 2002. Residents' Attitudes Toward Tourism Development. *Annals of Tourism Research*, Vol. 29, No. 3, p. 668-688.
- The Belize Times*, 2000a. "Two Contracts Signed at Ministry of Works," 3 December, p.5.
- The Belize Times*, 2000b. "Big Time Build Up: A Bundle of New Investments in New Year," 3 December, p.1.
- Tosun, Cevat 2001. Host Perceptions of Impacts: A Comparative Tourism Study. *Annals of Tourism Research*, Vol. 29, No.1, p.231-253.
- Vail, David and Lars Hultkrantz 2000. Property right and sustainable nature tourism: adaptation and mal-adaptation in Dalarna (Sweden) and Maine (USA). *Ecological Economics* 35, p. 223-242.
- Vedder, A. and A. W. Weber. 1990. The Mountain Gorilla Project (Volcanoes National Park) -- Rwanda, in *Living with Wildlife: Wildlife Resource Management with Local Participation in Africa*. A. Kiss, ed. World Bank.

Vincent, Vern C. and William Thompson 2002. Assessing Community Support and Sustainability for Ecotourism Development. *Journal of Travel Research*, Vol. 41, p. 153-160.

Women's Conservation Group (WCG), 1999. *Letter to Landowners*, 3 July 1999, Mrs. Jesse Young, President.

Women's Conservation Group (WCG), 2000. "Building on 15 Years of Community-Based Conservation in Belize: A Reappraisal of The Community Baboon Sanctuary." A proposal submitted by CBS WCG to UNDP, April 2000 draft, Mrs. Jesse Young, President.

CHAPTER 3

WOMEN, CRAFTS, AND CONSERVATION ATTITUDES: CREATING
ALLIANCES BETWEEN COMMUNITIES AND PROTECTED AREAS IN
ECUADOR¹

¹ Lash, G. Y. B. 2003. To be submitted to *Environmental Conservation*.

SUMMARY

Private reserves are used as methods for creating enforceable protected areas (PAs) for endangered wildlife and habitats. Even so, studies show that support from buffer zone communities is required for long-term PA success, and that this support is related to perceived benefits and costs within the localized framework of social and economic factors. In building alliances with surrounding communities, PA managers look strategically to rural development projects both to enhance local livelihoods, thereby engendering support, and to communicate PA conservation goals. One such development and conservation strategy is crafts production in conjunction with ecotourism ventures in rural areas, allowing local residents, particularly women, to gain access to markets, training and empowerment. Participation in crafts provides income which, in turn, provides incentives to support PAs.

To assess the effectiveness of this strategy, this paper examines the experience of women in the crafts industry compared to non-craft women in the village of Santa Marianita, located near Maquipucuna Reserve, a large private cloud forest in northwestern Ecuador. The hypothesis of this study is that women in the village crafts industry exhibit a greater level of support for the Reserve than non-craft women. Support is measured based on their attitudes towards forest conservation, and perceived benefits from the reserve and its programs.

Results indicate that there are no significant differences between craft and non-craft women, most likely due to the constant presence of Reserve staff and tourists in the daily life of the village. All women recognize the need to preserve forests and wildlife. Even so, accord still exists, from both groups of women, for hunting and for clearing of

forest for pasture and sugar cane, the main wage-earners for rural families. Both craft and non-craft women strongly support no hunting in the Reserve, mainly because it is private property. Over two-thirds of women support people buying large tracks of land, but almost half (42%) are concerned that land is needed to provide traditional agricultural jobs for local people, and lands in conservation do not. Women understand the need to protect water sources and forests around them, and also were aware of Reserve goals. Over one-third of women interviewed received no benefits from the Reserve, while at the same time over three-fourths of women said the Reserve has had a positive impact on their lives.

Two factors are identified as central to engendering support and aligning PA and community conservation goals: 1) expectations of village women of the social and economic roles of the Reserve, and 2) private property status of the reserve. This study has important implications not only for the continued future success of the Maquipucuna Reserve but also to the perceived value and expectations by local stakeholders of private reserves in general, and to crafts as a viable tool for community development.

Keywords: Protected areas, women, crafts, ecotourism, conservation, Ecuador.

INTRODUCTION

Local Agenda 21 of the United Nations calls citizens around the world to “think globally and act locally,” addressing the sustainable use of natural resources at the community level as a tangible method for implementing global goals of sustainability (Sipos 1999). Allocation and management of forest resources for intergenerational equity is of paramount importance, particularly those forests in tropical soils (Rogers 1993; Redgwell 1999). How can communities at the local level best use and protect these tropical

forests? This leads to challenging policy questions: *which* forest lands to protect, *who* manages them, and for *what* products? Local residents may have long standing claims to newly protected lands and demand that historical uses such as hunting or extraction of other natural resources be allowed to continue (Ite 1996; Maikhuri 2000).

Protected areas (PAs), such as national parks, are political methods of attempting to secure intergenerational and interspecific use of natural resources (Talbot 1984). Privately-owned PAs combine the solidity of well-defined property rights with the opportunity to protect and preserve wildlife and/or natural resources, and are a common strategy for non-governmental organizations (NGOs; Brandon 1996; Langholz and Brandon 2001).

Even though private PAs have legal fortitude, they, like all types of PAs, nevertheless depend on the cooperation and support of adjacent communities (Dugelby and Libby 1998; Sneed 1997; Little 1994). Symbiotic relationships can emerge between PAs and surrounding villages with regard to conservation ethics and economic enterprises (Stevens 1997). Wunder (1999:1) confirms that income from tourism “tends to change local attitudes and behaviour, such as reducing overexploitation, creating ‘untouchable’ zones and user quotas.” On the other hand, adversarial relationships can be created if a clear understanding of needs and goals of both PAs and villagers is absent (Srikosamatara and Brockelman 2002; Tchamie, T. T. K. 1994; Hughes, D. M., 1996). Support for PAs by local residents is largely dependent on perceived social and economic benefits (Lash 2003; Ite 1996; Götmark, *et. al.* 2000). Cooperation between PAs and villagers can be enhanced through training workshops, job opportunities, and other items perceived as benefits by local residents.

In promoting community enterprises, ecotourism has long been acknowledged as a potential means to both conserve natural resources and provide economic benefits to local residents (Epler Wood 2002). Communities can use ecotourism as an opportunity to enhance their livelihoods through diversifying incomes, improving human capital through training, and empowering residents with the ability to control tourism decision-making (Ashley and Roe 1998; Ashley 2000).

When working with local communities, it is important to involve not only leaders, but also diverse groups and the under-privileged or marginalized residents, such as women and children (Bullock 1994). Women can be key players in community-based ecotourism (CBE) ventures by offering rooms, cooking meals, and making crafts. Handicrafts can be produced episodically, allowing women to work part-time and to be based at home so as to compliment domestic and childcare duties (Healy 1994; Lash, *et. al.* 1999). As teachers of the next generation, it is important that women have opportunities to learn skills, enhance their education, and become empowered as equal members of society (Badi'i 1997; Dankelman and Davidson 1988).

Crafts can give women access to tourism markets, as well as encouraging sustainable production and resource use (Basgall 1997). Craft-making can provide revenue for women who otherwise would not be able to work outside the home. Women gain money to buy needed household items, special treats for their children, and to pay for children's schooling (Lash *et., al.* 1999). Making and selling crafts can also bring a sense of pride and confidence, as well as financial independence to women (Healy 1994; Scheyvens 1999).

Ecuador

Designated as a mega-biodiverse country with several biological “hotspots,” Ecuador hosts over 25,000 plant, 1500 bird, 320 mammal, 350 reptile, 400 amphibian, and 800 fish species, equaling some of the highest levels of biodiversity and endemism on earth, and bringing the need for its conservation to a critical level (Conservation International 2002; Ecuador 2003). Its habitats range from marine ecosystems to montane climates at 6300m elevation in the Andes. Ecuador is well known for its ecotourism destinations, in particular the Galapagos Islands and its Oriente (Amazonian) indigenous tours, highlighted by community-based ecotourism projects in the Achuar and Cofan territories (Epler Wood 1998). This combination of biological and cultural wealth with market recognition as a global tourism destination has prompted NGOs to merge PA management and ecotourism as an economic generator for both NGOs and buffer zone communities.

With forests rich also in minerals and oil, the Ecuadorian government depends on the sale of many of its natural resources, such as oil, to pay the annual interest on its international debt (Jermyn 2002). Along with oil reserves, the government looks towards mining for gold and other valuable minerals as a supplement for foreign capital from oil. Extended exploration for mineral and oil deposits puts a huge burden on Ecuador’s natural environments, and communities living in these natural areas.

Although revenue from tourism does not equal the gross income from oil or gold, it has been shown to influence national decisions regarding protecting the Cuyabeno Reserve in Ecuador from oil and colonization (Wunder 1999). The same is the case in the community of Capirona, in the Amazon of Ecuador, where tourism has discouraged

oil development and helped ensure autonomy of indigenous peoples (TNC 2001). It is the intention of conservation advocates that tourism's long-term benefits to communities and to ecological systems will influence future resource policy and practice, both at the local and national levels.

La Reserva Maquipucuna (Maquipucuna Reserve) was established in 1988 as a private reserve by the non-profit NGO, Fundación Maquipucuna (FM) as means to protect one of Ecuador's last remaining cloud forests. In particular, the Reserve protects a population of the endangered spectacled bear (*Tremarctos ornatus*) and a cock-of-the-rock (*Rupicola peruviana*) lek. Maquipucuna lies within the Chocó-Darien-Western Ecuador hotspot (Conservation International 2002), and is part of the Chocó-Andean Rainforest Corridor Project, a multi-stakeholder initiative to conserve 2.5 million hectares of these critical habitats (FM 2001, FM 2003). Although FM has worked with the village of Santa Marianita (known as "Marianitas") as well as other nearby communities for several years, it is unclear whether locals really support the Reserve and its conservation goals, as hunting and clearing pressures remain.

Concerns exist in the minds of both villagers and Reserve owners over achieving a common understanding of conservation. FM has had to contend with squatters on its southern borders, hunters in its periphery, and gold prospecting studies in its interior. Local residents see a very large track of land not in "use" and unable to support families by earning a living the only way they know how – by clearing land and growing sugar cane or ranching cows. Can village women and FM staff achieve a common conservation understanding and goals? And can the crafts industry provide an expanded income base for rural residents to choose over traditional livelihood methods?

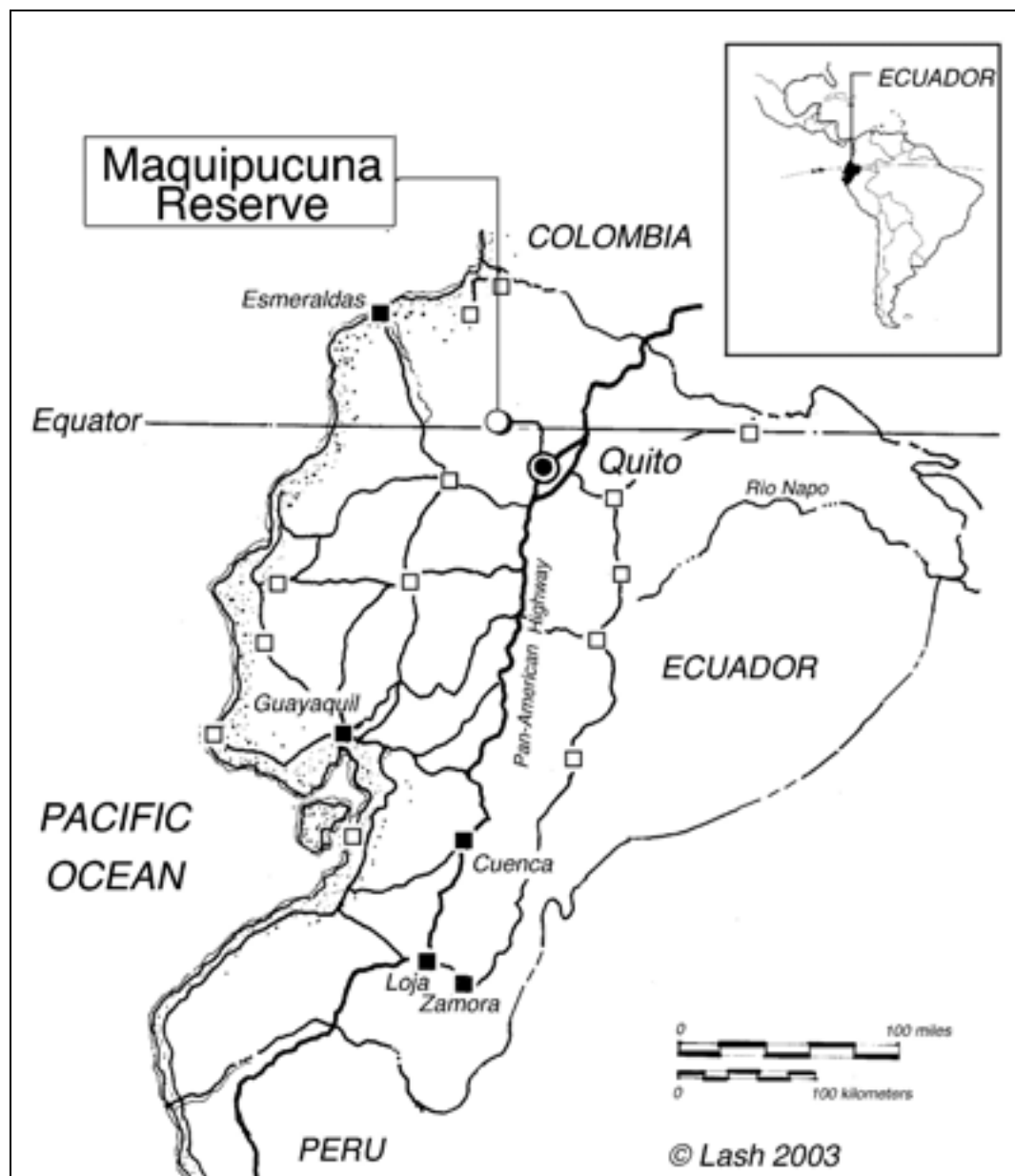
This study focuses on rural craft women in Ecuador and their relationship to the nearby private Maquipucuna Reserve. The purpose of this study is to examine resident women in Marianitas, from the prospective of the crafts industry, and their attitudes towards forest conservation, as well as their perceived benefits from the reserve and its programs. The expectation is that women in the crafts industry will exhibit greater knowledge of conservation and be more receptive to conservation practices than non-crafts women, thereby lending greater support to the Reserve.

Study site – La Reserva Maquipucuna and the Village of Santa Marianitas

Maquipucuna Reserve is located on the equator at 0° 10'51, 64" N – 0° 0'40, 25" N and 78° 40'23, 32" W – 78° 34'13, 14" W (Figure 3.1). This private reserve is a documented success in terms of both its nature conservation and its ecotourism venture (Drumm 1998). The 5000 hectare (ha) reserve is 80% primary cloud forest, with an 18,000 ha as a “protected forest” buffer zone (FM 2002). Reserve land is comprised of steep terrain, making farming difficult and ideal for protection. Covering four different life zones ranging from 1,200 to 2,800 meters above sea level, the Reserve’s forests and valleys harbor significant watersheds for the region, including the headwaters of the Río Guayllabamba.

Located 83 km northwest of Quito, a two-hour drive on the main road to the coast, a part of the Reserve’s northern area has been developed into an ecotourism venture. A simple lodge was built in 1989 for researchers, and with the acquisition of additional land next to the Umachaca River, a more elaborate lodge, Thomas H. Davis Ecotourism Lodge, was built starting in 1993 and opened in 1995. This lodge received only 300 overnight guests in 1995, increasing to 1000 in 1996, to over 1500 people in

Figure 3.1 Location Map: Maquipucuna Reserve in Ecuador



1997, 1700 in 2001 and over 2000 guests in 2002. The lodge can house a total of 36 people (18 guests and 18 researchers). At the time of the study, the Reserve employed eleven full-time staff (mostly locals), and eight temporary workers.

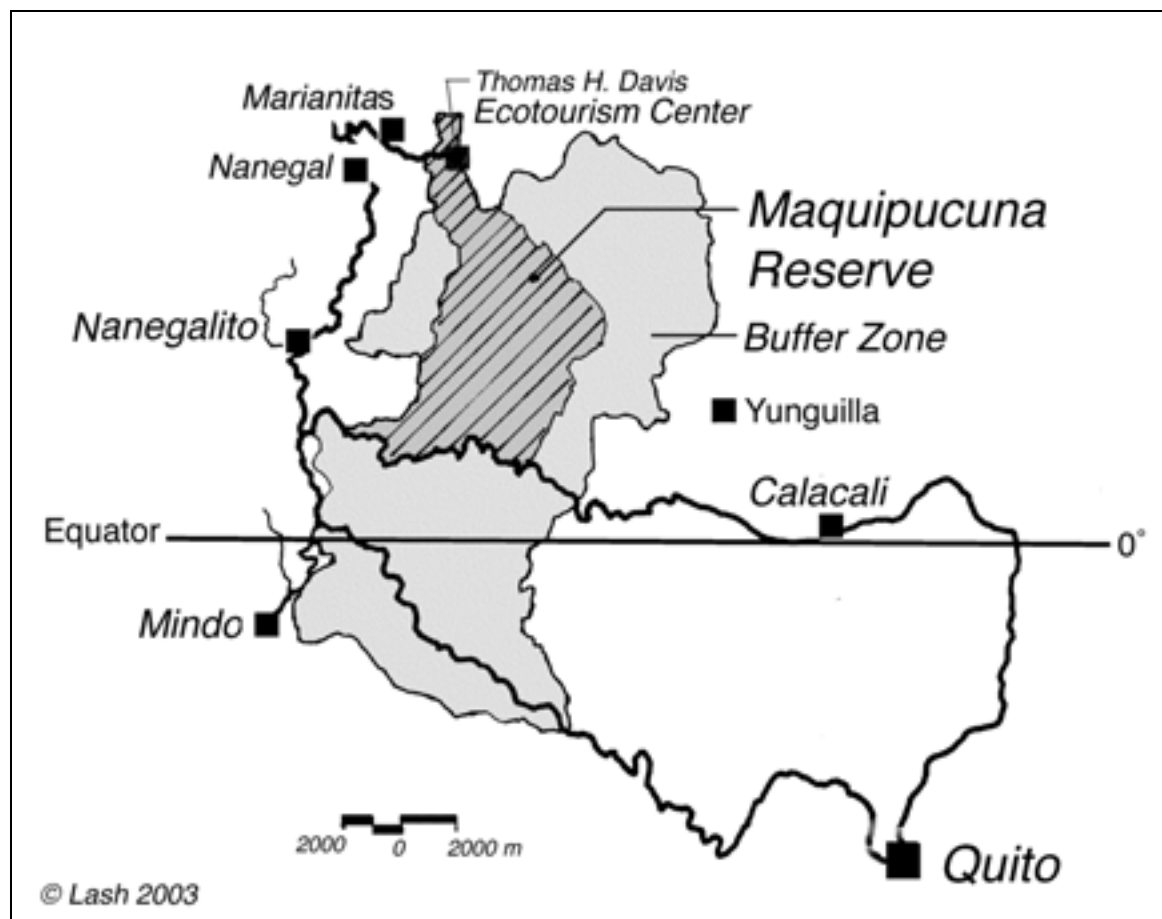
In addition, the ecolodge and its trails have become a day-stop for tourists, with a new (post-study), visitor center with interpretations on the whole Choco-Andean corridor, built in Marianitas. The Reserve is well-marketed as an ecotourism destination (Pearson & Middleton 1996).

Marianitas village is located on the road to the ecotourism lodge, four kilometers (km) from Maquipucuna Reserve (Figure 3.2). Its economy consists mainly of family farms, with milk and sugar cane alcohol as primary products. The area has a history of owners of large farms employing local families to live on and manage their lands. Villagers are dependent on forested lands for collection of bamboo, thatch palm, edible palms, game animals, and other non-timber forest products.

The two other industries located near Marianitas and neighboring villages, besides the ecotourism services at the lodge, are a large chicken farm and a flower-growing factory. Like the Reserve, each employs approximately 10 to 20 persons from the area, leaving most people to do “machete work” (cutting and grinding sugar cane) in the fields to obtain income.

At the time of the study, village residents were directly involved in the Reserve and its ecotourism through five community programs started by FM: 1) guide training, 2) crafts production training, 3) agroforestry training, 4) child day-care program, and 5) environmental classes at the school, as well as through direct employment and contract labor at the ecolodge (Lash 1998). In contrast, other communities (except for programs at Yungilla and Nanegal) were less directly associated with the Reserve, only supplying material goods needed at the ecolodge.

Figure 3.2 **Location Map: Maquipucuna Reserve and Marianitas Village**



Marianitas was selected as the research site for four principal reasons: first, the layout of the road demands that tourists traveling to the Reserve's ecotourism lodge pass through the village; second, the village is close to the reserve; third, the reserve has an ongoing relationship with community members; and fourth, women have an established artisan group, as an income generator and liberator from machete work.

The village of Marianitas was established around the late 1950s, and now has a population of approximately 230 residents (over half of whom are under the age of 15 years), divided into 36 households, from 12 main families. A few services are available

in the village such as two general stores, a restaurant, transportation services, and the women's artisan group, Los Colibrís ("The Hummingbirds").

Brief history of Los Colibrís

The Los Colibrís (LC) began in December 1995, as a FM-Peace Corps (PC) initiative, with the goal to provide local crafts for sale to tourists at the Reserve's ecolodge. The group started with 16 interested residents, both men and women, and progressed over time to a core group of five women. Their success was measured by their dedication to making the group succeed; cooperation with each other; shared duties, costs and profits; trust of each other; and an ability to evaluate systems and change methods (Lash *et. al.* 1999). Their products range from baskets of cabuya vine, to tagua pendants and keychains, to candleholders, bamboo napkin rings, and recycled paper greetings cards.

In 1996, they successfully obtained a grant from USAID for carpentry machinery, and rented a house for their workshop. They received training in various craft making techniques, opened their own workshop in Marianitas, and are selling their products in Quito, at Craft Fairs, and to two wholesalers in the United States.

METHODS

Survey sample and study periods

To focus on any links between conservation attitudes and craft training, women in Marianitas, and particularly those in the craft guild, Los Colibrís, were chosen as the focus of this study. The survey population comprised all women in Marianitas.

Women were chosen as subjects for this research because: 1) women are generally not given a voice in decisions about community development, although many times women know more about the day-to-day running of the community and its needs

(Nazarea-Sandoval 1995); 2) rural women are unquestionably linked to conservation of the environment, therefore their attitudes towards conservation practices is important and useful in developing conservation policy (Dankelman and Davidson 1988); and 3) women are an important asset in the ecotourism workforce (Sproule and Shandi 1998).

Informants were selected based on two non-probability sampling strategies: 1) stratified purposeful sampling (subgroups of crafts and non-crafts) and 2) snowball or chain sampling (where one informant leads to another; Hudelson, 1994; Johnson, 1990; Patton, 1990). Village women were divided into two groups, 1) those having been trained in crafts ($n = 14$), and 2) those who had not ($n = 35$). Informants were taken from these samples.

A reconnaissance trip was made in April 1997 to assess the study site, meet villagers and FM staff, and to discuss the project and its implications. Contact was made with the Peace Corps volunteers (PCVs) living in Marianitas at the time and their assistance in this study discussed and planned. The female PCV was chosen to assist the author in data collection, not only as a Spanish interpreter, but also as a person who knew all villagers on a personal basis. Data were collected on-site in the village of Marianitas during an eight-week period from June to August 1998. The two researchers lived in the village at the home of a resident during the time of the study.

Data sources, questionnaires, and analysis

Involving people in data collection and interpretation opens the door for rapport between researchers and people, and promotes understanding of the complex and varied lifestyle of rural inhabitants (Chambers 1994). Although this study did not take a fully participatory approach, it did involve residents in helping to re-word questions, add and

subtract questions that were relevant/not relevant, express full views through open-ended questions, and give feedback on the presentation to villagers at the end of the study.

Data sources were formal and informal interviews, on-site records, and published materials on Maquipucuna Reserve, Marianitas and LC. A total of 31 women, 9 of whom were trained in crafts production and 22 who were not, were interviewed for this study (63% of women residents). Additionally, 10 key informants were interviewed to gather data on the histories of the Reserve, the village, the crafts group, and other community ecotourism enterprises in the area. Other key informants provided a view of village life, its political, social and economic structures. In addition to these individual interviews, the study included informal meetings with local residents, planned meetings with representatives from FM, PC, and craft shops in Quito.

Data were collected using semi-structured questionnaires to guide the interviews. The interviews were conducted generally over a two-hour period, either in the home or business place of the informant, or at the residence of the researchers, at a specified time the interviewee had chosen. Data were recorded by hand in English, using pre-made data collection sheets, with responses translated from Spanish to English by the translator as the informant replied to each question. All economic data were collected in using Ecuadorian sucres, the currency at the time of the study. These were then converted into US dollars, at the rate of 5000 sucres to the US\$1. Confidentiality was assured by coding interviews with numbers. Informants were given a small gift for their time and cooperation with the study.

Three to five test interviews were conducted to get feedback on the study, refine questions, and begin to define the domain of conservation attitudes. Interviews with key

informants/specialists were used to develop a free list of conservation practices/ non-practices, as well as document the history of the area and other industries (Weller and Romney, 1988).

The semi-structured questionnaires consisted of 60 questions in three parts. First, information on participation in crafts training was gathered. Second, questions on individual conservation attitudes and cultural values towards the Reserve, its animals/plants and life processes (rainfall, etc.) were asked. Third, background demographic information was collected on informants, such as age, marital status, number of children, education, etc.

As a guide to the Reserve and its buffer zone region, other developments were cataloged, such as the sugar cane industry or locations for proposed mining concessions. Maps of the region were collected, and a map was made of the village to locate houses, fields, and demographic and familial relationships for future correlation and study.

Data Analysis

The purpose of this research falls under the categories of both 1) basic qualitative research, where the “analysis will be heavily shaped by the theoretical framework within which the study is conducted” and 2) summative evaluations, where analyses “contribute to making decisions about a program or intervention, usually decisions about overall effectiveness, continuation, expansion, and/or replication in other sites, “ with findings presented in a full report with recommendations (Patton, 1990).

Due to the open-ended nature of the interview questions, descriptive analysis was performed using Stat-View and Excel for the Macintosh. The primary unit of analysis was the individual person interviewed. Data analysis strategies included both cross-case

(craft-trained, not-craft-trained) and cross-interview analysis for each question. The cross-case analysis was first, where the coding for each question was examined for consensus by group. Individual cases from the interviews are also useful to clarify reasons for conservation attitudes and practices -- a “bad” experience with Reserve staff could lead to poaching, even if the individual is trained in crafts.

RESULTS

Characteristics of surveyed women in Marianitas

In 1998, the community of Marianitas had a population of 50 women, 53 men, with 102 children under the age of 15, for a total of 205 residents living in area.

Age and education

The average age of women interviewed was 34 years, with standard deviation of 12 years, and a range of 13 to 58 years. LC women (median = 27) were significantly younger than Other women (median = 37).

Education of the women interviewed was a mean of 5 years (Grade 5) with standard deviation of 2.5 years, with the range from 1 to 11 years (Grade 1 to some University classes). LC women had an education mean of 7 years, median of 6 years, range of 5 to 10 years. Other women had attended school for an average of 4.5 years, with a median of 5 years, and range of 1 to 11 years.

Training received

Most training classes were started by FM and had been offered on a variety of subjects. A list of classes taken by LC and Other women was compiled (Table 3.1). For obvious reasons of selection, the differences between LC (100%) and Other (14%) on “crafts/recycled paper” training was significant ($p = .001$). The Other women who

answered “craft” had only taken one or two days of training before leaving the group, so it was decided to place them in the “Other” category.

What is interesting to note is that 68% of Other women had attended no training seminars at all, and 44% of LC women had no other courses than crafts.

Table 3.1 Training seminars attended by women in Marianitas, by percentage.		
*p-value is significant at 95% level, NS = not significant		
Workshop	LC women (n = 9)	Other women (n = 22)
None	44% (other than crafts)	68%
Crafts/ Recycled Paper	100% *	14%
Hair Cutting	0%	9%
Birds/ Guiding	11%	9%
Tree Nursery	0%	9%
Sewing/ Cooking	11%	9%
First Aid	11%	0%
Cattle Ranching	11%	0%
Religion	11%	0%
Children Nursery	11%	0%
Accounting	11%	0%
Human Relations	11%	0%
Leadership	11%	0%
Project Design	11%	0%
Teaching	11%	0%
French Art	0%	4%

Training women had received related to the Reserve was also listed (Table 3.2). This was to obtain an idea of who had taken courses in conservation or related subjects which might influence women’s knowledge and attitudes towards protection of wildlife and forests. Sixty-seven percent (67%) of LC women had no course; 77% of Other had not attended a reserve-related course. There was no significant difference between these two groups.

Table 3.2 Training seminars related to the Reserve attended by women in Marianitas, by percentage.

*p-value is significant at 95% level, NS = not significant

Workshop	LC women (n = 9)	Other women (n = 22)
None	67%	77% NS
Conservation	22%	9% NS
Guide Training	11%	9%
Trash Clean-up	0%	4%
Animal Care	0%	4%
Planting	0%	4%
Birds	0%	4%
Slide Show by FM	11%	0%

Jobs/income

Women living in the small, rural village of Marianitas have limited options for employment. Almost all (84%) of women interviewed cited their responsibility for domestic duties: cooking, cleaning, taking care of children and the household; 16% of women said that this was their only job. Related to household duties was milking cows, taking care of livestock and other farm animals; 22% of women said this was included in their daily routine. One-third (35%) of the women worked in cutting and grinding sugar cane (machete work) for the making of alcohol. Non-agricultural jobs involved crafts production (13%) and other such jobs as teacher, store manager, Reserve employee, factory worker, and public works caretaker (22% total).

Although only a few reserve employees were interviewed, the reserve has had a great influence over the lives of many villagers in Marianitas. It has employed villagers as assistant manager, guides, gardeners, housekeepers, cooks, construction workers, guards, and contracted out for transportation, laundry, growing fruit and other foods. At the time of the study, 25 of 103 adult residents were employed or contracted at the reserve, for a total of 24% of all village adults.

Of the 36 households in Marianitas at the time of the study, 22 of them (61%) had a household member who was either currently or previously employed by the Reserve.

Of the women in crafts, 89% had been either employed by the reserve themselves (in a job other than crafts) or had a family member employed at the reserve, currently or in the past. Of the Other women interviewed in the village, 64% had one of their family members employed previously at the Reserve, or at the time of the study. Other women's percentage (64%) is similar to the overall population of the village employed (61%) by the Reserve, while the LC score is higher (89%), but not significantly ($p > 0.05$).

Income of women in the village varied tremendously, depending on whether she worked outside the home or not (Table 3.3). The women in the study reported making an average of \$99 per month, with a standard deviation of \$117. Income ranged from \$0 to a maximum of \$465 per month. In reality, 59% made \$93 or less, under the \$99 mean. LC women averaged \$55/ month, and Other women averaged \$125/ month. Differences in income between LC and Other women were not significant ($p > 0.05$).

Table 3.3 Gross earnings per month by women in Marianitas, by percentage.

(Money in US dollars; 1 US\$= 5000 Ecuadorian sucres) N=27

	From	To:	Count	Percent
1	0	\$46	11	41%
2	\$46	\$93	5	18%
3	\$93	\$140	4	15%
4	\$140	\$186	4	15%
5	\$186	\$232	1	4%
6	\$232	\$279	0	0%
7	\$279	\$326	0	0%
8	\$326	\$372	0	0%
9	\$372	\$419	0	0%
10	\$419	\$465	2	7%

Family size

Thirty-one LC and Other women had 150 children between them, or an average of five each (Table 3.4). When examined by group, LC women have less children (average of 3) than Other women (average of 6). This is to be expected as the women in crafts are younger (median 27), than the women not in crafts (median 37), and therefore would have birthed less babies to date.

Table 3.4 Number of children alive, by craft (LC) and non-craft (Other) women, 1998.		
Values in parenthesis represent number of respondents.		
Number of Children	LC (n = 9)	Other (n = 22)
Mean	2.78	5.68
Total	25	125
Range	0-7	0-14
Age range of children	1-15 years	1-38 years

Land owned

Women were asked if they owned land, and if so, what size the parcels were. Seventy percent (70%) of women owned less than 15 hectares of land, with another 17% from between 15 – 30 hectares. Only 13% owned land over 30 hectares (2 Other, with 76 ha and 50 ha, and 2 LC with 35 ha and 31 ha). These are less than the average land owned of between 21 and 50 ha found around Podocarpus National Park (Tello, *et. al.* 1998).

Perception of benefits received from Reserve

Women were asked, “Do you receive benefits from the Reserve?” (Table 3.5). Over one-third (39%) of total respondents said that they had received “nothing” or listed negative benefits as costs, while the majority (61%) identified their benefits from the Reserve as positive. There was no significant difference between the LC and Other “no” groups ($p > 0.05$).

Table 3.5 Perception of Reserve benefits, by craft (LC) and non-craft (Other) women, 1998.

Values in parenthesis represent number of respondents.

*p-value is significant at 95% level, NS = not significant

<i>a. Do you receive benefits from the Reserve?</i>	LC (n = 9)	Other (n = 22)	Total (n = 31)
Yes	56% (5)	64% (14) NS	61% (19)
No	44% (4)	36% (8) NS	39% (12)
<i>b. What are your benefits?</i>	LC (n = 5)	Other (n = 14)	Total (n = 19)
<i>Positive benefits:</i>			
Income/Jobs	56% (5)	36% (8) NS	42% (13)
Protecting forest	11% (1)	23% (5) NS	19% (6)
Education	11% (1)	41% (9) NS	32% (10)
Tourism	-	14% (3) NS	10% (3)
Improved Road	-	4% (1)	3% (1)
<i>Negative benefits (costs):</i>	LC (n = 4)	Other (n = 8)	Total (n = 12)
Nothing	33% (3)	23% (5) NS	26% (8)
Poor relationship w/FM	11% (1)	-	3% (1)
Loss of agricultural land	-	4% (1)	3% (1)
FM doesn't help villages	-	4% (1)	3% (1)
Lost jobs at Reserve	-	4% (1)	3% (1)

Overall, 56% of LC women acknowledged receiving benefits from the Reserve.

Income/jobs was listed as a benefit from all of LC women who responded with benefits.

Additional benefits included protecting the forest (11%) and education courses (11%).

Negative benefits were identified by 44% of LC women. One-third (33%) of LC women perceived that no benefits had been gained personally, while 11% listed a poor

relationship with FM staff as a cost. All LC respondents with negative benefits (n=4)

were women who no longer worked in the crafts industry at the time of the study, either

due to the time-constraints of another job (n=1) or because they were forced out of the

crafts group (n=3).

Similarly, 64% of Other women acknowledged receiving benefits from the Reserve. Education courses (41%) and income/jobs (36%) were identified by Other women who responded as having realized benefits from the reserve. Additional benefits were: protecting the forest (23%), tourism – seeing visitors in town (14%), and the road from the village to the reserve (4%). Negative benefits were claimed by 36% of Other women. Almost one-quarter (23%) of Other women responded with “nothing” as their benefits, while loss of agricultural land (4%), claims that FM doesn’t help villages (4%), and lost jobs at the reserve (4%) were listed as costs.

There was no significant difference between LC and Other women in any of the categories listed ($p > 0.05$).

Awareness of need to protect natural resources

Women were asked if they thought protecting the environment was important, and whether the Reserve helps to protect the environment. Fervently, all women said “yes” the environment should be protected (Table 3.6). All LCs and all but two Others (91%) said that the Reserve helped to protect animals and forests. The two dissenters were concerned about FM leaving, and that wild animals needed planted food crops to survive.

Table 3.6 Perception of protecting the environment, by craft (LC) and non-craft (Other) women, 1998.

Values in parenthesis represent number of respondents.
*p-value is significant at 95% level, NS = not significant

<i>a. Do you think protecting the environment is important?</i>	LC (n = 9)	Other (n = 22)	Total (n = 31)
Yes	100% (9)	100% (22)	100% (31)
No	0% (0)	0% (0)	0% (0)
<i>b. Do you think the Reserve helps to protect the environment?</i>	LC (n = 9)	Other (n = 22)	Total (n = 31)
Yes	100% (9)	91% (20)	94% (29)
No	0% (0)	9% (2)	6% (2)

Attitudes towards private property owners

In order to assess women's attitudes towards having a large track of land made into a private reserve, they were asked, "Are you upset about people from Quito coming in and buying land here?" Over two-thirds (68%) of women interviewed responded with "no," they did not mind, with 10% of women responding "don't know" and 22% indicating that "yes" they were upset with this practice (Table 3.7).

Table 3.7 Attitudes towards outsiders buying lands, by craft (LC) and non-craft (Other) women, 1998.

Values in parenthesis represent number of respondents.
*p-value is significant at 95% level, NS = not significant

<i>Are you upset about people from Quito coming in and buying land here?</i>	LC (n = 9)	Other (n = 22)	Total (n = 31)
No	78% (7)	64% (14) NS	68% (21)
Yes	11% (1)	27% (6) NS	22% (7)
Don't Know	11% (1)	9% (2)	10% (3)

Of the LC women, over three-fourths (78%) responded "no" they were not bothered by these land sales, with only 11% concerned. Almost two-thirds (64%) of Other women were not upset with outside land sales, while 27% were concerned that land was going to rich, non-locals. LC and Other response differences were not significant.

Even though women do not mind people buying land as private property, they do mind about having no jobs from these lands. Overall, the comments ranged from "no, everybody has a right to have land," to "yes, they are going to take it all." Thirteen women (42% of total, six LC and seven Other) expressed their concern that this process of land purchase for conservation is depleting the jobs in the area and causing people to move to Quito for work. One woman explains, "They are stopping all the work by

buying the land up. The people that had farms needed a caretaker of farms and when FM buys it, there is no work” (Interviewee #23, 1998).

Comments on women’s attitudes towards people from Quito (outsiders) buying land indicate that women are familiar with private land holdings and that they recognize that purchasing and selling land is consistent with individual rights in a free-market economy. However, with regard to the *use* of the land, rural residents expect, as the norm, that landowners with large land holdings will hire local families to work the land, in a “hacienda-style” system. When viewed in this light, a land holding of the size of the reserve (5000 ha) is capable of supporting 100 families at 50 ha each. To the women, this traditional view of land use and its consequences of “no jobs” is defensible, even though realistically these lands are “too steep to support farming or logging” (Key informant #4, 1998).

Conservation attitudes and practices

Hunting and palmetto extraction

Poaching was reported within Reserve boundaries, so the topic of hunting was explored. Women were questioned as to their history of eating wild game and palmetto (hearts of palm), and their behavior and attitudes towards hunting and those who hunt (Table 3.8).

Palmetto is a small palm that grows wild and is prized for its delicate pith, or heart, for eating. It is a special treat, and 100% of women interviewed said that they eat it, particularly on special occasions (*e.g.*, Christmas), and also whenever they can find it. Harvesting the heart of palm kills the tree, as the traditional method is to cut down the whole tree. Women respect that they should cut palms on their own lands, but also know that many people have over-harvested their own supplies and therefore have to go

“farther away” to find it. Women say that before there was a Reserve, people used to cut palmetto in the Reserve area.

Next, women were asked about eating wild game animals. Half of both LC and Other women said “yes,” they eat wild game, from “once in a while” (56%) to “once a week” (25%). Of the women who said “no,” most (40%) said that they used to eat wild meat when they were a child. On quarter of these women ate game “whenever an animal comes here” and presents the opportunity near their houses to kill and eat it. Only five women (16% of total) said that they had never eaten wild game. There was no significant difference in the frequency of responses from LC and Other women ($p > 0.05$).

Women were asked, “Do you or your family hunt?” Over half of both LC and Other women said “yes.” LC and Other women responses were virtually identical, with 55%-56% “yes” and 44%-45% “no.” Women did respond that, although they used to hunt and eat wild game, they can buy meat now, therefore, it is not necessary for most people to hunt.

All women (and key informants) interviewed acknowledged that hunting in the Reserve is not allowed. They said that hunting or collecting on other people’s property is “not good” because the rights of private property ownership should be respected. And yet, they do acknowledge that sometimes animals, palmetto, thatch and other resources can only be gotten “up in the mountains,” implying privately-owned areas are being used for public use. When asked how many people they thought hunted in the Reserve, half of the women who responded to the question estimated between one and five persons, while the other half declared that nobody hunted there.

Table 3.8 Conservation attitudes and practices, by craft (LC) and non-craft (Other) women, 1998.

Values in parenthesis represent number of respondents.

*p-value is significant at 95% level, NS = not significant

<i>a. Do you/your family eat hearts of palm?</i>	LC (n = 9)	Other (n = 22)	Total (n = 31)
Yes	100% (9)	100% (22)	100% (31)
No	0% (0)	0% (0)	0% (0)
<i>b. Do you eat wild game? If yes, how often do you eat game?</i>	LC (n = 5)	Other (n = 11)	Total (n = 16)
Once a week	-	36% (4)	25% (4)
Whenever given	-	9% (1)	6% (1)
Once in a while	80% (4)	45% (5) NS	56% (9)
Twice a month	20% (1)	-	6% (1)
Many times a month	-	9% (1)	6% (1)
<i>c. If no, how often did you eat game, in the past?</i>	LC (n = 5)	Other (n = 10)	Total (n = 15)
Used to as a child	40% (2)	40% (4)	40% (6)
Never	40% (2)	30% (3) NS	33% (5)
Whenever an animal comes here	20% (1)	30% (3)	26% (4)
<i>d. Do you or your family hunt?</i>	LC (n = 9)	Other (n = 22)	Total (n = 31)
Yes	56% (5)	55% (12)	55% (17)
No	44% (4)	45% (10)	45% (14)
<i>e. How many people do you think hunt in the reserve?</i>	LC (n = 9)	Other (n = 14)	Total (n = 23)
1-5	56% (5)	43% (6)	48% (11)
Nobody	44% (4)	57% (8)	52% (12)
<i>f. What do you think of people who hunt in the reserve?</i>	LC (n = 9)	Other (n = 22)	Total (n = 31)
Hunting is ok on own land	67% (6)	77% (17) NS	64% (23)
Hunting is bad	33% (3)	23% (5)	36% (8)

Women either talked about hunting as “bad” or that it is only ok to hunt on one’s own land, when asked about what they thought of hunters in general, and those who

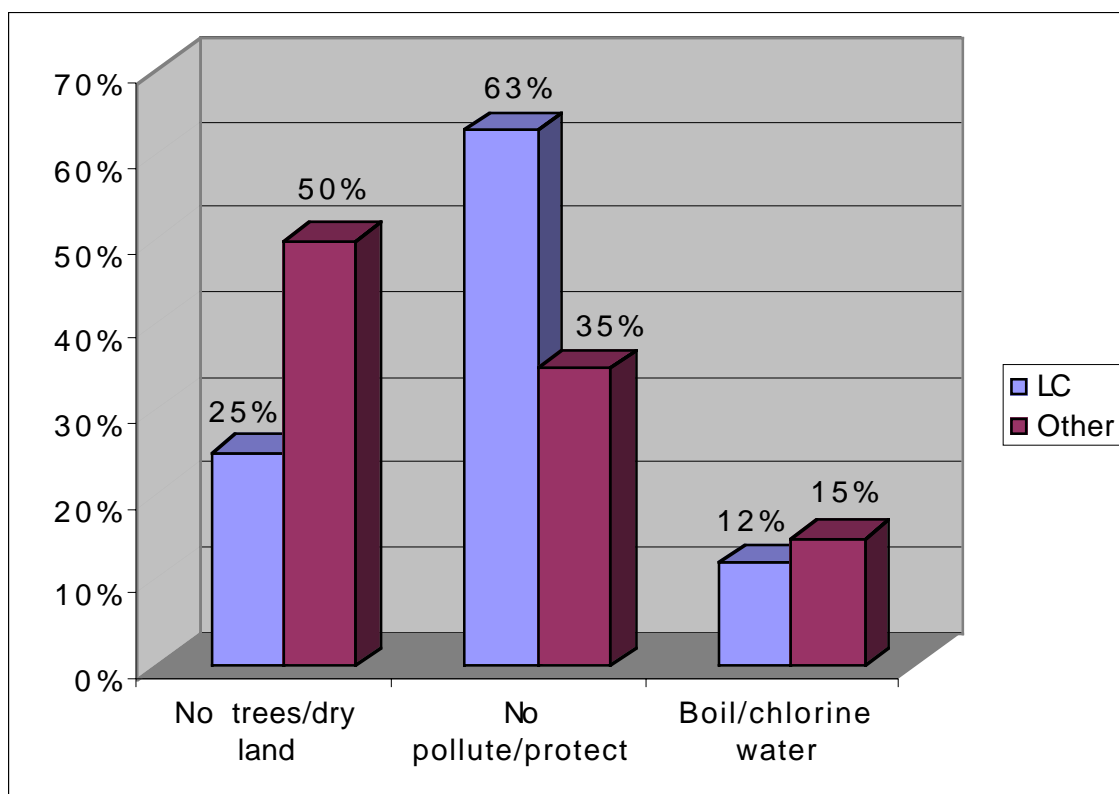
hunted in the Reserve. Responses reinforced a respect for private property, with two-thirds of women saying it is alright to hunt on one's own property, while one-third of women declared that "hunting is bad" in general. Reasons for this "bad" view were: hunting "uses up" animals; deprives future generations of children of animals to see; meat is available to buy; people should grow their own animals; the Reserve is a protected forest; and the Reserve is private property.

Also, in the "bad" category, a few women added specifics about hunters in the Reserve as: angry at the Reserve or don't believe it should be there, just "stupid people" who don't know better, or people who really do need to hunt (can't afford to buy meat). There was no significant difference between responses from LC and Other women.

Conservation example: protection of village water source, and access to clean water

As an example of the conservation attitudes in the village, an 11-month law suit was underway at the time of the study, on whether or not to protect the village water source. There was concern by villagers that the water supply was being polluted by a local farmer who was clearing the area for crops and using pesticides on those crops. Some believed that clearing the area would promote erosion, where as others voiced that clearing was good to keep leaves and debris away from the spring.

Pertinent to the discussions was also the legality of the farmer's claim to this land. The farmer had acquired the land through "invading" it, working it, and getting title, while falsely declaring his use of the land (Key informant #5, 1998). The original owners, FM, and one-half of the villagers, supported turning this 30 ha area into a "protected forest," where trees could not be cut nor could the land be farmed. The other half of the villagers supported the farmer and his claims.

Figure 3.3 Women's attitudes towards protecting the village's water source

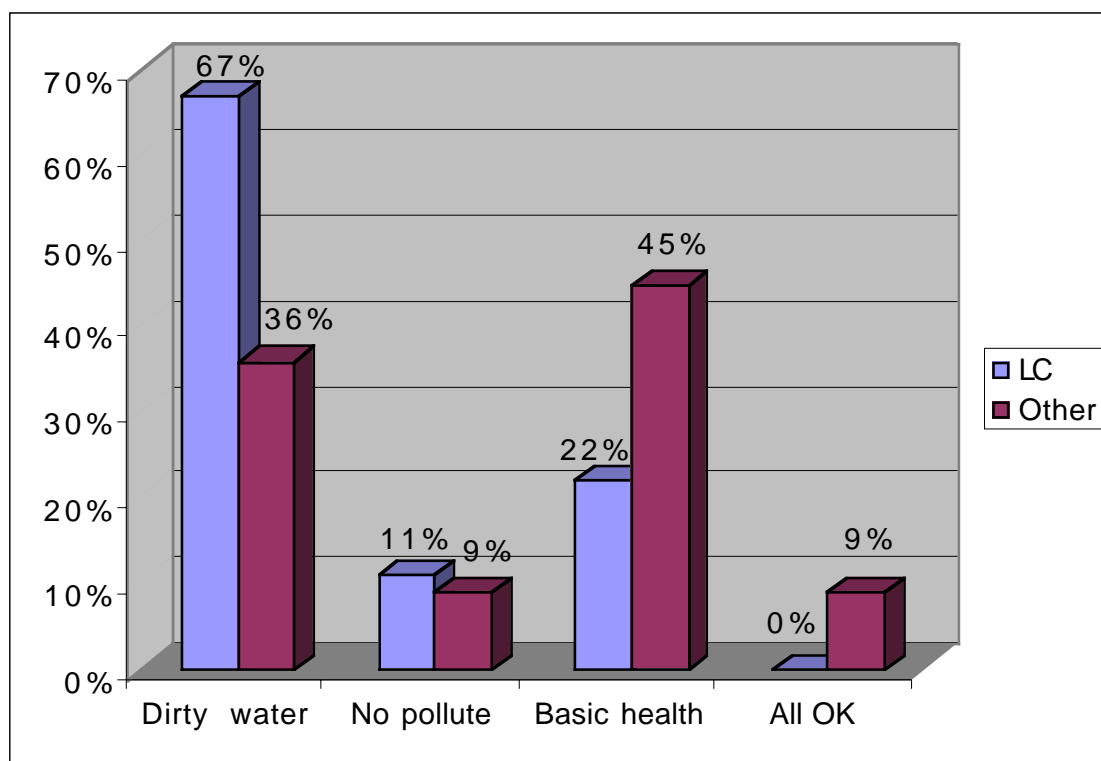
Values in parenthesis represent number of respondents. *p-value is significant at 95% level, NS = not significant			
How do you feel about protecting the towns water source?	LC (n = 8)	Other (n = 20)	Total (n = 28)
No Cut Trees/Dry up land	25% (2)	50% (10) NS	43% (12)
Don't pollute source/need to protect	63% (5)	35% (7) NS	43% (12)
Boil/Chlorine water	12% (1)	15% (3)	14% (4)

Women were asked how they felt about protecting the town's water source.

Those interviewed were concerned about three main topics related to protecting the village water source. These were: 1) the knowledge of the connection between cutting tress and land drying up (43%), 2) the need to stop pollution and to protect the water source (43%), and 3) that water is unhealthy and needs to be boiled or have chlorine

added to make it safe to drink (14%). The differences in LC women and Other were that the LCs concentrated on the need to not pollute the water source (63%), while the Other women were more concerned about the connection to drying up the water (50%). There was no significant differences in responses of LC and Other women.

Figure 3.4 Women's attitudes towards access to clean water



Values in parenthesis represent number of respondents. *p-value is significant at 95% level, NS = not significant			
<i>How do you feel about the town's access to clean water?</i>	LC (n = 9)	Other (n = 22)	Total (n = 31)
Water is dirty, need to boil	67% (6)	36% (8) NS	45% (14)
Don't pollute the source	11% (1)	9% (2)	10% (3)
Basic health need	22% (2)	45% (10)	39% (12)
All ok/have enough	0% (0)	9% (2)	6% (2)

Women were asked about their thoughts on the village's access to clean water. Two-thirds (67%) of LC women were concerned that water was currently not clean, and needed to be boiled or have chlorine added in order to make it safe to drink. The last one-third of LCs responded that clean water was a basic health need (22%), and that the water source should not be polluted (11%). Like LC, Other women were also concerned that their current water was unhealthy to drink (36%), but were more concerned with water as a basic health need (45%). Other women also mentioned the need to keep the water source free from pollution (9%). Only two Other women (9%) believed that there was enough water and that all was OK with the water. There was no significant differences in responses of LC and Other women.

Knowledge of Reserve goals

When asked “What is the purpose of Maquipucuna Reserve?” women replied that it is primarily to “care for the forest” and to “teach people to conserve forests.” LC women recognized the FM mission as caring for forest (44%) more than Other women, who in turn, more than LC women, understood the need to teach local residents to conserve forests (45%).

Table 3.9 Knowledge of Reserve goals, by craft (LC) and non-craft (Other) women, 1998.

Values in parenthesis represent number of respondents.
*p-value is significant at 95% level, NS = not significant

<i>What is the purpose of Maquipucuna Reserve?</i>	LC (n = 9)	Other (n = 22)	Total (n = 31)
Care for the forest	44% (4)	31% (7) NS	35% (11)
Teach people to conserve forests	22% (2)	45% (10) NS	38% (12)
Give jobs to local people	22% (2)	13% (3) NS	16% (5)
Tourism	22% (2)	9% (2) NS	13% (4)
Stop hunting	11% (1)	9% (2) NS	9% (3)
Buy lots of land	-	4% (1)	3% (1)
Don't know	-	4% (1)	3% (1)

Also, LC women mentioned “give jobs to local people” and “tourism” more frequently than Other women, referring to their own jobs in crafts and tourism with the Reserve. Other women added the basic concern of FM “buying lots of land,” and that she “don’t know” what the goals are. There were no significant differences between groups.

As a comparison, reserve goals are, as reported by FM staff: 1) to protect biodiversity, and 2) to support sustainable development of buffer zone communities. FM plans to accomplish these goals by purchasing land for the Corridor project; addressing health issues, such as sanitation and potable water; helping develop community projects; conducting applied research; and implementing alternative uses of the forest (such as ecotourism and organic gardening).

When the two lists (FM’s and women’s) are compared, all the women’s responses can be placed within the two main FM goals and implementation plans. This indicates that village women are aware of the Reserve goals and policies.

Impact of Reserve on lives of women

Changes in women’s activities with Reserve

To assess what kind of impact the formation of the Reserve has had on the lives of residents (Table 3.10), women were asked, “What did you used to do (before Reserve), that you can’t do now? The majority of women responded “Nothing” (58%) they used to do is different than now. While both LC and Other women replied that they used to “hunt animals/cut trees” (26%), only Other women said they “had job/sold things” 9%, and “had land” 3%. One LC member said she used to “enjoy the forest” (3%) by walking unrestricted in it.

Table 3.10 What women used to do (before Reserve), by craft (LC) and non-craft (Other) women, 1998.

Values in parenthesis represent number of respondents.

*p-value is significant at 95% level, NS = not significant

<i>What did you used to do that you can't do now?</i>	LC (n = 9)	Other (n = 22)	Total (n = 31)
Nothing	66% (6)	54% (12)	58% (18)
Hunt animals/cut trees	22% (2)	27% (6)	26% (8)
Had jobs/sold things	-	14% (3)	9% (3)
Had land	-	5% (1)	3% (1)
Enjoyed forest	11% (1)	-	3% (1)

Next, women were asked “What can you do now (after Reserve), that you couldn’t do before?” (Table 3.11). One-third (33%) of LCs replied that the Reserve “helps us/learn new things (boil water, trash), and 22% said that they now “can sell things/have job” in the crafts industry. Because of these activities, the LC “nothing” response (11%) was much lower than the previous question, and than the Other women here (36%). Other women also answered that they now were “conscious of protecting forest” (23%).

Table 3.11 What women do now (after Reserve), by craft (LC) and non-craft (Other) women, 1998.

Values in parenthesis represent number of respondents.

*p-value is significant at 95% level, NS = not significant

<i>What can you do now that you couldn't do before?</i>	LC (n = 9)	Other (n = 22)	Total (n = 31)
Nothing	11% (1)	36% (8)	29% (9)
FM enforces hunting laws/we don't hunt	11% (1)	9% (2)	10% (3)
Help us/learn new things (boil water, trash)	33% (3)	-	10% (3)
Conscious of protecting forest	-	23% (5)	16% (5)
Can sell things/have Job	22% (2)	9% (2)	12% (4)
Lost work, sold land and can't work without land	-	9% (2)	6% (2)
Arrived recently (n/a)	22% (2)	14% (3)	16% (5)

Additionally, Other women said that they could “sell things/have job” (9%), and that they lost work because they sold their land to the Reserve (9%). Five women were recent arrivals to the area, and so had not experienced life before the Reserve (16%).

Perceived impact of the Reserve on the lives of women

Almost three-fourths of all women interviewed said that the Reserve has had a positive impact on their lives (Table 3.12). Only one woman (LC) experienced a negative impact, and seven indicated the Reserve was neutral for them – neither positive nor negative.

Table 3.12 Impact of Reserve on lives of women, by craft (LC) and non-craft (Other) women, 1998.			
Values in parenthesis represent number of respondents. *p-value is significant at 95% level, NS = not significant			
<i>a. What impact has the Reserve had on your life?</i>	LC (n = 9)	Other (n = 22)	Total (n = 31)
Positive	77% (7)	72% (16)	74% (23)
Negative	11% (1)	-	3% (1)
Neutral	11% (1)	27% (6)	22% (7)
<i>b. How impacted?</i>	LC (n = 8)	Other (n = 16)	Total (n = 24)
Provided jobs	38% (3)	25% (4)	29% (7)
Conserve forest and water	38% (3)	6% (1) *	17% (4)
Changed attitudes/behavior (not kill animals, trash disposal, appreciates forest, happier town, people dress up like bears at Christmas)	50% (4)	25% (4)	33% (8)
FM gave support to town	12% (1)	12% (2)	12% (3)
Cultural exchange/tourists	-	12% (2)	8% (2)
Educational benefits to adults and kids	12% (1)	25% (4)	21% (5)
Clean up trash	-	6% (1)	4% (1)
Good	-	6% (1)	4% (1)
Lost job/contract	12% (1)	12% (2)	12% (3)

When asked “How impacted?” the highest response was “changed attitude or behavior” from 33% of the women. This important result points to the success of FM’s conservation messages and training programs within the village. As women responded:

“It’s good I learned from the FM to love nature. Before I knew these plants – you think it’s just a plant and nothing else. Now it’s different with courses – you know with the fruit or nut of a plant, a bird can live. Now you know that if you conserve the plant, you conserve the bird” (Interviewee #40, 1998).

“I think FM has helped and it’s a happier town; it was a sad town. Tourists pass in a bus and now kids know what a bus is! It’s like if a plane landed here and people learned what a plane is” (Key Informant #3, 1998).

A related topic was “conserve forest and water,” illustrating the importance of this to LCs (38%) and the little interest it is given from Other women (6%). This difference was almost significant at $p = 0.0559$ (2-tail, t-test, $DF = 22$). The next highest response was “provided jobs” (29%), which was mentioned by LC women 38% of the time, and only 25% from Other women, indicating the support by FM of the crafts industry. Conversely, Other women indicated “educational benefits” 25% of the time, whereas only 12% of LCs mentioned education. Negative impact was “lost job” at 12%.

Criticisms about the Reserve

When asked if they had any criticism of the Reserve, 67% of LC women had something to say, compared to only 27% of the other women interviewed; this difference was significant ($p = 0.0422$, 2-tail t-test, $DF = 29$). Responses critiquing the Reserve included: “not supporting the community/doing nothing” (22% LC, 14% Other); “no jobs for community residents/jobs given to outsiders” (22% LC, 4% Other); “FM doesn’t

explain its goals/why not hunt” (11% LC); “doesn’t pay sometimes for crafts bought” (11% LC); “don’t want Reserve/lose control of resources” (4% Other); and “Reserve fired family member” (4% Other).

One women criticized the Reserve, saying,

“Should give work to people here. This is the help they can give. It’s an exaggeration that FM will help – people think they can ask FM to buy land for stadium. I hope they will give us a park. I can’t say FM should give us things, but would be better if FM did. For us, it’s not in our interest that they give us things – I want jobs, but people [who have jobs] just want FM to give things, like a park” (Interviewee #23, 1998).

Table 3.13 Criticism about the Reserve, by craft (LC) and non-craft (Other) women, 1998.

Values in parenthesis represent number of respondents.

*p-value is significant at 95% level, NS = not significant

<i>What criticisms do you have about the reserve?</i>	LC (n = 9)	Other (n = 22)	Total (n = 31)
None, all OK	33% (3)	73% (16) *	61% (19)
Fired family member	--	4% (1)	3% (1)
FM does not educate community about goals and why not hunt, not cut trees, etc.	11% (1)	--	3% (1)
No jobs for community people – giving jobs to outsiders.	22% (2)	4% (1) NS	10% (3)
Reserve has done nothing, not support community	22% (2)	14% (3) NS	16% (5)
Reserve does not pay sometimes for crafts	11% (1)	--	3% (1)
Don’t want FM because we lose control of natural resources (take away land).	--	4% (1)	3% (1)

Impact of crafts on lives of LC women

LC women were asked, “How has your involvement in crafts changed your life?” Two-thirds (67%) of women reported that the income from crafts production had a definite positive impact, not just as discretionary income, but on their ability to pay monthly household debts and buy things for their children. Other benefits listed by LC women were learning new skills (22%), occupying free time with something other than

housework (33%), and that villagers see the success of the group and that it give others “an ambition to go forward and form a group too” (Interviewee #40, 1998). Part of this success was identified as the trust that group members had with each other. Two of the women (22%) reported that crafts had not changed their life. One young woman said that she was able to stay in the village and not have to go to Quito to find work as a maid.

Development needs

Women were asked, “What other kinds of development would you like to see in the village? Summing up the “poor” status of the village, two women said, “everything” (6%). As in previous responses, over one-third (39%) of women interviewed indicated that more income earning opportunities for village residents is a crucial priority.

Table 3.14 Development needs of women in Marianitas, 1998		
<i>What do you want for future & who provides these? (expectations of Reserve)</i>		
	Number	Percentage
More Jobs	12	39%
Park/Plaza	9	29%
Community house	6	19%
Farming/plantations	6	19%
Health Center	5	16%
Nursery	5	16%
Playground	4	13%
Courses	3	10%
School expansion	3	10%
Water system	2	6%
More cows	2	6%
Stadium	2	6%
"Everything"	2	6%
More People	1	3%
Market	1	3%
Fiesta	1	3%
Jam Factory	1	3%
Sewing Factory	1	3%
Carpentry Cooperative	1	3%

Other responses that were over ten-percent were: a park at the village square (29%), a community meeting house for the village (19%), increase farming and ability to plant (19%), a health center 16%, children's nursery 16%, and a playground for children 13%. Women expected many of these items, such as the park, nursery, and jobs, should be implemented by FM for the village.

Future vision of the reserve

In order to assess what women's vision for the future of the reserve was, they were asked, "Are there any improvements you think should be made to the reserve?" Half of women (51%) responded to give work to people, 19% to increase tourism, 19% to help village with community development (roads, telephone, water, park), 9% to help children, 6% to protect forests, and 3% each to: children's nursery, better administration, no fighting, stop buying land, live up to promises, give more courses, nothing.

Table 3.15 Improvements that should be made to the Reserve, 1998.

Values in parenthesis represent number of respondents.

<i>Are there any improvements you think should be made to the reserve?</i>	Total (n = 31)
Give work to people	51% (16)
Increase tourism	19% (6)
To help village with community development projects	19% (6)
To help children	6% (2)
To protect forests	3% (1)
Children's nursery	3% (1)
Better administration	3% (1)
No fighting	3% (1)
Stop buying land	3% (1)
Live up to promises	3% (1)
Give more courses	3% (1)
Nothing	3% (1)

DISCUSSION

Conservation attitudes and practices

“Idea of conservation doesn’t come easily. Only people who work in it can understand the practicality of conservation in any way. They don’t know what conservation is and don’t know how to do it, so they see the Reserve as stripping them of rights, of cutting wood. It destroys their way of life” (Key Informant #4, 1998).

Contrary to this view by a local key informant, women of Marianitas understand conservation and have incorporated many practices and thought patterns into their own lives. All women interviewed (100%) agreed that the environment (forests and animals) should be protected and almost all believed that FM is contributing to this protection. Over sixty percent (61%) of all village households had members who worked in or for the Reserve, of which 89% of Los Colibrís (LC), and 64% of Other, households were connected to the Reserve. This supports the key informant assertion that to understand conservation, one must work in conservation. Villagers from Marianitas do – after ten years of the Reserve as their neighbor, they are inescapably bound in a symbiotic relationship with FM. Women say they didn’t used to know conservation – they learned. Training programs sponsored by FM on natural history (guide training, agroforestry, birding) and on daily life skills (sewing, crafts, first aid, leadership) are eagerly anticipated and attended by village women, cementing even more the relationship between village life and FM.

In the minds of women, conservation is both about preserving the beauty of nature for future generations and about creating jobs from the environment. The informant’s concern over “stripping them of rights, of cutting wood” is not about a loss of resources, but about the loss (opportunity cost) of jobs/income that extracting these resources

provides. Over two-thirds (68%) of women did not object to large land sales to private owners; whereas the 22% who did object were concerned that these “rich, non-locals” were buying land and not hiring local residents as employees. Forty-one percent (41%) of women explained that when land is “taken out of production” for conservation, this is equated with a loss of jobs. Women did not mind large land sales, if only the owners would hire local families to work or care for the land.

This is the classic debate over use and protection of natural resources, and these women in Marianitas are living it. Conservation must be linked to providing jobs and improving livelihoods, and then it can be incorporated and valued in daily life (Ashley and Row 1998; Lash 2003; Maikhuri, *et. al.* 2000).

In general, the women of Marianitas have access to the daily dialogue generated from the presence of the PA, its managers and tourists, along with the availability of training courses, all of which contribute to promoting conservation attitudes. As an example, 88% of women in the crafts group LC, and 85% of other women, expressed the need to protect the forests around the village water source. Fully 50% of Other women and 25% of LC responded with the connection between a water source drying up and the cutting of surrounding forests, as well as 63% of LC and 35% of Other women recognized the need to protect and not pollute the water source.

Poaching was reported in the Reserve at the time of this study. As hunting is a threat to conservation (Dugelby and Libby 1998), women were asked about the concept and practice of hunting. Half of the women (both LC and Other) replied that they or someone in their family hunts. Women eat wild game from “once in a while” (56%) to “once a week” (25%). Of those women who do not eat wild game now, 40% said they

“used to as a child.” Only 16% of women interviewed had never eaten wild meat. It was brought to our attention that domestic meat is now commercially available and so it is no longer necessary to hunt wild animals.

In Marianitas, the concept of hunting is linked to the concept of private property and land ownership. Two-thirds (64%) of believe that hunting is “ok on your own land.” This general agreement that hunting, although perhaps infrequent, is not only an opportunity but an entitlement of property ownership is both problematic and prosperous for conservation. If everyone decided to hunt on “their own lands,” then animals would have nowhere to go, creating a tragedy of the commons (Hardin 1968). Positively, Reserve owners can take advantage of this acceptance of private property rights to control access to and use of their lands, and land products.

Although commercially-driven poaching is hard to prevent and control (Srikosamatara and Brockelman 2002), fortunately all the illicit hunting in Maquipucuna was reportedly done out of poverty and a genuine need to feed families, or simply for spite against the Reserve (Key informants #2, #5, Interviewees #11, #12). This bitterness towards FM was linked to employment issues, the firing and hiring of certain people in the village. Gain and loss of job benefits can cause resentment and retaliation when some people benefit from the PA and others do not (Srikosamatara and Brockelman 2002).

Expectations of benefits and impact of the Reserve

Overall, 61% of women acquired benefits from the Reserve; 39% did not. Jobs were the most frequent response – either that jobs had been received (42%), that jobs were lost (3%), or that villagers needed more jobs in future (39%). This theme of “jobs as primary benefits” points to the narrow opportunities for obtaining income by villagers,

particularly women. Prior to the opening of the ecotourism lodge at the Reserve, villagers were confined to mainly agricultural work, either in milk production or sugar cane processing. Now they look to the Reserve to provide additional work options. Education was also high on the benefits list at 32%. While LCs (56%) were mainly conscious of economic benefits in the form of “jobs,” Other women cited more intrinsic and non-tangible benefits such as “education” (41%) and protecting forests (23%).

Limitations imposed by the Reserve on local women were assessed. Prior to the creation of the Reserve, women used to: hunt animals and cut trees (26%), had jobs or sold things (9%), owned a portion of Reserve land (3%), and enjoyed walking through the forest (3%). The largest segment of women (58%) answered that “nothing” is restricted that they did before. The opportunities from the Reserve were also assessed. Some women again found that “nothing” is different (29%), with an additional 16% of women residents arriving in the village after the creation of Maquipucuna. LC women found that FM had helped them to “learn new things” (33%) and that they could now sell items and have a job (22%). Other women said now they could protect the forest (23%).

Over 70% of both groups of women considered the Reserve to have had a positive impact on their lives. One-third (33%) of all women interviewed said that, because of FM, they had changed their ways of thinking about the environment. Craft women (38%) were more conscious of conserving forests and animals than Other women (6%), an almost significant difference between groups at the 95% confidence level ($p = 0.0559$). Clearly the training and educational programs from FM, and the ever-presence of the Reserve in the lives of villagers are having an effect. This conservation awareness could also be due to LC’s extensive business relationship through crafts with FM staff.

Accurate knowledge of Reserve and FM goals is both apparent from women's specific answers and lacking from their general responses. LC women believe that the main purpose of the Reserve is to care for the forest, whereas Other women said it is to teach people to conserve forests. Other goals were listed as: give jobs to local people, tourism, stop hunting, and buy lots of land. Clearly, women are aware of the goals of FM. They are just not sure of why these goals are important. As one woman said,

“I think that the thing that the Reserve does bad is not telling the people of the community what their goals are of FM and what the purpose of not cutting down forest is and why we should conserve animals, plants and birds...I don't think any of these people with recreational courses [training] can be in disagreement with FM – but rest of town doesn't know why and they are always criticizing the FM” (Interviewee #40, 1998).

Explanations of why FM conserves forests, and why villagers should as well, is needed if support for the Reserve is to be maintained. Support for Maquipucuna was also hindered by expectations that FM should provide infrastructure, such as telephones, water systems, and a park, for the village. Residents perceived it as FM's role to involve the community in tourism, jobs, and community education. FM was seen as not living up to its “promises” because it used its revenue to buy land, but not to give jobs to local people. This fact was not understood by local women.

“FM always says have no money but always has money to buy land – they should tell us where money comes from and what for, because people don't know” (Interviewee #40, 1998).

In reality, FM has assisted in implementation of infrastructure items, through their political and personal contacts, and through helping villagers legalize the town for grants.

Similar evidence was found in the communities living around the Cross River National Park (CRNP) in Nigeria, where community support was based on the expectations of socio-economic development, such as electricity, water, roads, health,

and schools, by the park for the villages (Ite 1996). Just as with FM, “the CRNP is not a development agency as most communities perceive it...From all indications, communities’ conception of ‘development’ and the associated priorities is very different from that of the National Park project managers” (*ibid*: 355). In the case of CRNP, support was dependent on perceived costs and benefits from the park, and when expectations were not met, support declined. Similar loss of support by local residents from a perceived lack of benefits can be found in other studies of rural buffer zone communities and PAs as well (Alexander 2000; Bookbinder, *et. al.* 1998; Götmark, *et. al.* 2000; Teye, *et. al.* 2002; Lash 2003).

Private property status of the Reserve

As is demonstrated with Maquipucuna Reserve and Marianitas village, privately-owned reserves and PAs are an increasingly useful tool for conserving natural resources (Langholz 1996). Private nature reserves, by definition, have acquired ownership of the lands they manage and protect, exhibiting the same rights to private property as many village lands. Local residents identify with the need to have controlled access to land, enforceable boundaries, and the ability to transfer ownership on the open market and at will. In Marianitas, the concept of private property is well-understood and, for the most part, respected. On the other hand, historical rights such as rights of way, gathering plant materials and hunting game “in the mountains” are well-established and can frustrate owners who would like to prohibit people from gathering and hunting on their lands.

Conservation efforts can be improved by enforcing trespassing laws and hunting restrictions. When FM hired a guard, instituted patrols, and prosecuted poachers when caught, villager attitudes and behavior towards hunting and collecting in the reserve

changed drastically. Now substitutability of commercial meat is available for most, but not all, residents of the village. Private property rights can be used to a reserve's advantage as means of mitigating historical rights of hunting public goods such as wildlife and extraction of natural resources.

The negative side of private property rights lies in the extreme “wealth” of the reserve owner compared to the residents in surrounding communities. The women of Marianitas live in a rural society which traditionally values conversion of forest into pasture or sugar cane fields. There is an expectation by villagers for “rich” landowners with large landholdings to employ local residents and families to work these pastures and cane fields. This dependency of rural people on support from the wealthy is a pervasive ideology of increasingly marginalized peoples. Expectations can outpace reality and cause frustration and hostility (Maikhuri, *et. al.* 2000). Studies on private reserves show that providing jobs creates “tangible links” between PAs and communities (Langholz 1996: 274; Alderman 1990; 1994).

Impact of crafts industry

Rural development initiatives are undertaken as a means to improve local livelihoods and to extend the local income base so that rural workers may have the opportunity to remain on farms without the need to migrate to urban centers (Lash 1998; 1999). Women stated that many young girls migrate to Quito to work as maids, and that the LC crafts initiative has allowed at least one young woman to stay in the village earning income.

LCs have created their own life empowerment with craft jobs. In this tightly-woven community, they exhibit similar characteristics and responses to Other women in the village. A significant difference was seen as 67% of LC (compared to 27% Other)

women had the self-confidence to speak up with concerns about FM, and express how the rest of villagers do not understand FM goals. LC criticisms were based on their perception of a lack of good communication between FM and villagers, and mutual understanding of needs and goals.

Communication is key to any human enterprise (Stevens and Sherpa 1992). When PA managers and/or NGOS partner with local community residents, it is crucial that a groundwork for communication be laid out prior to negotiation (Covey 1992). More importantly, is the assurance that local voices and opinions will be heard and that community residents can participate fully in the resource use decision making process (Ashley and Roe 1998; Ostrom 1992). Additionally, empowerment can be measured by the ability of local people, particularly women, to have “influence over external decisions,” giving women “more control over their lives” (Ashley 2000: 22).

Since 1998, the LC group has successfully purchased land, built a permanent artisan workshop, and now conducts demonstrations to tourists as well as selling crafts. This LC enterprise has become a regular stop on the tourist route to the Reserve’s ecolodge.

The study concludes that crafts training is most important for its empowerment of women more so than for creating a conservation ethic. All women interviewed expressed the need for more job opportunities for women and a great desire for training programs. The key to shared conservation goals and creating alliances between PAs and village communities is to provide economic alternatives, such as crafts, for members of the community, particularly women, that offer both an independent income and the ability to fulfill conservation goals of the PA.

The results from this study suggest that crafts initiatives can be a successful conservation tool when combined with the fortitude of privately-owned reserve lands, when hindrances, such as expectations by local partners, are addressed and solved in agreement.

Communities adjacent to protected areas cannot have full control over these public or private resources, but they do desire stakeholder status. As long as protected areas are important to NGOs and policy-makers, then community support of conservation efforts is mandatory. Support comes with jobs which provide economic benefits in keeping with the conservation goals of protecting sensitive natural environments. In the case of Maquipucuna and LC, jobs can come from artisan work, providing income, identity, and self-sufficiency for women and their families. As more service industry jobs, such as ecotourism and crafts, come into rural areas, residents have a choice to switch from practices which degrade environments (Lash and Austin 2003). These data may act as a guide for the importance of future grassroots artisan programs in initiating this workforce transformation, and in looking at how rural people view private property rights as an enforcement to conservation of natural resources.

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REFERENCES

- Alderman, Claudia L. 1990. *A Study of the Role of Privately Owned Lands Used for Nature Tourism, Education and Conservation*. Paper sponsored by Conservation International, Washington D.C.
- Alexander, Sara, E. 2000. Resident attitudes towards conservation and black howler monkeys in Belize: the Community Baboon Sanctuary. *Environmental Conservation* 27 (4): 341- 350.
- Ashley, Caroline. 2000. *The Impacts of Tourism on Rural Livelihoods: Namibia's Experience*. Working Paper 128. London: Overseas Development Institute.
- Ashley, C. and D. Roe. 1998. *Enhancing Community Involvement in Wildlife Tourism: Issues and Challenges*. Wildlife and Development Series No. 11. London: International Institute for Environment and Development (IIED).
- Badi'i, Hooshmand. 1997. *Spiritual Solution of Economic Problems*. Canada: Webcom.
- Basgall, Monte 1997. "Ecology and the Tourist Marketplace: Conserving Parks and People," *Duke Magazine* 83 (6): 8-13.
- Bookbinder, M. P., E. Dinerstirn, A. Rijal, H. Cauley, and A. Rajouria 1998. Ecotourism's Support of Biodiversity Conservation. *Conservation Biology*, Vol. 12, No. 6 p. 1399-1404.
- Brandon, Katrina. 1996. *Ecotourism and Conservation: A Review of Key Issues*. Washington, D.C.: The World Bank.
- Bullock, Susan 1994. *Women and Work*. London: Zed Books, Ltd.
- Conservation International (CI) 2002. Web site: <http://www.conservation.org/xp/CIWEB/strategies/hotspots/hotspots.xml>
- Covey, Stephen R. 1992. *Principle-Centered Leadership*. New York: Fireside.
- Dankelman, I. and J. Davidson, 1988. *Women And Environment In The Third World: Alliance for the Future*. London: Earthscan Publication Ltd. in association with IUCN.
- Drumm, A., 1998. "New Approaches to Community-based Ecotourism Management: Learning from Ecuador," IN *Ecotourism: A Guide for Planners and Managers*, Vol 2. Lindberg, K., M. Epler Wood, and D. Engeldrum, eds. North Bennington, Vermont: The Ecotourism Society, pp. 197-214.

- Dugelby, Barbara and Michelle Libby 1998. "Analyzing the Social Context at PiP Sites," IN *Parks in Peril: People, Politics, and Protected Areas*, K. Brandon, K. H. Redford, and S. E. Sanderson, eds. Washington, D. C.: Island Press, pp. 63-75.
- Ecuador 2003. <http://www.ecuador-travel.net/information.biodiversity.htm>
- Epler Wood, Megan 1998. *Meeting the global challenge of community participation in ecotourism: case studies and lessons from Ecuador*. American Verde Working Paper No. 2. Latin American and Caribbean Division. Arlington, VA: The Nature Conservancy.
- Epler Wood, M. 2002. *Ecotourism: Principles, Practices & Policies for Sustainability*. Paris: United Nations Environment Programme (UNEP).
- Fundación Maquipucuna 2001. Choco-Andean Conservation Corridor Project – Ecuador MSP (TF-023882). 2nd Withdrawal Request – October 2001.
- Fundación Maquipucuna 2003. Web site: http://www.maqui.org/la_reserva.html
- Götmark, F., H. Söderlundh, and M. Thorell. 2000. Buffer zones for forest reserves: opinions of land owners and conservation value of their forest around nature reserves in southern Sweden. *Biodiversity and Conservation* 9: 1377-1390.
- Hardin, Garrett 1968. The Tragedy of the Commons, *Science*, vol. 162, pp. 1243-1248.
- Healy, Robert G. 1994. "Tourist Merchandise" as a Means of Generating Local Benefits From Ecotourism. *Journal of Sustainable Tourism* 2(3), pp. 137-151.
- Hudelson, Patricia M. 1994. *Qualitative Research For Health Programmes*. Geneva: Division of Mental Health, World Health Organization.
- Hughes, D. M., 1996. "When Parks Encroach Upon People: Expanding National Parks in the Rusitu Valley, Zimbabwe," *Cultural Survival Quarterly* . 20(1): 36-40.
- Ite, Uwem E. 1996. Community perceptions of the Cross River National Park, Nigeria." *Environmental Conservation* 23(4): 351-357.
- Jermyn, Leslie 2002. Introduction – Ecuadorian Oil, Debt and Poverty: A True Story. In Dossier on the OCP pipeline in Ecuador, "Outrage in the Rainforest." <http://www.globalaware.org/introduction>
- Johnson, Jeffrey C. 1990. *Selecting Ethnographic Informants*. Qualitative Research Methods Series, vol. 22. Newbury Park, California: Sage Publications.
- Langholz, J. 1996. Economics, objectives, and success of private nature reserves in sub-Saharan Africa and Latin America. *Conservation Biology* 10, 271-280.

- Langholz, J. and K. Brandon 2001. Privately Owned Protected Areas. In *The Encyclopedia of Ecotourism*, Weaver, David B. ed., New York: CABI Publishing, p. 303-314.
- Lash, G.Y.B. Lash 1998. Women, Crafts and Conservation Attitudes: Alliances Between Communities and Protected Areas. Paper presented at the *Adventure Travel Society 1998 World Congress*, Quito, Ecuador, November 1998.
- Lash, G.Y.B., S. Parsons, and R. Justicia, 1999. Los Colibrís Crafts Group: Empowering Women and Supporting Sustainable Development in the Tropical Cloud Forests of Western Ecuador. IN *Gender & Tourism: Women's Employment and Participation in Tourism*, UNED-UK Report for the United Nations Commission on Sustainable Development 7th Session, April 1999, Minu Hemmati, ed., p. 122-132.
- Lash, G.Y.B. 2003. A Longitudinal Study Of Community Perceptions: Preserving Public Goods On Private Lands In The Community Baboon Sanctuary, Belize. In *Sustaining Our Spirit: Ecotourism On Privately-Owned Rural Lands and Protected Areas*. Ph.D. diss., University of Georgia, Athens, p. 67-174.
- Little, Peter D. 1994. "The Link Between Local Participation and Improved Conservation: A Review of Issues and Experiences," IN *Natural Connections: Perspectives in Community-based Conservation*, eds. D. Western and R. M. Wright. Washington D. C.: Island Press, p. 347-372.
- Maikhuri, R. K., U. Rana, K. S. Rao, S. Nautiyal, and K. G. Saxena 2000. Promoting ecotourism in the buffer zone areas of Nanda Devi Biosphere Reserve: an option to resolve people-policy conflict. *International Journal of Sustainable Development and World Ecology*, Vol 7, p. 1-10.
- Nazarea-Sandoval, Virginia D. 1995. *Local Knowledge and Agricultural Decision Making in the Philippines: Class, Gender, and Resistance*. Cornell University Press.
- Ostrom, Elinor 1992. The Rudiments of a Theory of the Origins, survival, and Performance of Common-Property Institutions. In *Making the Commons Work: Theory, Practice, and Policy*. D. W. Bromley, ed. San Francisco: ICS Press, p. 292-318.
- Patton, Michael Quinn. 1990. *Qualitative Evaluation and Research Methods, 2nd. Ed.* Newbury Park, California: Sage Publications.
- Redgwell, C. 1999. Intergenerational Equity and Agenda 21. *Sustainable Development International*, London: ICG Publishing Ltd., Spring 1999: 13-16.

- Rogers, A. 1993. *The Earth Summit: A Planetary Reckoning*. Los Angeles: Global View Press.
- Scheyvens, Regina 1999. Siyabonga Craft Cooperative: A Case Study. IN *Gender & Tourism: Women's Employment and Participation in Tourism*, UNED-UK Report for the United Nations Commission on Sustainable Development 7th Session, April 1999, Minu Hemmati, editor, p. 149-157.
- Sipos, Z. A. 1999. Local to Global Links to Implement Agenda 21 – the Local Agenda 21 Process. *Sustainable Development International*, London: ICG Publishing Ltd., Spring 1999: 9-12.
- Sneed, Paul G. 1997. "National Parklands and Northern Homelands: Toward Co-Management of National Parks in Alaska and the Yukon," IN *Conservation Through Cultural Survival: Indigenous Peoples and Protected Areas*, ed. S. Stevens. Washington, D.C.: Island Press, p. 135-154.
- Srikosamatara, S. and W. Y. Brockelman 2002. Conservation of protected areas in Thailand: A diversity of problems, a diversity of solutions. In *Making parks work: Strategies for preserving tropical nature*, ed. J. Terborgh, C. van Schaik, L. Davenport and M. Rao. Washington D.C.: Island Press. p. 218-231.
- Stevens, Stan 1997. "Annapurna Conservation Area: Empowerment, Conservation, and Development in Nepal," IN *Conservation Through Cultural Survival: Indigenous Peoples and Protected Areas*, ed. S. Stevens. Washington, D.C.: Island Press, p. 237-261.
- Stevens, Stanley F. and Mingma Norbu Sherpa 1993. Indigenous Peoples and Protected Areas: New Approaches to Conservation in Highland Nepal. In *Parks, Peaks, and People*, Hamilton, L. S., D. P. Bauer, and H. F. Takeuchi, eds. Honolulu: East-West Center, p. 73-88.
- Talbot, L. M. 1984. The Role of Protected Areas in the Implementation of the World Conservation Strategy, in *National Parks, Conservation, and Development: The Role of Protected Areas in Sustaining Society*, McNeely, J. and K. R. Miller, eds. Washington D. C.: Smithsonian Institution Press, p. 15-16.
- Tchamie, T. T. K., 1994. "Learning from Local Hostility to Protected Areas in Togo," *Unasylva*. 176, Vol.45.
- Teye, Victor, Sevil F. Sönmez, and Ercan Sirakaya 2002. Residents' Attitudes Toward Tourism Development. *Annals of Tourism Research*, Vol. 29, No. 3, p. 668-688.
- The Nature Conservancy (TNC) 2001. *Site Conservation Planning: A Framework for Developing and Measuring the Impact of Effective Biodiversity Conservation Strategies*, Washington, DC.

- Weller, Susan C. and A. Kimball Romney. 1988. *Systematic Data Collection*. Qualitative Research Methods Series, vol. 10. Newbury Park, California: Sage Publications.
- Wunder, Sven 1999. *Promoting Forest Conservation Through Ecotourism Income? A case study from the Ecuadorian Amazon region*. Jakarta, Indonesia: Center for International Forestry Research (CIFOR) Occasional Paper No. 21, March 1999.

CHAPTER 4

CONCLUSION: OUR FUTURE

Like "civilization" in the nineteenth century, "development" is the name not only for a value, but also for a dominant problematic or interpretive grid through which the impoverished regions of the world are known to us. Within this interpretive grid, a host of everyday observations are rendered intelligible and meaningful. Poor countries are by definition "less developed," and the poverty and powerlessness of the people who live in such countries are only the external signs of this underlying condition. The images of the ragged poor of Asia thus become legible as markers of a stage of development, while the bloated bellies of African children are the signs of social as well as nutritional deficiency. Within this problematic, it appears self-evident that debtor Third World nation-states and starving peasants share a common "problem," that both lack a single "thing": "development."

Ferguson, 1994

SUMMARY

This dissertation offers for consideration a synthesized model from the literature of factors contributing to the success of community-based ecotourism (CBE), and examines two case studies of CBE, one in villages of the Community Baboon Sanctuary (CBS) in Belize, and the other in Marianitas, Ecuador, adjacent to a private reserve, Maquipucuna. The objectives of this research were to 1) examine local community support for habitat conservation and for their associated protected areas (PAs), through conservation attitudes and perceived benefits, 2) examine the issue of private property rights versus protection of public goods, and 3) document trends in development and resource use that could be applied in other CBE cases and PA management in general.

These case study results point to some of the limitations of CBE as a conservation and sustainable development tool, and to some of the complex issues that surround the ecotourism industry with regard to protecting biodiversity and improving

livelihoods of local people. Three common, and closely related, themes stand out in this research.

First, private property rights, and private management of public goods, are a central theme in both case studies. The CBS consists of all private rural landowners, while Maquipucuna is a private reserve, without permanent residents. The women's craft group, Los Colibrís (LC), is a private economic enterprise, on private rural lands, affiliated in a business relationship with Maquipucuna Reserve, whose mission is to preserve public goods. Private property ownership ensures exclusive rights of control over use of land and its resources, however, public goods such as wildlife are not owned exclusively, and therefore are subject to overuse by a collective of individual owners. This is the case of the privatized CBS "commons," where private landowners and public monkeys are in competition for land, and as well as in Marianitas, where hunting animals and private property rights are intertwined.

The second theme, the conflict between use versus preservation of natural resources, is linked with the above private vs. public issue. Use vs. preservation is an inherent concept of CBE. The CBS landowners are simultaneously attempting to preserve monkeys on their lands, creating a 4700 hectare sanctuary, while at the same time, to live on the land and extract a living from it. As development in the area increases, pressures to use these areas that are under protection increases as well. The women in Marianitas face this concept daily, as they struggle to comprehend why so much Reserve land is put into conservation and is not providing jobs for the community members.

This leads to the third concept, of economic versus social welfare. Local community support for PAs is dependent on benefits received from PAs, and both of these cases are heavily invested in this issue (Maikhuri *et. al.* 2000). These cases support Heinen's (1996) assertion that benefits to rural residents from PAs are educational/social at the start of the community-PA relationship, but gradually turn to economic benefits as time and circumstances apply. In the CBS, the uneven distribution of economic benefits threatens to dissolve the sanctuary, while in Marianitas, the women expect both jobs and social benefits from the Reserve.

This chapter examines these three issues in general, and then in particular with regard to the Belize and Ecuador case studies. Then, it presents the case studies in light of the SCBE model developed in Chapter One, noting where the successes and problems exist. This chapter concludes with a look at future directions, research, and the use of tourism to promote peace and unity in the world.

I. CURRENT CASES: CBS & MARIANITAS

PUBLIC VS. PRIVATE

The Issue

The issue of public and private land holdings and associated rights is at the core of rural transactions and livelihoods. The keys here are the understandings of individual, communal, and public rights. Indigenous communities and other associations may hold land in a communal agreement, in the form of undivided, large areas. Similarly, groups of resource users may hold rights to access and extraction of common pool resources (CPR) in an appropriator organization (AO), such as in fisheries (McCay 2001) or CAMPFIRE (Pye-Smith and Feyerabend 1994).

When all lands are held in individual title, there is the possibility for a “tragedy of the commons” to occur regarding public goods such as wildlife or riverside development (Hardin 1968). Equity problems occur when legal and unofficial rights are not in agreement. If communal lands are not registered officially with government, what a community member may believe that she can do on “her” portion of communal lands may be different than dictated by government laws or legal documents, leading to a possible loss of her time, labor, revenue, and lands.

Ecotourism professionals see these clashes between individual, community, and governmental land uses, through conflicts of designated property rights, as potentially degrading to human communities. This occurs when development is counter to local culture, of an inappropriate scale for the local community and its members, and promotes inequitable distributions of financial and physical resources into the hands of a few, leaving the remaining landless poor with little hope. The hope of CBE is to give local communities both legal and unofficial control over these lands and their lives, while still preserving natural environments.

The basis of this paper’s SCBE model is local empowerment and control. Local management and sovereignty over decision-making is seen in this model as key to successful outcomes, both for residents and for the environment. This can be a highly debated topic, as outcomes from local control are, to date, overwhelmingly in favor of over-development and destructive use of natural resources instead of under-development and protection.

In reality, local control is still under the jurisdiction or auspices of regional and national governments, and accountable to the greater body of users or stakeholders.

Rules of law are a “checks and balances” system, which (ideally) assure public welfare as well as individual welfare. Additionally, pressures from special interest groups, national and international environmental organizations, and development interests can push and pull a project in many directions, effectively eroding local sovereignty.

Diminishing local sovereignty can be both positive and negative. On the one hand, it is the necessary role of government and of public advocacy organizations to monitor and regulate over-development of resources in order to preserve public goods. Public interests, in the form of protecting resources such as wildlife, old growth or air quality, must be upheld, sometimes at the expense of local interests. On the other hand, it is necessary that local people have, if not the last voice, at least a strong, clear voice in development options and implementation. What is key here is not the order that the voices are heard in, but the amount of information and concerns from that voice that are addressed and incorporated into the final decisions.

The Cases

Local sovereignty was exemplified in both of these studies. The LC women of Marianitas had formed their group, pared it down to five core working members, and were in control of their time, production, and management. The CBS local committee finally received sovereignty to manage their sanctuary in 1994, when the assisting national NGO (non-governmental organization) moved out.

Both of these case studies were conducted on private lands that were designated as PAs and/or buffer zone areas. All residents felt that they had the right to do things on their own private lands as long as it did not harm anyone else. Examples of this are the harvesting of hearts of palm and hunting in Marianitas, and clearing trees for pasture in

the CBS. In both Marianitas and the CBS, animals migrate through these forests, and yet there is the belief by the majority that it is permissible to hunt them (Marianitas) or to cut forest (CBS) on one's own land. The reality here is that if everyone actually took these actions, then the tragedy of the commons would exist.

There is an expectation that jobs come from the land. Land in conservation has an opportunity cost that has not been met in both of these cases by alternative income or benefits. In Marianitas, land was originally held in large parcels by few owners, creating land scarcity. Women expressed the expectation that these lands are needed to provide jobs for the local residents, as caretakers and machete workers. Unlike Marianitas and its view of land scarcity, a key tenet of the CBS villagers is that land has always been available, either from family or to lease from government. Large parcels can remain as family holdings for generations, and are available when needed.

In this regard, with the loss of 36% of CBS pledges, the lands of the CBS are in peril of being transferred out of original ownership to new residents who lack the will to protect howler monkeys and their habitats (Heinen 1996). This changing user base puts pressure on the management of the Women's Conservation Group (WCG) to unite ever more diverse groups and to articulate the mission of the CBS even more clearly. However, because compliance remains on a strictly voluntary basis, their overall effectiveness will be seriously challenged.

This voluntary nature of compliance can be the most serious limitation to landowner conservation. In the CBS, lack of protected covenants and other enforceable regulatory mechanisms have already allowed owners to clear areas of land without regard for leaving desired tree species, or bulldoze through prime monkey habitat in order to

create housing roads. Even when certain practices, such as fencing within the 20-meter public right-of-way along riversides and beachfronts, are against the law, numerous violations are still seen in areas of high tourist developments, such as in San Pedro and Caye Caulker (Lash and Austin 2003). In the CBS, one of the tourist lodges and some landowners have fenced down to the waterside, effectively blocking public access. In Marianitas, a similar destruction of public goods occurred when the forests around the village water source were cut.

Regulating private development in an effort to preserve public goods is the role of government. In the case of these private lands, there is no AO for CBS users to take the place of government enforcement in order to protect the CPR monkeys and monkey habitat. Without these regulations, the fate of the future of the CBS is in doubt.

USE VS. PRESERVATION

The Issue

Ecotourism is an industry of use. It is not a preservation industry. It aims to protect and preserve the environment and its natural resources (and indigenous cultures for that matter) through use. By its very disposition of interacting with Nature through the viewing of, impacting lightly on, and manipulation of wildlife and wild lands (and unique cultures) ecotourism is using, if not using-up, these resources.

In theory, ecotourism seeks to use resources sustainably, meaning that its use does not harm the viability of the ecosystem and its parts, for current and future generations of human use. It seeks to honor, preserve, and market the uniqueness of species, places, and peoples, as attractions for its clientele. It also seeks to create economic and other benefits for residents in an effort to provide incentives for local conservation of resources.

In practice, ecotourism can produce the following stories, where:

- individual goals for developing CPRs can cause a tragedy of the commons to occur;
- under the guidance of the “invisible hand,” private landowners each develop independently their properties, promoting habitat fragmentation, and decline or destruction of natural systems;
- homogenous groups with shared visions are displaced by heterogeneous newcomers with conflicting visions, effectively dissolving past agreements towards limits of use, and conservation;
- uniqueness of place and of culture is homogenized into a formula for development that destroys or compromises the essential character of its original attraction;
- powerful development interests assert their will over marginalized peoples and preservation plans;
- local benefits from ecotourism enterprises are lost in leakages to international and national partners.

This dual mandate of use and preservation is the challenge. On the private side, local control over natural resources can lead to extensive use and degradation of environments. Over-development and reliance on economic returns can shift a sustainable conservation project into one of resource loss and failure through overuse. Zoning, building codes, and subdivision ordinances, and other restrictions can be methods for regulating use. Providing incentives can be a positive method for inducing preservation practices. Alternatively, members of an AO can agree on limitations of use of CPRs, and applied those agreements to enforce use restrictions (Ostrum 1992).

On the public side, the issue of use versus preservation of natural resources is a global dilemma for all National Parks and PAs. The key is to find the balance between human use and enjoyment, and the ecological needs for healthy, sustainable systems. It is not always clear. Techniques such as LAC (Limits of Acceptable Use) can be applied to assess impacts of tourists on trails, garbage, water systems, plant communities and more (Stankey, *et. al.*, 1985).

As biodiversity worldwide dwindles, there is a clarion call to create more PAs in an effort to preserve at least 10% of the earth's surface (IUCN 2003). This is a noble effort, but which almost always clashes with people who already live in these newly-formed PAs (Terborgh and Peres 2002). This preservationist mentality of protecting lands for wildlife and ecosystems is not understood by cultures whose view of the land is strictly utilitarian. For example, in the Western conservationist view, "catch and release" fishing is humane, ethical, and a way to preserve species for future breeding, while still promoting the pleasure of fishing by tourists and anglers. In the view of the Sápmi of Lapland, "catch and release" fishing is cruel and wasteful, as the fish is not being eaten and is being injured for no good reason. They see it as "playing God," and not respecting life (*pers. comm.* Hadi Lile, February 2003).

Additionally, the making of parks can potentially impact many groups of local peoples by displacing them from these natural area homes in an unjust and arbitrary manner, without their consideration or consent (Sutherland 1998). This migration of peoples, or even simply restricted access by buffer zone communities, can cause resentment and retaliation against PAs and their personnel (Tchamie 1994).

The legacies from John Muir and Gifford Pinchot, on the valuation of preserving or using natural areas, are strong in our global leadership community. And yet, finding the balance of the “Land Ethic” articulated by Aldo Leopold has been difficult. We can only hope to continue to strive to find this balance.

The Cases

The two cases presented here are also caught up in finding the balance between use and preservation, regarding the development of the area and its natural resources. In the “preservation” arena, both of these two areas have made an impact at the international level. Maquipucuna is part of a bi-national biological corridor, the Choco-Andean Corridor, in a country known as a global biodiversity hot-spot. Buffer zone communities, such as Marianitas, are needed to help protect, and add to, this corridor; therefore, local conservation awareness and practices are critically important. Similarly, the CBS is part of the black howler monkeys’ Meso-American habitat, which only exists in parts of Mexico, Guatemala, and Belize. As one of the last remaining howler monkey strongholds, the CBS is an important resource for the viability of the species. Seen as a success, the CBS is internationally known as a model for private landowner conservation.

In the “use” arena, the two PAs in these cases differ in the fact that, one PA, Maquipucuna Reserve, has no people allowed to live in it on a permanent basis, while the other, CBS, is made up entirely of resident, private landowners. In Maquipucuna, development is limited to outside the reserve boundaries, in the villages of Marianitas and surrounding communities. These communities are separate from the PA, and as such, rapid or dense development would have little impact on the Reserve.

On the contrary, if the villages of the CBS develop rapidly or extensively, this development would be in direct competition for howler monkey conservation.

Landowners in the CBS have come up against this situation, with opposition and indecision on how to proceed. One conflict occurred when the BL “school-troop” monkey habitat was bifurcated for a future housing project road. Outcries from BL villagers expressed that the monkeys (and the economic returns that they brought in for the community) come first, resulting in the project land being exchanged for a non-monkey area.

This exchange of land in the CBS area is occurring steadily, as property values rose from US\$25 to over US\$1800 per hectare, and lands are sold to outside interests that can afford these increased prices. This is particularly a concern as the additional 700 to 1000 homes are built in WB, bringing an influx of three times more people than of the entire population of the seven CBS villages. With the additional 4800 residents, it is almost impossible to see how the CBS will survive as a conservation stronghold, even if mandatory, not voluntary, regulations were in place. Additionally, to tip the balance towards use and development is also the fact that 36% of the pledged lands are now “unpledged” and need to be renewed.

Both Marianitas and Bermudian Landing (BL) in the CBS are quickly becoming gateways into their respective PAs. Like the CBS Museum, the new Visitor/Training Center in Marianitas acts as a tourist collection point, offering educational information on the Maquipucuna Reserve and the Choco-Andean Corridor. As with all gateway cities, development pressures rise until limits or standards are set. Increased development, with new amenities, additional housing, and infrastructures such as water and sanitation can be

positive for both tourists and residents. In Marianitas, this development can be extremely beneficial for villagers, as it would also bring new jobs and opportunities. In the CBS, the gateway status of BL can also be seen as beneficial for residents, providing services that were previously lacking. However, as development increases, it also threatens to out-compete the necessary amount of habitat needed for howler monkey conservation. It is quite possible that in ten years time, howler monkeys will be in cages at prominent eco-resorts, and a dedicated, publicly-owned and privately-run by WCG, 1000-plus hectare “Howler Monkey Reserve” will be in place along side the Belize River and adjacent waterways.

ECONOMIC VS. SOCIAL WELFARE

The Issue

PA conservation requires support from local people who live in or nearby the PA and are affected by it (Ite 1996). Support is usually dependent on residents receiving benefits that are perceived as just compensation for their costs (Bookbinder, *et. al.* 1998; Teye, *et. al.* 2002). When compensation is not received, negative changes in attitudes can occur (Srikosamatara and Brockelman 2002).

One important concern is the uneven distribution of wealth, both economic (revenue, natural resources) and social (knowledge, information) among the people of the world, causing disparity between rich and poor, educated and uneducated. Another issue is development at non-local scales, having implications far more wide-spread than just those of profits or losses. The human impact of this “Cancunization” can be devastating to a village and a way of life that was once close-knit and working together well. Its social impacts can affect the spirit of the people and the place by displacing local

customs, spacing of houses, heights of buildings, transportation methods, leadership, and methods of exchange (Lash and Austin 2003).

The success of tourism, and particularly ecotourism which is implemented in naturally sensitive areas, can be used instead as a means to alleviate poverty, as in “pro-poor tourism” (Roe, *et. al.* 2002). Using Schumacher (1973) as a guide, the social needs of people as well as their economic needs, can be addressed. A key to this success is building mutual trust between PAs and community (Dugelby and Libby 1998; Fukuyama 1995).

The Cases

Driving the previously discussed “use versus preservation” dilemma are “economic versus social” returns. On the social/ethical side, CBS landowners want to preserve the howler monkeys because they are harmless and humanlike, on the economic side, because they bring in revenue. All women interviewed in Marianitas expressed the need to conserve forests, although they had trouble reconciling land conservation with the need for jobs. One half (51%) of women interviewed said that more jobs should come from the Reserve.

One of Wilson’s (2002) key elements of an effective strategy for achieving conservation is to make it profitable. He suggests to enhance the livelihoods of local people who live near or in PAs. This is the mission of CBE. Like the women in Marianitas, conservation education, not crafts, can promote knowledge of the connections between preserving a plant and preserving a bird, or between cutting the forest and water sources drying up. Like landowners in the CBS, conservation of monkeys can bring profits and benefits to those taking part in tourism services. But an inequitable

distribution of profits (or knowledge) can also bring disillusionment and a feeling of comparative deprivation from those who are participating in conservation but not reaping economic (or other perceived “social profits” such as knowledge) rewards. This act of inequity denies both the economic actor and the human spirit the right of just compensation. Similarly, the success of the LC women of Marianitas has caused some resentment in the village, as non-craft villagers view LC success as an inequity.

Once began, unequal compensation, and its associated social deprivations, is difficult to halt. In the CBS, the scale of revenue generated in BL is so far beyond the reach of other villages that economic equities are not likely to follow in future. BL will most likely continue to be the commercial center of CBS, and to capture the greatest amount of tourism revenue. If equitable benefits are indeed needed for local support (Bookbinder, *et. al.* 1998), then this fact of BL’s success makes it difficult to see how the CBS can continue to exist as a multi-owner private reserve.

Social needs expressed by people in these studies were universal as well. In Ecuador, women believe that access to clean drinking water is a basic human right. In Belize, not only economic benefits, but also good communications and honesty are sought. The LC women in Marianitas and the landowners in CBS both criticized their management organizations, Fundación Maquicupuna (FM) and WCG, for not communicating better with them and villagers in general. The parallels between these cases are striking and speak to a greater commonality for all PA communities. Both groups want transparency of management operations, goals, and how income is spent and why. In both groups, some feel that management has “done nothing to support the community” and should be more equitable and consistent in its support of all people of

the village, not just certain people. This disunity, both in Belize and in Ecuador, fosters resentment and frustration among members, causing members to not want to work together, nor with management. And yet, both groups want to continue exploring the possibilities of receiving benefits from tourism to these PAs, and so wish to improve and unify relationships between management and residents.

A key item missing from these two cases is good communication, through consultation, and the sense of unity and cohesiveness of a cooperative or AO. Consultation involves all on an equal basis and allows all stakeholders to express their underlying assumptions, operational realities, goals and concerns in a safe and non-confrontational manner. Gregory and Keeney (1994) assessed successfully the impacts of a future coal mining operation in a primary forest in Sabah, Malaysia with a multitude of stakeholders (mine developers, local government, development agencies, environmental spokespersons, and social interests) and obtained consensus on a list of objectives. This “public values forum,” a combination of focus groups and public involvement, can be used to solicit, combine, and prioritize objectives for assessing alternatives in seemingly diametrically opposed development projects (Keeney, *et. al.* 1990; Gregory and Keeney 1994).

Local empowerment of women is a theme in both of these studies. The women of the WCG have had the opportunity to learn new skills as managers of the CBS. The LC women of Marianitas have learned the crafts industry, and a few other village women have also taken advantage of the workshops which have been offered to all. LC women have learned to interface directly with visitors, FM staff, and international buyers of their products. This local empowerment of women certainly changes their individual lives on

the local level, and it also changes the collective lives of women on the global level as well, as advocated by pro-poor tourism (Roe, *et. al.* 2002). By improving their livelihoods, these women in both Marianitas and the CBS build confidence and evidence that women all over the world can not only contribute to their communities, but also lead them.

THE SCBE MODEL IN BELIZE AND ECUADOR

The SCBE Model was created to assess factors influencing success in a community-based ecotourism (CBE) venture, and to predict where failure or success might occur. As example, the two case studies of CBS in Belize and LC women in Ecuador are presented here.

This model is about people and not about conserving resources *per se*. It is assumed that if SCBE is accomplished, then conservation of natural resources will occur, because “success” cannot happen without preserving resources for future use. This is the classic “use versus preservation” paradox.

Table 4.1 Case study evaluation of SCBE model		
SCBE FACTORS	CBS Belize	LC Ecuador
F (Culturally-Fit)	Program fits within existing local property lines and practices; improves livelihoods through ecotourism income and associated benefits. <u>Problems:</u> uneven distribution of benefits, causing disunity, competition, and comparative deprivation between six villages and BL	Program fits with existing time constraints of women & child care; use local materials and sell at local markets (Reserve); improves livelihoods through income and knowledge. <u>Problems:</u> at first husbands did not approve; LC success has caused some resentment in village

G (Grassroots Participation)	Local pledged landowners (LO), local management, local guides, and local entrepreneurs	Suggested by PCV & FM, and started by men and women of village
S (Local Sovereignty)	Managed by local committee and landowners. <u>Problems</u> : LO feel left out of management; Committee is appointed not elected	Women in group are self-sufficient and in control of time, production, and management. <u>Problems</u> : large group dynamics, with men and women, did not work – had to form small core of five women
C (Communication)	Sparse from management to all LO. <u>Problems</u> : LO ignorant of management decisions due to few meetings and no newsletters. Lack of honest and transparent financial records over the years, causing mistrust of management	Strong within LC group. <u>Problems</u> : weak with FM and distributors. LC women criticizing about lack of communication between FM and villagers
T (Training)	Increased training with computers, business, leadership, guiding, food preserving. <u>Problems</u> : training is mainly available to BL residents only, due in part to lack of transportation	Craft training, leadership, guiding, first aid, accounting, conservation education and more. <u>Problems</u> : not many women have taken courses; business skills were not strong in LC women
M (Marketable Product)	Monkeys! CHC with cultural lifestyle, CBS Museum, HML, Nature Resort, Belize River. <u>Problems</u> : almost all products are in BL; no package tours linking villages	Crafts! Demonstration of craft production, Maquipucuna Reserve and Ecolodge. <u>Problems</u> : Quality of crafts good but not always consistent,; LC women work only after get an order – no place to keep sufficient inventory
P (Partnerships)	BAS, WWF, PfB, PACT, BELRIV. <u>Problems</u> : more competition than collaboration between partners	FM, PC, Quito gallery, USA contact. <u>Problems</u> : need more sales outlets for crafts

II. FUTURE DIRECTIONS: “THE GOOD DEAL”

In an unified effort to combat human misery in 40% of the planet's peoples, and to promote peace, the United Nations declared poverty eradication, sanitation and access to clean drinking water, and education for all as the mandates from the world's leaders at the World Summit on Sustainable Development (WSSD) in Johannesburg, South Africa in September 2002. On the non-human side, the world's natural resources were examined and found to be in peril, with 160 to 300 species of plants and animals driven to extinction every 100 years (50 to 100 times the natural extinction rate), water resources declining as one-third of the human population lives in areas where withdrawals exceed supply; global climate changes, due to rising amounts of greenhouse gases, causing droughts and famines, floods and evacuation of island states due to rising seas (IUCN Red List 2000; WRI 2003; Rachel's Environment 2003).

How do we address such monumental challenges? To “save” the Earth's environment and its peoples, one can protect vast areas, such as the Pico da Neblina National Park in Brazil, and one can use the environment in a sustainable manner, such as the micro-hydroelectric plants in Kenya, Sri Lanka and Nepal, to promote the uplifting of human livelihoods (Kluger and Dorfman 2002). This dual concept of both “sustainable” (protection) and “development” (use) encompasses the equitable visions of long-term future generations (Brundtland 1989) and short-term growth options.

In our rush to develop the world, we have forgotten many times the people who live in these conditions without water, without sanitation, without security. When we choose to take valiant efforts to eradicate poverty, disease, and ignorance, we bring to the foreground what sustains our spirit: heartfelt, people-to-people connections which honor

our creativity, self-determination, dignity, connection to Nature, and our essence as worthy human beings, each of whom can make a difference in the world.

In this larger picture of global development, ecotourism can play a major role, at least by improving the livelihoods of rural people, and thereby also attempting to conserve natural places. As a member of a large, global industry, ecotourism has the potential to affect all areas of the planet, at a local level. On the developmental end of the scale, it can promote “smart growth,” creating unity between community and development, such as in the case of Kapawi Lodge, Ecuador, and its collaboration between the Achuar people and its private sector partner. Ecotourism can also promote aesthetics, so that areas still retain a sense of place, and that the unique “place” doesn’t get lost in a copy of Disneyland (Benfield, *et. al.* 2001). This can be seen in the village and surrounding area of Kavak, Venezuela, where the Pemon people have constructed an attractive, traditional village for tourists at the base of the Auyan-tepui mesa near Angel Falls, just outside of Canaima National Park, preserving both their own village and the traditional lifestyle of the people. On the humanitarian end, it can promote local dreams and visions of a better way of life and livelihoods for rural residents. This can be seen in the collaborative efforts of the Mayan people of the Toledo Ecotourism Association (TES) in Belize, their ecotourism guesthouse system, and their efforts to establish community conservation areas in order to maintain their connections to the land and to preserve it for future generations.

FUTURE RESEARCH

Less developed countries (LDCs) can use the United States (US), and its evolution of the development of its park and forest systems, as a model for methods of

protecting natural resources. As in the US, PAs can serve as a catalyst not only for job creation in tourism, but also for environmental education of local residents and the populace in general. PAs can impart a new mindset of values for preservation of ecosystems, rather than seeing land as simply providing extractive jobs. In the case of the CBS, it may be necessary in the near future to create a fully public PA, or a privatized PA like Maquipucuna, if landowners continue to degrade resources and ignore their voluntary pledges. Like in the history of the US, lands under local, private control are subject to the allurements of short term economic gains over long term future benefits.

New studies can be done (by the people themselves) to examine this spectrum of developmental and humanitarian needs in these cases of Belize and Ecuador. What are these people's dreams and visions for their lives, and how do they wish to improve their future? In the CBS, with the increased development of urban housing and an influx of new residents from various cultures, how do people respond differently to the concept of conservation from 2000 until now? Have their aspirations changed? Do they still believe in future benefits and that "Better will come"? Will the increased development in the area completely eliminate opportunities for tourism and/or conservation of monkeys?

The village of Marianitas is just ten years behind BL of the CBS in tourism development. Longitudinal studies can track economic benefits and the influence of tourism on the village of Marianitas and its residents, to see if they encounter similar challenges as the CBS. Tourism was just starting to be mentioned in the 1998 Marianitas study, with similar results as the 1988 CBS study. Both institutions were three years old when these results were collected, with the CBS starting in 1985, and the FM Ecolodge bringing in tourists in 1995. These studies concur with Heinen (1996) in their

documentation of a progression from intrinsic values of benefits and camaraderie with visitors, to economic values and a strictly “professional” attitude towards visitors.

These progressive changes can be seen in the impacts of tourism service certification. Certification dramatically shifts the role of the landowner from volunteer protectorate and gracious host of his/her own lands, wildlife, and culture, to a service employee in a sanctuary whose sole purpose is to serve the tourist and generate revenue from doing so, thereby paying associated taxes and fees (King and Stewart 1996).

Ecotourism development can change the lifestyles of rural farming/ranching communities into service industries with increased density of populations, creating urban sprawl in a rural landscape, or “Rural Sprawl.”

Story: How Poor People Live

One day a father of a very wealthy family took his son on a trip to the country with the firm purpose of showing his son how poor people live. They spent a couple of days and nights on the farm of what would be considered a very poor family. On their return from their trip, the father asked his son, "How was the trip?" "It was great, Dad.," the son replied. "Did you see how poor people live?" the father asked. "Oh yeah," said the son. "So, tell me, what did you learn from the trip?" asked the father.

The son answered: "I saw that we have one dog and they had four. We have a pool that reaches to the middle of our garden and they have a creek that has no end. We have imported lanterns in our garden and they have the stars at night. Our patio reaches to the front yard and they have the whole horizon. We have a small piece of land to live on and they have fields that go beyond our sight. We have servants who serve us, but they serve others. We buy our food, but they grow theirs. We have walls around our property to protect us, they have friends to protect them."

The boy's father was speechless. Then his son added, "Thanks, Dad, for showing me how poor we are."

This is the essence of the development dilemma – the cyclical spiral of “improving livelihoods” (Ashley and Roe 1998) through a “Cancunization” of environments and societies with modern amenities such as electricity, grocery stores, and

hotels, to losing the beauty of a star-filled night in a dark village with no street lamps. Where is the balance? What do tourists come to see? What do residents wish to live with?

By drawing on the literature, successful practice and practicality of CPR appropriator organizations (AO), we can begin to approximate the cohesion required to arrive at solutions to these questions and create benefits for all. Only when all members of an organization, company, or community perceive benefits, will prosperity, harmony, and goodwill emerge. Even in the marketplace, we see that “win-win” solutions are best (Covey 1989). Sales training emphasizes a friendly attitude and service to the customer, knowing that negative experiences can severely harm a company or product.

Service must have a voluntary or sacrificial aspect to it to be truly valuable. For example, Danesh (1997:158-159), interviewed a CEO who’s company had turned a marvelous profit the year before and who’s workers were happy, congenial, and productive. In contrast, this year they were irritable, taking sick days, unproductive, and profits were way below previous years. The differences were that last year, the employees had put together a food drive all year, held company meetings in the evenings so that they could solicit food during the day, worked hard and sacrificed personal time to perform both company and food drive needs. This year, management had cancelled the food drive in anticipation of even higher profits and productivity (based on last year’s success), and thereby taking “the spirit of service out of [the] workplace, and with it the will to work.”

So, what will our Future look like? Workplaces filled with happy people or miserable people? A world filled with happy people, or a world filled with miserable

people? We can see some of the misery already. Can we see the happiness? In our U. S. Constitution, we are guaranteed the rights to “Life, Liberty, and the Pursuit of Happiness.” Is this so much to achieve? Surely, our forefathers thought it possible. With visioning techniques and the science of “scenarios,” future possibilities can be envisioned and charted so as to “back-cast,” creating the steps forward to achieve our desired future conditions (Robinson 1996; Rhoades, *et. al.* 2001). These techniques can be implemented for cases of CBE, like the landowners of the CBS and the women of Marianitas.

PEACE THROUGH TOURISM

CBE and Cross-Cultural Learning

Tourism has the potential, and the goal, to promote cross-cultural learning and understanding. When people travel, they are exposed to a diversity of cultures, as well as diverse landscapes. CBE is about small scale tourism, and small-scale development for people, both travelers and residents. In this way, travelers have an opportunity to get to know local residents on a more personal basis. This is a remarkable asset for local people and visitors alike. As the T-shirts of the CBS have inscribed on the back, “Conservation By the People, For the People,” voicing that the main focus of conservation is people.

The International Institute for Peace through Tourism (IIPT)

The IIPT has produced a “Credo of the Peaceful Traveler.” It aims to have travelers think about their attitudes and actions, to honor the hosts and places that they visit, and to be “Ambassadors for Peace.” The IIPT supports projects “that contribute to the vision of ‘Tourism as a Global Peace Industry,’ with three international networks (Educators, Community-Based Tourism, and Spirituality in Tourism; IIPT 2003).

Education For Peace (EFP)

EFP was created to bring peace and unity to people who have seen war and strife. Its key component is the Law of Unity, where, like a living organism, the whole is dependent on its diverse parts. This program is based on the premise that peace is created when we can visualize our fellow humans, and indeed every aspect of life, as a unified whole made up as diverse parts – as one world with all of humankind as its citizens. This tangible program was implemented in Bosnia-Herzegovina in six pilot primary and secondary schools. It teaches children to be peacemakers by applying the concepts of unity and peace in every class subject, and in the way that they study every subject. For example, history is seen in a new light, not just in terms of conflict, but in terms of unity and accomplishments. Students can ask, where are the women? Where are the occasions of peace? When did the significant achievements take place? This program has worked so well that the government has requested it be implemented in all schools in the country, and suggested that it be taken worldwide (EFP 2003).

There are great possibilities of modifying this program for the tourism industry – government officials, tour operators, guides and hoteliers – so that hosts and guests can interact on terms of peace. Combined with EFP in the schools, this would impact not only nationals, but also the international visitors they contact, and could literally change the world. Additionally, like the conservation tax in Belize, an education for peace tax could be charged to every tourist visiting the county to pay for the EFP programs. This is truly implementing the concept of tourists as ambassadors for peace, and of peace through tourism.

THE NEW ERA

The connections between global and local life becomes more apparent as the last century (20th) came to a close and this century (21st) moves on. As nation states unite in global bodies like the European Union, shared values take the place of competing views. So, it has been said, “All politics are local.” Every act of humanity is done at the local level and may have great or small impacts on our global world. Most of us do not know how our actions may ripple into a larger sphere of influence, and yet, all relationships and plans of action begin at home and in our community.

As example, the economies of the world are interlinked. The extraction of oil in Ecuador and the past corruption of oil proceeds by officials, in an effort to build roads and other infrastructure for the country, have caused the creation of such massive global debt that Ecuador was forced to undergo dollarization just to stabilize its economy (Jermyn 2002). This global action has had negative impacts at the local, rural levels of commerce. Prices rose, making it difficult for rural people to afford staple goods. Local trade becomes global when local goods are bought and sold in international markets. The pricing of goods on an international or even regional market can dictate failure or success of a local economy.

As the destruction of the old world (and worldview) is happening around us, simultaneously a new era is being created. This new era honors each person as a member of one global family, each with unique talents and customs. Like the masses of suffering people listening to the great speeches of President Franklin D. Roosevelt (FDR) or Martin Luther King, Jr. (MLK), we need to be “in-spired” – to have our spiritual side awakened in our businesses, homes, and all relationships. Just as FDR brought in the “New Deal”

in 1933 to bring a financially battered economy out of depression and into prosperity, and just as President Harry Truman brought in the “Fair Deal” in 1949 to uplift the war-torn world into peace through development, we now need to bring in the “Good Deal” to transform a battered society out of the fear of separateness and into a world of unity and peace.

As FDR said so simply, “the only thing we have to fear is fear itself – nameless, unreasoning, unjustified terror which paralyzes needed efforts to convert retreat into advance” (Roosevelt 1933). The Good Deal is to be a win-win contract, with unity and justice for all. Tourism, and particularly ecotourism, on privately-owned rural lands and protected areas, has a great role to play in the drama of this new era. When we work together, success stories of community spirit abound, such as the indigenous groups: the Cofan in Ecuador, the Kuna in Panama, Yungilla village in Ecuador, the Flowers Bank villagers in Belize.

As President Roosevelt reminded us,

Happiness lies not in the mere possession of money; it lies in the joy of achievement, in the thrill of creative effort. The joy and moral stimulation of work no longer must be forgotten in the mad chase of evanescent profits. These dark days will be worth all they cost us if they teach us that our true destiny is not to be ministered unto but to minister to ourselves and to our fellow men.

Recognition of the falsity of material wealth as the standard of success goes hand in hand with the abandonment of the false belief that public office and high political position are to be valued only by the standards of pride of place and personal profit... Small wonder that confidence languishes, for it thrives only on honesty, on honor, on the sacredness of obligations, on faithful protection, on unselfish performance; without them it cannot live.

All instances of where people can work together and feel inspired are examples of sustaining our spirit.

BIBLIOGRAPHY

- Ashley, Caroline and Dilys Roe 1998. *Enhancing Community Involvement in Wildlife Tourism: Issues and Challenges*. London: International Institute for Environment and Development (IIED).
- Benfield, F. Kaid, Jutka Terris, and Nancy Vorsanger 2001. *Solving Sprawl: Models of Smart Growth in Communities Across America*. New York: Natural Resources Defense Council.
- Bookbinder, M. P., E. Dinerstirn, A. Rijal, H. Cauley, and A. Rajouria 1998. Ecotourism's Support of Biodiversity Conservation. *Conservation Biology*, Vol. 12, No. 6 p. 1399-1404.
- Brundtland, Gro Harlem 1989. Global Change and Our Common Future, In *One Earth, One Future: Our Changing Global Environment*. Silver, Cheryl Simon and Ruth S. DeFries 1990. Washington: National Academy Press.
- Covey, Stephen, R. 1990. *7 Habits of Highly Effective People*. New York: Simon and Schuster.
- Danesh, H.B. 1997. The Psychology of Spirituality: from divided self to integrated self. Wienacht, Switzerland: Landegg Academy Press.
- Dugelby, Barbara and Michelle Libby 1998. Analyzing the Social Context at PiP Sites. In *Parks in Peril: People, Politics, and Protected Areas*. K. Brandon, K. H. Redford, and S. E. Sanderson, eds. Washington, DC: Island Press, p. 63-75.
- Education For Peace (EFP) 2003. <http://efp.landegg.edu>
- Ferguson, James 1994. Preface. IN *The Anti-Politics Machine, "Development," Depoliticization, and Bureaucratic Power in Lesotho*. Minneapolis, MN: University of Minnesota Press.
- Fukuyama, Francis 1995. *Trust: The Social Virtues and the Creation of Prosperity*. New York: Free Press Paperbacks.
- Gregory, Robin and Ralph L. Keeney 1994. Creating Policy Alternatives Using Stakeholder Values. *Management Science*, Vol. 40, No. 8, p. 1035-1048.
- Hardin, Garrett 1968. Tragedy of the Commons. *Science*, Vol. 162, p. 1243 –1248.
- Heinen, Joel T. 1996. Human Behavior, Incentives, and Protected Area Management. *Conservation Biology*, Vol. 10, No. 2, pp. 681-684.
- International Institute for Peace through Tourism (IIPT) 2003. <http://www.iipt.org>

- Ite, Uwem E. 1996. Community perceptions of the Cross River National Park, Nigeria. *Environmental Conservation* 23(4): 351-357.
- IUCN Red List of Threatened Species 2000. Confirming the Global Extinction Crisis. p. 1-4. <http://www.iucn.org/redlist/2000/news.html>
- IUCN World Commission on Protected Areas, 2003. <http://iucn.org/themes/wcpa/>
- Jermyn, Leslie 2002. Introduction – Ecuadorian Oil, Debt and Poverty: A True Story. In Dossier on the OCP pipeline in Ecuador, “Outrage in the Rainforest.” <http://www.globalaware.org/introduction>
- Keeney, Ralph, L., Detlof Von Winterfeldt, and Thomas Eppel 1990. Eliciting Public Values for Complex Policy Decisions. *Management Science*, Vol. 36, No. 9, p. 1011-1030.
- King, David A. and William P. Stewart 1996. Ecotourism and Commodification: Protecting People and Places. *Biodiversity and Conservation* 5, 293-305.
- Kluger, Jeffrey and Andrea Dorfman 2002. The Challenges We Face, *Time Special Report: How To Save The Earth*. September 2, 2002, p. 10-19.
- Lash, G. Y. B. and A. D. Austin 2003. *Rural Ecotourism Assessment Program*. Burlington, VT: The International Ecotourism Society. In Prep.
- Maikhuri, R. K., U. Rana, K. S. Rao, S. Nautiyal, and K. G. Saxena 2000. Promoting ecotourism in the buffer zone areas of Nanda Devi Biosphere Reserve: an option to resolve people-policy conflict. *International Journal of Sustainable Development and World Ecology*, Vol 7, p. 1-10.
- McCay, Bonnie 2001. Community-based and Cooperative Fisheries: Solutions to Fisherman’s Problems. In *Protecting the Commons: A Framework for Resource Management in the Americas*, Burger, Joanna, Elinor Ostrom, Richard B. Norgaard, David Policansky, and Bernard D. Goldstein, eds., p. 175-194.
- Ostrom, Elinor 1992. The Rudiments of a Theory of the Origins, survival, and Performance of Common-Property Institutions. In *Making the Commons Work: Theory, Practice, and Policy*. D. W. Bromley, ed. San Francisco: ICS Press, p. 292-318.
- Pye-Smith, Charlie and Grazia Borrini Feyerabend 1994. *The Wealth of Communities: Stories of Success in Local Environmental Management*. West Hartford, CT: Kumarian Press.

- Rachel's Environment & Health Weekly* 1995. New Perspectives on Loss of Species. May 11, 1995, p. 1-10. <http://www.monitor.net/rachel/r441.html>
- Rhoades, Robert E., Virginia Nazarea-Rhoades, and Maricel Piniero 2001. Contrasting Scientific and Local Valuations of Land Use Change: The Future Visioning Methodology. In *Bridging Human and Ecological Landscapes: Participatory Research and Sustainable Development in an Andean Agricultural Frontier*. Robert E. Rhoades, ed., p. 333-349.
- Robinson, John B. 1996. *Life in 2030: Exploring a Sustainable Future for Canada*. University of British Columbia Press.
- Roe, Dilys, Harold Goodwin and Caroline Ashley (2002). *The Tourism Industry and Poverty Reduction: A Business Planner*. Pro-poor tourism briefing No. 2, March 2002. <http://www.propoortourism.org.uk>
- Roosevelt, Franklin D. 1933. First Inaugural Address. <http://www.bartleby.com/124/pres49.html>
- Schumacher, E. F. 1973. *Small is beautiful: Economics as if people mattered*. New York: Harper & Row, Publishers, Inc.
- Srikosamatara, Sompoad and Warren Y. Brockelman 2002. Conservation of Protected Areas in Thailand: A Diversity of Problems and a Diversity of Solutions. In *Making Parks Work: Strategies for Preserving Tropical Nature*. John Terborgh, Carel van Schaik, Lisa Davenport, and Madhu Rao, eds., p. 218-231.
- Stankey, G.H., D. N. Cole, R. C. Lucas, M. E. Petersen, and S. S. Frissell 1985. *The Limits of Acceptable Change (LAC) System for Wilderness Planning*. USDA Forest Service General Technical Report INT-176. Intermountain Forest and Range Experiment Station, Ogden, UT.
- Sutherland, A. 1998. *The Making of Belize: Globalization in the Margins*. Westport, CT: Bergin and Garvey.
- Tchamie, T. T. K. 1994. Learning from local hostility to protected areas in Togo. *Unasylva* 176, Vol 45.
- Terborgh, John and Carlos A. Peres 2002. The Problem of People in Parks. In *Making parks work: Strategies for preserving tropical nature*, ed. J. Terborgh, C. van Schaik, L. Davenport and M. Rao. Washington D.C.: Island Press, p. 307-319.
- Teye, Victor, Sevil F. Sönmez, and Ercan Sirakaya 2002. Residents' Attitudes Toward Tourism Development. *Annals of Tourism Research*, Vol. 29, No. 3, p. 668-688.
- Wilson, Edward O. 2002. *The Future of Life*. New York: Alfred A. Knopf.

World Resources Institute (WRI) 2003. Sustainable Development Information Service (SDIS) Global Trends: Water: Critical Shortages Ahead?
<http://www.wri.org/wri/trends/water2.html>

CHAPTER 5

EPILOGUE: THE SPIRIT OF DEVELOPMENT:
A NEW PARADIGM UNIFYING PEOPLES, ENVIRONMENT, ECONOMICS AND
GOD¹

¹ Lash, G. Y. B. 2003. To be submitted to *Ecotheology*.

“The profound and far-reaching changes, the unity and unprecedented cooperation required to re-orient the world toward an environmentally sustainable and just future, will only be possible by touching the human spirit, by appealing to those universal values which alone can empower individuals and peoples to act in accordance with the long-term interests of the planet and humanity as a whole.”

Bahá'í International Community to the Plenary Session of the 1992 Earth Summit

“In a real sense all life is inter-related. All men are caught in an inescapable network of mutuality, tied in a single garment of destiny. Whatever affects one directly affects all indirectly. I can never be what I ought to be until you are what you ought to be, and you can never be what you ought to be until I am what I ought to be. This is the inter-related structure of reality.”

Rev. Martin Luther King, Jr.

SUMMARY

Rural community life and its development are a microcosm of global growth, as governments, corporations and funding institutions seek to increase economic production, GNP, and bring all nations into a modernized 21st century. Is this the best way? Is integration into development schemes, particularly following a European/USA model, what people in these rural communities really want, and the true way to integrate local and global goals? This paper says, “No!”

All people want, and are entitled to, the right to safety, to practice their religion, to sanitary conditions, to health, to shelter and food, and to education for their children (UDHR 2003). Modern development can help to achieve these rights, but it alone will not bring them about. The crux of rural development is what residents really want best (using their definition of “best”), for their families and communities. In reality, they want to be listened to, to be heard, seen, respected and valued – their land, their beliefs and practices, their lives. They want to keep their unique diversity of culture and knowledge from simply blending into a Western/Northern melting pot, and to feel honor in doing so.

In ecotourism, for example, rural residents want the best for both wildlife and humans – but have been taught that if it comes down to a choice between the two, the

human family comes first. At present, wildlife is not “family” to most cultures. How can the Earth’s ecosystems and her peoples come together again as one family? How can people feel like they are benefiting both? The answer lies in bringing the divine attributes of humanity – honor, reverence, justice and the Golden Rule – back into economics and the development process.

The purpose of development lies not in the economic status of a community, state or nation, nor in its social or political power, but rather in the hearts of its peoples. It is to bring hope. The key to economic, social, and political development is the development of human capital, of the human spirit. All else follows. If the human spirit is free from the pollution of prejudice, fear, mistrust, and self-doubt and filled with understanding, love, trust, and certainty, then prosperity follows, environmental sustainability blossoms, and human rights to services such as clean water, health care, security, freedom of expression are automatic.

The answer lies in the new paradigm of “Connecting with Spirit.”

I. OUR 20TH CENTURY JOURNEY

When James Burke wrote *Connections* (1978) and narrated a television show of the same name, he illustrated how interconnected all aspects of human life are. Our technology, our inventions, our rituals are linked by the circuitous routes of our thoughts and minds. We create change through these mental routes, and thus change both the view and reality of our universe. Burke affirms, “All communities in all places at all times manifest their own view of reality in what they do. The entire culture reflects the contemporary model of reality. We are what we know. And when the body of knowledge changes, so do we” (1995, p. 11).

This paper follows in the connective tradition of James Burke. It documents and examines a few of the myriad of social, environmental and economic 20th century trends in development that have led us up the spiraling path from finding our roots (our past) and embracing technology and global innovations (our present) to a new paradigm of Connecting with Spirit (our future). Our knowledge is changing, and therefore our worldview is changing also. We are on the brink of a brave new world, particularly at the margins where humans and the environment meet and merge. Our historical and current concepts of Nature and our place in it are but fragments of the holistic system. A new spiritual lens in which to view the world is now emerging, bringing into focus disparate fields and ideas which connect and explain how and why the world is moving towards a spiritual framework, manifesting a consilience of peoples, environment, economics, and God.

“Each of us is now being drawn, in one way or another, to that same great vision. It is more than a vision. It is an emerging force. It is the next step in our evolutionary journey. Humanity, the human species, is longing now to touch that force, to shed that which interferes with clear contact” (Zukav 1989, p. 13). We see this greater vision and touch this force when we interact with nature. As travelers, all people can experience the wonder and beauty in countless natural places and exotic cultures. Ecotourism development came into existence as that subset of tourism which seeks out these natural and cultural experiences and taps into our spiritual connections to biological and human diversity (Honey 1999).

Presently, all development operates under a paradigm with economic value as the highest good. This is now changing. The last 100 years brought us from of the 19th

century Age of Industry into the 20th century Age of Information – both based on our intellects; the 21st century promises to usher in the Age of Spirit, based on our hearts. It is time to open fully these doors to the spirit of development as we also embrace a new paradigm of honoring spiritual values as the highest good.

This new paradigm seeks to achieve what its predecessors have not: a uniting of all peoples and their economic systems in harmony with the Earth, drawing its life from the interweaving of core tenets from many disciplines. “A balanced perspective cannot be acquired by studying disciplines in pieces but through pursuit of the consilience among them” (Wilson 1998, p. 13). Sustainable development is a philosophy, not simply a product. It is a way of being, a way of doing business, a way of relating to both people and places. It aims to balance a multitude of disciplines with a multitude of stakeholders in dialogue, actions and rewards. We have progressed over the millennia as a species, and over the last century as a global race. Let us see where we have come from and where we are going to in our future pursuit of sustainable rural development.

PEOPLES

Humans are social animals, relying on complex social structures for organization and interaction (Morris 1967). Over millennia, human cultures have created many types of social constructs and traditions – some that seem quite strange to modern-day thinking and practices (Bates and Plog 1991; Rappaport 1984). In a world based primarily on Northern/ “developed nation” values, much of these secondary types of social heritage are at odds with development and are being marginalized or lost in the name of progress.

In order to understand and include these diverse cultures in development dialogue, we can examine the past/present timeline of human society and corresponding views about environment.

Table 5.1 Timeline of human society and environment						
Time	Past-----Present					
World View	Religion-Based		Science/Technology-Based		Spirit and Science-Based	
Social Paradigm	Hunters, Gatherers	Agriculturists	City Dwellers	Industrialists	Cultural Creatives*	Indigenous Peoples
Dominant Belief/Value	Returning Cycles	Creative Dominance Over Nature	Aggregation, Specialization	Progress, Civilization	Activists, Integration	Keepers Of Spirit
Member Group	Tribal Community	Individual, Family	City State	Nation State	Individual & Global	World Tribe Community
Base Connection	Emotional	Physical	Mental, Intellect	Ego, Materialism	Heart & Mind	Soul
Paradigm of Nature	Controlled by Nature	Stewardship	Modernism	Colonialism	Land Ethic, Contextual	One With Nature
*(Ray and Anderson 2000)						

This diagram (Table 4.1) chronicles the evolutionary transformation of a human societal paradigm, its dominant value, the member group to which it belongs, its base connection to the environment, and its model of nature. It is an unidirectional circle, a spiraling progression upwards through space and time, like the Navajo story of Creation with the four worlds stacked on top of one another (Zolbrod 1984). We cannot go backwards, but we can come to what seems full circle, such as with 20th century indigenous peoples overlaying the hunter-gatherers of pre-agricultural times. Both embrace a tribal community but while the ancient tribes had no knowledge of a world greater than their immediate surroundings, almost all indigenous peoples of today are aware of, if not interact with in some way, national governments that claim or manage lands adjacent to or in indigenous territories.

The point of this spiraling timeline is to note that human society is evolving in its relationship to each other and, as we will see in the next section, in its relationship to the earth. Even though all of these social paradigms can be argued to co-exist today, there is, nevertheless, a historical movement of peoples over millennia from nomadic tribes to agrarian settlements of families or clans, into urban aggregations, creating a mercantile class with specialization in trades which encouraged now available wares to be bought and bartered. City-states developed into industrialized nations, from which sprang a contemporary re-evaluation of life, leading to activism and integration into a global society. As separate societies, indigenous peoples hold remembrance of the spiritual connections between humans and earth for the world community.

This movement is not just physical but a mental one as well. Each group possesses a distinct combination of their worldview and dominant beliefs to which problem solving is applied. Over the last two centuries, the idea that science and technology could provide long-sought solutions for human well-being became prevalent with the creation of factory mechanization and production lines, even though there were initial concerns that jobs would be lost to technology (Cooper 1988). In 1949, President Harry Truman put forth policy to use science and technology to “advance” all the world’s societies (Escobar 1995). Today, all nations are dependent on science and technology, so much so that it is still thought of as a means to eradicate human misery by providing new kinds of food, shelter, utilities and jobs (Davidson 2000).

These technological solutions are not agreed on by everyone. As science and its normative values took over the cities, rural lifestyles still continued in the countryside. Life with the land formed practical and spiritual values that were proven to work in times

of need and survival. These became traditions. These tenets are important to acknowledge because they make up the philosophy of a people, a culture. When gathering a multitude of stakeholders at the table for negotiations, all cultural norms and societal stages must be considered and supported for a truly sustainable development solution (Farley 2002).

A new mindset is blossoming, in the United States and worldwide, that believes that science and technology alone, absent of ethics or an emphasis on human rights, is not the answer (Preble and Safina 2002; Jennings 1994; Schumacher 1973). We, in the US, are transitioning from what Ray and Anderson (2000) document as stages of human values and behavior, the “Traditionals” and the “Moderns,” to form the “Cultural Creatives.” Some dominant values of each are listed here. Traditionals believe: in the Religious Right; patriarchy is best; sex needs to be regulated; pride in serving in the military; small town life is virtuous; in freedom to carry arms; and foreigners are not welcomed. Moderns value: democracy, equality, and justice; linear analytic thinking; making a lot of money; latest styles and trends; economic and technological progress; bigger is better; and time is money. Cultural Creatives are: volunteers and activists; synthesized thinkers; learners of exotic cultures; pro-environment and for ecological sustainability; not concerned about “success”; for community and neighborhood revitalization (pp. 27-32).

These expansions in mindset and behavior, in focus from immediate family to nation to world, in equality for women and for all cultures, and in recognizing that we are charged to “think globally and act locally,” have brought the human race to a point in its development that has not been faced before in the history of humankind. Now, having

seen the 20th century come to a close, we currently sit in transition between existing as nation states and as a global citizenry. Humanity has necessarily experimented with global organizing bodies such as the League of Nations and the United Nations for over 50 years. No world government exists yet, but this is the future trend of our timeline. In order for this next step to be taken, the new paradigm of Connecting with Spirit will have to occur. It has already begun.

ENVIRONMENT

People and the environment are one. We have been and always will be tied to the Earth that we inhabit. Ancient man knew this, and worked with the seasons, the moon, the stars, to guide his way and his daily life. Mother Nature was man's outdoor classroom and she taught him well about her cycles of existence, of renewal. Man's relationship to Earth became one of relationship to the Creator – Mother Earth and Father Sky, with each animal embodying a characteristic of its wealth: strength, courage, cunning, speed. Wealth was measured by both physical and spiritual attributes; a wealthy man was one who possessed a balanced nature, exhibiting qualities which could provide for his people and bring harmony to his clan.

With these attributes, Man learned to anticipate the constancy of nature with the predictability of a craftsman. Each year, each month, each day, cycles were honored and worshiped. "This endless recurrence of natural events, and these monotonous repetitions in the human drama, so profoundly influenced the primitive mind that they shaped many of its beliefs and practices" (Dubos 1962, p. 49). Even today, our emotional being is stirred with reverence and awe when we gather at sacred monuments to nature's constancy such as Stonehenge, or celebrate with festivities the coming of new life in

spring. For ancient man, change was the constant circle of eternal renewal – in truth not change at all. Ancient peoples had no concept of “progress” beyond the seasonal and yearly cycles of nature and human life.

With the advent of civilization and the Age of Reason with its concentration on the intellect, the new idea of progress came into being. Man “progressed” from a tribe in simple harmony with nature to one who complexly molded and analyzed nature. Progressive man embraced and created (man-made) change. Natural cycles were still there, but the reliance on them seemed less because of man’s ability to move beyond his emotional attachment to nature. “The belief in progress became a kind of religious faith among the philosophers of the Enlightenment with scientific inclinations; it has spread more and more vigorously ever since, weakening and almost destroying in the heart and the minds of men the emotional power of belief in eternal return” (Dubos 1962, p. 56).

As human society progressed, its core beliefs and interactions with the environment changed as well. Humans left their emotional attachment to nature behind but their physical connections remained strong. Unlike hunters and gatherers, who were at the mercy of the seasons, climate, and migrating herds, agriculturists settled and shaped their farms and fields at will, and embraced the concept of stewardship over their plants, animals, and lands. Since Columbus sailed west over 500 years ago, European nations have explored and conquered “the South.” When resources became scarce in Europe, colonies were founded to provide timber, dyes, oil, minerals, and cash crops for export. Thus, pristine environments were transformed from forests into pastures and open spaces for human habitation. Once cleared, then land could be “developed” with modern agricultural or technological projects, for the betterment of society. The

mentality of the necessity of “development,” created, adopted and exported by Northern countries, is pervasive in our world society today (Escobar 1995; Davidson 2000).

With increasing human populations worldwide (500 million in 1650, one billion in 1850, to 6.1 billion in 2001; Ehrlich 1990; World Bank 2002), modern metropolises were built over ancient cities, creating contemporary concrete jungles, channeled rivers, and industrial parks. By 1872, in an effort to preserve the uniqueness of its wilderness, President Ulysses S. Grant of the United States (US) declared Yellowstone as the world’s first National Park. This park was established for both recreation and conservation, “as public park or pleasuring ground for the benefit and enjoyment of the people” (Everhart 1972, p. 8). This mandate of both preserving a wilderness and using it for recreation and local needs has become a conundrum for US law and for managers of parks and protected areas worldwide

Global parks and protected areas (PAs) are increasing yearly, due to international pressures to preserve vanishing ecosystems, with 44,000 existing PAs covering more than 10% of earth’s surface (World Commission on Protected Areas 2002). As human settlements expand and forest fragmentation occurs, conflicts between wild animals and people escalates, particularly at park boundaries. Everywhere – from villagers in India facing death from tigers, ranchers in Yellowstone losing sheep to wolves, to farmers in Thailand watching crops and homes trampled by elephants, to residential neighborhoods plagued by landscape-eating deer – humans and animals live at the edge of balancing wild and developed places.

Conservation practices are generally created and regulated by government, but Aldo Leopold saw that it was equally important for individual land users to cultivate an

“ecological conscience” to be able to employ sound land management. (Meine 1987). Leopold’s “Land Ethic” was born after years of experience with nature and its components, and of seeing humans create wanton waste of precious non-human life. His tale of “Thinking Like a Mountain” brings the powerful realization that managing deer, for example, has to be done in context of the mountain’s scale of time and its ancient ecological community; that the wildness of the wolf is an integral part of the mountain, and of ourselves (Leopold 1966).

Wilderness areas are created for the preservation of their “wildness” – not only to protect their physical traits such as the wolf and the mountain, but also their spiritual traits such as majesty and ancientness. This base connection between humans and nature through our minds and our hearts is anchored in an underlying concept of “wilderness” that creates a dilemma for developing and managing PAs. As God is the creator of wilderness, so therefore, the wild aspect of nature is a symbol of God. There is the dilemma: if we leave wilderness untouched, its sacredness is assured; if we manage it, then it is our creation, and its sacredness is lost (Sagoff 1994).

“We abuse land because we regard it as a commodity belonging to us. When we see land as a community to which we belong, we may begin to use it with love and respect. There is no other way for land to survive the impact of mechanized man, nor for us to reap from it the esthetic harvest it is capable...of contributing to culture” (Leopold 1966, p. xviii-xix).

This “esthetic harvest” is a link to our hearts. It is the essence of shared beliefs among environmentalists, tourists, and all others who visit wild places and feel grandeur in the spirit of place, as well as in ourselves. “The cultural harvest from the land is the

contribution of an organic conception of the good life. It is so because society does not yet have a definition of the good life that managers can use as a blueprint” (Norton 1991, p. 55).

By extracting the primary concerns and commonalities from environmental policy debate, Norton derives the concept of “Contextualism” as a model for ecological management and “ecosystem health.” It is built on the Land Ethic’s concept of land in the larger context – as a system of interwoven parts, of needs, scale and sense of time. Norton demonstrates that there are core sets of values that diverse and even polarized groups of environmentalists share. It is in the recombining of these extracted values that contextualism provides converging policy solutions that are to be found at “the intersection of ecologically and economically acceptable policy options. (1991, p.190).

Some of the world’s greatest policy documents on environment and sustainable development were created at the United Nation’s Earth Summit 1992 in Rio de Janeiro, Brazil. Five main products emerged: the Convention on Biological Diversity, the Convention on Climate Change, the Rio Declaration, Statement of Forest Principles, and Agenda 21 (Rogers 1993). Future generations were in the spotlight – how do we “meet the needs and aspirations of present and future generations without compromising the ability of future generations to meet their needs” (Brundtland 1989, p.149). To plan such policies, sustainability is seen as integral to social, political, and economic concepts and values, with an ethic of cooperation and interdependence between all of the world’s nations. The Rio Earth Summit is probably best known for Agenda 21, a 500-page “Manual for Planetary Survival” and “revolutionary” document in 40 chapters which demarcates environmental ills of the earth, and proposes solutions to heal them (Rogers

1993, p. 199). It gave the world a ray of hope that environmental degradation, poverty, and lack of human security would cease and be reversed.

Ten years later, world governments gathered at the United Nation's World Summit on Sustainable Development (WSSD) in Johannesburg, South Africa. Earth Summit 2002 was a ten-year review of Rio. Its purpose was to assess the state of the world and how far governments had progressed in achieving the goals of declarations and treaties signed since 1992. Implementation was this Summit's focus, not negotiating new issues or documents. The role of non-governmental organizations (NGOs) expanded, as Civil Society held their own parallel forum. Justice for the environment, although a prime topic, was secondary to correcting humanitarian issues such as poverty, access to water, human security, sanitation, and education.

"Progression" into the 21st century requires that we address these basic and crucial issues of human dignity, in order to be able to alleviate the degradation that we have placed upon our natural environments.

ECONOMICS

In neo-classical resource economics, future development of private rural lands is a function of the land's market value (rent), its highest and best use, and the landowner's perception of benefits and costs associated with each development option. Each individual has the right and indeed the obligation to fulfill her own wants and needs, and to make her own choices so as to improve her conditions. As long as no one is worse off than before, then this free exchange by individuals translates into welfare gains for the collective. A corollary to this is a "zero sum" gain, where a positive gain by one person(/company/nation) is associated with a corresponding and equal negative gain or

loss by another. When this kind of economic exchange happens, it creates a “win/lose” mindset, undermining true sustainability, where a “win/win” attitude and outcome is not only obligatory but necessary (Covey 1990).

Only tradable goods are registered in markets. When a rational individual makes a market decision, only those factors, presumably, around these tradable goods are considered, in an objective manner. However, being human, subjective reasoning is inevitable. Each human mind brings hundreds if not thousands of external factors into the equation, for myriads of outcomes (one for each individual, as no two people are exactly alike).

The ubiquitous nature of this subjective core of every human being is the crux of “spiritual economics” in the following part of this paper. The proposed goal of future commerce, politics and society is to understand these thought processes of diverse individuals, to identify common threads, and to develop new market rules that deal fairly with these subjective, universal traits.

One way to better understand the rationality of individual human behaviors is to examine the history of human survival and what individuals in society valued most at the time. Axiology, the science of human values, identifies interesting contrasts in the concept of labor between those cultures born of the North or temperate climates versus the South or tropical climates, and which permeate every aspect of our lives today. World economy runs primarily on concepts of work, production, labor, value of time and returns, and an underlying sense of scarcity that stems from ancient European history, exported through colonialism and trade for centuries. Much of the world’s European work ethic, and its sense of scarcity, can be seen as a biological survival mechanism that

developed in response to a cold climate. In contrast, people living in tropical climates developed views of work and relationships that sharply differ from those of the north. To paraphrase Dr. Joy DeGruy-Leary:

Ancient man living in the North had only three months each year to collect food and supplies for the other nine months before snows fell and he and his tribe were required to take shelter in the caves. If enough food was not collected, he and his clan would die. Thus, the concept of scarcity, in relationship to food, was born. The need to work, count, measure, record, barter, protect, and defend these goods (objects) was developed. Food, shelter, women, as objects, became assigned the highest value. Man's highest valued relationship was his "relationship to objects." In protecting his supplies, a leader would confer titles or some honored station onto his kinsmen, so as to enlist their help in fighting outsiders who might want to steal his goods and to keep his kinsmen content with not stealing his goods as well! It was a well-run system for survival that is seen throughout the feudal states, kingdoms, nations and colonies of Europe today.

In tropical countries, ancient man had twelve months of the year in which to gather food. Food was plentiful and did not need to be stockpiled – it was picked fresh off the tree, or one went to a relative's house within the extended family and ate. Clothing and shelter were also not a concern, as the weather was not cold. Objects were not important; relationships were. If one was turned out of one's house, then a relative's or a friend's house would do. Man's highest value was assigned as his "relationship to people." There was no need to work, count, measure, report, protect, or defend any object! There was no concept of scarcity. There was no concept of time required. It was a well-run system that necessitated leisure time relaxing with one's family and friends, developing the relationships that were most important (DeGruy-Leary 2002).

In this light, the challenges of European colonization of the tropics can be understood, as well as the challenges of integrating and overlaying the praxis of dominant European business economy with local tropical cultures worldwide. In accounting the history of Madagascar, Stratton relates, the "Malagasy laborer has none of his European or American counterpart's inducements to work for fixed wages during certain hours of the day or the night, and regular days of the week, throughout the year – not even with a paid holiday in summer. The Malagasy's needs are simple and his wants easily

satisfied...His concept of success does not goad him along to ‘improve’ himself...In short, most of the Malagasy see no virtue in work as such...A Malagasy man and his family can get by very happily with highly irregular working hours amounting to no more than three or four wage-earning months of the year. The rest of the time they spend in resting up after enjoying themselves. Thus there is a chronic labor shortage in Madagascar the while there is also a chronic unemployment” (Stratton 1964, p. 10-11).

Scientific and technological advances are integral to our modern way of thinking, categorizing and analyzing events, businesses, economies and society. Businesses seek to understand and to harness these changes to build manmade progress. “The foundation of modern business is reason. But Western corporate culture itself, as with any culture, evolves and changes...managers are continually confronted with the limitations of any fixed notion of reason; rationality itself evolves and shifts definitional emphasis between the Technical, Moral, and Aesthetic Universes” (Dobson 1999, p. 4). This capacity of all humans to shift our rational thinking for problem solving bodes well for the future of our society. All the neural synapses and abstract concepts are in place to easily switch “universes” of thought when problem-solving with different case criteria and desired outcomes. In reality, we are able to pursue material wealth in a logical fashion, or apply some moral principle as a higher good, or to be led by truth and beauty in our assessments and solutions (Dobson 1999). Our mind is gifted with logical *and* subjective reasoning to use both to best determine options, and to be able to “look outside the box” in terms of possible solutions.

Moral principles, truth, beauty, intrinsic value of places and wildlife are very real components of a managerial or market decision, but external to the market equation.

Spiritual qualities cannot be reduced to monetary value, nor traded, bought and sold without approximating their value in some real sense. Environmental economics seeks to correct this oversight (Daly and Cobb 1989; Daly 1990). It has been difficult.

Companies are reluctant to place non-tangible goods on the balance sheet, even with regulations and incentives to do so. Pollution, tangible in many of its forms and sources, has caught the attention of civil society and forced its recognition and some mitigation. Even with successes on these fronts, other externalities such as social costs and benefits of associated changes in culture and lifestyle are missed.

“Like winds and sunsets, wild things were taken for granted until progress began to do away with them. Now we face the question whether a still higher ‘standard of living’ is worth its cost in things natural, wild, and free... These wild things, I admit, had little human value until mechanization assured us of a good breakfast, and until science disclosed the drama of where they come from and how they live. The whole conflict thus boils down to a question of degree. We of the minority see a law of diminishing returns in progress; our opponents do not” (Leopold 1966, p. xvii).

This dichotomy of views, optimistic and pessimistic, between economists and biologists towards the exhaustibility of future resources and whether, at all, concern for future generations is to be applied, is anchored in the assumptions of “progress.”

Passmore concludes that, “Had Western man been able to continue to believe either that the future of the world lies in the hands of Providence or that progress is inevitable he would not feel his present qualms about the future; the problem of conservation would not exist for him. But while a belief in the inevitability of progress still affects the thinking of a great many of the world’s inhabitants...amongst Western intellectuals it

tends now to be replaced by the quite opposite view that unless men change their ways, catastrophe is inevitable” (1974, p. 80).

Whether our future is progressive or catastrophic is a question of scale. Ecology and economics can co-exist on an ecological scale, not an economic scale; resources are plentiful if used in moderation, in conjunction with new eco-friendly technologies, and with a sense of justice (as discussed later in this paper). We cannot be assured that substitutes for exhausted resources will be available in future – environmentalists argue that there are no substitutions, while economists declare their existence and worth (Passmore 1974). We are growing to understand that economies of a smaller scale are nobler, filled with moral purpose and spiritual space for a livable future (Schumacher 1973).

“Voluntary simplicity,” as espoused by Elgin (1993), is a proponent of a noble and moral life, and borrows many of the tropical concepts of needs and labor presented earlier. It seeks to steer materialistic society toward a simpler time, where self-sufficiency, inner success, and enjoyment of one’s life are attainable and valuable goals. Voluntary simplicity is about living in alignment with one’s life purpose, as well as achieving a standard of living that allows that life purpose to be attained. It is an “ecological approach” to life which puts less demand on the earth’s resources, emphasizing frugality, service, cooperation, and a view of the earth as a living organism connected to all (p. 36-39). Elgin predicts, “Simpler ways of living in the ecological era will result in changes as great as the transition from the agrarian era to the industrial era. In an interdependent, ecologically conscious world every aspect of life will be touched and changed: consumption levels and patterns, living and working environments,

political attitudes and processes, international ethics and relations, the uses of mass media, education, and many more” (1993, p. 37). “Progress” (manmade and of Providence) will continue, but on an ecologically-sensitive scale, and with a renewed sense of purpose that both simplifies and enriches our lives.

II. NEW PARADIGM – CONNECTING WITH SPIRIT

Dr. Andrew Weil expressed, “The greatest advances in man’s understanding of the universe are made by intuitive leaps at the frontiers of knowledge, not by intellectual walks along well-traveled paths.” At this beginning of the 21st Century, we stand on the brink of a leap of faith into the unknown “valley of spirit.” Are we ready to go there? We, in the developed nations, are comfortable in our fast-paced technological world, marveling at the wonders of science and its advances. Science makes glorious contributions to uplifting the conditions of the human race, but, science alone cannot fulfill the final goals of eliminating poverty, achieving racial unity, providing equity and justice for the world’s peoples. It must be combined with genuine love for our brothers and sisters in all cultures, and a willingness to distribute the products of science in ways that heal not harm people and the Earth.

This is the realm of public policy. Public policy involves consultation and participation from stakeholders. Now, it also must include a spiritual leap in our thinking and in our business practices, where true justice for others is seen as the best course of action for one’s self. Our well-worn intellectual paths, trod by all members of human society, have converged at this spiritual frontier. This leap, or paradigm shift, is already upon us. We are beginning to realize that the scenery around us is different; we have

gone beyond the steep and arduous “mountain of economic wealth” and are now walking into the level and comfortable “valley of spirit.”

How does this shift in thinking and interactions affect us? What happens when spirit/love/justice, not money, becomes the foundation for wealth? How can this intuitive knowledge of spirit be used in practical application? These questions and more are addressed here in the context of ecotourism, as a subset of development, and the people who create it. In 2002, ecotourism was celebrated and scrutinized at numerous global fora in preparation for the WTO/UNEP International Year of Ecotourism (IYE) Summit in Quebec, and the WSSD in Johannesburg, with mixed reviews about its potency and its success as a whole. Ecotourism is both hailed for preserving dwindling cultures and biodiversity, and blamed for degrading both environment and human dignity. What is missing to bring these dichotomies together for success? Why do some projects fail or succeed, and why is there a large professional segment of detractors, as well as proponents, of ecotourism?

The answers lie in the spirit of development – in the heart-to-heart connections between people. When we honor our oneness, at how much we are alike rather than our differences, while at the same time truly understanding these differences and recognizing each other for who we are, then solutions to the world’s problems are clear. Like Norton’s contextualism, we can synthesize commonalities between people and their context, and arrive at the essence of debate: “How can my wants be considered?” and “How can I be heard/seen?” This is exemplified by Fukuyama’s description of two forces at the core of all development projects and their stakeholders. The first is “‘rational desire,’ in which human beings [seek] to satisfy their material needs through

the accumulation of wealth; and second...is...’struggle for recognition,’ that is, the desire of all human beings to have their essence as free, moral beings recognized by other human beings” (1995, p. 358).

This combination of “rational desire” from neo-classical economics and “struggle for recognition” from both the depths of human history and the human soul, creates a new economic actor, the “21st century mystic.” This actor’s actions are guided by both material and spiritual assessments, but ultimately led by spiritual tenets in the final analysis. Putting spiritual qualities first is the essence of this paper’s new theory, “Spiritual Economics,” and its embedded philosophical concept of “Community-Created Ecotourism” (CCE). Connecting with the spirit in peoples and in places is the glue that repairs dissenter and advocate, agency and community, government and God.

In this age of war, people speak out for peace. We globally unite en masse at spiritually-motivated political events such as the 250,000 person “Marcia della Pace” from Perugia to Assisi, Italy in October 2001 and the “Million Man March” in October 1994 in Washington, D. C. Evidences of connecting ecological and human spirits are everywhere. Professionals from the social and natural sciences, from diverse disciplines and occupations, devote with increasing frequency entire conferences to this merger of spirit and science – the International Institute for Peace Through Tourism (IIPT)’s Spirituality and Tourism Conference in Assisi¹, The 2001 Summit On Spirituality and Sustainability², The Forum on Religion and Ecology at Harvard³, the December 2002 issue of *Conservation Biology*, and numerous Interfaith Conferences are but a small list.

¹ (<http://www.iipt.org>)

² (<http://www.2001summit.org>)

³ (<http://environment.harvard.edu/religion/info/infhome.html>)

As ambassadors of peace, travelers can bring understanding of different cultures home and promote global unity, justice and sustainable development. *The Credo of the Peaceful Traveler* reads, “Grateful for the opportunity to travel and experience the world and because peace begins with the individual, I affirm my personal responsibility and commitment to:

- Journey with an open mind and gentle heart
- Accept with grace and gratitude the diversity I encounter
- Revere and protect the natural environment which sustains all life
- Appreciate all cultures I discover
- Respect and thank my hosts for their welcome
- Offer my hand in friendship to everyone I meet
- Support travel services that share these views and act upon them, and
- By my spirit, words and actions, encourage others to travel the world in peace” (IIPT 2000).

Uniting the world’s women, men, and children of all cultures through aspects of tourism, business, politics and human relations is the mission of this new paradigm. Let us examine who is bringing about this paradigm shift of *Connecting with Spirit* to the worlds of business, economics and ecotourism specifically, and how it is manifesting itself worldwide.

21ST CENTURY MYSTICS

"I've learned that love, not time, heals all wounds," Andy Rooney said. Andy is right. Love is the greatest power on Earth, and business managers are now incorporating the power of love into their professional lives. Yahoo senior executive Tim Sanders

writes from his recent book, *Love Is the Killer App: How to Win Business and Influence Friends*, that the “most powerful force in business isn’t greed, fear, or even the raw energy of unbridled competition. The most powerful force in business is love.” By sharing knowledge and expertise, generously giving away contacts, and showing true compassion for the success of others, one achieves prosperity and success. The bonds between company consultant and client become personal, not just professional (Sanders 2002, p. 64).

In a remarkable little book, *The Corporate Mystic*, Hendricks and Ludeman share how CEOs of today are using intuition to build leadership skills and practices to better their businesses. In one of their examples, “Ed McCracken of Silicon Graphics tells an arresting story about the power of people-intuition:

‘We were in a complex negotiation worth hundreds of millions of dollars. We were stalled out, about \$75 million apart, and everyone was getting tremendously frustrated. Finally, we called time-out and took a break to reflect. During the break it occurred to us that the issue didn’t have anything to do with the technical aspects of the deal. It was really about the other side wondering if we liked them. We were trying to pour on more and more details, when it was actually an emotional issue. So, when we got back together we focused in on how much we liked them and wanted to work with them. The deal was resolved very shortly’” (1996, p. 102-103).

This desire for our recognition as worthy and “likable” by others is a crucial part of the human psyche. It is integral not only to business negotiations but also to all other relationships as well.

Human society is in transition to embrace a spirit-based world view. We are honoring our “mystical” sides on our way to becoming world citizens (Table 4.2).

Table 5.2 Future of human society and the environment		
Time	Present-----Future	
World View	Spirit Based	
Social Paradigm	21st Century Mystic	World Citizen
Dominant Belief/Value	Empowerment, Capacity Building	Unity
Base Connection	Heart, Mind & Soul	Spirit
Paradigm of Nature	Universal System	Sustainability, Gaia
Member Group	Global Community	Global Community

Like the Cultural Creatives with their emphasis on activism, simplicity, and global consciousness, 21st century mystics embrace creating a life of purpose, filled with compassion and love for others. They are people who take an inner look at their lives and ask, “How can I make a difference with my life?”

Not only do we encounter mystics in “new age” professions (yoga teachers and alternative health services) but also in business schools and financial institutions. Twenty-first century mystics are permeating high-profile corporate culture, and strive towards employee and client relations that bring out the ethical nature in all of us – honesty and forthrightness, fulfilling promises, forgiveness, team spirit, working in cooperation and collaboration. It is good for business as well as for the soul. By bringing spirituality back into the workplace, mystics empower their employees and clients to honor their spiritual sides and to develop their capacities to the fullest. They see themselves as part of a global community. Like Leopold’s land ethic, they feel a part

of the biotic community, a universal system of nature, and connect with the environment on multiple levels of heart, mind, and soul. Like tropical people, they value relationships more than objects (while understanding the value of objects like temperate people), creating a transition from solely Northern views of business and work to an appreciation and application of Southern values.

Women are important 21st century mystics. They are compassionate, strong-willed, practical, and promoters of peace. Women birth future generations, raise them to maturity, and want to watch them live in peace, not die in war. Concern for future well-being is a high priority, and therefore sustainable development is as well. Women bring a holistic nature, a unifying force to business and politics. They encourage building relationships between people, and connect heart-to-heart. Women are focused on Life and will change society – for the better – as they grow into their new roles of power in this century.

Compassionate relationships are the keys to life. Relationships express what is uniquely human in us, what we need from each other to grow and build a *new* Utopia. No matter what color, culture, or country we come from, relationships prosper when we see beyond these modern labels to the essence of being human. Beyond anthropology lies the connectiveness of all cultures – the core foundations of all humans. This is the basis for a collective world view and a global government, where “the earth is but one country, and mankind its citizens” (Bahá’u’lláh, as cited in Bell and Seow 1994).

We are spiritual beings having a human experience. “For the vast majority of the world’s population, the idea that human nature has a spiritual dimension – indeed that its fundamental identity is spiritual – is a truth requiring no demonstration...It would seem

obvious, therefore, that efforts of any kind to promote human progress must seek to tap capacities so universal and so immensely creative.” (Bahá’í International Community 1999, p. 15). We honor this spiritual dimension by showing reverence towards each other. “Reverence is contact with the essence of each thing and person and plant and bird and animal. It is contact with the interior of its beingness” (Zukav 1989, p. 50). When reverence is brought to the negotiating table between villagers and developers, all present are honored and equal. Reverence sets the stage for “win-win” solutions.

“The human spirit...embraces all beings, and as far as human ability permits discovers the realities of things and becomes cognizant of their peculiarities and effects, and of the qualities and properties of beings. But the human spirit, unless assisted by the spirit of faith, does not become acquainted with the divine secrets and the heavenly realities. It is like a mirror which, although clear, polished and brilliant, is still in need of light. Until a ray of the sun reflects upon it, it cannot discover the heavenly secrets” (‘Abdu’l-Bahá 1981, p. 208).

As emerging world citizens, we look to our “inner religion” – that essence of God and goodly qualities in each of us – to light the way and dispel the darkness of human greed and apathy. We are transforming the world into a global village, where unity of humankind is not only recognized in thought and word, but also in deed.

RETURNING TO THE SACRED

Spirituality and tourism have walked hand-in-hand for centuries in the form of pilgrimages. Modern day tourism has also capitalized on this connection, not only to holy shrines around the world, but also to “sacred sites” and ancient civilizations. These sites represent the harmony that existed between ancient peoples and the earth and sky.

From Stonehenge to Machu Picchu, Chartres to Assisi, Katmandu to Mount Shasta, the Sphinx to Ayers Rock, all bring forth past knowledge and wisdom to our present – we can feel the connection through the ages.

“The cycles of Life need to be approached with reverence. They have been in place for billions of years. They are a reflection of the natural breathing of the soul of Gaia itself, the Earth consciousness, as it moves its force fields and guides the cycles of Life. If these are revered, how could we look at something as exquisite as our Earth’s ecology and do one thing that would risk the balance of the system?” (Zukav 1989, p. 51). Sustainable development of the environment will stem from a love of Gaia, the Mother Earth, and from a love for all of her human and non-human citizens.

Our spirits soar when we sit on a mountain top and look out over a beautiful valley, when we sit on the sand of a deserted beach watching the sunset, when we caress with our eyes and hands an ancient tree in a dense forest. We get in touch with our souls in the silence of these places and in their beauty and wonder (Guill 2000). Exquisite beauty creates silence. Silence opens the doorway to the God within. The attraction of wild places is their combination of silent aloneness and unifying oneness, allowing us to communicate quietly with our inner selves. Anne Dillard confirms the need for silence and stillness, the need to interact with the grandeur of life in the gaps. “The gaps are the thing. The gaps are the spirit’s one home, the altitudes and latitudes so dazzlingly spare and clean that the spirit can discover itself like a once-blind man unbound” (1974, p. 269).

This spiritual quality of place, the quiet awe that places of majesty produce, is tangible, fundamental and priceless. We have tried in the past to monetize its worth, and

indeed have demonstrated some success in doing so. Land closer to mountains majesty, roaring rivers, fruited plains commands a higher sale value than less awe-inspiring places. There exist in nature aesthetic and intrinsic values, unlike distance, that are not so easily determined (Callicott 1987).

Aesthetics is a core human feeling. We can easily tell when a painting, garden, or a string of musical notes is pleasing to us; describing why is much more difficult. The same applies for nature and its wildlife, and how it integrates with human habitation. Wild places evoke strong feelings, sometimes harmonious and sometimes grave, but nevertheless strong. Humans, regardless of cultural background and experience, exhibit an innate, biological attraction to nature, and exposure to these natural environments promotes our psychological well-being (Kellert 1997; Ulrich 1981). When tested, humans consistently chose natural scenes over urban settings, and natural views with water are preferred over all others (Ulrich 1981; Kellert 1997). Development of cityscapes can incorporate these responses by promoting parks and water features in city planning and policy (Ulrich 1981).

The essence of a place and its aesthetic value is enhanced by “a sense of mystery.” Mystery opens up the possibility to learning more about a scene, to explore winding paths, and distant landmarks (Kaplan and Kaplan 1995, p. 55-56). Simonds writes, “The interest in any view is increased by an arrangement that piques one’s curiosity...lawns partly hidden by projecting groups of shrubs. These give possible opportunities for making discoveries, and such opportunities compete with variety in giving spice to life” (Kaplan and Kaplan 1995, p. 57). Mystery opens the heart and captures the imagination – qualities that are needed for developing places for ecotourism.

Developers are finally realizing that what sells is a “sense of place” – an identification of a particular cultural area or uniqueness. In the tourism field, some gateway cities to national parks and PAs in the United States have established unique characters; destinations like alpine Helen, Georgia or colonial Williamsburg, Virginia are built with a particular theme that serves as an attraction for visitors. Themed places work well because value is placed on synergistic construction and on containing haphazard development through creating a sense of place. This focused development can enhance the surrounding natural and urban environments by reducing the clutter of monotonous, boxed buildings, roads, and too much concrete.

All over the world, we are losing our connections to the spirit of the land when cities expand and grow and spread into adjacent rural lands, giving no thought to their metastasization except that of the highest and best use of land. Governor Glendening of Maryland notes, “Americans...[act] as if moving out to the suburbs is the same as moving up in life...In our haste...[w]e paid little attention to what was happening to agricultural communities as farms were fragmented by development, or what was happening to forest – and the wildlife that lives in them – when roads and malls tore through them” (Benfield, *et. al.* 2001, p. viii).

“Smart growth” development is America’s answer for the blight of urban sprawl (Bullard, *et. al.* 2000; Benfield, *et. al.* 2001). It is about planning growth so that low-density open spaces and farms can exist on the periphery, while high density cities support the core populace. It is a way of developing walkable mixed-use neighborhoods, with nearby amenities such as restaurants, grocery stores, post office, and train station. Smart growth aims to create the vision and reality of a happy and prosperous community

life for one and all, unfettered by the ills and separateness of our fear-based and material-based traditions. Smart growth is indeed a way to connect with the spirit of people and places where we live and work and play.

While waiting for smart growth communities to be built, we seek solitude and distance from daily stresses. One popular solution is to leave the noise, traffic, and pollution and go to a place that transforms us into another world, even if only for a day. We seek out fantastic man-made worlds, like Disneyland, and the natural paradises of PAs. Visitation to national parks in the US soared from around 300 million visitors in 1980 to over 424 million in 2001. The Great Smoky Mountains National Park in North Carolina and Tennessee is the most frequently visited park in the US, increasing from almost 12 million visitors in 1980 to over 20 million in 2000. Visitation to the Grand Canyon, the next most-popular park, almost doubled from its 1980 figure of 2.5 million to over 4.8 million visitors in 2000 (National Park Service 2002).

Fantasy and adventure have captured the hearts of millions of people over the centuries, as Joseph Campbell expressed in his tale of *The Hero With A Thousand Faces* (1949). The attraction of heroes and heroines today blends with the mystical in blockbusters such as “Harry Potter and the Sorcerer’s Stone” (2001), “Lord of the Rings: The Fellowship of the Ring” (2001), “Jurassic Park” (1993), and “The Sixth Sense” (1999). This modern blend of nature, magic, adventure, heroes, and heart speaks to our inner being and reminds us that we are capable of much more – courage, compassion, camaraderie. We are capable of saving the world.

SPIRITUAL ECONOMICS

“The Earth Summit must establish a whole new basis for relations between rich and poor, North and South, including a concerted attack on poverty as a central priority for the 21st Century. We owe at least this much to future generations, from whom we have borrowed a fragile planet called Earth” (Maurice Strong, UNCED Secretary-General, 1992).

Half of the world’s people (3 billion) are poor, living on less than \$2 per day, even though “global wealth [is] now estimated at \$24 trillion annually.” Sixty percent of all people live in less developed countries (LDCs), usually in the South. Half of all the earth’s biodiversity lives in tropical forests. The poor have only what is available for free, which are generally common-pool, natural resources. “Global attention has...focused on the complex relationship between environmental degradation, poverty and sustainability. Understanding it may be key to ending poverty and closing the gap between more and less affluent, as well as meeting the objective of sustainable development” (UN Population Fund 2002, Ch.3, p.1 and 2).

As the world convened at the tenth anniversary of the Earth Summit 1992 to celebrate the Earth Summit 2002 in Johannesburg, South Africa, a new relationship between rich and poor, North and South, is again the challenge. Guidelines have emerged from business, religion, and science to address these new relationships – this is the realm of Spiritual Economics within the new paradigm, “Connecting with Spirit.”

“New paradigm thinking, relevant to all human endeavor, posits the interconnectiveness of all people...No one can win at the expense of another and long retain his or her advantage” (Williamson 1997, p. 160). These primal connections between humans and our “inner wealth” have been severed in the last 200 years of industrialized society because of the failure to eliminate class distinctions, and of our

reliance on purely economic gains and “outer wealth.” Veblen (1899) clarifies, “Conspicuous consumption of valuable goods is a means of reputability to the gentleman of leisure” (p. 57). “One’s neighbours, mechanically speaking, often are socially not one’s neighbours, or even acquaintances; and still their transient good opinion has a high degree of utility. The only practicable means of impressing one’s pecuniary ability on these unsympathetic observers of one’s everyday life is an unremitting demonstration of ability to pay” (p. 65). This social belief and practice has had profound effects on the dichotomy between the rich and poor of today.

Instead of seeing wealth within ourselves – in our abilities, our service to one another, our unity as members of one human race – we seek wealth (and happiness) in the form of accumulated tangible goods and personal pleasures. That would almost be acceptable if this material “wealth” was distributed evenly among all humans. But it is not. “[T]he principal cause of these difficulties lies in the laws of the present civilization; for they lead to a small number of individuals accumulating incomparable fortunes, beyond their needs, whilst the greater number remains destitute, stripped and in the greatest misery” (‘Abdu’l-Bahá as cited in Shams 1998, p. 24-25).

These laws of civilization have at their core a hierarchical structure. “Every civilization brought forth in the course of human history has been a hierarchical affair... You can have hierarchy without civilization, but you can’t have civilization without hierarchy” (Quinn 1999, p. 85). For a time in human history this worked well. Where there were city- or nation-states, creating a hierarchy with only a few aristocratic rich among a mass of uneducated poor was seen as just. In a sense, the rich took care of the masses, so the system was operating efficiently. Of course, as one of the masses or as

one of the colonized, one might disagree – most revolutions begin this way (Kautsky 1980). These hierarchical systems may have been efficient by definition, but they did not provide equity. As we move into a global economy where information systems are key and knowledge is our primary product, education of the masses becomes a necessity for commerce and for democratic systems which rely on an educated populace.

Since the Industrial Revolution, we have aligned ourselves with technology and a Western work ethic that has only continued colonialism and subjugation of the masses, not honored them. To explain, most of the industrialized world values the attributes of the maximization of revenue and marginal production of goods, which leads to short-run consumption of natural resources and social opportunity losses. Now we, the human race, have the option to walk away from the hierarchical concept of civilization instead of thinking that hierarchy and civilization are human mandates, and to go “*Beyond Civilization*” (Quinn 1999).

Quinn proposes creating a society where all are “making a living together” (p. 160) and all are equal players in the system. This is not to advocate that we all form communes and split all profits equally. Instead, it is addressing principles of scale, integration, and interdependence. Schumacher, in his famous book, *Small Is Beautiful: Economics as if People Mattered*, argues for “Buddhist Economics,” an economy of scale that provides the most services for the least consumption, along with maximum well-being and “enough” for all. “From a Buddhist point of view, this is standing the truth on its head by considering goods as more important than people and consumption as more important than creative activity” (1973, p. 56-57). Schumacher continues, “The richer a society, the more impossible it becomes to do worthwhile things without immediate pay-

off. Economics has become such a thralldom that it absorbs almost the whole of foreign policy. People say, 'Ah yes, we don't like to go with these people, but we depend on them economically so we must humour them.' It tends to absorb the whole of ethics and to take precedence over all other human considerations" (p. 69).

We now have the opportunity to create a new world ethics by revising our political and economic systems by simply "putting people first" (Cernea 1995). Money is neutral. Justice or injustice comes from the use of monetary wealth and from the production and distribution of revenue, not its existence. "Economic injustice is an inevitable consequence of a market-based rather than a conscience-based way of thinking. Money as the bottom line is the shadow side of the American psyche. Putting money before heart, we...repudiate a core value of American democracy. When we place our freedom to do as we wish before our responsibility to do right by others, we desecrate one of our basic first principles: freedom for the individual balanced with responsibility toward the collective good" (Williamson 1997, p. 157).

Consequences of violating this balance between the individual and the collective are philosophically illustrated in Garret Hardin's (1968) well-known "tragedy of the commons," where each individual's belief in his/her right to breed ultimately harms the greater collective, the "commons" of the Earth, with overpopulation.

The tragedy of the commons can be avoided. To achieve economic justice, we in the global commons can transform our reliance on a traditional market-driven economy defined by the principles of private property rights based on individual concerns, to a spirit-driven economy defined by principles of communal property rights based on the unity of communal and individual concerns. This social cooperation is facilitated

through “communication, information, altruism, morality, and trust” (Brown and Harris 1992, p. 71). In spiritual economics the commons is included as an economic actor and all individuals are part of a larger schema. Therefore, the tragedy of the commons is avoided because the outcome balances the needs of all individuals with the needs of the commons to the benefit of all, without destroying or degrading the commons. Spiritual economics, based on underlying principles of social cooperation, solves the inefficiencies of the market through elimination of all externalities such as pollution, equity concerns such as distribution of rents, and stabilization concerns such as loss of jobs.

When we look beyond Leopold’s Land Ethic and Norton’s Contextualism, we see not only the commons, ourselves, and the greater context as one community (mountain, watershed, wildlife, town, etc.), but also we see the emergence of the spiritual connection between humans and the Earth, between economics and God. Leopold writes of land “yield[ing] a cultural harvest...Such as view of land and people is, of course, subject to the blurs and distortions of personal experience and personal bias” (1966, p. xix). These distortions are false. When we recognize the spiritual essence of our connection to all people and land, personal experience and bias is irrelevant. Our next step is here – to use the knowledge of the past as a springboard to not only create “a mental model of the good life” but also to rise to the realization that this mental model is dependent on no one, no place, no time, but that it simply exists. The cultural harvest becomes one of a unified yield, with all humans experiencing the same joy of community.

Norton concludes that Leopold “connected the ‘quiet desperation’ of materialism and consumerism with alienation from nature,” (1991, p. 55), referring to the Earth as “nature.” This alienation is not only from *earth* nature, but also from *human* nature.

Human nature is Divine. It is not, in essence, made of greed nor hate, but charity and love. For us to base our society on materialism and conspicuous consumption is to believe only in the negative qualities of humanity and to not see to the core essence of the positive, the divine. For if we are to alleviate poverty and human misery in this world, we must be able to see the good in all humanity, acknowledge it, and defend it with swift action to correct our wayward social systems which allow these atrocities to continue. Furthermore, as we recognize human poverty as unjust, we must also see that environmental degradation is an unjust act which demands alleviation as well. We can open minds to the wonders of the human-earth soul connections, and learn to love the *core* essence of humanity which, contrary to economic teachings, is not greed and selfishness, but divine love and service for our common good – this is the “good life.”

“If...the Golden Rule...were actually applied to the world’s economic problems... and the love of God, the sort of love which makes a home life happy, were used as a scientific measurement to regulate our international and national affairs; to settle all relations between labour and capital, between rich and poor, to regulate all coinage and commerce, can there be any doubt that the results would be far more conducive to human welfare than our present policies?” (‘Abdu’l-Bahá as cited in Shams 1998, p. 26).

This formula of using “the love of God” as a scientific measurement for all economics and human affairs can be more concretely explained in today’s terms by distilling this new system of spiritual economics into four main principles. These are: 1) honesty and trustworthiness, 2) justice, 3) consultation, and 4) spirit of service (Miller 2002, Henderson 2002).

1. Honesty and Trustworthiness

For the last one hundred years (at least), businessmen believed that they could generate more capital by not being honest – and did. That is not the case today – just look at the domino effect of the Enron and World Com scandals. To be successful in business today, there must be both honest cooperation and competition, with a set of fair rules. Where those rules do not exist, economies suffer. If we examine briefly some Latin American countries, for example, the ones with floundering economies are the ones lacking rules that are honest and trustworthy. Today, one must be honest to succeed in business over the long-term. Being honest creates revenue! Being dishonest loses capital. “A nation’s well being is conditioned by a single pervasive cultural characteristic – the level of trust inherent in the society” (Fukuyama 1995, p. 47). Through spiritual economics, we are creating trustworthy enterprises, economies and a unified world.

2. Justice

Economics is a social institution that has to make moral decisions. Managers in business make decisions of justice every day. Who to hire? Who to fire? What is fair compensation for this employee, consultant or service provider? “At the individual level, [the principle of] justice is that faculty of the soul that enables each person to distinguish truth from falsehood...[a]t the group level, a concern for justice is the indispensable compass in collective decision making, because it is the only means by which unity of thought and action can be achieved” (Bahá’í International Community 1999, p.8). As world financial, social and political systems become more interconnected, there must be unity of thought to solve problems.

The “fundamental purpose of business is to help people work together to make their strengths more effective and their weaknesses irrelevant” (Henderson 2002). When we use consultation to brainstorm about a problem, *detached* from the individual parties involved and from our own desired outcome, we truly open the doors to all possibilities and to creating win-win solutions. Free market concepts declare that “without the competition and profits that provide discipline in the private sector, there is no way of really knowing if prices are correct” (Anderson and Leal 1991, p. 93). Spiritual economics puts justice and fairness, not maximum profit, at the cornerstone of any business deal, so that “correct prices” become those that are just. When we know that we are interrelated and interdependent, competition is transformed into cooperation (Preble and Safina 2002).

3. Consultation

When we talk of consultation here, it is with a new sense of identity and purpose. Consultation between people is a spiritual conference with God. To explain, when we consult with one another, we honor our diversity of understandings, skills, culture, and communicate directly to the God within each of us. Consultation allows us to really hear each other’s heart on an issue, and see each other a “gem of inestimable value” (Bahá’u’lláh 1939, p. 259). The purpose of consultation is to banish “foreignness” and to truly understand each other and the total array of options open as solutions to a problem. What is called for “is a consultative process in which the individual participants strive to transcend their respective points of view, in order to function as members of a body with its own interests and goals. In such an atmosphere, characterized by both candor and courtesy [not debate or partisanship], ideas belong not to the

individual to whom they occur during the discussion but to the group as a whole, to take up, discard, or revise as seems to best serve the goal pursued” (Bahá’í International Community 1999, p.13).

Consultation makes justice and fairness accessible to us. For example, in a dispute between gold miners and Peruvian Indians, a facilitator decided to try this spiritual method of consultation. The miners saw the Indians as tertiary in the process; the gold was there and it was obvious that it was in the best interest of all to extract as much as possible for the greatest profit and least cost. The facilitator created a setting where Indians and gold miners sat in a circle with paper, and listed and talked about the spiritual nobility of human beings as the organizing principle of business and economic enterprise as facilitating spiritual growth. At first, people didn’t get it. But then they began to appreciate how they could do better towards each other. They could stop the victimization of the Indians by putting in clean water, building schools and in general fostering human happiness (Henderson 2002).

Through consultation, we reach John Rawls’ “‘reflective equilibrium’ between principles of justice and our most firmly held intuitive convictions” (Norton 1991, p.90). Consultation is justice in action.

4. Spirit of Service

The world is looking for a new work ethic, one where work is slower, more meaningful. Work can also be a form of prayer, a means of worshiping God (Perschel 2002). What is it that motivates us? Many of us want wealth, and we are most satisfied when we are making a difference to others. Wealth is an instrument of service. Wealth is required to alleviate poverty, to feed people in times of famine, to build health clinics,

to bring about a global economic system that puts justice as its ultimate goal. In the system of spiritual economics, the rich will come to love the poor and to give from their resources to assist all (Henderson 2002; Miller 2002).

“Leaders who are guided by spiritual principles should thrive in the new economy...they must be ‘attuned to people and ideas’ and able to articulate a vision and imbue others with purpose” (Gunther 2001, p.6). However, when religion and God are mentioned in connection with business, listeners balk. “While the business world has found ways to talk about race, gender equity, sexuality, disability, and even mental illness, religion has remained the last taboo...One survey of executives found that more than 60% had positive feelings about spirituality and a negative view of religion...[A Fortune 500 company chairman says] ‘We...don’t want to drive people to a particular religious belief...[b]ut we do want people to ask the fundamental questions. What’s driving them? What is this life all about?’” (Gunther 2001, p. 3).

Spiritual economics, and this new paradigm of *Connecting with Spirit* is not about any particular religion; it is about the oneness of humankind. It is about bringing the intentions of religion, in its purest, spiritual sense, back to our Western anti-religious society, so that we may remember the positive bounties of religion, such as ethics, justice, equality, goodness, and service. As a global society, we interact with people from different religions and cultures – to many of these people religion is a way of life. When we honor universal principles of justice, honesty, trustworthiness, service to humanity, and consult as equals, we honor our connected human spirits.

Sacred Contracts are a special component of spiritual economics. Indigenous peoples worldwide have used sacred contracts for centuries; descendants from colonial

powers still have a few lessons to learn in how to prepare and implement these agreements. Original peoples believe that contracts are sacred and that land is not owned by a person or persons, and that humans are one with nature and the land. Sacred contracts embody the four principles of spiritual economics. In our dominant, Western view of this world, contracts are made between persons – and potentially dishonest persons at that (that is generally why a contract is drawn) – and not between persons, the land, and God. If signed with a sense of trustworthiness and justice, then contracts are a sacred bond between humans, and between humans and the earth. These contracts cannot be violated or broken when signed with the heart.

Policy is inter-linked with economics. Currently, government is used for structuring and regulating the lives and actions of people. What if, instead of regulations, we used incentives? There is a great volume of evidence that incentives work to change behavior, and to create new lines of thinking. With incentives, people can be more inclined to incorporate into their daily lives sound and protective practices towards the land and its environment. A “carrot,” in the long run, is usually better than the “stick.” This is the premise behind CBE and the need to bring benefits to local people in order to preserve natural resources and to support PAs.

The downside is that finding the “right” incentive which pleases everyone is both difficult and time-consuming; it is easier in many ways to simply tell people what they cannot do, than to list the things they can and that will make them happy. Creating a list of common objectives and goals may take a long-time effort in understanding each other, particularly if groups are polarized or from different cultures and walks of life. It is also

good to remember that incentives do not have to be economic – the most effective incentives may be rewards of knowledge, or acceptance, or love.

The Connecting with Spirit paradigm creates a revitalization of our political system in harmony with new spiritual economic principles and practices. Shown in Table 4.3, Williamson (1997) identifies seven “Renaissance Political Principles” which embody the mandates of this new paradigm, and includes much of the essence of sacred contracts of indigenous peoples.

Table 5.3 Renaissance political principles
1) The power within us is greater than any power outside us.
2) Government should concern itself less with how to allocate our external resources and more with how to harness our internal ones.
3) The source of wealth is our capacity for genius. Creation of wealth through the stimulation of creative thinking is thus the primary source of economic recovery and stimulation.
4) The highest political dialogue is not adversarial but rather a synergistic conversation between high-minded liberal visions for the country and high-minded conservative ones.
5) The politics of hate is a branch that does not bear fruit. That is why another branch is starting to grow. Love is a more powerful political and social tool than hatred.
6) We will not move forward as a nation without repenting for our lack of righteousness toward other Americans in the past and present, and all other nations of the world.
7) We must acknowledge the power of the inner life, the wisdom found in silence, and the primacy of the voice of conscience. Otherwise, the American experiment will end. It shall have failed.
(Williamson 1997, p. 263-264)

When we come to politics and to business with a sense of reverence, we are applying the principles of honesty, justice, consultation, and the spirit of service. “[A] reverent businessman or businesswoman is a person who infuses a new energy into the archetype of entrepreneur, shifting it from a dynamic that is motivated by profits that are generated by serving others to a dynamic of serving others that is made possible by profits, and a reverent politician is a person who challenges the concept of external power, and brings to the political arena the concerns of the heart” (Zukav 1989, p. 56).

Heart-to-heart connections bring success, both short-term and long-term, to our business partnerships and enterprises. Let us look at how these principles can be applied in ecotourism, particular at the community level.

III. THE PHILOSOPHY OF COMMUNITY-CREATED ECOTOURISM (CCE)

Ecotourism embodies freedom and unity – freedom to travel and to visit a multitude of cultures and natural wonders; freedom to learn about the world. Unity is achieved as we connect with and begin to understand these diverse cultures and see how much we are alike as humans, with the same cares for family, community, and God.

Ecotourism has a distinguished ancestry. Ecotourism, as an offspring of Tourism and Nature, was born to accommodate the growing numbers of environmentalists who wish to visit and experience life in the “wild” before the wild is tamed. It is an industry that touches almost every other, representing a synthesis of goods and services, materials and markets, employment and education, politics and ideals. At its best, it empowers women, local communities, diverse cultures, and travelers; supports partnerships between governments, NGOs, private sector, and global funding agencies; blends the high technology of transcontinental flight and internet communications with ancient dances and sacred sites. It is a multi-disciplinary industry, covering a myriad of topics.

Community-based ecotourism (CBE) projects are the grassroots initiatives that support rural community life and its development as a microcosm of global growth. Designed to promote well-being of the local residents and to conserve natural resources, ecotourism at the community level requires extensive participation on the part of community members and leaders. Ideally, residents will exhibit a high level type of participation as either 1) “interactive participation” where “people participate in joint

analysis...[form] new groups or [strengthen] existing ones...and take control over local decisions” or 2) “self-mobilization” where “people participate by taking initiatives independent of external institutions to change systems” (Pretty 1994, p. 41). Introduced here, “community-created ecotourism” (CCE) is a new variant of CBE, which promotes self-mobilization of locally created and controlled ecotourism development with its associated social, economic, and cultural costs and benefits.

STORY

This is a story of a young hero being asked by a king, “What is it that all women want the most?” The king promises his kingdom to the hero if he can find the answer, and death if he cannot. So, our hero travels far and wide and asks all women, but gets no one answer in return. Finally, on his way back to the king, he meets with an ugly old hag who tells him that he lacks the right answer to his question, and that he will die unless she helps him. “What do you want in return?” asks our hero, and the hag replies, “Marry me.”

So they travel to the king who grants them an audience and asks, “Have you found the answer?” “Yes,” our hero says. “This old hag has the answer. And you are to marry us after she tells you.” Everybody in the court begins to snicker. How could this old hag know the answer? And he is going to marry her! The hag steps up to the king and says, “The answer is Sovereignty. All women want the right to choose what is right for their own lives.” The king is aghast. He knows she is correct. So, that very day the king gives our hero his kingdom, and weds the hero and hag. That night, when they are in bed as husband and wife, the hag says to the hero, “Husband, because you have wed me voluntarily and love me as your wife, I have another gift for you. If you but kiss me, I will turn into my true self, a beautiful young maiden. The bad news is that it only lasts each day either between sunset and sunrise, or between sunrise and sunset – the choice is yours.”

Our hero thinks about this. “This is wonderful! But do I want my bride to be beautiful at night, when only I will see her and ugly during the day, when all will see her? Or if she is beautiful during the day, all will be jealous of what I have, and I will only know her as ugly at night.” Finally he decides. “Wife, this is a choice I cannot make. It is too important for you. You must decide.” At this, the hag throws her arms around her husband and says, “In that case you have given me sovereignty to do as I please. Because of this, you will have me beautiful all day and all night, forever.” They kiss and she regains her youth and beauty and they live happily ever after! (Warren 2002).

This story illustrates the primary goal of CCE and what local communities want when they step into an ecotourism venture. They want sovereignty over the products, benefits, costs, cultural messages and impacts. In short, they “want the right to choose what is right for their own lives” (Lash and Austin 2003). Sovereignty implies autonomy and honor. It is given as a means to honor a person, a community, a nation.

However, this story also illustrates another side of sovereignty. Communities want full sovereignty – to be able to chose to not do something as well as to do it. In the story, the old hag was not given the choice to remain an old hag, and to not change into a beautiful maiden. Sometimes developers and governments believe that they are giving local communities a full choice of options, when in fact, it is only a portion of the complete array. This is particularly true when diverse cultures and levels of economic actors interact.

Sovereignty for local residents over development is paramount. However, some developers do not always see local efforts as the most efficient or productive in a global market. “The principles of neighborhood and subsistence will be disparaged by the globalists as “protectionism” – and that is exactly what it is. It is a protectionism that is just and sound because it protects local producers and is the best assurance of adequate supplies to local consumers. And the idea that local needs should be met first and only surpluses should be exported does not imply any prejudice against charity toward people in other places or trade with them...Without prosperous local economies, the people have no power and the land no voice” (Berry 2002 p. 210-11).

In project planning, who are the community members? Who gets to participate in the planning process and how much weight is given to various stakeholders in the final

analysis? What is the highest and best use for the land and, even more importantly, who determines what the highest and best use of the land is? These are questions that every development project faces, and correctly so. “By community I mean, rather, places in which the bonds between people and those between people and the natural world create a pattern of connectedness, responsibility, and mutual need. Real communities foster dignity, competence, participation, and opportunities for good work. And good communities provide places in which children’s imaginations and earthy sensibilities root and grow” (Orr 1993, p.428).

CCE encourages all community residents to first create the planning process, participate in it, determine a vision for their future, prepare detailed rules of use and distribution of products and profits, and then to make it happen. Partnerships are useful to provide knowledge of tourism or other areas that may not be available from local human resources at the beginning. NGO support can tie the project into larger networks and marketing options. Outside “experts” or facilitators can be called in to assist, but community members determine outcomes and evaluate results.

An example from Fiji (Baba 1997) illustrates the principles of CCE . When Koroyanitu National Park (KNP) was proposed, villagers in the park zoned areas were able to design and implement a development program (KDP) to preserve their village and agricultural livelihoods. Fijian traditional culture is based on the concept of *vanua*, which means “all that belongs to a person including land, fishing areas, tradition, relatives and culture...[and] which provide[s] all the needs of the villagers” (p. 106).

In the face of a growing cash market, landowners began to sell trees, gravel, and rights to mine – “their natural heritage” (p. 106). *Vanua* could not provide both needs

and wants (cash items) of the people. Recognition of this problem was the first step in the community process. Once this was realized, the next important step was to develop a shared vision for sustainable village/park development, with participation from the whole community, not only leaders. Multi-village meetings were planned, along with trips to inspect development options occurring in other areas (logging, mining). Important lessons learned here were to work with in the existing political (chiefs) and religious structures and to reach consensus on this vision, and on new roles and responsibilities for all residents. Another lesson learned was to take the time to let community members understand these new visions and roles in order to change their behaviors , and not have results forced in the short-term.

A crucial result was that villagers decided to separate welfare projects (those that support the basic needs of all community residents) from commercial projects (those that bring in cash and support wants of the community). *Vanua* is only responsible (as before) for meeting needs, while a new concept, *bisinisi* or commerce was created to satisfy wants (p. 109). Expanded, this system is a noble model for sustainable development and elimination of poverty worldwide. By agreeing on basic needs and having them met with a communal welfare fund, commercial projects are given better chance of becomes prosperous at a smaller scale, because individual cash is used only for wants. This model created “an asset which did not exist before – a sustainable community capable of adapting to a changing and competitive world” (p. 109). This case points out the importance of consultation at every stage, and of learning from others.

IV. CONCLUSIONS

As Aldo Leopold wrote, “All ethics so far evolved rest upon a single premise: that the individual is a member of a community of interdependent parts” (1966, p. 239). We have developed separately (from clans to countries) over thousands of years, and now in this global society we are learning to unify, but like the pieces from different jigsaw puzzles, we don’t fit. We need to metamorphose ourselves into the same tapestry – to become the same jigsaw puzzle – so that our multi-colored and multi-shaped pieces may fit harmoniously into one big beautiful picture of Life on Earth. We are all one, created from the same picture. It is simply that in our human condition we have experienced different operational realities and, in trying to find one system that works for all, we have imposed one culture’s (Northern) beliefs and values over all others. No one culture works for all; together they all make the whole. We need the diversity of humankind. We cannot keep imposing the Northern viewpoints of reality on the rest of the world. The North is but one piece of the puzzle. Our post-industrial society of European origin does not “fit” into the life picture/puzzle of 4/5ths of the human race! The Northern systems of governance, banking, work ethic, relationship to Nature and relationship towards our fellow humans are all ultimately inadequate for a renaissance global society. The world needs all the pieces of the puzzle to be whole. When we give equal weight to the diverse cultures of the South and permit them to step into their spaces in the picture, humanity becomes whole.

The vision of the next wave of humanity will not be based on divisions, nation states, money, time, competition, nor control, but on world unity, justice, peace, consultation, and detachment from outcomes. Things in life will not need to be measured

and counted. Work will take on a new meaning as a sense of worship, as in “Avodah, a Hebrew word [that] means both ‘work’ and ‘worship’” (Gunther 2001, p.2). Time will be abundant and therefore inconsequential. Scarcity will be a thing of the past and only abundance will remain. “We must turn from scarcity thinking to possibility thinking, in meeting not only our personal goals but our societal goals as well. The economic order in America is essentially unjust, but as solid as it appears to be, it is part of a system now passing away. As spiritual beings, we are outgrowing its tenets. As new structures of thought emerge, new institutional structures will follow. But it will take our material as well as spiritual efforts to transform a system so firmly entrenched” (Williamson 1997, p. 166).

The future of humankind is upon us. We feel the synergism when we experience heart-to-heart connections between people, when we share a loving moment, or empathize with a tragic event. The entire world felt this soul connection on 11 September 2001. Through the horror, we became one soul. Wherever we lived, as citizens of many countries, as peoples of many languages, as families from many cultures, as worshippers of many religions, we came together with sadness and compassion. We honored our unity, our humanity. Through the horror, we even connected and empathized with the people who caused the tragedy – what must be the underlying terrors of the human condition that created this?

We began to share stories, to learn about faraway cultures and countries, to learn about conditions of life, beliefs, and about the underlining “oneness” of women and men worldwide. We prayed for one another; we recognized injustices; we helped one another. We created heroes and heroines out of the love and courage they showed others.

Strangers become family. We glimpsed at the true possibility of global unity, not just under a political, human-made system like a unity of nations, but under a spiritual, God-made system of a unity of peoples, connecting with the spirit of humankind worldwide. We glimpsed at our future of peace.

“Disunity is a danger that the nations and peoples of the earth can no longer endure; the consequences are too terrible to contemplate, too obvious to require demonstration...Nation-building has come to an end...A world, growing to maturity, must abandon this fetish, recognize the oneness and wholeness of human relationships, and establish once and for all the machinery that can best incarnate this fundamental principle of its life” (Universal House of Justice, 1985, p. 35).

The world’s peoples want peace. It may seem like there is always one more war to fight and one more person or group to abolish from this earth. This is untrue. These trappings of war are but the vestiges of traditions now out-grown. Like a youth grown tall, we cannot fit anymore into the clothes of childhood; we must don the clothes of adulthood. Peace brings trials and tribulations, commitments and forthrightness, courage and consul. It is not an easy path. It is, however, the only path that leads to a world both worth living in and capable of supporting life.

It is now time for us to stand up and fight with passion for this world future. We must choose biophilia over biophobia. We choose Life. David Orr asks, “Is it possible for us to be neutral or ‘objective’ toward life and nature? I don’t think so...what often passes for neutrality is...rather the thinly disguised self-interest of those with much to gain financially or professionally...in Abraham Maslow’s words, is often ‘a defense against being flooded by the emotions of humility, reverence, mystery, wonder, and awe.’

Life ought to excite our passion, not our indifference. Life in jeopardy ought to cause us to take a stand, not retreat into a spurious neutrality” (1993, p. 421).

“We are such stuff as dreams are made on” wrote Shakespeare in *The Tempest*. We all have the capacity to dream and create our futures, individually and collectively. “I have a Dream!” cried Reverend Martin Luther King, Jr., and the Civil Rights Movement in the United States was made manifest. There is a tempest raging in our souls to do what we feel in our hearts is right. Why the conflict? We are caught by Western societal values which dictate that objects, such as income and career are more valuable than relationships. This reductionist thinking believes that what and how much we have makes us who we are. Our hearts know the truth: life is about much more than consumption and collecting revenue. We are no longer the man of leisure who must prove his worth through lavishness; what counts is who we are and what we do in life. Good deeds and experiences felt, seen, and heard through connections of the heart can extend to development programs and business relationships, countries and corporations. Partnerships between private/public institutions and local communities can be made sustainable, equitable, and just. I have a Dream! What are your dreams? What are the dreams of others? Nurturing and sustaining the spirit of development is accomplished by forging relationships, one by one, day by day. By connecting with spirit, we can create a world of beauty, peace, love, laughter, learning, sincerity, freedom, and justice...for all...and make all of our dreams come true.

BIBLIOGRAPHY

- ‘Abdu’l-Bahá, 1981. *Some Answered Questions*. Wilmette, Illinois: Bahá’í Publishing Trust.
- Anderson and Leal 1991. *Free Market Environmentalism*. San Francisco: Pacific Research Institute for Public Policy.
- Baba, Jale O. 1997. Towards Sustainable Livelihoods: The Koroyanitu Development Program, In *Ecotourism for Forest Conservation and Community Development: Proceedings of an International Seminar*. Bornemeier, J., Victor, M. and Durst, P. (eds.) 1997, held in Chiang Mai, Thailand, 28-31 January, 1997. FAO/RAP Publication: 1997/26; RECOFTC Report No. 15. Bangkok, Thailand, p. 103-116.
- Bahá’í International Community 1999. *The Prosperity of Humankind*. Wilmette, Illinois: Bahá’í Publishing Trust.
- Bahá’u’lláh 1939. *Gleanings from the Writings of Bahá’u’lláh*. Wilmette, Illinois: Bahá’í Publishing Trust.
- Bates, Daniel G. and Fred Plog, 1991. *Human Adaptive Strategies*. New York: McGraw-Hill.
- Bell, Richard W. and Jimmy Seow, eds. 1994. *The Environment: Our Common Heritage*. Mona Vale, Australia: Association for Bahá’í Studies Australia.
- Benfield, F. Kaid, Jutka Terris, and Nancy Vorsanger 2001. *Solving Sprawl: Models of Smart Growth in Communities Across America*. New York: Natural Resources Defense Council.
- Berry, Wendell 2002. The Idea of a Local Economy, In *The Good in Nature and Humanity: Connecting Science, Religion, and Spirituality with the Natural World*. Kellert, Stephen R. and Timothy J. Farnham, eds. Washington, DC: Island Press. p. 199-211.
- Brown, Greg, and Charles C. Harris, Jr. 1992. National Forest Management and the “Tragedy of the Commons”: A Multidisciplinary Perspective. *Society and Natural Resources*, Vol 5, pp. 67-83.
- Brundtland, Gro Harlem 1989. Global Change and Our Common Future, In *One Earth, One Future: Our Changing Global Environment*. Silver, Cheryl Simon and Ruth S. DeFries 1990. Washington: National Academy Press.
- Bullard, Robert D., Glenn S. Johnson and Angel Torres 2000. *Sprawl City: Race, Politics, and Planning in Atlanta*. Washington, DC: Island Press.

- Burke, James 1978. *Connections*. Boston: Little, Brown and Company.
- Burke, James 1995. *The Day the Universe Changed*. Boston: Little, Brown and Co.
- Callicott, J. Baird 1987. The Land Aesthetic, In *Companion to A Sand County Almanac*, J. Baird Callicott, ed. Madison: University of Wisconsin, p. 157-171.
- Campbell, Joseph 1949. *The Hero with a Thousand Faces*. Princeton, NJ: Princeton University Press.
- Cernea, Michael M. ed. 1995. *Putting People First: Sociological Variables in Rural Development, 2nd Edition*. New York: Oxford University Press.
- Cooper, Carolyn C. 1988. "A Whole Battalion of Stockers": Thomas Blanchard's Production Line and Hand Labor at Springfield Armory, *Journal of the Society for Industrial Archeology*, Vol. 14, No. 1, p. 37-58.
- Covey, Stephen, R. 1990. *7 Habits of Highly Effective People*. New York: Simon and Schuster.
- Daly, Herman E. and John B. Cobb, Jr. 1989. *For the Common Good: Redirecting the Economy Toward Community, the Environment, and a Sustainable Future*. Boston: Beacon Press.
- Daly, Herman E. 1990. *Steady-State Economics, 2nd ed.* Washington, DC: Island Press.
- Davidson, Julie 2000. Sustainable Development: Business as Usual or a New Way Of Living? *Environmental Ethics*, 22:1, p.25-42.
- DeGruy-Leary, Joy, 2002. Axiology and Post Traumatic Slave Syndrome. Lecture at Emory University, March 27, 2002. Sponsored by *Oneness*, www.powerofoneness.com
- Dillard, Annie, 1974. *Pilgrim at Tinker Creek*. New York: Harper's Magazine Press.
- Dobson, John, 1999. *The Art of Management and the Aesthetic Manager: The Coming Way of Business*. Westport, CT: Quorum Books.
- Dubos, René, 1962. *The Torch of Life: Continuity in Living Experience*. New York: Simon and Schuster.
- Ehrlich, Paul R. and Anne H. Ehrlich 1990. *The Population Explosion*. New York: Simon and Schuster, Inc.
- Elgin, Duane 1993. *Voluntary Simplicity: Toward a Way of Life that is Outwardly Simple, Inwardly Rich*. New York: William Morrow and Company.

- Escobar, Arturo 1995. *Encountering Development: The Making and Unmaking of the Third World*. Princeton, NJ: Princeton University Press.
- Everhart, William C. 1972. *The National Park Service*. New York: Praeger Publishers.
- Farley, Margaret 2002. Religious Meanings for Nature and Humanity. In *The Good in Nature and Humanity: Connecting Science, Religion, and Spirituality with the Natural World*. Kellert, Stephen R. and Timothy J. Farnham, eds. Washington, DC: Island Press. p. 103-112.
- Fukuyama, Francis 1995. *Trust: The Social Virtues and the Creation of Prosperity*. New York: Free Press Paperbacks.
- Guill, Autry 2000. Where is My Soul? *Magical Blend*, Issue #75, p. 19-25.
- Gunther, Marc 2001. God and Business. *Fortune*, July 9, 2001. <http://www.fortune.com>
- Hardin, Garrett 1968. Tragedy of the Commons. *Science*, Vol. 162, p. 1243 –1248.
- Henderson, R. C. 2002. Thoughts on the Spiritualization of Business and Professional Life. Paper presented at conference, *Bringing Spiritual Principles and Values to Business*. First annual meeting of the Bahá'í Business Forum for the Americas (BBFA).
- Hendricks, Gay, and Kate Ludeman, 1996. *The Corporate Mystic*. New York: Bantam Books.
- Honey, Martha 1999. *Ecotourism and Sustainable Development: Who Owns Paradise?* Washington, DC: Island Press.
- International Institute for Peace Through Tourism (IIPT) 2000. *The Credo of the Peaceful Traveler*. <http://www.iipt.org>
- Jennings, Philip 1994. Science , Technology and the Environment, In *The Environment: Our Common Heritage*. Richard W. Bell and Jimmy Seow, eds. Mona Vale, Australia: Association for Bahá'í Studies Australia, p. 62-69.
- Kaplan, Rachel and Stephen Kaplan 1995. *The Experience of Nature: A Psychological Perspective*. Ann Arbor, MI: Ulrich's Bookstore.
- Kautsky, J. H. 1980. *The Political Consequences of Modernization*. Malabar, Florida: Robert E. Krieger Publishing Company.
- Kellert 1997. The Aesthetic Appeal. Ch. 3 In *Kinship to Mastery: Biophilia in Human Evolution and Development*. Washington, DC: Island Press, p. 33-49.

- Lash, G. Y. B. and A. D. Austin 2003. *Rural Ecotourism Assessment Program*. Burlington, VT: The International Ecotourism Society. In Prep.
- Leopold, A. 1966. *A Sand County Almanac*. New York: Oxford University Press.
- Meine, Curt 1987. Building "The Land Ethic." In *Companion to A Sand County Almanac*, J. Baird Callicott, ed. Madison: University of Wisconsin, p. 172-185.
- Miller, L. M. 2002. Establishing the Principles of a Bahá'í Business Culture. Paper presented at conference, *Bringing Spiritual Principles and Values to Business*. First annual meeting of the Bahá'í Business Forum for the Americas (BBFA).
- Morris, Desmond, 1967. *The Naked Ape: A zoologist's study of the human animal*. New York: McGraw-Hill.
- National Park Service 2002. Data base. <http://www.nps.gov>
- Norton, B. G. 1991. *Toward Unity Among Environmentalists*. New York: Oxford University Press.
- Orr, David 1993. Love It or Lose It: The Coming Biophilia Revolution. In *The Biophilia Hypothesis*. Kellert, Stephen R. and Edward O. Wilson, eds. Washington DC: Island Press, p.415-440.
- Passmore, John 1974. *Man's Responsibility for Nature*. New York: Scribner's Sons.
- Perschel, Robert 2002. Work, Worship, and the Natural World: A Challenge for the Land Use Professions. In *The Good in Nature and Humanity: Connecting Science, Religion, and Spirituality with the Natural World*. Kellert, Stephen R. and Timothy J. Farnham, eds. Washington, DC: Island Press. p. 145-160.
- Preble, Dave and Carl Safina 2002. A Rising Tide for Ethics. In *The Good in Nature and Humanity: Connecting Science, Religion, and Spirituality with the Natural World*. Kellert, Stephen R. and Timothy J. Farnham, eds. Washington, DC: Island Press. p. 175-181.
- Pretty, Jules N. 1994. Alternative Systems of Inquiry for A Sustainable Agriculture. *Institute of Development Studies (IDS) Bulletin* 25 (2): 37-48.
- Quinn, Daniel 1999. *Beyond Civilization*. New York: Three Rivers Press.
- Rappaport, Roy A. 1984. *Pigs for the Ancestors: Ritual in the Ecology of a New Guinea People*. New Haven, CT: Yale University Press.

- Ray, P. H. and S. R. Anderson 2000. *Cultural Creatives: How 50 Million People are Changing the World*. New York: Harmony Books.
- Rogers, Adam 1993. *The Earth Summit: A Planetary Reckoning*. Los Angeles: Global View Press.
- Sagoff, Mark 1994. The Ethical Considerations of Wilderness Management. Lecture at University of Georgia, Institute of Ecology, November 3, 1994.
- Sanders, Tim 2002. Love Is the Killer App, *Fast Company*, Issue 55, Feb. 2002, p. 64. <http://pf.fastcompany.com/online/55/love.html>
- Schumacher, E. F. 1973. *Small is beautiful: Economics as if people mattered*. New York: Harper & Row, Publishers, Inc.
- Shams, Badi 1998. *Economics of the future: A compilation from the Bahá'í Writings*. New Delhi: Bahá'í Publishing Trust.
- Stratton, Arthur, 1964. *The Great Red Island*. New York: Charles Scribner's Sons.
- Ulrich, Roger S. 1981. Natural Versus Urban Scenes: Some Psychophysiological Effects. *Environment and Behavior*, Vol. 13 No. 5, p. 523-556.
- United Nations Populations Fund 2002. State of World Population 2001, <http://www.unfpa.org>
- Universal Declaration of Human Rights (UDHR) 2003. UN Department of Public Information. <http://193.194.138.190/udhr/index.htm>
- Universal House of Justice, 1985. *The Promise of World Peace*. Mona Vale: Bahá'í Publications Australia.
- Veblen, Thorstein [1899] 2001. *The Theory of the Leisure Class*. Reprint, with introduction by Alan Wolfe. New York: The Modern Library.
- Warren, L. 2002. Labyrinth and Grail: The Quest for the Feminine. Paper presented at *International Labyrinth Symposium*, Glastonbury. The Labyrinth Society.
- Williamson, Marianne 1997. *The Healing of America*. New York: Simon & Schuster.
- Wilson, Edward O. 1998. *Consilience: The Unity of Knowledge*. New York: Alfred A. Knopf.
- World Bank 2002. Population 2001. World Development Indicators Database: Quick Reference Table. <http://www.worldbank.org/data>

World Commission on Protected Areas 2002. *World Parks Congress 2003*.
<http://wcpa.iucn.org>

Zolbrod, P. 1984. The Emergence. Chap.1 in *Diné bahane': The Navajo Creation Story*. Albuquerque: University of New Mexico Press, p. 33-78.

Zukav, Gary, 1989. *The Seat of the Soul*. New York: Simon and Schuster.

APPENDICES

APPENDIX A: 1992 SEMI-STRUCTURED INTERVIEW GUIDE – CBS BELIZE

Interviewee's Name, Age, Village, Interviewer's Name, Date, Time.

Introduction -- *Greet the landowner and introduce yourself and hand her/him a copy of the consent form, while explaining the project and its purpose.*

Is this a good time to talk with you about the sanctuary? Do you have approximately one hour to sit down with me and answer about fifty questions? I really appreciate you taking the time to help on this study. When we are finished with the study, each village counsel member will receive a copy of the report. I hope that we can come up with a tourism development plan that will benefit all members of the CBS. Ok, are you ready?

First, I'd like to ask you some general questions about you and the CBS:

1. Are you a member of the CBS?
If no: Do you plan on signing the agreement in the future?
If yes: When did you sign the agreement?
If yes: How long do you think that you will be a member of CBS?
- *2. How familiar are you with the baboon?
 Can you tell me something about this animal?
- *3. Why do you think there is an interest in the baboon?
- *4. What happens in the Community Baboon Sanctuary?
- *5. Do you think baboons should be protected in Belize?
 Why?
- *6. Do you think the Community Baboon Sanctuary helps to protect the baboons? How?
- *7. Do you think this type of program could work in other parts of Belize?
- *8. Are there benefits to local people taking part in the CBS?
 What are they?
- *9. Can you describe any benefits you are personally receiving from the CBS?
- *10. Do you think you will get benefits in the future?
- *11. Do relatives of yours benefit from the sanctuary?
- *12. Are there costs to local people taking part in the CBS?
 What are they?
- *13. What are the most important costs you are paying because of the CBS?
14. Do the benefits that you receive balance the costs?
15. *If not*, are there any benefits that would balance these costs?
 What are they?

Now I'd like to ask you some questions about tourist activity in the CBS:

- *16. Would you like people to come visit your land as tourists?
17. What activities or services (for example: canoeing, hiking, places to buy supplies) are you aware of that are available for tourists visiting CBS in general?
 What about in your village?
18. Specifically, what accommodations are available in your village for tourists -- places to sleep and eat?
 Who owns them?
 Where are these places located?
19. Do you personally offer any of these accommodations for tourists?
If so, where are these places located?
 How many rooms do you have available for tourists?
 How many tourists can sleep in these rooms?
 Approximately how often do you have tourists stay at your place?
 What size groups of tourists do you generally have?
 How many nights do they usually stay, would you guess?
 How much do you charge for an overnight stay per person?
20. Overall, approximately how many tourists stay at your place per year?

21. Do you offer meals for tourists?
If so, how much do you charge for a meal per person?
 Approximately how often do you have tourists eat at your place?
 22. Overall, approximately how many tourists stay eat at your place per year?
 23. Have you ever worked as a guide for tourists?
If so, how often?
 Do you still?
 Do you charge for this service?
 How much?
 What size groups of tourists do you generally guide?
 24. Overall, approximately how many tourists have you guided in the last year?
 25. Do you personally offer any other activities or services for tourists?
If so, what?
 Where is it located?
 How many "*canoes, horses* " do you have available for tourists?
 Approximately how often do you have tourists use this activity or service?
 What size groups of tourists do you generally have?
 Approximately how long does it take the tourists to complete this activity --
 one-hour? 1/2 a day?
 How much do you charge for this activity or service?
 26. Overall, approximately how many tourists per year use this other activity or service that you offer?
 27. Do you employ anyone to help you with any of the tourist activities or services that you offer?
If so, how many employees?
 What are their jobs?
 Do you pay them for their help?
 How much do you pay them?
 How often do they work for you?
 28. Are you employed by someone to help with any tourist activities or services?
If so, what is your job?
 Do you get paid for this job?
 How much?
 How often do you work for this employer?
 29. What other activities or services can you think of that could be offered on your land or in your village?
 30. Specifically, where do you think these activities or services should be located?
 31. Do you think that you would like to offer any of these services to tourists?
- Now, I'd like to ask you some questions about the CBS in general:
- *32. Have numbers of tourists increased recently in this area?
 - *33. Do you think an increase in foreign tourists would benefit the country?
 In what ways?
 - *34. Would increased foreign tourism benefit the local residents in this area? How?
 - *35. With respect to the sanctuary, would increased tourism benefit you personally?
 How?
 - *36. Are there negative aspects to tourism?
 What are they?
 - *37. Does the CBS benefit other Belizean (non-locals)? How?
 - *38. Who benefits most from CBS: all Belizeans, just local residents, or foreigners, or all equally?
 - *39. Have you been to any other sanctuaries in Belize yourself?
If yes, which ones?
If not, why not?
 Would you like to travel there to visit?
 40. Has the Belize Audubon Society been a benefit to the CBS? In what ways?
 41. Do you think BAS should have a role in managing the CBS? If so, what role?
 42. What type of management do you think is best for the CBS?

43. Are there other forms of development besides tourism that you think would benefit the sanctuary?
(e.g., new agriculture, water systems, etc.)
What are they?
44. How do you think these forms of development should be accomplished?
- In closing, I'd like to ask you a couple of general questions:
- *45. What has been the best thing to come from the sanctuary so far?
- *46. Do you foresee any special problems with the sanctuary in the future?

Well, that completes the interview. I really appreciate you taking the time to talk to me and answer the questions about the sanctuary. We should have some preliminary results at the end of this month, and the final report will be sent to each village council member by around the end of the year. If you have any questions or comments, please contact either me or Diana/Gail. Thanks again for your time. Can you tell me how to get to...

* Hartup's questions (1989)

APPENDIX B: 2000 SEMI-STRUCTURED INTERVIEW GUIDE – CBS BELIZE

Interviewee's Name, Age, Gender, Village, Interviewer's Name, Date, Time.

Introduction -- *Greet the landowner and introduce yourself and hand her/him a copy of the consent form, while explaining the project and its purposes. Have her/him sign 2 copies of form & give one to her/him to keep. You keep the other attached to the survey.*

Is this a good time to talk with you about the sanctuary? Do you have approximately one hour to sit down with me and answer about fifty questions? I really appreciate you taking the time to help on this study. When we are finished with the study, each village counsel member will receive a copy of the report. I hope that we can come up with a tourism development plan that will benefit all members of the CBS. Ok, are you ready?

First, I'd like to ask you some general questions about you and the CBS:

- #1. What area makes up the Community Baboon Sanctuary (CBS)? What villages?
2. Are you a member of the CBS?
#Did you, or one of your relatives sign the pledge? Who? & When signed?
If no: Do you plan on signing the pledge in the future?
If yes: How long do you think that you will be a member of CBS?
- *3. Can you tell me something about the baboon?
- *4. Why do you think that people are interested in the baboon?
- *5. What goes on in the Community Baboon Sanctuary? (What do people do in the CBS?)
- *6. Do you think baboons should be protected in Belize?
Why?
- *7. Do you think the Community Baboon Sanctuary helps to protect the baboons? How?
- #7a. When was the last time you remember someone hurting a baboon?
- *8. Are there benefits to local people taking part in the CBS?
What are they?
- *9. Can you describe any benefits you are personally receiving from the CBS?
- *10. Do you think you will get benefits in the future?
- *11. Do you have relatives who benefit from the CBS?
- *12. *[Does it cost the villagers anything to take part in the CBS? Do local people have to pay anything to be a part of the CBS? What?]=old wording of question*
Do villagers lose or give up anything to be able to have the sanctuary?
- *13. *[What are the most important costs you are paying because of the CBS?]*
Do you give up anything by having the sanctuary here?
14. Do the benefits that you receive balance the costs?
15. *If not*, are there any benefits that would balance these costs?
What are they?
- #15a. Do you own land? Where? How much? Do you have title?

Now I'd like to ask you some questions about tourist activity in the CBS:

- *16. Would you like people to come visit your land as tourists?
17. On the whole, what activities or services (for example: canoeing, hiking, places to buy supplies) are available for tourists when they visit CBS?
What about in your village (*put in name of village*)?
- #17a. Are guided tours available in your village?
- #17b. Are there any packaged tours?
- #17c. Is there a cheaper price for combined tours?
18. Specifically, what accommodations are available in your village for tourists -- places to sleep and eat?
Who owns them?
Where are these places located?

19. Do you personally offer any of these accommodations for tourists?
If so, where are these places located?
 How many rooms do you have available for tourists?
 How many tourists can sleep in these rooms?
 Approximately how often do you have tourists stay at your place?
 What size groups of tourists do you generally have?
 How many nights do they usually stay, would you guess?
 How much do you charge for an overnight stay per person?
20. Approximately how many tourists stay at your place per year?
21. Do you offer meals for tourists?
If so, how much do you charge for a meal per person?
 Approximately how often do you have tourists eat at your place?
22. Approximately how many tourists eat at your place per year?
23. Have you ever worked as a guide for tourists?
If so, how often?
 Do you still?
 Do you charge for this service?
 How much?
 What size groups of tourists do you generally guide?
24. Approximately how many tourists have you guided in the last year?
25. Do you personally offer any other activities or services for tourists?
If so, what?
 Where is it located?
 How many "canoes, horses " do you have available for tourists?
If yes, How many tame horses?
 How many saddles?
 How many vehicles?
 How many passengers can they hold?
 How many tents?
 Approximately how often do you have tourists use this activity or service?
 What size groups of tourists do you generally have?
 Approximately how long does it take the tourists to complete this activity --
 one-hour? 1/2 a day?
 How much do you charge for this activity or service?
26. Approximately how many tourists per year do you take horseback riding (or canoeing, etc.)?
27. Do you employ anyone to help you with any of the tourist activities or services that you offer?
If so, how many employees?
 What are their jobs?
 Do you pay them for their help?
 How much do you pay them?
 How often do they work for you?
28. Are you employed by someone to help with any tourist activities or services?
If so, what is your job?
 Do you get paid for this job?
 How much?
 How often do you work for this employer?
29. What other activities or services can you think of that could be offered on your land or in your village?
30. Specifically, where do you think these activities or services should be located?
31. Do you think that you would like to offer any of these services to tourists?
- *32. Have numbers of tourists increased recently in this area?
- *33. Do you think an increase in foreign tourists would benefit the local residents in this area?
 In what ways?
- *34. Would increased foreign tourism benefit Belize? How?
- *35. With respect to the sanctuary, would increased tourism benefit you personally?
 How?

- *36. Is there anything bad (not good) about tourism?
What?
 - *37. Does the CBS benefit other Belizeans, other than local residents? How?
 - *38. Who benefits most from CBS: all Belizeans, just local residents, or foreigners, or all equally?
(circle one)
 - *39. Have you been to any other wildlife sanctuaries in Belize?
If yes, which ones?
If not, why not?
Would you like to travel to one and visit, if you had the chance?
 - #40. How is the CBS managed now? (Who runs CBS?)
 - #41. Which staff or committee members are paid and which are volunteers?
 - #42. Which positions do you think should be paid?
 - 43. What role did the Belize Audubon Society (BAS) have in managing the CBS?
 - 44. Was the Belize Audubon Society a benefit to the CBS?
In what ways?
 - #45. Have any other organizations or agencies been a benefit to the CBS?
Which ones? In what ways?
 - #46. Do you think BAS or any of these other organizations should have a role in managing the CBS
now?
If so, which ones? If so, what role?
 - 47. What type of management do you think is best for the CBS?
 - 48. Are there other forms of development besides tourism that you think would benefit the local residents of the sanctuary? (e.g., new agriculture, water systems, etc.)
What are they?
 - 49. How do you think that development such as (mentioned above) can be accomplished/
established/ implemented?
 - #50. What do you think about mining?
 - #51. What do you think about garbage landfills? (garbage dumps)
Have you heard about the proposal to put the country's garbage dump near the Zoo?
What do you think about that?
 - #52. What do you think about the government paving the road to the Big Falls Rice Farm from the Western Highway, bridging the river, and continuing the paved road on this side of the river?
- In closing, I'd like to ask you a couple of general questions:
- *53. What has been the best thing to come from the CBS since it was established?
(What good has come from the CBS?)
 - *54. Do you foresee any special problems with the sanctuary in the future?
 - #55. What would you recommend to others starting a tourism or conservation project?
 - #56. What investments or improvements are needed now?
Who should provide these?
 - #57. Any other comments?

Well, that completes the interview. I really appreciate you taking the time to talk to me and answer the questions about the sanctuary. We should have some preliminary results at the end of this month, and the final report will be sent to each village council member by around the end of the year. If you have any questions or comments, please contact either me or Stephanie/Gail. Thanks again for your time. Can you tell me how to get to...

* Hartup's questions (1989)

New questions for 2000.

APPENDIX C: 2000 KEY INFORMANT INTERVIEW GUIDE – BELIZE

2000 Key Informant CBS Questionnaire: Age, Gender, Interviewee's Name, Village/ Agency, Interviewer's Name, Date, Time

Introduction -- *Greet the informant and introduce yourself and read to him/her the consent form, and get him/her to sign two copies & keep one, while explaining the project and its purposes.*

First, I'd like to start by asking you some questions about the organizational structure of the Community Baboon Sanctuary (CBS).

1. Which villages are now considered to be part of the CBS?
2. Who would you consider are the local leaders in the CBS communities?
Why?
3. Who runs CBS now on the local level?
4. Who makes decisions about the tourism development in the CBS?
5. How are these decisions communicated to residents in the villages?
6. What community groups or business cooperatives are there in the CBS villages?
7. Do any of these groups or co-ops collectively own or manage tourism businesses in CBS?
If yes, which groups?
8. How are these groups and businesses run? Are there officers? Are there staff?
Who are they?
Are the officers and staff paid or volunteer?
How often do they meet?
Who is responsible for hiring, training and paying staff/volunteers?

Next, I'd like to ask you some questions about involvement of outside agencies with the (CBS).

9. What outside agencies (ex. BAS) were/are involved in the management of the CBS?
10. When did they start/stop their involvement?
11. What was/is the nature of their involvement? - Do they assist with training, funding, management, equipment & supplies or services?
If so, how and how often?
12. Who did/do they interface with in the villages?

Next, I would like to ask you some questions about tourism in the CBS.

13. What tour companies now patronize CBS? In the past?
What types of activities do they offer in their tours to the CBS?
How are these activities packaged?
Are these 1/2 day or full day tours? Are there overnight tours?
How many tourists per week?
14. What would you estimate are the annual tourist numbers at the CBS villages: FB, IB, SHM, BL, DHC, WB, SPBF past, present, & projected?
15. What jobs are connected to tourism in the villages of CBS?
In Belize City?
16. What do you think will be the future of the CBS?

Lastly, I am going to ask you some questions about how the CBS has affected local residents.

17. In your opinion, approximately how many landowners still agree to pledge land for the monkeys/CBS?
18. What are the main successes and main problems of the CBS?
Successes:
Problems:
19. How has the CBS changed the lives of people in each of the villages
(BL, SHM, DHC, IB, FB, WB, SP/BF)?

This completes our interview. Thank you for taking the time to answer these questions. Do you have any comments you would like to add?

APPENDIX D: CBS MUSEUM VISITOR RECORDS – BELIZE

Visitors to the CBS Museum 1997													
	Jan-97	Feb-97	Mar-97	Apr-97	May-97	Jun-97	Jul-97	Aug-97	Sep-97	Oct-97	Nov-97	Dec-97	Total 97
Unknown	6	6	14	4	5	2	5	3	3	0	0	9	57
USA	262	266	319	148	134	128	122	99	36	56	100	208	1878
Belize	3	50	158	13	259	201	127	30	9	2	9	12	873
Canada	21	29	59	4	1	6	4	4	0	4	11	30	173
England	9	17	8	8	19	3	6	8	13	6	27	6	130
France	7	3	0	0	3	2	1	3	0	0	0	2	21
Germany	8	19	12	6	2	5	3	10	4	5	20	7	101
Austria		3	2					4		1			10
Holland			2	1	5	7	3		4	18	2	1	43
Belgium		1	2		2		3	1	2		2		13
Switzerland	4	11	2	1	2		1		3	3	1	6	34
Denmark			1							1		1	3
Sweden			2			3	3					3	11
Italy			4				2	12					18
Spain	1	1										2	4
Poland			2							2			4
Norway								2					2
Israel	1				5					1	2		9
India		1											1
Japan		1							2		1		4
Australia	1		2			2			2	2	5	3	17
New Zealand					2								2
Bolivia			1			2							3
Brazil						1	2						3
Argentina	1		2									2	5
Mexico			1	3	2	3	8	3	1			1	22
Barbados											1		1
Guatemala		1	1			2						2	6
El Salvador			2				1						3
Czech Rep.										2			2
Honduras						2							2
Peru		1											1
South Africa			3										3
Other Islands	4						1						5
Total	328	410	599	188	441	369	292	179	79	103	181	295	3464

Visitors to the CBS Museum 1998													
	Jan-98	Feb-98	Mar-98	Apr-98	May-98	Jun-98	Jul-98	Aug-98	Sep-98	Oct-98	Nov-98	Dec-98	Total 98
Unknown	6	90	21	10	1	24	12	13	2		6	12	197
USA	175	214	430	115	139	70	99	75	55	47	35	97	1551
Belize	7	34	249	16	445	26	20	24	5	11	2	5	844
Canada	32	38	22	11	7	2	4	5	4	2	7	14	148
England	15	15	26	10			10	10	3		2	21	112
Scotland	3	2	5										10
Ireland				1									1
Wales			1	3			1						5
France	1	5					2	2	3	3	1	1	18
Germany	13	5	5	9	5	2		5	4	6	4	2	60
Austria	1	4		1		2					6		14
Holland	1							3					4
Belgium					3		1	7		1	1		13
Switzerland	2	2	2	2	2	4	5				4		23
Sweden	1										1		2
Italy	3						2	3			1	2	11
Australia	2		6	2				7					17
New Zealand	3		3									1	7
Brazil							2	1					3
Argentina	2	1			5		3						11
Mexico	2	1						2				1	6
Guatemala	1				1						1		3
Czech Rep.	2							2	2				6
Honduras								1					1
Costa Rica									1				1
Bahamas							21	1					22
South Africa					2								2
Other Islands				2		1			1				4
Total	272	411	770	182	610	131	182	161	80	70	71	156	3096

Visitors to the CBS Museum 1999													
	Jan-99	Feb-99	Mar-99	Apr-99	May-99	Jun-99	Jul-99	Aug-99	Sep-99	Oct-99	Nov-99	Dec-99	Total 99
Unknown	37	14	20	2	5	16	49	11	5	3	3	17	182
USA	234	133	151	147	150	95	113	80	22	36	65	133	1359
Belize	7	365	514	15	200	2	96	11	3	7	3	10	1233
Canada	16	14	8	6		1	4	5		3	5	7	69
England	10	12	12	8	1		1	11	1	2	46	30	134
Scotland		2	1					4					7
Ireland					1								1
Wales					1								1
France	5	2	3				1	8		2		46	67
Germany	5	8	8	2			1	4	2		7	5	42
Austria	1	2	1		1		4						9
Holland		2	4				2				1		9
Belgium										1	2	2	5
Switzerland	1	4	2	1		1					5	6	20
Italy	2		1			1		7		3			14
Spain						1		6					7
Poland								1				1	2
Norway								1					1
Turkey								1					1
Israel			2										2
Japan	1												1
Australia	2	1		2				1	2			5	13
Brazil							1						1
Chile					1								1
Argentina												2	2
Ecuador												1	1
Mexico			1		3	1	1		2	1	1	7	17
Barbados	1												1
US Virgin Is.		2						2					4
Guatemala		1											1
El Salvador			1	2			1						4
Czech Rep.			1										1
Bermuda						2	1						3
Dominican Rep.							1						1
Honduras							2	1					3
Total	322	562	730	185	363	120	278	154	37	58	138	272	3219

Visitors to CBS Museum 2000 (Jan-Mar)				
	Jan-00	Feb-00	Mar-00	Total 00
Unknown	23	10	23	56
USA	131	157	270	558
Belize	9	11	301	321
Canada	15	23	11	49
England	18	3	5	26
Scotland		1		1
Ireland		1		1
France	3		2	5
Germany	1		3	4
Austria	4		1	5
Holland	3	1	1	5
Belgium	1			1
Switzerland	1	3	4	8
Denmark		1		1
Italy	1	1	1	3
Poland		1		1
Israel	1			1
Japan	1			1
Australia	2	3		5
New Zealand	1	2		3
Ecuador	1		1	2
Mexico	1			1
Total	217	218	623	1058

APPENDIX E: 2000 INTERVIEW CONSENT FORM – BELIZE

Cohesive community planning or rural sprawl? Taking a second look at private-ownership conservation through ecotourism development in the Community Baboon Sanctuary in Belize.

Informed Consent Form**Dear Community Baboon Sanctuary Resident:**

This study will evaluate the ability of ecotourism at the Community Baboon Sanctuary (CBS) to meet the needs and expectations of the residents in the seven villages in and around the sanctuary. This study will look at the distribution of tourist activities and housing in the CBS, and compare these to the benefits that the landowners in all seven villages are receiving from tourism. This study is similar to one done in 1992 by me, Gail Bruner (now, Gail Lash), and will assess the changes that have taken place in the last eight years. The study aims to find ways to distribute tourism benefits to all landowners, document ways of managing tourism that works best, and promote the kinds of development that residents feel is needed in their villages.

You are asked to participate in an interview given by me or an assistant. You will be asked questions to which you can respond freely, with any thoughts that you may have on the subject. The researcher will write down your responses in a notebook as you are talking. The results of this participation will be confidential, and will not be released in any individually identifiable form without your prior consent, unless otherwise required by law. Your identity will be coded, and all data will be kept in a secured location. Your identity will not be revealed in any publication of the results of this research. Answers involving locations of things (tourist activities, etc.) will be used to make a map of current tourism opportunities. The interview will take from one to two hours to complete.

Most of the members of the CBS who participated in the 1992 study will be asked to be interviewed, as well as new residents with tourism facilities, or who are involved in tourism management. You have the right to decline the interview, or to withdraw from the interview at any time without penalty. Your participation does not involve any foreseeable risks, discomforts or stresses. The benefits you may expect from this study are that your opinions on tourism development and the effectiveness of the CBS (or village) management of tourism programs will be reported (without your name listed) and hopefully used to generate positive actions and policies. The researcher will answer any further questions about the research, now or during the course of the project, and can be reached at the address/phone below.

Mrs. Lash is a graduate student and the principle investigator in this study. She is working on this project as partial fulfillment of a Doctoral degree at the University of Georgia under the direction of Dr. David Newman, School of Forest Resources (1-706-542-7649). Ms. Siegel is assisting Mrs. Lash with this project. Please sign both copies of this form. Keep one and return the other to the investigator.

Sincerely,
Mrs. Gail Lash
366 Oakland Ave., SE
Atlanta, GA 30312 USA
Telephone: 1-404-523-3689

Ms. Stephanie Siegel
3435-X North Druid Hills Rd.
Decatur, GA 30033 USA
Telephone: 1-404-325-9409

I agree to participate in the research titled, "Cohesive community planning or rural sprawl? Taking a second look at private-ownership conservation through ecotourism development in the Community Baboon Sanctuary in Belize," which is being conducted by Mrs. Gail Lash of the University of Georgia. I understand that this participation is entirely voluntary. I have the right to leave the study at any time without giving any reason, and without penalty.

Signature of Researcher

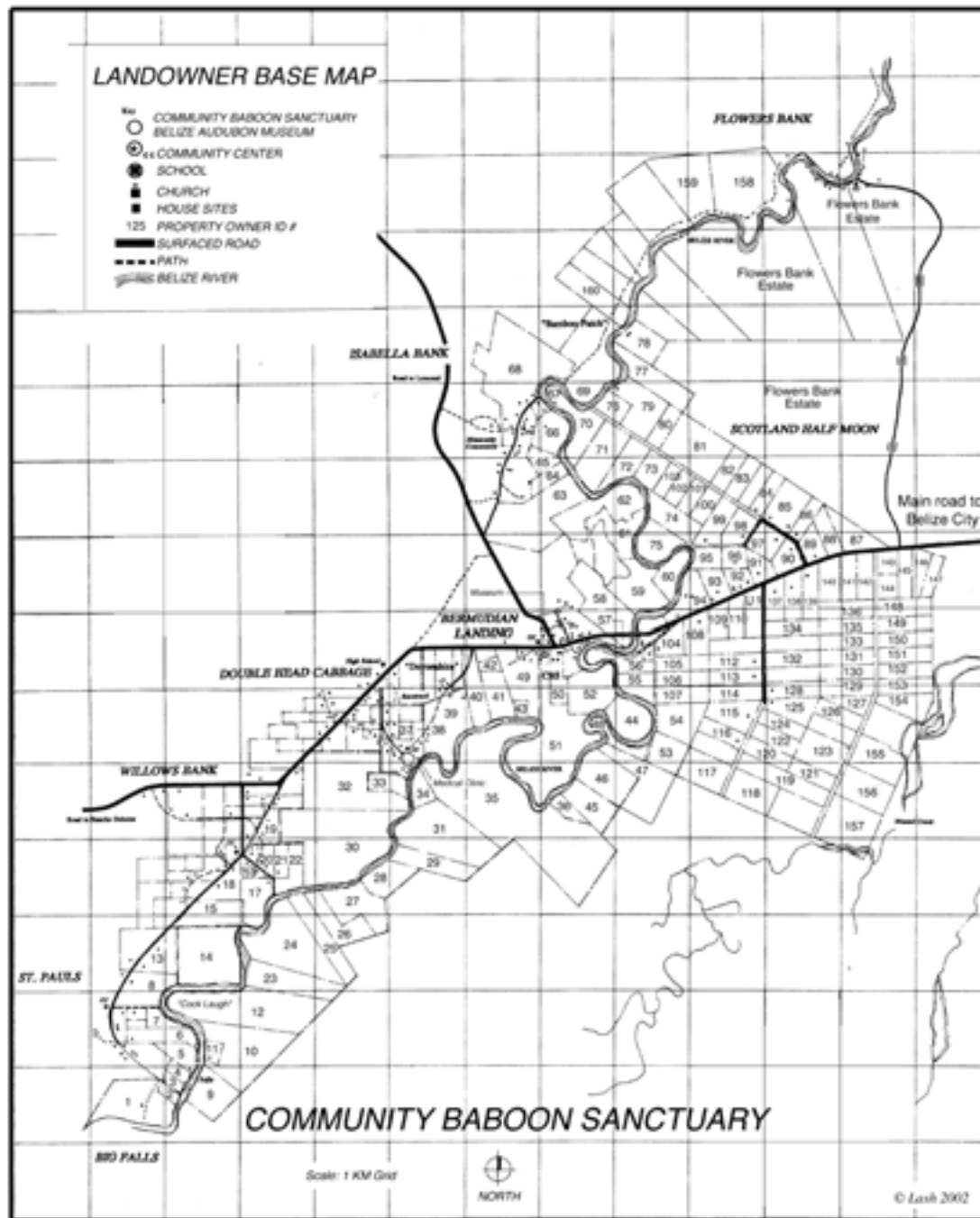
Date

Signature of Participant

Date

Research at the University of Georgia that involves human participants is overseen by the Institutional Review Board. Questions or problems regarding your rights as a participant should be addressed to Julia D. Alexander, M.A., Institutional Review Board, Office of the Vice President for Research, University of Georgia, 606A Boyd Graduate Studies Research Center, Athens, Georgia 30602-7411; Telephone (1-706) 542-6514; E-Mail Address IRB@uga.edu.

APPENDIX F: 2000 CBS LANDOWNER BASE MAP WITH NUMBERED PARCELS



[A composite drawing made by Mr. Nevin Lash. Property data were compiled from the Department of Land and Surveys' maps of the southern villages, and SHM properties from Mr. Ray Moody, Chairman, shown in Bruner (1993), with modifications in 2000. Flowers Bank properties were a composite of Lyon and Horwich (1996) and local residents' April 2000 drawings and input.]

APPENDIX G: 2000 CBS LANDOWNER LIST – MAP KEY

LIST OF CBS PLEDGED & NON-PLEDGED LANDOWNERS April 2000							
Map Number	Name	Village	Pledged?	Horwich/Lyons 1990	New Member	Comments	Received 1998 Landowner Payment, CBS Records
1	Eddie McFadzean	SP/BF	Y	**			Y
2	Hubert Kelly	SP/BF					
3	Wallace Revers (wife Orma)	SP/BF	Y	**			Y
4	Herman Williams	SP/BF	Y	**		died	missed
5	Kent Thompson (wife Kathleen)	SP/BF	Y		*		Y
5	Matthew Thompson	SP/BF	Y	**		died	fam.
	Cyril Thompson (Matthew's son)	SP/BF					Y
6	Marta Rogers	SP/BF	Y	**		in U.S.A.	missed
7	(Marsella) Estella Cassasola	SP/BF	Y	**			missed
8	Fred MacFadzean	SP/BF				died	
9	Big Falls Rice Farm	SP/BF					
10	Basil Thompson (wife Olive)	SP/BF	Y	**		died	Y
	Lisa Young (Basil's D., Anthony)	SP/BF					
	Ann Thompson	SP/BF					
11	Bernice Cassasola	SP/BF	Y		*		missed
12	Eustace Pakeman	SP/BF	Y	**		in Belize City	Y
13	Amy Young	SP/BF					
14	Edward McKoy	SP/BF					
15	Oswald McFadzean (wife Vaicina)	SP/BF	Y	**			Y
16	Ethlyn Young	SP/BF				in Esperanza village	
	Yvette Joseph	SP/BF					
	Diane Kingston	SP/BF					
	Orlin Casasola (wife Keckdelia Ferman)	SP/BF	Y		*		missed
	Mary McFadzean	SP/BF				died	
26,28	John McFadzean, Jr.	SP/BF	Y		R		Y
	Niconor Ferman	SP/BF				died	
	Albert Ferman (Niconor's son; Kristina)	SP/BF	Y		*		missed
	Carolyn Aguilar	SP/BF					
	Pamela Ferman	SP/BF					
	Manny McFadzean	SP/BF	Y	**		died	missed
17,18,24	Ruben Belisle	WB	Y/R	**		died-son in WB	fam.
17,18,24	Wilward Belisle (Ruben's son)	WB	Y		R		Y
19	William Pook	WB				ill	
20,23	Joe Roca (wife Olive)	WB	Y	**		died	Y
	Delcie Roca (Joe's daughter)	WB					
	Clinton Roca (Joe's son)	WB	Y		*		Y
21	Ernest MacFadzean	WB				died	
22	Albert McFadzean	WB	Y	**			Y
25	Leopold Pook (wife Annie)	WB	Y	**		died	Y
26,28	John McFadzean, Sr.	WB	Y/R	**		died-son in SP/BF	fam.

LIST OF CBS PLEDGED & NON-PLEDGED LANDOWNERS April 2000

Map Number	Name	Village	Pledged?	Horwich/Lyons 1990	New Member	Comments	Received 1998 Landowner Payment, CBS Records
29	Randolph Young (wife E.Harris)	WB	Y	**			Y
	Ethie Harris	WB				died	
30	Robert Stephenson (5 sons)	WB	Y		*	died	Y
30	George Stephenson (Robert's son)	WB	Y	**			Y
	Alvin Stephenson (wife Marilyn)	WB					
	Alvan Stephenson (wife Thelma Flowers)	WB					
	Harold Sutherland	WB	Y	**			Y
30	Wallace Stephenson (wife Elaine)	WB				Robert's son	
	Charles McFadzean, Sr.	WB	Y		*		missed
	Charles McFadzean, Jr. (wife Meredith)	WB					
	Renia Stephenson	WB					
	Philip Young	WB					
	Pearl Belisle Sanchez	WB					
	Michele Belisle	WB	Y		*		joined 1999
	Wendall Belisle (wife Michele)	WB					
	Morline Burns	WB					
	Lloyd Stephenson, Sr.	WB	Y/R	**		died-son in WB	fam.
	Lloyd Stephenson, Jr.	WB	Y		R		Y
	Eddie Gabb	WB					
	Clarence Rue	WB					
	Beverly Young Pook	WB					
	James Banner	WB					
	Ardeth Belisle	WB				(in SP/BF)	
	Amy Bell Nicolas	WB				died	
	George Flowers	WB	Y	**		died	missed
31	Peter Harris	DHC	Y	**			Y
32	Charles Wingo	DHC	Y	**		SOLD 200ac Chinese	SOLD
33	Roy Talbert (wife Rita)	DHC	Y	**			Y
34	Arthur Wade	DHC					
35	Maud Armstrong	DHC	Y	**			Y
36	Bert Young	DHC	Y	**		ill	Y
37	Casmore Martinez	DHC	Y	**		in U.S.A.	missed
37	Lloyd Martinez	DHC	Y	**		died	missed
38	Horel Nicolas	DHC					
39	Selvyn Jeffords	DHC	Y	**			Y
40	Fred Herrera	DHC				died	
41	Edwin Pitts	DHC	Y	**		died	missed
42,48	Benjamin Baptist, Sr.	DHC	Y	**		died	missed
43	Cecil Young	DHC				died	
44, 107	Benjamin Baptist, Jr. (now Sr.)	DHC	Y	**			Y

LIST OF CBS PLEDGED & NON-PLEDGED LANDOWNERS April 2000							
Map Number	Name	Village	Pledged?	Horwich/Lyons 1990	New Member	Comments	Received 1998 Landowner Payment, CBS Records
45	Lloyd Flowers (wife Joyce)	DHC	Y	**			Y
46	Cardinal Nicolas	DHC	Y	**			Y
47	Charles Stump	DHC	Y	**			Y
	Lawrence Flowers	DHC	Y		*		missed
	Randolph Baptist	DHC	Y		*		missed
	Norris Harris	DHC	Y		*		missed
	Emmanuel McFadzean	DHC	Y	**			Y
	Alson Flowers	DHC					
	LaVerne Yoder	DHC				not in CBS	
	Conrad Rowland, Sr.	DHC				died	
	Conrad Rowland, Jr.	DHC					
	Indera Rowland (Conrad Jr.'s d.)	DHC					
	Victor Smith	DHC				died	
	Percival Flowers, Jr.	DHC					
	Irma Nicholas Jones	DHC	Y		*		missed
	Olga Jones	DHC					
	Meaureen Jones Galvis	DHC				died	
	Percival Flowers, Sr.	DHC					
	Winston Staine	DHC	Y		*		Y
	Randolph Rowland	DHC					
	Sonia Fergusen	DHC					
	Earl Panting	DHC					
	Regional Sankey	DHC					
	Hank Thompson (Kent's son)	DHC					
49	John Humes	BL	Y	**		died	Y
50	Fallet Young	BL	Y	**			Y
51	John Swift	BL	Y	**		died	Y
51	Roy Young (Alvin's son)	BL	Y	**		Nature Resort	Y
52	John Link	BL	Y		*	died	missed
52	Ed Thorton	BL				H. Monkey Lodge	
53	Benjamin Baptist, III (now Jr.)	DHC					
54	Roy Joseph	BL	Y	**			Y
55	Paul Joseph (wife Geraldine)	BL	Y	**			Y
56	Sydney Russell	BL	Y	**		SOLD 82ac Chinese	Y
57	Edna Baptist	BL	Y	**			Y
58	Elston Wade	BL	Y	**			Y
	Jerome Wade (Elston's son)	BL					
	Delvorine Wade	BL					
59	Alvin Young	BL	Y		*		missed
59	Camille Young, Sr.	BL	Y	**			missed
60	Bernard Herrera (wife F. Baizer)	BL	Y	**		died	Y
61,76	Vincente Herrera	BL	Y	**		died	Y
62	Raymond Lord	BL	Y	**			Y

LIST OF CBS PLEDGED & NON-PLEDGED LANDOWNERS April 2000							
Map Number	Name	Village	Pledged?	Horwich/Lyons 1990	New Member	Comments	Received 1998 Landowner Payment, CBS Records
	Andrew Lord (Raymond's son)	BL					
63,71	Edward Herrera	BL	Y	**		died	Y
	Ralph Flowers (wife Jean)	BL	Y		*	died	Y
	Rudolph Joseph (wife Joyola)	BL	Y		*	died	Y
	Elswith Baisar	BL					
	Eric Wade	BL					
	Frank Young	BL					
	John Baisar	BL					
	John Wade	BL					
	Norman Bood	BL					
	Marsella Pope	BL					
	Maxine Baisar	BL					
	Nicolas Baisar	BL	Y		*		Y
	John Perez, Sr.	BL	Y	**			missed
	Clifton Young	BL	Y	**		in U.S.A.	Y
64, 69	Walter Banner, Sr. (wife Matilda)	IB	Y	**		SOLD parcel 69	Y
65	Orlando Salas (wife Zonia)	IB	Y	**			Y
66	William "Buck" Hyde	IB	Y	**		in Cayo	Y
67	Eduardo Eck (wife Lucia)	IB	Y	**		died	Y
68	Allan Herrera (wife Nimi)	IB	Y	**		in Belize City	Y
	Celestia Herrera (Allen's sister-in-l.)	IB					
	Leonie Herrera (Allen's mother)	IB					
70	Dan Lanza	IB	Y	**			Y
72	Emilio Lanza	IB	Y	**		SOLD 33.5ac US citz.	Y
73	Horace Hulse (wife Inez)	IB	Y	**		died	Y
74	Joe Lanza	IB	Y	**			Y
77	Coons	IB				not in CBS	
78, 160	Dudley Hendy	IB	Y	**			Y
78	Edwin Hendy (wife Dellis)	IB	Y	**		died	fam.
78, 104	Dellis Hendy	IB					Y
79	Melford Hendy, M&H River Camps	IB	Y	**		w/Canadian Partners	Y
	John Madrill	IB					
	Patricia Lanza	IB					
	Steven Yoder	IB				in U.S.A.	
	Maurice Lanza	IB					
	Steven Lanza	IB					
	Patricia Perez	IB					
	David Wade	IB					
75	Joseph Arana	SHM	Y	**			missed
80	Veronica Sharon	SHM					
81	Ray Hernandez	SHM					
82	Josephine Kerr	SHM				died	
83, 128	Frank Kerr	SHM					

LIST OF CBS PLEDGED & NON-PLEDGED LANDOWNERS April 2000							
Map Number	Name	Village	Pledged?	Horwich/Lyons 1990	New Member	Comments	Received 1998 Landowner Payment, CBS Records
84	Randolph Moody	SHM					
85	Bartola Ortez	SHM					
86	Reuben Cadle	SHM				in Burrell Boom	
87	A & B Development	SHM					
88	Winston Alvin Gillett	SHM				in Burrell Boom	
89,140	Orlando Dawson	SHM	Y	**			Y
90	James Sabastian	SHM					
91	"Chinaman"	SHM					
92	Mennonites	SHM					
93,95	Recardo Flores	SHM	Y		*		Y
94	Thomas Myvett (wife Idolly)	SHM	Y	**		died	Y
	George Myvett	SHM					
96	Anastacio Soler	SHM	Y	**			missed
98,154	Roy Kerr	SHM					
99,100	Leonard Arana	SHM					
101	Mable Frazer	SHM				in Burrell Boom	
102	Morris Lanza	SHM				(in IB)	
103	Robert Thranton, Jr.	SHM					
104	Dellis Hendy	SHM				(in IB)	
105	Carlos Soler	SHM					
106	Elson Wade, Jr.	SHM				(in BL)	
107	Evan Goff	SHM					
108	Lucio Flores	SHM					
109	Lindford Russell	SHM				in Belize City	
110	Ricardo Martinez	SHM					
111	John Aguet	SHM					
112	Manual Soler	SHM					
113	Anastacio Soler, Jr.	SHM					
115	Donolo Soler	SHM					
116	Floyd Pope	SHM					
117	Francis Baisar	BL	Y	**		in U.S.A.	Y
118	Vallon Pope	SHM					
119	Anthony Hyde	SHM					
120	Lazarus Gaizar	SHM					
121	Carman Flores	SHM					
122	Stephen Davis	SHM					
123	Herman Charlesworth (wife Iva)	SHM					
124	Alfonzo Maldonado	SHM					
125	Josephine Ledlow	SHM					
126	Fullert McCow Conolly	SHM				in Caymans	
127	Rodney Flores	SHM					
129	Milford Henley	SHM					

LIST OF CBS PLEDGED & NON-PLEDGED LANDOWNERS April 2000							
Map Number	Name	Village	Pledged?	Horwich/Lyons 1990	New Member	Comments	Received 1998 Landowner Payment, CBS Records
130	Lewis Myvett	SHM					
131	Duncan Pinkard	SHM				(in DHC)	
132	Wain Moody (Sarita's son)	SHM	Y		*		missed
	Sarita Moody	SHM					
133	Calbert Lodge	SHM					
134	Rupert Ledlon	SHM				(in SP)	
135	Enlich Seymour Pinkard	SHM				in Burrell Boom	
136	Edwin Kerr	SHM					
139	Romilo	SHM				in Ladyville	
141	Vallon O'Brien	SHM				in U.S.A.	
142	William Oliver (wife here)	SHM				died	
143	Terrance Fraizer	SHM				in Burrell Boom	
144	Fessie Oliver	SHM					
145	Lloyd George Cadle	SHM					
146	Herbert Frazer, Jr.	SHM				in Burrell Boom	
147	Wilhem Lodge	SHM					
148	Andres Colin	SHM					
149	Dalton Gillet, Jr.	SHM				died	
152	Rose Oliver/L. Stuart	SHM				in Burrell Boom	
153	Elton Donald Gillet	SHM				died	
157	Percival Thompson	SHM				in Burrell Boom	
	Harold Arnold	SHM	Y		*		missed
	Clifford Moody	SHM				died	
FBE+	Vallon Hendy	FB	Y		*		missed
158	Henry Dawson	FB	Y	**		SOLD 300acLightburn	SOLD
FBE+	Linnette Rhaburn	FB	Y		*		missed
FBE+	Cordell Robinson (wife Sharon)	FB	Y		*		missed
FBE	Cecil Flowers (wife Daisy)	FB	Y	**			Y
FBE+	Egbert Robinson (wife Roselle)	FB	Y		*		missed
FBE	Calbert Hinks	FB	Y	**			Y
FBE+	Ruben Rhaburn	FB	Y	**			Y
FBE	Huson Baptist	FB	Y	**		in Belize City	Y
FBE	Robert Mitchell	FB	Y/R	**		died-daughter in FB	fam.
FBE	Eleanor Mitchell (Robert's daug.)	FB	Y		R		Y
FBE	Winston Flowers	FB					
FBE	Clifton Robinson	FB					
FBE+	Clinton Rhaburn	FB					
FBE+	Carl Flowers	FB					
FBE	Violet Rhaburn	FB					
159	Lincoln Flowers	FB	Y	**		SOLD 200acLightburn	Y
	Pledged Landowner Totals:		102	77	25+ 4R	27 died; 8 moved/6 sold = 41 lost pledges	69 paid / 31 missed

Key	
FBE	Flowers Bank Estate is a titled, one-parcel conveyance of 1,010 hectares owned by the descendents of 21 original purchasers. Four original owners are still alive, but only one, Mr. Cecil Flowers, is in Belize. This parcel has yet to be surveyed, divided and titled to descendents, although residents have knowledge of their acreage due. The "+" indicates that additional lands are owned or leased by this landowner.
Y/R	Pledged landowners who died, and relative took over pledge, with new signed pledge (not tallied in total pledges)
R	Relative who took over deceased' pledge, and signed new pledge (tallied in total pledges)
*	Signed pledges with property maps from Museum records, Aug. 1992, & New signed members from 2000 records, for a Total of 25 new signed landowners after 1990
**	List of 77 signed landowners from Horwich & Lyon, 1990

APPENDIX H: RECOMMENDATIONS FOR THE CBS, BELIZE

Discussion and Recommendations on: 1) Pledges and Land Title, 2) Conservation Attitudes, 3) Private or Public Management? and 4) CBS – Suburb of Belize City?

1) Pledges and Land Title – Who Owns The Sanctuary?

As pledged residents either move away or age and die, private land is passed on to children and grandchildren. Are these next generations maintaining or selling their lands? Will these younger residents become members of the CBS and support it, or will they decide that making pastures, roads, and housing developments are in their best interests? With the deaths of 27 of the documented 102 pledged landowners, the absence of eight landowners, and the sale of riparian lands to people from outside the CBS, both physically and culturally, these CBS lands are in jeopardy of reverting back to pre-pledge farming practices or, more likely, of succumbing to the increased pressures to clear land for housing or livestock.

The practice of residents leasing lands from government for development and then obtaining title many years later (when one wants to sell) is a system that worked well in the past when land was plentiful and cheap, but has its flaws in the present and future. In accordance to classic market supply and demand systems, as these rural havens attract both urban Belizeans and foreigners with a willingness to pay, demand for land increases and land prices escalate. These new outsider purchasers encourage locals to sell large land parcels or to subdivide and sell family plots, eventually pricing local residents who have lived there for generations out of the market (Lash and Austin 2003). This creates mosaics of land ownership and land use with forest habitat that may or may not support the black howler monkeys.

This study recommends two actions. First is the need to secure a new pledge from all CBS landowners, leased or titled, riverside or roadside. This has the great advantage of obtaining current records of land ownership and of educating all residents about biodiversity and the importance of their contributions to any and all conservation efforts. It also ensures that they have a voice in overall development plans, and can gain access to annual landowner payments and other benefits.

Second, because these are private lands with all rights of private ownership, voluntary pledges promoting BMPs have no enforcement rights and may be unstable over time, particularly if the land is not titled and can be recalled and resold by government. Participation in the CBS would be affected by a decreased membership, as some landowners abandoned BMPs, and others choose to follow. Using a fully-involved landowner “appropriator organization,” there is the great need to establish legally binding protective covenants and zoning regulations on all lands of the CBS, in accordance with howler monkey management plans and BRV rural development and tourism plans. Additionally, all land parcels and vegetation cover would be mapped to delineate a biological corridor for the monkeys and other wildlife, in collaboration with the Northern Belize Corridor Project (NBCP) and The Meso Americas Biological Corridors Program administered by PfB.

2) Conservation Attitudes

Quote: “I don’t think Belizeans in this area are interested in the baboons; they accept them and live with them. We pass them and don’t even think about them twice. Example: parrots fly over and we don’t hear them – if there is conservation movement then we get more conscious of them – oh parrots! Likewise for the monkeys. Only when study them [do research] do we become aware. There is no movement to conserve them – just that they are there and you don’t do anything to [harm] them.” (Interviewee #156, 2000)

One of the greatest accomplishments of the CBS in its 18 year-history has been the increased awareness of howler monkeys and other wildlife by residents of the seven villages, solidifying a conservation ethic in the minds of rural residents (Horwich and Lyon 1995). This conservation ethic is passive – residents simply leave the monkeys alone. Whereas in 1988, protection of the monkeys was linked to their intrinsic values, such as education (Hartup 1989, 1994), the 2000 study documented the change in villager attitudes towards monkeys to purely economic values.

Correspondingly, 100% of interviewees in 2000 agreed that monkeys need to be protected. This result is most likely a combination of 1) a genuine desire to conserve monkeys because they are harmless and humanlike, 2) it is easy to protect them by just ignoring them, and 3) the knowledge that healthy populations of monkeys bring tourists and tourism revenue. This combination needs to be nurtured and protected as well – as long as these qualities (harmless, can be ignored, and bring in tourism benefits) remain, protection of monkeys is secure.

3) Private or Public Management?

A new management organizational structure, which involves all landowners as CPR users, or appropriators, is needed for the CBS to become sustainable in the eyes of a majority of pledged landowners, village residents, national NGOs and government agencies. These CPRs require an “appropriator organization” which allocates resource assets equitably to all users.

One possible new management structure would call for landowners to receive “rights of just compensation.” There is a threat to the entire BRV area of creating separate and fragmented land uses by individual landowners, analogous to the segmented

situation created by individual USA states in their road building practices, prior to national government control. This new business paradigm for CBS would create an association where landowners have a stock ownership in the association based on the amount of land they provided to the company. The association buys rights or easements (paid in stock) to the trees used for howler monkey conservation, along with rights of egress to the property for tourism purposes.

Stock ownership in the association is a way to equalize benefits to all residents, based on the value of the landowner contributions (*e.g.*, number of hectares contributed). This association would depend on updating CBS land maps, ownership records, and land use data. This type of structure would address the major equity problems that exist between villages and residents in the CBS, as well as the efficiency problems of producing and conserving a public good (monkeys) on private lands.

5) Community Baboon Sanctuary, Suburb of Belize City?

For rural populations which have existed until the mid-1990s without basic services such as electricity, increased rural development, particularly from government (when it is free) is a welcomed sight – “Better has come!” as locals say. Where do governmental rural development goals intersect with local resident’s desires for increased standards of livelihood? With the “urban sprawl” of Belize City, in the form of industrial parks and new urban housing tracts, at CBS’s doorstep, there is a great need to involve the rural landowners in producing a Belize River Valley Master Plan for both tourism and general infrastructure development to ensure local support and to clarify local expectations.

Both BELRIV and PfB are collaborating on such an ecotourism master plan, and the WCG of CBS has also received grants which include a broad assessment of the

ecotourism potential of the Belize River Valley and how to spread ecotourism development throughout the villages. The need is to integrate these ecotourism plans into a broad-spectrum rural area development plan, to assess how adding over 1000 new houses to the existing 300 total houses in the seven-village area will affect both local ecotourism efforts and lifestyles.

There is a also great desire from residents to integrate improved agriculture techniques into area development plans, which would include increased mechanization and markets for agricultural products and livestock. With training, intensive agriculture on an appropriate scale could both increase yields and eliminate the need for slash-and-burn techniques which, depending on the fallow period, use up more land. Of course, associated benefits of increased yields would have to outweigh the costs of machinery and improving soil quality.

Ironically, monkeys and their habitat might be increasingly protected through mechanization IF the same, dedicated plots were used intensely (like rice farming), leaving other areas under minimal use, and IF landowners still abided by pledge terms when clearing land of leaving large trees, food tree species, aerial corridors around property lines, and 20 meter (66-feet) of riparian corridor from the highest flood line. By lowering costs (time, labor) with machinery, greater returns on agricultural lands could provide greater incentives for pledged landowners to honor their commitment to preserve riparian and corridor habitats for the monkeys.

One villager, in describing the physical and cultural changes that have occurred from increased tourism in other areas of Belize declared, “Lose sight of [your] original goal and perhaps what you started offering no longer exists” (Interviewee # 144, 2000).

APPENDIX I: 2000 JOURNAL WRITINGS, STORIES FROM BELIZE

4 April 2000

I met resident on road to Flowers Bank (FB) – he was burning the land on the north side of the road. Big fire burning the bush – I took photos. He said FB is the only village without electricity – it's political. He said he will build a house here, that urban area has too much crime – wants to move to rural area. He started the fire at 6:30am, and this was 11:15am! Said it would go only so far – Mussel Creek water would stop it.

13 April 2000

When we got to Mussel Creek, it opened up into a wide waterway of grass and dried up land (riverbed). People had burned the edges to keep down tall grass and promote grazing grass for cattle and horses – saw some. Saw jacana birds, brown with yellow inside wings, at water's edge in grass/duckweed (called "Georgie-bull"). Saw great blue heron (called "Full pot," for obvious reasons), egrets, cormorants, sandpiper-like birds (black and white). Walked a ways south about a mile to the large savanna, and came back out by the 3rd bridge near the road.

16 April 2000

Waited, because everyone is at the softball game today. Walked around river road to confirm houses and stopped at riverside clinic – moon up and one day short of full, parrots flying in for the night, sun setting, still light but dark – river is so peaceful with white egrets flying near the water, pink flowers of bukut tree rising above green trees across river. This side is cleared down to the water – just grass, and other side is wild bush – beautiful. Said prayer. Came back to the community center -- new management taking over and holding first meeting tonight.

1992 Total # of Tourist Served per CBS villager from 5 Tourist Services, by village							
Village	Distance from BL 1=closest	#Villagers offering services	#Villagers interviewed	#Villagers receiving tourists	Total # tourists received in village	% of CBS Total	Mean # tourists received per villager offering services
BL	0	22	22	11	507	69.9%	23
SHM	1	8	8	3	33	4.5%	4
IB	2	18	18	3	29	4.0%	2
DHC	3	24	24	4	18	2.5%	1
WB	4	22	22	4	16	2.2%	1
SP/BF	5	18	18	3	57	7.9%	3
FB	6	14	14	4	65	9.0%	5
Total		126	126	32	725	100%	6
= 25% of people interviewed are receiving tourists							
2000 Total # of Tourist Served per CBS villager from 5 Tourist Services, by village							
BL	0	12	12	9	2516	68.4%	210
SHM	1	4	7	3	28	0.8%	7
IB	2	4	8	3	83	2.2%	21
DHC	3	12	18	3	294	8.0%	24
WB	4	14	19	7	90	2.4%	6
SP/BF	5	12	14	7	602	16.4%	50
FB	6	12	12	5	66	1.8%	6
Total		70	90	37	3679	100%	52
= 41% of people interviewed are receiving tourists							

April 2000: Other Development/improvements needed/recommended									
	BL	WB	SP/BF	DHC	SHM	IB	FB	N=	%
Water Systems	10	14	8	15	5	5	3	60	67%
Better Roads	3	4	4	7	3	3	1	25	28%
More/Improved Agriculture	2	5	4	4	3	2	3	23	26%
Better Tourist Acc.	2	5	5	2	2	2	5	23	26%
Equal benefits for all	2	5		4	1	3	2	17	19%
PR/Develop all villages	3			5	1	4	4	17	19%
Cooperation/Unity	3		6			3	2	14	16%
More jobs/\$	1	4	2	2	2	1	1	13	14%
Improve management		3	4	2	2		2	13	14%
Fruit Factories/Markets	4	4	1	1	1	1		12	13%
Telephones	5	1		5		1		12	13%
Electricity		2	1		1	2	5	11	12%
Better/More Trails	1	3	1	1	1	2	1	10	11%
Develop market plan/ package	1	1	3	2	1	1	1	10	11%
Guide Training	2	1	2		1		2	8	9%
Be Nice to tourists	2		1	3			2	8	9%
Youth Sports facilities		1		2	2	2		7	8%
Hurricane Shelter	1		1	3		2		7	8%
Better com. w/ LO	1	2	1	1	1	1		7	8%
Need Farm Machinery	1		1	1			3	6	7%
Transportation	1	1	1	1		1	1	6	7%
Brighten up place	2	2		2				6	7%
Housing projects		2	2	1	1			6	7%
CBS Tour Bus	2	3					1	6	7%
Change CBS Management	2	1		1	2			6	7%
Improve school/teachers	1		2	1	1			5	6%
Stop drugs/Crime/sign	3				1		1	5	6%
Gift Shop	2	1	1		1			5	6%
More Tourist Activities	2		2				1	5	6%
Learn from Others	2		2				1	5	6%
Livestock Market/Coop		3		1				4	4%
More livestock		2		1		1		4	4%
Lights on Road	1		1	2				4	4%
Get Tourist feedback	1	1	1		1			4	4%
Hospitality Training			1				3	4	4%
LO Loan for tourism development				1		1	2	4	4%
Tourist Center				1			3	4	4%
LO as stakeholder		1	2				1	4	4%
Sewage Systems		1	2					3	3%
Encourage youth to farm	2		1					3	3%

	BL	WB	SP/BF	DHC	SHM	IB	FB	N=	%
Hospital/nurse		1		1			1	3	3%
Health Clinic	1		1	1				3	3%
Rural Dev. Plan	2		1					3	3%
Restaurant	1	1		1				3	3%
Park	1	1	1					3	3%
Increase awareness/Ed.	1	2						3	3%
Ties to other wildlife sanctuaries	2	1						3	3%
Need monthly reports		1			1		1	3	3%
Internet Marketing	1		2					3	3%
Guided tours				1		1	1	3	3%
Business Training							3	3	3%
Women's' Cooperative	1	1						2	2%
Plant nursery	1		1					2	2%
Plant Vegetation. Gardens	2							2	2%
Technical/Outreach Education	1			1				2	2%
Computer and sewing classes	1						1	2	2%
Beautify River bank for tourist				1		1		2	2%
More People/New Thinking					1		1	2	2%
Research Center	1		1					2	2%
New Private Reserve	1			1				2	2%
Relocate CBS HQ	1	1						2	2%
Need New pledge	1	1						2	2%
Snack/Cool Spot					1	1		2	2%
Public Restrooms	1				1			2	2%
New elected management					2			2	2%
CBS/CHC needs funding	1		1					2	2%
Road sign for CHC			2					2	2%
Classy Bar			1	1				2	2%
Run CBS as Biz	2							2	2%
Night Watchman for museum	1			1				2	2%
Canoeing				1			1	2	2%
Horseback riding						1	1	2	2%
Encourage Self-sufficiency	2							2	2%
Change mindset to success for all			1				1	2	2%
Ties to NGO/Other orgs.	2							2	2%
Improve CC						2		2	2%
Enforce Laws/Hunting Fines			1	1				2	2%
Police Station/Mobile Staff			1	1				2	2%
Improve Farm/livestock relations			1					1	1%
Fence Cows				1				1	1%
Reading Program			1					1	1%
Video Equip for Ed.	1							1	1%

	BL	WB	SP/BF	DHC	SHM	IB	FB	N=	%
Library						1		1	1%
Youth class on drugs/morals	1							1	1%
Relocate health center to road				1				1	1%
Old age Assistance						1		1	1%
Stabilize rivers edge				1				1	1%
Bottle local water	1							1	1%
Develop Village					1			1	1%
Supermarket	1							1	1%
Electric Co. Office	1							1	1%
Camping					1			1	1%
Improve CHC Museum			1					1	1%
Improve \$ recordkeeping			1					1	1%
Cultural contact	1							1	1%
Golf Carts				1				1	1%
Hunting/Fishing						1		1	1%
Improve CBS Museum				1				1	1%
Monthly Monkey census/Health checks				1				1	1%
Annual LO Payment			1					1	1%
Help neighbor/not hurt			1					1	1%
Pay trainee for training							1	1	1%
Hire non-BL Guides							1	1	1%
Who should provide these?									
Government	10	12	7	14	5	7	6	61	68%
Villagers/local residents	1	8	6	3	2	2	8	30	33%
CBS	2	1	2	1	3	2	3	14	16%
Village council	1	1	2	3	1	2		10	11%
NGO/Peace Corps	4		2	2	1		1	10	11%
Outside funding/loans		2		3			4	9	10%
Cooperative	1	3		1	2		1	8	9%
Foreigners	2	1		2	1	1		7	8%
Volunteers/youth	1		1	1				3	3%
By God		1		1				2	2%
All Belizeans			1					1	1%
DK				1				1	1%

APPENDIX K: 1998 SEMI-STRUCTURED INTERVIEW GUIDE – ECUADOR

Informant's Name _____ Village _____ Specialist/Res. Staff? _____
 Code# _____ Gender _____ Approx. Age _____ Where Interviewed _____
 Interviewer's Name _____ Date _____ Time _____

Introduction -- Greet the informant and introduce yourself and read to her the consent form, and get her to sign two copies & keep one, while explaining the project and its purposes.

Is this a good time to talk with you about tourism training and your relationship to La Reserva Maquipucuna? Do you have approximately one hour to sit down with us and answer about 50 questions? I really appreciate you taking the time to help with this study. When we are finished with the study, the village mayor, the president of the crafts guild, "Los Calibris", and La Reserva staff will receive a copy of the report. I hope that we can come up with a tourism training plan that will benefit many residents of the villages around Maquipucuna. Ok, are you ready?

¿Es un buen momento para hablar con usted sobre la educación turística y su relación con La Reserva Maquipucuna?. ¿Tiene usted aproximadamente una hora para hablar con nosotras y contestar cerca de 50 preguntas?. Le agradecemos el tiempo dedicado por usted en la ayuda con este estudio. Cuando terminemos el estudio, el alcalde del pueblo, el presidente del grupo de artesanía "Los Calibris" y los trabajadores de la Reserva recibirán una copia de este informe. Esperamos que podamos desarrollar un plan de educación turística que beneficiará a los habitantes de los pueblos cercanos a Maquipucuna. ¿Está listo/a?

First, I'd like to ask you some general questions about your jobs and your training/or not in the crafts industry.

Primero, me gustaría preguntarle algunas generalidades sobre su trabajo y su educación (si tiene) en la industria de la artesanía.

1. *What jobs do women in this village have?*
¿Qué trabajos desarrollan las mujeres de este pueblo?
2. *What jobs do you hold now?*
¿Qué trabajos tienen en la actualidad?
How long?
¿Cuánto tiempo hace?.
3. *What jobs in the past have you had?*
¿Cuáles son los trabajos que ha tenido usted en el pasado?
How long?
¿Cuánto tiempo?
4. *What kinds of job training did you get?*
¿Qué clase de educación recibió usted para este trabajo?
Has it been mainly on-the-job training?
¿Ha sido en su mismo puesto de trabajo?
5. *What workshops/seminars have you attended to learn new things?*
¿A qué tipos de talleres o seminarios ha asistido usted para aprender nuevas cosas?
6. *What do (did) you think about these training seminars?*
¿Qué opina/ó usted acerca de estos talleres o seminarios?
7. *What training have you had related to the Reserve?*
¿Qué educación recibió usted acerca de la Reserva?
- *8. *Are you now, or have you ever been, trained or worked in crafts production?*
¿Ha sido o está siendo educado en temas de producción artesanal?.
Why did you want to/ not want to/ be trained in crafts production?
¿Por qué desearía o no desearía ser formado en la producción de la artesanía?
9. *How were you trained in crafts production?*
¿Cómo fue usted educado sobre la producción artesanal?
10. *Have you taught anyone else how to make crafts?*
¿Ha enseñado a otras personas a realizar trabajos artesanales?

11. *How long have you (did you) work in production of crafts? (months/years/days)*
¿Cuánto tiempo hace que trabaja usted en la producción artesanal? (meses/años/días)
12. *When was that? (dates)*
¿Cuándo fue? (fechas)
13. *How are you paid for your crafts -- by the piece, etc.?*
¿Cómo se le paga a usted su artesanía, por piezas, etc.?
14. *What are things that you like about making crafts?*
¿Qué tipo de cosas le gusta fabricar con su artesanía?
Not like?
¿Qué no te gusta?
Compare to other jobs?
¿Puede comparar este trabajo con otros?
15. *How can the craft job be improved?*
¿Cómo se puede mejorar la producción artesanal?
16. *What are the good things about working in crafts?*
¿Cuáles son los beneficios de trabajar en la artesanía?
Bad things?
¿Y los costes?
17. *How has your involvement in crafts changed your life?*
¿Cómo ha cambiado su vida después de su participación en la artesanía?
18. *How do you think that your husband feels about you working in crafts?*
¿Qué cree usted que opina su esposo acerca de su trabajo en la artesanía?
19. *How much money do you make in crafts?*
¿Cuánto dinero gana por trabajar en la artesanía?
20. *Who makes the most money in crafts?*
¿Quién gana la mayoría del dinero en la producción artesanal?
the least?
¿Y el mínimo?
21. *Is there anything else that you want to tell me about crafts or training in general?*
¿Hay algo más que le gustaría contarme sobre la artesanía en general?
22. *What other kinds of jobs or training would you like to see for women in this town?*
¿Qué otros tipos de trabajos o educación le gustaría para las mujeres de esta ciudad?
23. *What other kinds of development would you like to see in this town?*
¿Qué otro tipo de desarrollos le gustaría ver en esta ciudad?

Next, I'd like to ask you some general questions about your knowledge of and use of natural resources:

Ahora, desearía preguntarle algunas generalidades sobre su conocimiento acerca de los recursos naturales y cómo se utilizan:

24. *Can you tell me something about the animals /plants of the forest?*
¿Puede decirme algo sobre las plantas y los animales del bosque?
25. *Can you tell me something about the bears?*
¿Puede decirme algo sobre los osos?
26. *Have you been in La Reserva Maquipucuna?*
¿Ha estado en La Reserva Maquipucuna?
27. *How often do you visit the reserve?*
¿Con qué frecuencia visita usted la reserva?
28. *What do you like to see and do in the Reserve?*
¿Qué le gustaría ver y hacer en la Reserva?
29. *What is the purpose of Maquipucuna Reserve?*
En su opinión, ¿cuál es el propósito de la Reserva Maquipucuna?
30. *What are the benefits of the Reserve?*
¿Cuáles son, en general, los beneficios de la reserva?
31. *What benefits do you receive from the Reserve?*
¿Cuáles son los beneficios que recibe usted de la reserva?
32. *Do you have any criticisms of the Reserve?*
¿Crítica usted alguna cosa de la Reserva?

33. *Do you do any business with the Reserve?*
¿Ha realizado usted algún negocio con la Reserva?
34. *How has it changed your life?*
¿Cómo ha cambiado su vida?
35. *What did you do before the Reserve that you can't do now?*
¿Qué hacía usted antes de la formación de la reserva que no puede hacer ahora?
That you can do now?
¿Qué puede hacer ahora?
36. *How do you want to see the Reserve change -- what is your vision for the future?*
¿Cómo quiere que la reserva cambie – y cuál es su visión de futuro para ella?
37. *Are you upset about Quitonians coming in & taking land for the Reserve?*
¿Está usted molesta de la venida de los Quitonianos y que consigan tierras de la Reserva?.
38. *Do you think protecting the environment (animals/forests) is important?*
¿Cree que se proteger el medio ambiente (animales/plantas) es importante?
Why?/ not?
¿Por qué sí? ¿Por qué no?
39. *Do you think the Reserve helps to protect the environment (animals/forests)?*
¿Cree que la reserva ayuda a la protección del medio ambiente (animales/plantas)?
40. *Do you do any farming?*
¿Cultiva algo? (animales y plantas)
41. *What do you grow/raise?*
¿Qué cultiva?
42. *Who in your family makes the decisions about what to farm/grow/raise?*
¿Quién en su familia toma las decisiones sobre qué cultivar?
43. *Do you use natural resources from outside of the Reserve?*
¿Utiliza los recursos del exterior de la reserva?
44. *Have you ever eaten wild meat?*
¿Ha comido alguna vez carne de animales salvajes?
Does your family need to eat wild game (meat)?
¿Necesita su familia comer carne de animales salvajes?
How often?
¿Con qué frecuencia?
Where do you hunt?
¿Dónde cazan?
Who in your family hunts?
¿Quién de su familia caza?
45. *Do you or anyone in your family eat hears of palm?*
¿Usted o alguien de su familia come hojas de palmera?
Where do you get it?
¿Dónde la consigue?
How often?
¿Con qué frecuencia?
46. *Do you use natural resources from the Reserve?*
¿Utiliza usted los recursos naturales de la reserva?
47. *How many people do you think hunt on the Reserve?*
¿Cuánta gente cree usted que caza en la Reserva?
How many people do you think cut palmetto from the Reserve?
¿Cuánta gente cree usted que corta palmera de la Reserva?
- *48. *What do you think of people who hunt on their own property?*
¿Qué piensa de la gente que caza en su propiedad?
What do you think of people who cut palmetto on their own property?
¿Qué piensa de la gente que corta palmera en su propiedad?
49. *What do you think about mining?*
¿Qué opina de las extracciones de minerales?

50. *Is there anything else that you want to tell me about protecting the environment?*
¿Hay algo más que me quisiera contar sobre la protección del medio ambiente?
51. *How do you feel about the town's access to clean H2O?*
¿Qué piensa del acceso que posee la ciudad al H2O potable?
52. *How do you feel about protecting the town's source of H2O?*
¿Qué piensa sobre la protección del recurso del H2O que posee la ciudad?
53. *Do you know any women in the village who have opinions of the Reserve different than yours?*
¿Conoce a algunas mujeres que tengan opiniones diferentes respecto a usted con referencia a la Reserva?
54. *Is there anything else that you want to tell me about the Reserve?*
¿Hay alguna cosa más que me quiera contar sobre la reserva?

Lastly, I'd like to ask you some general questions about yourself:

Por último, me gustaría preguntarle algunos aspectos personales:

55. *How old are you?*
¿Cuántos años tiene?
56. *Are you married?*
¿Está casada?
57. *Do you have children?*
¿Tiene hijos?
How many?
Cuántos?
What ages/gender?
¿Cuáles son sus edades y sus sexos?
58. *Do they live with you?*
¿Viven con usted?
- *59. *In regard to the job you do, which months of the year do you do this work?*
Con respecto a su trabajo, ¿cuántos meses al año le dedica?
60. *How many years have you worked at this job?*
¿Cuánto tiempo hace que tiene este trabajo?
61. *Approximately how much money did you make last year at this job?*
Aproximadamente, ¿cuánto dinero ganó usted con este trabajo?
- *62. *What education grade have you completed? (find out structure of ed system)*
¿Qué tipo de graduado posee usted? (¿cuál es tu nivel de educación?)
63. *Can you read? write?*
¿Sabe usted leer? Escribir?
64. *What languages do you speak?*
¿Qué idiomas habla usted?
65. *What is your house made of?*
¿De qué material está construida su casa?
Does your house have electricity?
¿Posee su casa electricidad?
refrigerator?
¿Refrigerador?
inside toilet?
¿Baño dentro de la casa?
TV? ¿
¿Televisión?
phone?
¿Teléfono?
Truck?
¿Vehículo?
Do you want any of these things?
¿Usted espera algunas de estas cosas?
What else do you need/want?
¿Cuáles de éstas necesita o espera?

Well, that completes the interview. I really appreciate you taking the time to talk to me and answer the questions about crafts training and your opinions of the Reserve. We should have some preliminary results at the end of the summer, and the final report will be sent to the village mayor and the president of the crafts guild by around the beginning of next year. If you have any questions or comments, please contact either me or Shannon. Thanks again for your time.

Bien, la encuesta está completada. Realmente aprecio su tiempo dedicado a hablar conmigo y contestar las cuestiones relacionadas con la educación artesanal y su opinión sobre la Reserva. Nosotros deberíamos tener algunos resultados preliminares al final del verano y el artículo definitivo se mandará a comienzos del año que viene al alcalde del pueblo y al presidente de la compañía artesanal. Si usted tiene alguna cuestión o comentario, por favor contacte conmigo o con Shannon. Gracias por su tiempo.

APPENDIX L: 1998 KEY INFORMANT INTERVIEW GUIDE – ECUADOR

Informant's Name _____ Village _____ Specialist/Res. _____
 Code# _____ Gender _____ Approx. Age _____ Where Interviewed _____
 Interviewer's Name _____ Date _____ Time _____

Introduction -- Greet the informant and introduce yourself and read to her the consent form, and get her to sign two copies & keep one, while explaining the project and its purposes.

Introducción- Agradece al encuestado su presencia y preséntate leyéndole el formulario y haciéndole firmar en las dos copias, una de las cuáles te la quedas, mientras explicas el proyecto y sus objetivos.

Crafts TrainingEducación artesanal

From Key Informants (Mayor, Pres. of Craft's Guild, Reserve Liaison, Pres. of St. Lucia's Cooperativa, Religious Leaders, Catholic Nuns from Nanegal-work in Marianitas, General Manager of Reserve, Forester, Leader /Teacher):

1. *What kinds of jobs do people have in this village?*
¿Qué tipo de trabajos hace la gente en este pueblo?
2. *What industries/factories are in the area?*
¿Qué industrias/fábricas existen en el área?
3. *What jobs are connected to tourism?*
¿Cuáles de los trabajos están relacionados con el turismo?
4. *What jobs are connected to the Reserve?*
¿Qué trabajos están relacionados con la Reserva?
5. *What jobs are separate from the Reserve?*
¿Qué trabajos no están relacionados con la Reserva?
6. *Name the types of training that are offered.*
Nombres de las clases de educación que ofrecen
7. *History/Economics of Crafts industry*
Historia/Economía de la industria artesanal

Conservation Attitudes and ValuesActitudes y valores conservacionistas

Next, I'd like to ask you some general questions about your knowledge of and use of natural resources:

Seguidamente, me gustaría preguntarle algunos aspectos generales sobre el conocimiento y el uso de espacios naturales:

From Key Informants (Mayor, Pres. of Craft's Guild, Reserve Liaison, Pres. of St. Lucia's Cooperativa, Religious Leaders, Catholic Nuns from Nanegal-work in Marianitas, General Manager of Reserve -, Forester, Leader/Landlord/Teacher):

8. *History of Reserve*
Historia de la Reserva
9. *What is the purpose of Maquipucuna Reserve?*
¿Cuál es el propósito de la Reserva de Maquipucuna?
10. *What are the Goals of the Fundación?*
¿Cuáles son los objetivos de la Fundación?
11. *What are the benefits of having a Reserve?*
¿Qué beneficios está obteniendo la Reserva?
12. *What are the costs of having a Reserve?*
¿Qué costes está teniendo la Reserva?
13. *Operational Hierarchy of Reserve (list staff & jobs)*
Jerarquía operacional de la Reserva (lista de empleados y empleo)
14. *Tourist Numbers at Reserve -- past, present, and projected*
Número de turistas en la Reserva—pasado, presente y en proyecto

15. *Problems/Successes of Reserve*
Problemas/Ventajas de la Reserva
16. *Which animals are endangered & live in Reserve?*
¿Qué animales están en peligro y viven en la Reserva?
17. *What “human actions” occur in the Reserve? (hunting, cutting palms, etc -- list specifics)*
¿Qué actividades humanas ocurren en la Reserva (caza, tala de palmeras, etc—lista específica)?
18. *Which of these actions are considered to be a problem (if any)?*
¿Cuáles de estas acciones están consideradas como un problema (si lo hay)?
19. *What kinds of involvement does the Reserve have with the village of Marianitas?*
¿Qué tipo de relación tiene la Reserva con el pueblo de los Marianitas?
20. *How has the Reserve changed the lives of people in Marianitas?*
¿Cómo ha cambiado la Reserva la vida de la gente Marianitas?

Demographics

Deamografía

From Key Informants (Mayor, Pres. of Craft's Guild, Reserve Liaison, Pres. of St. Lucia's Cooperativa, Religious Leaders, Catholic Nuns from Nanegal-work in Marianitas, General Manager of Reserve -, Forester, Leader/Landlord/Teacher):

21. *What is the structure of the school system -- how many grades/what ages?*
¿Cuál es el sistema estructural de la escuela- cuántos grados/qué edades?
22. *What is the population of Marianitas?*
¿Cuál es la población de los Marianitas?
23. *Name all the villages near the reserve.*
Todos los nombres de los pueblos cercanos a la Reserva
24. *Which of these villages have ongong programs with the Reserve?*
¿Cuáles de estos pueblos participan en los programas de la Reserva?
25. *What is the population of each of these villages?*
¿Cuál es la población de cada uno de estos pueblos?

APPENDIX M: 1998 INTERVIEW CONSENT FORM (ENGLISH) – ECUADOR

The University of Georgia, Daniel B. Warnell School of Forest Resources
Ecuadorian Case Study of Women, Crafts & Conservation Attitudes
Informed Consent Form

Dear Resident of Marianitas:

This study evaluates the ability of ecotourism at La Reserva Maquipucuna to meet the needs and expectations of the residents in the villages close to the reserve. This study examines the formation in Marianitas of the business of making crafts for tourists, and documents how women are trained in making crafts. Also attitudes about La Reserva are collected, along with how land and other natural resources are used around the reserve. The study aims to find ways to develop the natural resources of the area that are compatible with both the desires of the local community residents and with the goals of La Reserva.

You are asked to participate in an interview given by me and my assistant. You will be asked questions to which you are requested to respond freely, with any thoughts that you may have on the subject. The researcher will write down your responses in a notebook as you are talking. In a few cases the interviews will be taped, with your permission. Your identity and your answers to questions on your opinions of various subjects will be kept strictly confidential. Questions involving locations of things (training activities, etc.) will be used to make a map of current ecotourism opportunities, and thus these answers will not be confidential.

Most women trained in making crafts, and an equal number of women not trained in making crafts, will be asked to be interviewed. You have the right to decline the interview, or to withdraw from the interview at any time without penalty. Your participation does not involve any foreseeable risks, discomforts or stresses. The benefits you may expect from this study are 1) a small gift from me and 2) your opinions on use of natural resources and the effectiveness of crafts-training programs will be reported (without your name listed) and hopefully used to generate policy and positive actions. If you have any questions about the project, please feel free to contact either Gail Lash or Shannon Parsons.

Mrs. Lash is a graduate student and the principle investigator in this study. She is working on this project as partial fulfillment of a Doctoral degree at the University of Georgia. Mrs. Parsons is assisting Mrs. Lash with this project.

Sincerely,

Mrs. Gail Lash
 366 Oakland Ave., SE
 Atlanta, GA 30312 USA
 Telephone: 1-404-523-3689

Mrs. Shannon Parsons
 514 Taylor Street
 Moscow, ID 83843 USA
 Telephone: 1-208-885-1493

I agree to participate in the research titled, "Ecuadorian Case Study of Women, Crafts & Conservation Attitudes," which is being conducted by Mrs. Gail Y. Lash of the University of Georgia. I understand that this participation is entirely voluntary; I can withdraw my consent at any time without penalty. The above points have been explained to me.

 Signature of Researcher

 Date

 Signature of Participant

 Date

Research at the University of Georgia that involves human participants is overseen by the Institutional Review Board. Questions or problems regarding your rights as a participant should be addressed to Julia D. Alexander, M.A., Institutional Review Board, Office of the Vice President for Research, University of Georgia, 606A Boyd Graduate Studies Research Center, Athens, Georgia 30602-7411; Telephone (1-706) 542-6514; E-Mail Address JDA@ovpr.uga.edu.

APPENDIX N: 1998 INTERVIEW CONSENT FORM (SPANISH) – ECUADOR

The University of Georgia, Daniel B. Warnell School of Forest Resources
Estudio de Casos Ecuatorianos de Mujeres, Artesanía y Actitudes
Acerca de la Conservación Ambiental
Hoja de Consentimiento

Querido Residente de Marianitas:

Este estudio evaluará la habilidad de ecoturismo en La Reserva Maquipucuna lograr las expectativas y cumplir las necesidades de los habitantes de los pueblos cerca a La Reserva. El estudio examina la formación del negocio de fabricar artesanía para los turistas en Marianitas, y documenta cómo las mujeres se preparan para fabricar artesanía. También se documentará las actitudes de los habitantes y actitudes cerca de cómo se utiliza la tierra y los recursos naturales. El propósito es desarrollar los recursos naturales de la área en una manera compatible con los deseos de la comunidad y con las metas de La Reserva.

Le pedimos a Usted participar en una entrevista conmigo y mi asistente. Le haremos preguntas a las cuales Usted puede responder abiertamente y con cualquier pensamiento que tenga acerca del tema. La investigadora escribirá su respuesta en un cuaderno mientras hable Usted. En algunos casos se grabará las entrevistas, pero solamente con su permiso. Su identidad y sus respuestas a las preguntas acerca de sus opiniones de varios temas serán completamente confidenciales. Las preguntas que se trata la ubicación de actividades serán utilizadas para formar un mapa de oportunidades posibles para ecoturismo, y como consecuencia estas respuestas no serán confidenciales.

La mayoría de las mujeres educadas en la fabricación de artesanía y una cantidad igual de mujeres no educadas en la fabricación de artesanía serán entrevistadas. Tiene Usted el derecho a negar a participar en la entrevista o retirarse de la entrevista en cualquier momento sin castigo. Su participación no le implica ningún riesgo, incomodidad, ni estrés. Los beneficios que Usted recibirá incluye (1) un regalito de la investigadora, y (2) que sus opiniones acerca de los recursos naturales y la efectividad de los programas de educación de artesanía serán presentadas (sin su nombre) y tal vez utilizadas para generar acciones positivas y cambios en la política. Si tiene alguna pregunta o alguna cuestión acerca del proyecto, por favor contacte a Señora Gail Lash o a Señora Shannon Parsons.

Señora Lash es una estudiante graduada y la investigadora principal de este estudio. Ella está trabajando en este proyecto para completar su doctorado a la Universidad de Georgia. Señora Parsons es la asistente a Señora Lash en este proyecto.

Saludos,

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Consiento a participar en el proyecto “Estudio de Casos Ecuatoriano de Mujeres, Artesanía y Actitudes Acerca de la Conservación Ambiental” de Señora Gail Y. Lash de la Universidad de Georgia. Entiendo que mi participación en este estudio es completamente voluntario; puedo retractar mi consentimiento en cualquier momento sin castigo. Se me ha explicado la información anterior.

 Firma de la investigadora Fecha

 Firma del participante Fecha

Investigación a la Universidad de Georgia que incluye participantes humanos es controlada por el Consejo de Inspección Institucional (Institutional Review Board). Preguntas o problemas como participante deben ser dirigidos a Julia D. Alexander, M.A., Institutional Review Board, Office of the Vice President for Research, University of Georgia, 606A Boyd Graduate Studies Research Center, Athens, Georgia 30602-7411; Telephone (1-706) 542-6514; E-Mail Address JDA@ovpr.uga.edu.

APPENDIX O: 1998 JOURNAL WRITINGS, STORIES FROM ECUADOR

Monday, 22 June 1998

Up at 6am; breakfast at 6:30am. Got to see workers leaving for the Reserve. Nice light in the morning. After breakfast, went to the taller and Shannon told LC women which pieces were acceptable or not, and why. They listened; I took photos. Children going to school in uniforms on Mondays. They played the national anthem with children lined up outside, about 35 children in total at the school. Mist burned away and the sun came out. Finally the lechero came at 9:15 or so, and Russ left, back to States.

Beto said that he's waiting for the moon to cut bamboo to make my chalas – no moon now, so can't cut. William had shown me the lunar calendar and said that here at the equator the phases of the moon really do influence growing of plants, even cutting (growth) of hair or fingernails (if cut during waxing, grows faster; if cut during waning, grows slower). Interesting.

When we walked back from dinner, just turning dark, lightning bugs were out. I saw a red lightning bug on the road, moving sporadically (like a lightning bug) and flashing bright red! It had a bit bigger light than a normal lightning bug. Then it went into the bushes and disappeared. Both Shannon and I saw it from about 100 feet away. Weird! Must look it up.

Stars out tonight are wonderful – very clear after dinner. Saw Big Dipper and a satellite moving! Saw Seven Sisters; Scorpio and Little Dipper not up yet. It's getting cloudy now, but lightning bugs are everywhere – like stars on the ground and in mid-air! No interviews tonight because no lights and #16 doesn't have candles – do tomorrow.

APPENDIX P: ADDITIONAL DATA TABLES, ECUADOR

List of items for sale by Los Colibrís, June 1998 (5000 sucres = \$1US)		
Item	Old Reserve Price (sucres)	New Reserve Price (sucres)
Llavero de tagua pintado (Painted tagua keychain)	8000	10000
Llavero pepa de tagua (Tagua nut keychain)	6000	10000
Aretes pupos (Eye of tagua earrings)	8000	15000
Aretes de veinas (Veined tagua earrings)	9000	15000
Aretes pegados (Hanging earrings)	7000	15000
Vincha con metal (Hair clip with metal clasp)	10000	15000
Vincha con chonta (Hair clip with stick)	10000	15000
Vincha de tagua (Tagua Hair clip)	10000	15000
Tarjetas de papel reciclados (Recycled paper card)	5000	5000
Carpeta de papel reciclado (Recycled paper set of 12 cards and envelopes)	45000	45000
Juego de 6 portaservilletas (Napkin rings, set of 6)	38000	45000
Juego de 8 portaservilletas (Napkin rings, set of 8)	50000	60000
Saleros para 2 (Salt and pepper shakers)	20000	25000
Candelabras con coco (Coconut candle holder)	12000	15000
Candelabras pepa de tagua (Tagua candle holder)	10000	12500
Pepa de tagua (Tagua nut)	5000	7500
Portalapiz de caña guadua (Bamboo pencil holder)	6000	15000