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Environmental Conservation as an Instrument of National
Political Economy: Culture, Livelihoods, and territorial rights of
the Emberá of Panama

Sara Taylor

MAY 2016

Submitted to the faculty of Clark University, Worcester,
Massachusetts, in partial fulfillment of the requirements for the degree of Master of
Arts in the department of International Development and Social Change

And accepted on the recommendation of

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Chief Instructor

Environmental Conservation as an Instrument of National Political Economy: Culture, Livelihoods, and territorial rights of the Emberá of Panama

Sara Taylor

Abstract: This paper argues that areas of environmental conservation in the Panama Canal Watershed Zone were originally designed to fit an economic utility rather than to protect habitat. As a result there was an exclusion of forest-based communities in policy design and implementation, creating lasting impacts on indigenous Emberá territorial rights, livelihood opportunities, and traditional cultural practices. Based on recent fieldwork and a review of relevant secondary literature, this paper discusses how Emberá communities in Chagres National Park have adapted their culture and livelihoods to accommodate environmental regulation and explores what prospects the Emberá see for future generations if they do not mobilize for territorial rights. This paper concludes by recommending that the Panamanian government look towards community-based conservation management in order to most effectively achieve the preservation of the Canal Zones' valuable natural and cultural resources.

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DEDICATION

Para Erito y Zuleika, donde siempre estoy en casa.

And to my mother, who has shaped my ability to look in all directions—especially the most wild of my imagination—before knowing whether to choose the most practical or that of a dream.

ACKNOWLEDGEMENTS

I would like to express my deepest gratitude to my first reader, academic mentor, and professional hero: Denise Bebbington, whose dedicated guidance over the last two years has allowed me to grow as a writer, expand my capacity as a researcher, and discover a unique lens previously unknown in which to see the world. To my second reader, Rinku Chowdhury, thank you for insight which surpassed the breadth of this paper, and which will lead me in down countless paths of further research.

To those in and out of Panama, who have assisted me in collecting this research, thank you for your honest and genuine friendships and professional assistance. Among many: Erito, Zuleica, Estanislao, Jake Slusser, Tess De Los Rios, and Dimitrios Theodossopoulos. And of course, I owe immense gratitude to Clark University and the department of International Development, Community and Environment for allowing me the opportunity study under inspirational minds and travel to Panama to carry out this research.

TABLE OF CONTENTS

Figure 1	5
Table 1	20
Introduction	1
Section 1: Literature Review	9
1.1 <i>Human Occupation of Forest and Governance</i>	9
1.2 <i>Conservation as an instrument of National Political Economy</i>	11
1.3 <i>Indigenous mobilization for territory</i>	13
Section 2: Methodology	15
2.1 <i>Positionality and Previous Work</i>	15
2.2 <i>Interviews</i>	18
2.3 <i>Data Analysis</i>	19
Section 3: Contrasting Governance	22
3.1 <i>Lifestyle and Sense of Place</i>	22
3.2 <i>The Introduction of Colonos to the Panama Canal Watershed Zone</i>	25
3.3 <i>Contrast</i>	26
Section 4: Conservation and Livelihoods	28
4.1 <i>Regulation of Protected Areas</i>	28
4.2 <i>The Biodiversity Conservation Lobby</i>	29
4.3 <i>Agriculture</i>	31
4.4 <i>Gold</i>	33
4.5 <i>Eco-tourism</i>	34
4.6 <i>Emberá livelihood politics and conflict</i>	36
Section 5: The Role of Education and Co-Management	39
5.1 <i>The Emberá and the Value of Education</i>	39
5.2 <i>Community Based Conservation with the Guna and Beyond</i>	41
Conclusion	45
Appendix	47
Notes	49
Acronyms	50
Bibliography	51

Sara Taylor

Clark University

“Only when a people (un Pueblo) learns (acepta) its history and affirms (asume) its identity, does it have the right to define its future”

- Mayan activist group in Guatemala

Introduction

This paper argues that areas of environmental conservation in the Panama Canal Watershed Zone were originally designed to fit an economic utility rather than to protect habitat. As a result there was an exclusion of forest-based communities in policy design and implementation, creating lasting impacts on indigenous Emberá territorial rights, livelihood opportunities, and traditional cultural practices. Based on recent fieldwork and a review of relevant secondary literature, this paper discusses how Emberá communities in Chagres National Park have adapted their culture and livelihoods to accommodate environmental regulation and explores what prospects the Emberá see for future generations if they do not mobilize for territorial rights.

Although there are three major actors in this paper, this introduction will lay out a relevant narrative behind two essential histories: that of the Panama Canal and the migration of the indigenous Emberá into the Panama Canal Watershed Zone.

The Panama Canal

On July 7th, 1914, nearly 102 years ago, the first ship in the world crossed the narrow isthmus of Panama to travel from the Atlantic to the Pacific in a matter of hours. Since then, an estimated 340 million tons of cargo—and five percent of the world’s commerce annually—has passed through the Panama Canal (ACP 2015).

Ships from every corner of the world—some 13 to 14 thousand vessels—pass through the Canal every year serving over 144 maritime routes, connecting 160 countries, and reaching some 1,700 ports (ibid). “[As of the] end of fiscal year 2011, 1,015,721 vessels had used the waterway since its [official] opening”, making it the most continuously and consistently valuable economic resource in Panama since the gold and silver booms in the previous centuries (ibid). On the other hand, at least 25,000 people died during the Panama Canal’s construction either from accidents or of disease, illuminating the heavy cost of human life paid for the Canal’s existence (ibid). It is difficult to articulate all of the nuanced power this statistical giant holds over almost every facet of life in Panama, but rather it is important to see the forces that lay behind the numbers—unfolding a history tied to US imperialism and the power of the global economy holds over the environment.

The 1903 Hay-Bunau-Varilla treaty granted the United States “a canal concession in perpetuity to a canal zone 10 miles wide, 5 miles on either side of the Canal prism line” (ibid), translating into a significant and powerful divide at the center of the young country that segmented the two sides for the majority of the 20th century. Physical changes to the landscape caused ecological damage—as over 268,000,000 cubic yards of earth was moved to complete the Canal—disrupting species migration patterns and displacing thousands of Panamanians in the process (ibid). As Canal construction came to a close in 1914, tens of thousands of Canal laborers were laid off, and many began looking for open land to settle down on (Carse 2014). Between those displaced as a result of the flooding of Lake Gatun, and those

who were left without work after construction of the Canal was complete, thousands of families began settling in areas surrounding the PCWZ. A mere four decades after the Canal's premier it began to see warning signs that the process of settling former laborers and immigrants in the PCWZ had created an issue of deforestation that threatened to compromise the sustainability of its primary water source and the lifeblood of the Canal.

In a 1978 USAID report on the PCWZ, tropical forester Frank Wadsworth concluded that “only forests can restore and stabilize the capacity of the canal” and that the Panama Canal would cease to function if deforestation continued unchecked (Wadsworth 1978: 23). The primary motivation behind creating protected areas in the PCWZ has not been to protect rare in endangered species, but rather for the utility of storing and producing water to secure the continued operation of the Canal and the movement of goods. The story of the Panama Canal is an “explicit articulation of global and local dynamics in pursuing the implementation of a national project primarily oriented to satisfy the needs of international capitalism” (Rosales 2007: 47). The abundance of water in incredibly large volumes has as a result allowed world commerce to flourish—linking the Atlantic and Pacific basin countries and compressing space and time via the Panama Canal. Water is *the* major natural resource that the Canal depends upon to function, and a long existing “whatever is good for the Canal is good for Panama” mentality has led to closed-door governance of the country's water sources (Rosales 2007: 86). The concern of deforestation—and

the immanent loss of rainfall—led the Panamanian government to address the urgent need to protect the PCWZ's environment in a purposefully exclusionary way.

Emberá Movement to the Panama Canal Watershed Zone

The Emberá people are a forest-based indigenous group whose language and cultural practices predate the Spanish Conquest. Following the arrival of the Spanish in the late 15th century, a series of European institutions were introduced establishing territorial boundaries, rights to individual property, and racialized social and cultural categories that served to reinforce Spanish authority and power in the New World. Although the Emberá originate from what is today the Brazilian Amazon, by the late 16th century most had migrated to the northern region of Colombia and were directly affected by the European re-mapping of the region. By the end of the 19th century, a substantial number of Emberá were living in New Granada, which later was along the Panama-Colombia border, and were vulnerable to the geopolitical changes soon to come as a result of US interests in the region. In 1903, with the assistance of the US government, Panama and Colombia signed a treaty that shifted the Panama border farther east, effectively turning thousands of indigenous Colombians into indigenous Panamanians with the stroke of a pen (Llácar 2005).

Around the 1940's to the 1950's the Darien started to become crowded with *colonos*¹ in search of agricultural lands and pastures, and territorial pressure began to

¹ *Colono* is the Spanish term for colonist. In this context it refers to primarily agriculturalists and cattle

build as the Colombian *Fuerzas Armadas Revolucionarias de Colombia* (FARC)² took refuge near Emberá communities along the border.³ When migration out of the Darien began in the 1950's, many Emberá families moved towards less populated areas farther west.

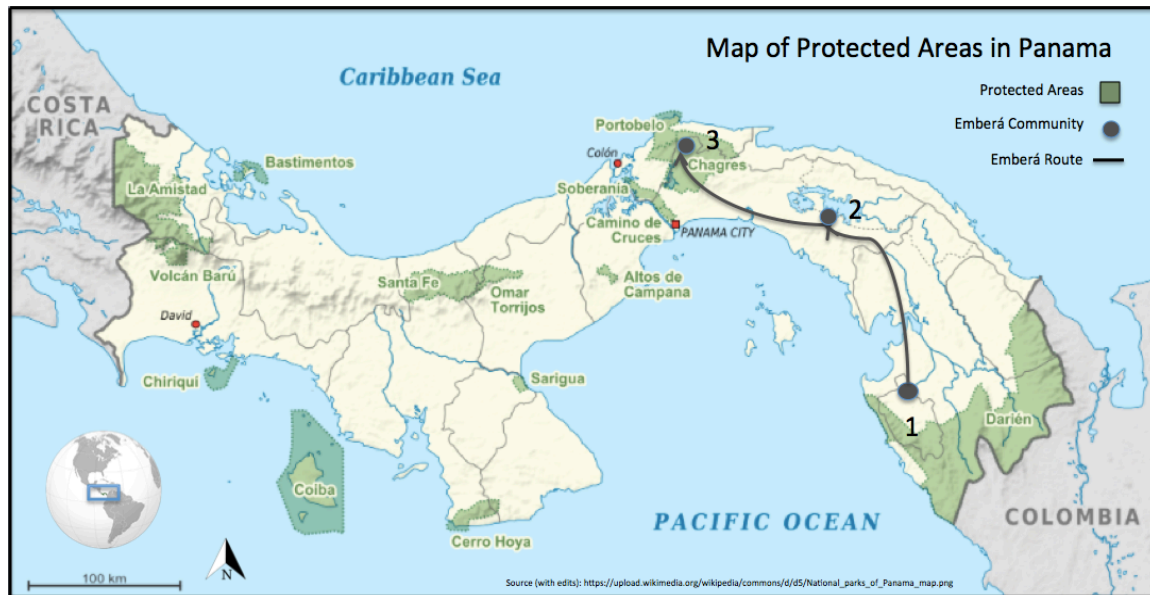


Figure 1. The first migration took place in the 1950's from the Emberá *comarca* in area 1 to the Bayano region in area 2. In the late 1960's the Emberá moved out of the Bayano region due to dam construction to area 3, which later became Chagres National Park in 1984.

The first location many Emberá chose to resettle was along the Bayano River in the Panama Province.⁴ According to Marco⁵, an elder Emberá member of one of the research communities I visited, and who left the Darien in the 1950's as a child, the geography along the Bayano River was similar to where they had come from along

² The FARC is a Colombian militarized revolutionary army originally founded in response to what was seen as an unfair distribution of land. In more recent years been tied to the narcotic and illegal drug trafficking market.

³ Taken from notes and interviews while carrying out fieldwork in 2010-2012, 2015.

⁴ See figure 1.

⁵ Name changed to protect respondent.

the Colombian border. His parents felt comfortable establishing their family in the area and relatives from the Darien joined them in the Bayano region over the next decade.⁶ Between 1972-1976, the Bayano Hydroelectric Dam was constructed, flooding more than 350 km² of pristine and highly biodiverse tropical forest, and as a result over 500 Emberá were forced to relocate (Wali 1993). According to Wali, although plans existed on paper to protect the region's fragile ecology and provide equitable compensation to residents for their loss of land and livelihood, the government largely failed to implement them (1993). The Emberá were given two choices: 1) accept a small compensation based on property values set by the company constructing the dam, or 2) relocate to a pre-determined location along the Inter-American highway, which in no way resembled their cultural and geographical preferences (Wali 1993). Although many Emberá chose to relocate to the pre-determined location along the highway, several hundred others chose to continue their migration west to a forested area a few miles east of the Panama Canal. In 1984—the year Chagres National Park was formed—the Emberá once again found themselves faced with the decision of whether or not they should attempt to find “unoccupied” land elsewhere, or adapt their traditional livelihoods to the new regulated environment. Unable to return to the Darien, the majority of Emberá opted to stay in the Park.

Paper Content

⁶ Taken from notes and interviews while carrying out fieldwork in 2010-2012, 2015.

This paper argues that the formation of Chagres National Park in Central Panama has created lasting impacts on the territorial rights, culture and traditional livelihoods of indigenous Emberá communities residing within its boundaries. It is not my intention to vilify environmental conservation and the Panama Canal, nor to romanticize efforts by indigenous Emberá to preserve livelihood practices, but rather to shed light on how these three projects are intricately woven together in their geographical relationship with the Panama Canal Watershed Zone (PCWZ).

My argument for this paper builds upon insight derived from two sources: secondary literature and primary research in Panama. In the first section of this paper I review relevant literature pertaining to forest governance, conservation as an instrument of national political economy, and indigenous identity and mobilization for land rights. In section two, I will discuss my research methodology, specifically the interviewing process I used during fieldwork in the summer of 2015, in addition to my previous ethnographic work with Emberá communities. In section three I explore Emberá cultural history in relation to their internal governing structure and socio-political dynamics, how this influenced their arrival to the PCWZ, and how this process differed from the Latino populations that also migrated to the area over 40 years ago. In section four, I provide a narrative of how the indigenous Emberá I interviewed describe their cultural, livelihood and land management practices have been reworked over the last 70 years due to conservation policy and management. Section 5 will conclude with an examination of how the Emberá I interviewed perceive education as a tool for economic mobility, and will give an example of how

the they are taking notes from the Guna to the north to understand how community-based conservation could be a potential opportunity in the case of the PCWZ.

Section 1: Literature Review

While reviewing the relevant literature pertaining to forest governance, conservation as an instrument of national political economy and indigenous identity and mobilization for land rights, the legacies of colonization were prevalent at every turn. In Panama, as elsewhere in Latin America, the way colonization manifested itself is both a visible and invisible force in the shaping of indigenous livelihoods and territorial rights. In this section I will draw on debates around the legacy of colonization, forest governance, and indigenous territory and identity to understand how these concepts can be linked to the creation of the Chagres National Park (CNP) in order to support the operations of the Panama Canal. First, I deconstruct the fortress model approach of environmental conservation. Second, I illustrate how Panamanian environmental policy in the PCWZ has reflected a western concept of “fortress” conservation in order to protect a symbol of global capital. Lastly, I will discuss the rise of indigenous identities in Latin America and more specifically in Panama, and how the Emberá have responded in the context of broader social movements.

1.1 Human Occupation of Forest and Governance

When creating an area of environmental conservation governments often follow an exclusionary model of removing as much human activity as possible in order to create an area that is theoretically “unoccupied”—and therefore without degradation caused by human presence (Molnar, Scherr and Khare 2004). But “much

of what outsiders view as 'wild' ecological communities are in fact the outcome of long periods of human intervention and management" (Redford and Padoch 1992; Tuxill and Nabhan 2002; Adams and McShane 1992; Toledo and Ordoñez 1998). When James Scott discusses the difference between those who are governable and those who are not, he describes the "installed linguistic usage and popular consciousness" of how we refer to those who are "ungoverned" (Scott 2009). The comparison between governable versus ungovernable could easily be mistaken for comparing civilized versus uncivilized, which utilizes such language as "tame" and "wild", "cooked" and "raw", and "valley people" and "hill people" (Scott 2009). Those who have been perceived as wild have rather been seen as ungovernable. Mac Chapin points out, "many of the areas that have been singled out for conservation efforts are inhabited by indigenous groups—a fact that runs counter to the popular notion of 'virgin' jungles and 'uninhabited' deserts" (Chapin 1990). The issue with characterizing a forested area as "unoccupied"—with the intent of controlling the return of native vegetation and species—is the assumption that healthy forests are inherently void of human presence (ibid). This logic is without basis, as humans are constantly interacting with forested areas, whether it is through agriculture practices, resource collection, medicinal purposes or through spiritual practices. At the center of this discussion is that of "who" or "what" is causing the degradation—or in other words, how do the occupiers of a piece of land interact with and place value on local resources, flora and fauna. Indigenous forms of managing natural resources have largely been overlooked or dismissed as they may not appear the same as national

governing bodies⁷ and so may not have considered relevant, modern, and legible, but rather wild, untamed and therefore illegible and unwarranted.

1.2 Conservation as an Instrument of National Political Economy

The power behind the voluminous and at times sudden precipitation that falls in the Canal Zone has made water an unruly resource to govern. The Panama Canal Authority (ACP) refers to water in terms of being part of a budget, necessitating measurements and control, and becoming a utility or form of infrastructure (Ibáñez, et al 2002). As Ashley Carse points out, “nature becomes infrastructure through work, human politics and values are inscribed on the landscape, much as they are embedded in arrangements of steel and concrete” (Winner, 1980; Carse, 2012: 540). As Stanley Heckadon-Moreno points out, until the late 1970’s “the concept of using the watershed as a [political] geographical unit - not a country, not a province, or a state or a corregimiento [county]—but a river [...] was new” in Panama (Carse, 2012: 551). Once the United States and Panamanian governments began to see rivers and watersheds as more than just an environmental landscape, but also a place where water was *produced*, there became a clear connection between economic activity and environmental well-being. The PCWZ has taken on a life of economic utility, with policy surrounding its conservation less about the environmental protection of a geographic feature in the landscape and more about meeting a budget.

In 2004 Mac Chapin published an article, "A Call to Conservationists" challenging two things in particular: the way large US based environmental organizations were receiving funding, and how these organizations were consistently excluding forest based communities in the design, implementation and evaluation of conservation projects. Chapin argues that not only were several of the largest environmental organizations prioritizing donors ahead of their mission, but they were also largely leaving indigenous groups who occupy forested areas out of the conversation entirely (2004). Under the assumption that the ACP created protected areas in the PCWZ as a utility to the Panama Canal, we find an inextricable relationship between conservation policy and economic dependency on a functioning Canal. The conservation initiatives in the PCWZ have always been in part controlled by the ACP, and as a result the Ministry of Environment has created regulations that have had serious effects on indigenous land rights and livelihood options. Just as conservation management has been prioritized based on donor funding (e.g. Chapin 2004), so has the funding and management of protected areas in the PCWZ directly been tied to the functioning of the Panama Canal. The Emberá living in the watershed have consistently and purposefully been excluded from participating in joint management and protection in order to assure that the Panama Canal priorities are preserved.

1.3 Indigenous Mobilization for Territory

Anthropologist Charlie Hale discusses identity politics as being a key factor in organizing and motivating indigenous mobilization for self-determination, rights to territory, autonomy, and peoplehood rights (Hale, 1997). Indigenous groups have consistently been marginalized and their voices intentionally silenced in favor of larger, wealthier interests. One example is the indigenous Achuar people of Peru's Amazonian Basin who have battled against big oil companies contaminating their ancestral territory for decades (Finer 2008). It is only in the past few decades that indigenous groups have used their identity to mobilize and resist state authorities. In Panama, the Emberá have learned valuable lessons from their neighbors to the north, the indigenous Guna.⁸

The Guna of Panama are a politically active indigenous group residing in the northern and eastern territory of Panama. In 1903, after the United States negotiated Panama's independence from Colombia, the government began efforts to consolidate the state with the fear that segments of the populations would still feel loyalty to the Colombian government (Garcia, 2004). New laws were introduced aimed at "civilizing" the Guna, including entrusting the Baptist and Catholic Churches with the mission of pacifying and settling the communities (Garcia, 2004). In response leaders from dozens of villages held an assembly in early February 1925 to find a way to stop the dilution of their culture, rights and lands (Howe 1995). The result was "the Kuna revolution, [which] began on February 25, 1925 when an armed group attacked the

⁸ The G in Guna is pronounced as a hard K, and so was incorrectly spelled for many years as Kuna. Guna has since been officially recognized as the correct spelling of the indigenous group's name.

Panamanian police stationed on the islands of Tupile and Ukupseni” (Narasgandup 2008). As a result of the revolt, the Panamanian government agreed to respect the Guna’s wishes, and the autonomous status of the Kuna was officially recognized in 1930, with the official Comarca of Kuna Yala⁹ established in 1938 under the name of Comarca¹⁰ de San Blas (Narasgandup 2008). This did not stop *colonos* from advancing into Guna territory, but it did however prove to other marginalized indigenous groups in Panama—like the Emberá—that indigenous mobilization efforts in defense of territory were possible.

From this review of relevant literature I was left questioning how the Emberá viewed their position within conservation policy that directly affected their lives. Questions loomed regarding whether or not the Emberá living within the PCWZ would be interested in participating in community based conservation, and how the Emberá might describe such a thing. In the next section I will review my research methodology in gathering relevant information on Emberá livelihoods and communal perspectives in order to create an inclusive understanding of how the Emberá view their opportunities for generations to come.

⁹ Since changed to Guna Yala.

¹⁰ Comarca is a term for territory, most easily translating to “reserve”.

Section 2: Methodology

For this research I carried out a review of relevant secondary literature complemented by a brief period of field work in Emberá communities. For the secondary literature I paid special attention to the historical processes surrounding the creation of areas of environmental conservation, how economic factors can play into how conservation policy is designed, and a long history of the exclusion of forest-based communities in these processes. To better understand how Emberá indigenous groups are specifically effected by conservation policy designed to protect the PCWZ I spent 3 weeks in communities carrying out individual and focus group discussions in CNP and Soberania National Park in the western watershed of the Panama Canal. I also visited the Panama Canal Library Archives where I examined print documentation related to how institutions relating to the Panama Canal have interacted with the forest-based communities in the watershed zones over the past one hundred years. This combination of primary research and literature evaluates how conservation policy in Panama has affected the Emberá access to livelihoods, territorial rights and ability to practice their traditional culture.

2.1 Positionality and Previous Work

In large part I was able to conduct fieldwork and gain the confidence of local community leaders and members due my longstanding relationships in the area. From 2010 to 2012, I served as a Peace Corps Volunteer in the indigenous community of Emberá One in CNP and often visited nearby communities within the Park. My first

hand experience in these communities challenged my conventional perception of conservation politics and forest management as I watched eloquent orators and leaders of local Embará communities feel powerless against local park authorities. While many *caciques*¹¹ felt encouraged that there was indeed a national legal system that could potentially work in their favor, they were simultaneously discouraged as larger government entities such as the ACP and the *Autoridad Nacional del Ambiente* (ANAM)¹² seemed uninterested in their perspectives and participation as legitimate leaders of rural indigenous communities. As a volunteer under the auspices of the US government I was mindful to avoid engaging in activities of a political nature, but the powerful effect of state exclusion on the Emberá stayed with me nonetheless.

Reflecting on the time I've spent in Emberá communities, I acknowledge that it has been a perpetual education in the conceptual differences between Emberá cultural and social practices and those of the western world. While the men of the communities I lived in and conducted research were relatively receptive to my presence, it was at times obvious how much my University degree and US citizenship shaped my relationships. My inexplicable status of being an older, single, white female seemed to only be overlooked as a result of my status as an educated American. From the beginning the women in the communities were consistently curious by my presence, also wondering why I might be pursuing work in a foreign country rather than settling down to start a family. I treaded carefully as to not

¹¹ *Cacique* is a term to describe a local leader, such as a community chief or political representative.

¹² The National Authority on the Environment, now called the *Ministerio del Ambientado*, or Ministry of Environment.

disrupt culturally sensitive relationships between the male and female populations and worked to assimilate into a similar daily lifestyle as those in the communities. Over time I felt confident that as a relatively older, single female I did not appear as a threat to local family structures, and that the relationships I had built were founded on trust and mutual respect.

With this in mind I fully intended to carry out interviews with an equal number of males and females, but found it difficult to persuade women to be interviewed without their husbands present. It seemed that the women were comfortable discussing matters of land and migration in a casual atmosphere, but few were willing to be interviewed in a more formal way—and most women immediately referred me to their husbands for fear of “not knowing what answers I was looking for”.¹³ The Emberá women were willing to comment and even be “present” for some interviews, but it was the Emberá men who were willing to go on record, which is why the majority of the participants were male.

My previously established relationship with the Emberá in CNP relaxed many participants and allowed them to open up regarding their personal experiences more than they might have with an unfamiliar outside researcher. Despite this level of comfort, I did continually sense that participants wanted to know what kinds of answers I was looking for as to respond “correctly”.¹⁴

¹³ Taken from notes and interviews while carrying out fieldwork in 2010-2012, 2015.

¹⁴ To combat this I rephrased several of the questions in different ways as to elicit responses that were consistent and genuine.

2.2 Interviews

As part of the fieldwork I carried out seven interviews across four indigenous Emberá communities in two protected areas.¹⁵ This series of semi-structured interviews were conducted with Emberá leaders as well as elder community members. Separately I carried out two additional interviews with Non-Governmental Organization (NGO) representatives in order to better understand how indigenous livelihoods and land tenure intersect with local and international NGO's.

In all cases I asked open-ended exploratory questions aimed at gaining a more in depth understanding of the current and historical physical and social landscapes in the PCWZ. The number of interviews carried out per community was the result of community accessibility and the willingness of participants to be interviewed. In three communities, Emberá Two, Emberá Three and Emberá Four, I was primarily able to reach local leadership, but in Emberá One, where I have longstanding relationships with community members, I found a larger number residents willing to speak with me.

I chose the four indigenous communities based on two primary factors: their ethnicity—they identified as Emberá—and their residence in a protected area in the PCWZ. All four communities interviewed are located on the western watershed slope of the Panama Canal in either CNP or the neighboring Soberania National Park. Among the indigenous communities I interviewed a total of fourteen participants, with a total of ten males and four females. Of these interviews three were focus group

¹⁵ See Figure 1 for interview breakdown.

discussions and four were one-on-one interviews. I chose participants based on their position within the community, as either local leadership (*cacique*) or community elder. Of the five *caciques* who agreed to be interviewed, one was female and four were male. All interviews were conducted in Spanish and I have used pseudonyms in order to protect the identity of the communities and individuals I interviewed.

2.3 Data Analysis

For each interview I used NVivo qualitative data analysis software to apply a “code”¹⁶ to each respondents’ answer in the interview. Some codes were repeated multiple times in a single interview, or across many interviews, which helped develop themes based on how often content was repeated. If the participant responded at length, I created or replicated a code for each sentence separately as to make sure all topics discussed were included in the resulting data. I abstained from coding any of my own additions to the conversation, such as interview and probing questions, as to not impact the data. In total the 7 interviews resulted in a combined 145 codes, or essentially, themes. From there I organized the top 83 codes¹⁷ out of the 145 into groups with similar qualities. This allowed me connect and draw comparisons

¹⁶ For this research I used NVivo qualitative data analysis software to organize and create themes for all of the interviews. Here a “code” refers to a particular theme that resulted from a particular sentence in an interview. Examples of common “codes” were livelihoods, education, and government conflict. At times sentences, paragraphs and even words carried multiple meanings, and so were labeled with multiple codes.

¹⁷ Codes mentioned at least 5 times across interviews.

between themes and create quantifiable data relating to the most discussed—and therefore perhaps the most relevant—topics across communities¹⁸.

Community	Top Interview Themes per Community	Top Themes Across All Interviews
Community 1 (Emberá One) <ul style="list-style-type: none"> • Four interviews • 6M/1F • 2 Male leaders (both interviewed) 	<ul style="list-style-type: none"> • Livelihood • Agriculture • Natural Resources 	Most common themes: <ul style="list-style-type: none"> • Livelihood • Park restrictions • Education • Natural Resources • Work Opportunity • Eco-tourism Themes mentioned across all interviews: <ul style="list-style-type: none"> • Livelihood • Park Restrictions • Eco-tourism • Agriculture • ANAM
Community 2 (Emberá Two) <ul style="list-style-type: none"> • One interview • 1M/1F • 2 Male leaders (1 interviewed) 	<ul style="list-style-type: none"> • Education • Livelihood • Development 	
Community 3 (Emberá Three) <ul style="list-style-type: none"> • One interview • 2M/2F • 1 Female leader (interviewed) 	<ul style="list-style-type: none"> • Eco-Tourism • Livelihood • Park Restrictions 	
Community 4 (Emberá Four) <ul style="list-style-type: none"> • One interview • 1M • 1 Male leader (interviewed) 	<ul style="list-style-type: none"> • Land Tenure-No Access • Park Restrictions • Natural Resource Management 	

Table 1. Description of each community based on gender and interview themes.

Data from the interviews suggest a strong reaction to issues related to livelihoods and land tenure, making up a combined total of 19.6 per cent of all codes. Issues or conflict surrounding government contact and livelihood intervention was the second most discussed topic across interviews, making up 12.4 per cent of coded data. Despite its lesser presence, an influential topic that became prevalent across interviews was that of education. Although topics surrounding education were only mentioned in 8 per cent of total codes, in 37 per cent of cases where education was addressed, it was in reference to access. For this research access to education was typically determined by the ability or interest of the Panamanian state to provide education to remote Emberá communities in the PCWZ, but was also referred to

¹⁸ See table 1.

situations where Emberá youth found an opportunity to access education outside of their communities. The topic of education is important within this study due to the implications that it has for community livelihoods opportunities and the ability of indigenous leaders to be viewed by Panamanian officials and professionals as equitable decision makers. On several occasions participants referred to education as a gateway to a more reliable and profitable livelihood—that which is more in line with work associated with the modernized Latino communities outside of the Park in the capital of Panama City. While this is a cue that there is a generational shift taking place—with the youth migrating towards jobs in urban areas—it is also a testament to a potential generational shift in cultural leanings. In order to determine how to situate the Emberá into the existing literature on conservation management, section 3 will explore Emberá cultural history in relation to their internal governing structure and socio-political dynamics, how this influenced their arrival to the PCWZ, and how this process differed from the Latino populations that also migrated to the area over 40 years ago.

Section 3: Contrasting Governance

When CNP was created in 1984, neither community leaders nor individual landholders among Emberá communities were invited to participate in determining park regulations nor to implement forestry and agricultural extension practices. Furthermore, there was no plan to eventually incorporate participation of those who live within the Park boundaries (Hauff 1999; Carse 2012). This section will evaluate literature on Emberá history combined with how the Emberá who I spoke with in the PCWZ described their internal governance. This will also give a brief comparison as to how the Latino communities in the area experienced their migration into the PCWZ which was based on a national governing system that favored Latino settlement during the 1950's-1960's.

3.1 Lifestyle and Sense of Place

While today the Emberá live in larger community settlements, up until the mid-20th century the Emberá preferred to live dispersed along river systems in clan-based settlements according to familial and cultural ties (Theodossopoulos 2010). Preferring to live on rivers, their social, cultural, and livelihood activity are structured around water systems, limiting the amount of places that the Emberá express they feel comfortable settling.¹⁹ As Theodossopoulos reflects,

“Until 15 or 20 years ago, the Embera were an indigenous people on the periphery of the Panamanian state, occupying lands unsuitable for

¹⁹ Taken from notes and interviews while carrying out fieldwork in 2010-2012, 2015.

intensive cultivation or systematic colonisation. Along with other Amerindian groups, they were stereotyped as indios (Indians) and occupied the bottom of the colonial, and later national, social ladder” (Theodossopoulos 2010).

This began to change in the 1960’s when the Emberá realized they would potentially have greater control of their territory if they could strengthen their communication with State entities—Ministry of Education and the Ministry of Health (Herlihy 1985). After centuries of retreating farther into the rainforest, the Emberá arrived at the point where there was no longer anywhere to go, and so followed the path toward reclaiming territory.²⁰ This was emphasized by what was said to be a Peruvian missionary and explorer, who visited the Emberá and demonstrated the valuable role education could play in securing land rights in the Darien (ibid). This missionary advised the Choco²¹ that through the formation of villages, they could ask the government to provide teachers, schools and medical supplies (ebid). It was around this time when the Emberá began settling in a pattern that resembled villages, and some communities strengthened their claim to territory through inviting in state sponsored organizations (Runk, 2012).

In November of 1983 the Emberá were granted two *comarcas* in the Darien province, and since have also gained the right to legally create similar style territories

²⁰ In the introduction to his article *The Value of Biological and Cultural Diversity*, Mac Chapin illustrates how colonizers move into the spaces where indigenous groups have historically occupied, and “gone are the days [that they can] retreat and redraw their territories beyond the periphery of the modernized world” (1990).

²¹ A common term referencing both the Emberá and Wounaan people.

outside of the *comarcas* with support from the *Tierra Colectiva*.²² This is significant because “only 63 percent of indigenous reside within the five designated *comarcas*”²³, leaving 37 percent dispersed throughout other areas of the country”, making the *Tierra Colectiva* a valuable social and political entity (Castillo 2001). While the Emberá of Emberá Community number two²⁴ in CNP have added a small piece of land to their collective territory in the PCWZ, it is not a large enough to satisfy traditional Emberá swidden agriculture, livelihoods and forest management²⁵. It is also “clear that even when indigenous populations are legal landholders, they still may not possess all the rights to environment and resources on their lands” (Runk 2012: 36). The physically delineated *comarcas* and areas within the *Tierra Colectiva* have lent confidence and political legitimacy to the Emberá, but they have also served as socially constructed spaces in which the Emberá are expected to confine themselves. The very idea of “allowing” the Emberá a confined legal space in which they are allowed practice their livelihoods—often restricted when overlapping with areas of environmental conservation—demonstrates the governing power the Panamanian state maintains over indigenous autonomy. But by not participating in the state form of land holding, many Emberá in the PCWZ were *illegible* to the state, and led them to

²² *Tierra Colectiva* is the indigenous governing body of Panama connected to the *comarca* territories. If you are a part of the *Tierra Colectiva (TC)* you are considered part of the indigenous collective, and will be included in group decisions making processes.

²³ A pesar de la existencia de cinco comarcas, solamente el 63.0% de la población vive dentro de las mismas.

²⁴ Community name changed to protect its identity. See table 1 for community breakdown.

²⁵ See figure 1.

be described as “nonauthorized cultivators”—squatters in a sense, and prevented them from being able to legally argue for territory (Carse 2014).

3.2 The Introduction of Colonos to the Panama Canal Watershed Zone

For much of the 20th century the Panamanian government’s economic policy promoted and financed extensive cattle ranching while generally neglecting the subsistence agricultural activities of rural peasant populations in the *interior*²⁶ (Cámara-Cabrales 1999). The *interior* is a region of Panama which has been farmed and grazed to the point where much of the land is either fully occupied or no longer productive (Carse 2014). In the 1950’s this led to significant soil degradation, and together with a growing population there was an increase in landlessness, causing many Latino families began searching for new lands to work in more distant areas. After the Second World War, “the Panamanian government channeled landless farmers to forested frontiers as part of its ‘conquest of the Jungle’ program” (Carse 2014: 187). State agencies looked to modernize agricultural production across the rural interior, including the headwaters of the Chagres River basin, by promoting and financing the construction of a network of rural “penetration” roads, allowing *colonos* to more easily access unoccupied lands (Carse 2014). Further, the *Patrimonio Familiar* (homestead) Law of 1941 provided small, titled property concessions to families who settled on uncultivated land (Carse 2014). In the 1960’s and 1970’s the Panamanian State was strongly encouraging landless peasant farmers and cattle

²⁶ The *interior* is a term used to describe areas of rural agriculture in Panama. Typically it is in reference to the provinces of Los Santos, the Azuero and Chiriqui.

ranchers from the *interior* to colonize lands within the PCWZ. In 1984 the government reversed course and created regulations surrounding CNP that urged residents to leave. As Carse points out, the change in State policy was politically significant; “*campesino* farmers were not representatives of a backward local culture spontaneously destroying forest, but participants in a multi-scale development project that was designed to transform rural areas by extending infrastructure and expertise” (2014: 166). This series of events portrays how the Panamanian government *produced* an environment for deforestation in the PCWZ, and then refused to assist or compensate the local population—neither Emberá nor Lationo—for losses due to strict, newly implemented conservation regulations.

3.3 Contrast

These histories create both parallels and contrast between how the Emberá arrived to the PCWZ and how the Latino population began settling in the area. Both groups were looking for *place*; that is—somewhere to practice livelihoods and raise their families in their preferred cultural context. For the Emberá, their cultural movement has not been static, but has shifted towards creating a strong community base in which to gain access to territory rights. The Latino communities by contrast, have primarily stuck with individual family land holding, which in some cases has weakened their ability to organize. But they have also had access to state amenities such as schools and a “homestead” law which most of the Emberá did not benefit from. While the intention of this paper is not to draw comparisons between the

Latino communities in the PCWZ with Emberá communities, an interesting parallel exist between the two cultural groups worth investigating. Questions regarding state relationships based on race, and how navigating roads versus rivers changes how communities access land and state amenities would be interesting to consider in future studies.

Section 4 will bring together the relationship between conservation policy and the livelihoods opportunities that currently exist for the Emberá living in CNP and Soberania National Park based on interviews from fieldwork.

Section 4: Conservation and Livelihoods

In this section it is important to remember that the Emberá are a highly mobile people, and at times have struggled to with state regulations prohibiting them from settling in patterns in which they have preferred for hundreds—if not thousands—of years.²⁷ This has created a tension in Emberá livelihood practices, and paired with the strict natural resource restrictions of CNP and Soberania National Park, those living in the PCWZ have had to adapt from working as agriculturalists to working in eco-tourism and even gold panning. Based on interviews conducted in 2015, along with field notes from 2010-2012, the following section will discuss how the Emberá responded to questions regarding their shifting livelihood practices since the creation of protected areas and discuss how this change has affected Emberá culture.

4.1 Regulation of Protected Areas

The legal constraints of CNP included Forest Law 13 of 1987 and executive Decree 73 of 1984 that declared ownership of land would be stripped unless there was a legal title; land being sold must first be offered as a sale to the Ministry of Environment; and that it would be illegal to cut down any forested area—even on titled property—that had been untouched for more than five years (Ministerio de Desarrollo Agropecuario 1984; Carse 2012). When the Panamanian government—by recommendation of the United States Engineering and Construction Bureau—created CNP and Soberania National Park, it did not have the financial resources to

²⁷ Taken from notes and interviews while carrying out fieldwork in 2010-2012, 2015.

compensate local residents for legal land titles, nor facilitate participatory conservation approaches for CNP management (PCC 1961; Carse 2014).²⁸ In more recent years the Ministry of Environment has been able to purchase titles from landowners, but for many Emberá residing in the area, when CNP was formed neither individuals nor Emberá communities held legal titles to the lands they occupied (Carse 2014). The Emberá I interviewed contributed this lack of communication first to a mishandling of events on the part of the Panamanian government, but also in some ways to cultural and language barriers that they faced when the Park was created.²⁹ As described by residents of the Park, few were informed prior to the formation of the area of conservation, and even fewer understood the consequences.³⁰ This has meant that the Emberá have been excluded from any form of compensation for loss of territory and access to livelihoods, and have become involuntary participants in the fortress model of conservation without any consent.

4.2 The Biodiversity Conservation Lobby

The biodiversity that lies within the PCWZ is extremely valuable, and the organizations which exist to protect the area, such as the Ministry of Environment, *Fundación Chagres*, *Fundación Natura*, *Fondo Chagres*, and the Smithsonian Tropical Research Institute, are given the important task of safeguarding invaluable local ecosystems. While protecting Panama's ecology should be a priority, it has come at

²⁸ Note A.

²⁹ Taken from notes and interviews while carrying out fieldwork in 2010-2012, 2015.

³⁰ Taken from notes and interviews while carrying out fieldwork in 2010-2012, 2015.

the cost of protecting Panama's indigenous knowledge and culture. In 2003 a debt-for-nature-swap called *Fondo Chagres*³¹ took place between the Panamanian government, the United States government, and The Nature Conservancy at a value of \$10 million USD (Natura Panama n.d.). The Natura Foundation—created with the assistance of the Nature Conservancy—was given the lead in creating a *Plan de Manejo*³² for the years 2005-2009, which did indeed mention the inclusion of forest-based communities in a number of sections (Natura Panama n.d.). Within the *Plan de Manejo* you can find several intentions of including communities in future conservation management, but the Emberá have seen little to no actual inclusion from the Natura Foundation or the Ministry of Environment.³³ In 2010 the Natura Foundation released an updated plan for the years 2010-2016, this time excluding almost any mention of local communities, but instead focusing on how to build eco-tourism infrastructure for park profit (Natura Panama 2010). While it briefly appeared as if the Emberá might be included in the newest conservation scheme—the debt-for-nature-swap—they instead faced further pressure to either participate in eco-tourism or relocate out of CNP.³⁴

³¹ El Fondo para la Conservación del Parque Nacional Chagres (Fondo Chagres) es un fondo ambiental nacional creado mediante el Acuerdo de Conservación de Bosques, suscrito in 2003 entre el Gobierno de la República de Panamá, The Nature Conservancy (TNC) y el Gobierno de los Estados Unidos de América. Los recursos del Fondo Chagres provienen del primer Canje de Deuda por Naturaleza que hace Panamá, formalizado el 10 de Julio de 2003, por un valor de 10 millones de dólares. Mediante el mismo, la deuda externa panameña por dicho valor fue pagada por el Gobierno de los Estados Unidos de América, con aportes de TNC, en el marco de la Ley de Conservación de Bosques Tropicales (TFCA), de los Estados Unidos del 29 de Julio 1998, con su enmienda N°105-214, aprobada por el Congreso de los Estados Unidos de América (Natura Panama 2010).

³² *Plan de Manejo* translates to “management plan”.

³³ Taken from notes and interviews while carrying out fieldwork in 2010-2012, 2015.

³⁴ Taken from notes and interviews while carrying out fieldwork in 2010-2012, 2015.

4.3 Agriculture

The Emberá of the PCWZ describe themselves as hunters, fishermen and agriculturalists.³⁵ While the river is central to the Emberá culture and lifestyle, traditionally the Emberá have also kept small plots of land near their houses to practice swidden agriculture, and prefer not to remain on a piece of land any longer than 5-10 years in order to allow the land to go fallow (Carse 2012). When CNP was designated a protected area in 1984, the Ministry of Environment essentially looked at a map of the area geography and placed a one dimensional layer of regulations upon the indigenous and Latino populations. While these regulations were created with the primary intention of preventing deforestation, in reality they disrupted a complex interconnected web of geographic relations on the ground. That is, what the Panamanian government did not see as they drew the line for the CNP's borders were the noncontiguous geographies that lay within its bounds (Carse 2014). As a result of this regulation the Emberá were restricted in how many hectares they were allowed to move about in, forcing them to produce agriculture outside of their preferred traditional swidden practices in order to maintain control of their land (Rosales). David, an elder and resident of Emberá community number two since 1975, considers this change in livelihood practices along with the alternatives available to families in his community.

The truth is we don't really work here anymore. For example, the tradition of raising pork, it's not ours and we don't particularly like it. Nor are we interested in raising cattle. At that, we are sure that the government would have us dedicate ourselves to 10 hectares of land

³⁵ Taken from notes and interviews while carrying out fieldwork in 2010-2012, 2015.

here, 10 hectares there, 10 hectares to raise cattle. And we're not into that either³⁶.

Many Emberá felt they were being forced to adopt a form of livelihood they were neither interested in nor accustomed to. According to the Emberá living within the PCWZ, most became disinterested in working a single plot of land, and soon semi-abandoned³⁷ their previous agriculture centered homes in search of dependable livelihoods.³⁸ This disruption in livelihood activities also affected the Emberá ability to harvest medicinal plants and participate in some shamanic rituals, further disconnecting them from their cultural traditions. With restrictions on how they were able to interact with the forest, but also feeling pressure to accumulate income in order to pay for education and basic amenities, many communities began to organize around eco-tourism projects. The transition from agriculture to eco-tourism was not without its flaws, and many abandoned it in the first years to return to working the land. The Emberá decision to move towards eco-tourism in the late 1990's was not an easy choice, and most likely would not have happened if it were not for the intersection of CNP regulations and the Emberá desire to educate their youth.

³⁶ Nosotros la verdad es que no trabajamos aquí. Por ejemplo, la tradición de ya el puerco de indígena no, no nos gusta esto. La tradición de ganado tampoco no lo hacemos. Además de eso nosotros estamos seguros que el gobierno que va hacer a dedicar a todo van a hacer 10 hectáreas de terreno, 10 hectárea, 10 hectárea para hacer ganado. No somos de ese.

³⁷ Some elder members of the community still visit their plot of land to continue farming a fraction of a hectare at a time in order to maintain "possession" of their old land.

³⁸ Taken from notes and interviews while carrying out fieldwork in 2010-2012, 2015.

4.4 Gold

From early on the Emberá knew they weren't particularly interested in adopting the surrounding Latino communities livelihood practices, but also recognized that merely retreating further into the forest would not be an option nor to their benefit. David, a resident of Emberá community number two, recounted that within a few years after the park was formed "the community had found another way to live, that there was a lot of gold in the Park, and so they stopped cutting down the forest³⁹".⁴⁰ Gold has played a unique role in the lives of the Emberá as on one hand it has slowed the rates of deforestation, but on the other it still requires them to participate in an illegal activity.

Gold panning became popular as a way of making just enough extra income to cover simple household staples, such as sugar and salt; but it wasn't lucrative enough—or legal enough—to become a realistic, widespread or a permanent livelihood alternative.⁴¹ It is, however, an income in which many of the Emberá in the PCWZ depend on. For example, on a sunny day in 2010 I headed to the Emberá community number one community center to meet with a few community members for a work project. Earlier in the week at an official community meeting we had designed a plan to begin making fish hatcheries, and agreed on this particular day to be our workday. To my dismay, not a single person showed up to work. The Emberá

³⁹ Ha encontrado una alternativa de sobrevivir, que es, hay mucha oro. Entonces, ellos dejaron de tumbarse, dejaron.

⁴⁰ Taken from notes and interviews while carrying out fieldwork in 2010-2012, 2015.

⁴¹ Taken from notes and interviews while carrying out fieldwork in 2010-2012, 2015.

of the community had grown dependent on cash income from eco-tourism, and were struggling to make ends meet in the off-season when fewer tourists arrived. Instead, to supplement their income, families turned to gold panning along the river.⁴² Although several participants interviewed mentioned gold as a common form of income, they also rejected it as a viable livelihood alternative, and only seemed interested in it remaining a practice to complement family income from the low tourist season.⁴³ Panning for gold is also illegal in CNP, and participants commented that they were tired of hiding their livelihoods activities from Park officials, such as ACP and the Ministry of Environment.

4.5 Eco-tourism

Visiting tourist like to describe Emberá culture is colorful, friendly, and socially accessible. These traits, along with the “exotic” and picturesque riverside villages they live in, make them attractive to the adventure-seeking international tourist trade.⁴⁴ The community of Emberá community number one is close enough to Panama City that it is an easy day trip for most travelers but far enough into the rainforest that visitors say they feel like they’ve entered a faraway world. Emberá community number one alone receives around 3,500 international visitors a year, and much like the Guna, this gives them international recognition and in a country where the Emberá have often been marginalize, I was able hear to sense pride as a

⁴² Taken from notes and interviews while carrying out fieldwork in 2010-2012, 2015.

⁴³ Taken from notes and interviews while carrying out fieldwork in 2010-2012, 2015.

⁴⁴ Taken from notes and interviews while carrying out fieldwork in 2010-2012, 2015.

reflection of their success in eco-tourism during interviews.⁴⁵ The Panamanian government has reacted positively in discovering such a low cost national revenue generator in eco-tourism. As Diana Ojeda writes in her article on indigenous tourism, *Whose Paradise? Conservation, tourism and land grabbing in Tayrona Natural Park, Colombia*, “the ‘exotic’ and ‘backward’ inhabitants of ‘exuberant natures’ fall into two exclusionary categories: they are either eco-guardians or eco-threats” (2011). Within this context, the community members of Emberá community number one have come to understand that falling under the category of “eco-guardians” is the most promising alternative to out migration. Although the Emberá living in CNP have been relatively prosperous working in eco-tourism, this new role of “eco-guardians” has not come without consequences. Visitors to the community in this setting of ecotourism are often unaware of their ability to craft and slowly mold what the Emberá themselves experience as an identity based on what is found most interesting to the tourist.⁴⁶ Anthropologist Dimitrios Theodossopoulos, who has spent several years studying the Emberá in CNP, agrees that the indigenous identity of the Emberá “is closely dependent upon this interaction of expectations, as well as a number of related practical and political circumstances” (2010). Theodossopoulos argues that the Emberá’s legal and relatively consistent form of revenue through eco-tourism allows a window of opportunity for youth to remain in the community, and therefore have an outlet to learn about their culture. While this is a valid argument, the eco-tourism business could require some cultural adaptation—attaching a monetary

⁴⁵ Taken from notes and interviews while carrying out fieldwork in 2010-2012, 2015.

⁴⁶ Taken from notes and interviews while carrying out fieldwork in 2010-2012, 2015.

value to the Emberá culture—and putting the Emberá in a position of interpreting their traditional history and knowledge of the forest as a commodity rather than a part of their cultural identity. The Emberá are the ultimate judge of how they identify as a people, but it is important to recognize that eco-tourism should be seen as an influencing factor.

4.6 Emberá Livelihood Politics and Conflict

Of the four communities where I carried out research, three participate in eco-tourism as their primary source of revenue, and the fourth at one time worked in eco-tourism as well. In interviews with the Emberá regarding their feelings on the viability of the tourism industry, the majority of participants said they enjoyed it as a livelihood activity in that it provided them with a leisurely life where they could still live outside of urban areas. But nearly all interview participants voiced serious concerns over whether or not eco-tourism is a truly sustainable and reliable long-term form of income.

Born out of necessity, the community of Emberá community number one was originally founded by the community of Emberá community number two. In 2004, not long after the launch of the new tourist community of Emberá community number one in 1998, tensions arose over how the community business was run and who controlled the finances. Within six years the two communities dramatically cut ties. As the chief of Emberá community number one points out, by 2004 trivial problems

started and the split came shortly after.⁴⁷ This might have been the end of the inter-community conflict if Emberá community number two had access to an alternative livelihood opportunity, but to this day this has not been the case. While the two communities now live in relative peace a decade later, many of those years in between were filled with callow revenge schemes, ranging from petty theft to falsely accusing each other of environmental infractions against CNP. In late 2010 during my first stay in Emberá community number one, one community member from Emberá community number two robbed a tank of propane gas from the Emberá community number one chief's house in broad daylight. This example highlights both the palpable tension between the two communities as well as the continuing economic strain that exist in Emberá community number two due to CNP regulation. Today Emberá community number two is one of the only Emberá communities in the PCWZ that does not participate in eco-tourism, and the majority of Emberá community number two community members still struggle to find consistent forms of livelihood.

Even though eco-tourism has been a successful economic venture for the community of Emberá community number one and a handful of other Emberá communities throughout the CNP, the success has created rifts between families, and at times stressed the Emberá's relationship with Park officials, as they now require more natural resources for materials to meet the demand of the tourism business. It has also promoted and propelled the Emberá into the monetary and consumerist culture of the global north, as international travelers descend upon these small

⁴⁷ Taken from notes and interviews while carrying out fieldwork in 2010-2012, 2015.

indigenous settlements and exchange artisan handicraft for relatively large amounts of US currency, further causing the Emberá to accentuate the profitable side of their culture. Eco-tourism as it stands has proven to be economically successful in the short term, but the Emberá have noted that it is not a model that can necessarily be replicated in many areas, and so is not a reliable livelihood alternative.

It has become clear that much of Emberá economic activity within the Parks is viewed as unattractive, unsustainable or against park regulations. Looking to the future, the Emberá are interested in the pivotal role education could play in determining economic opportunities for youth, and believe that through education their children will find a path to social and economic equality within their communities and Panamanian society.

Section 5: The Role of Education and Co-Management

Chapter 5 will consider how the Emberá view their future as residents of protected areas in the PCWZ. First there will be a discussion of the effect education has had on Emberá culture, livelihoods and identity, then move into a final example of how community based conservation management has worked among the indigenous Guna of Panama, and how the Emberá believe the model could be translated into how CNP is managed.

5.1 The Emberá and the Value of Education

Shortly before the creation of CNP Emberá community number two began to self-organize in order to represent themselves and better understand, if not become a part of, the state governance process. According to several interviews in CNP, at the center of this organization was access to education.⁴⁸ Prior to 1980, the only school that lay closer than a 2-3 hour hike away belonged to the Latino community of Chico.⁴⁹ Chico sits just across the river, leaving the Emberá students who lived in Emberá community number two with the task of navigating the San Juan de Pequení River—which often swells to dangerous rapids without warning—to access to any form of education. According to one Emberá community number two resident, the idea of building a school, a place to educate their children without crossing the dangerous river, motivated the community back in 1980 to organize and create

⁴⁸ Taken from notes and interviews while carrying out fieldwork in 2010-2012, 2015.

⁴⁹ Name of community has been changed to protect members.

official community leadership representation. According to David⁵⁰, “the elders thought, let’s name our local authority, like our chief or leader [...] so we can fight for a school”.⁵¹ ⁵² Finding formal education to be a more reliable path to a secure livelihood than gold panning or eco-tourism, David noted:

They (the kids) go right here (in the community) when it’s time for them to go to school. From there they turn 18 and go directly to University. And when they get to the University, and when they get their job with the government, or create their own private business, they can then live in a different way.⁵³

This is significant, as it suggests that the Emberá I spoke with believe that the life one could have as an educated person is better than the one the Emberá were currently living in the Parks. Most of the Emberá I spoke with placed significant value on education and the opportunity it would create for the next generation. David from Emberá community number two proudly stated that his daughter was a licensed teacher and was able to work as a paid state educator in their own community school in Emberá community number two, which simultaneously allowed her to demonstrate the value of her education to younger generations of Emberá. The power of education is unfolding in indigenous communities all across Panama, and the confidence among Emberá in the PCWZ that education will lead to a more reliable

⁵⁰ Name changed to protect identity of respondent.

⁵¹ La gente los mayores ellos pensaron vamos a nombrar autoridades como dirigente o cacique, jefe...para nosotros luchar por una escuela.

⁵² Taken from notes and interviews while carrying out fieldwork in 2010-2012, 2015.

⁵³ Entonces van aquí mismito, ¿ cuanto pase para la escuela. De allí cuando cumplen los 18 años directamente para la universidad. Y cuando llegan a la universidad. Y consigues su trabajo con el gobierno, ya consigues con una empresa privada. Y puedes vivir de otra forma también.

livelihood and equitable work opportunity is visible.⁵⁴ During interviews Emberá parents—some of whom never had access to education and were illiterate—displayed immense pride and confidence in their children who were pursuing education, even at the elementary level.

As youth leave their homes at age 18—and sometimes younger—to travel to urban areas to study, the majority of Emberá elders are lending their full support. But this begs the question, is the Emberá culture leaving communities as well? As indigenous groups across Panama work to achieve cultural, societal and economic equality, one must ask, is it possible to simultaneously remain a participant in a distinct and remote culture while pursuing a much different life in another? In this context, do educational gains equate to necessary cultural change? These are questions that are perhaps still unanswered and warrant further research by anthropologists in the field.

5.2 Community Based Conservation with the Guna and Beyond

Many Emberá within the PCWZ are willing and interested in knowing ways in which they can work with the Panamanian government to participate in conservation management. As Chapin has mentioned, “This is not solely a matter of social justice, which must in any case be a strong component of all conservation work. It is also a matter of pragmatism. Indigenous peoples live in most of the ecosystems that conservationists are so anxious to preserve” (Chapin 2004). With a long history of

⁵⁴ Taken from notes and interviews while carrying out fieldwork in 2010-2012, 2015.

living in forested areas, many traditional people hold valuable knowledge on how to sustainably interact with forest, and natural resource management should look to shift research and policy on conservation to include traditional people. Issues surrounding forest governance are present across Latin America and the world as the global north seeks ways to protect natural resources in developing countries.

In 1989 the Guna organized the First Interamerican Indigenous Congress on Natural Resources and the Environment where over 70 indigenous representatives from 17 countries were in attendance (Chapin 1990). At this Congress the overwhelming concern was how indigenous groups could establish boundaries and re-claim their territories, and how to stop—or at least slow—the intrusion of loggers, cattle ranchers and landless migrants from occupying their lands. The Guna worked to address these issues by paving the way for community based conservation management in their territory. According to Sarah Laird in her 2002 article on building equitable relationships between scientific researchers and indigenous communities, the *Proyecto de Estudio para el Manejo de Areas Silvestres de Kuna Yala (PEMANSKY)* and the Association of Employed Kunas (AEK) have teamed up to produce an information manual for researchers on scientific monitoring and cooperation (Laird and Noejovich, 2002). Established in 1983,

the Kuna objectives are outlined with regard to forest management, conservation of biological and cultural wealth, scientific collaboration, research priorities, and guidelines for researchers. Collaboration with Western scientists is encouraged for basic ecological research, botanical and faunal inventories, and the study and recording of Kuna

traditions and culture. Research is designed to provide the Kuna with information useful to them and under their control (Molnar et al, 2004).

This co-management of territory is an example of what could exist in other areas of Panama, but has failed at the state level to be recognized as a viable alternative to top down westernized conservation management. The Emberá, like groups elsewhere, have responded to challenges by mobilizing and organizing for greater access to education and other services. With education at the center of the Emberá vision for the future of its youth, perhaps one of the best ways to move forward would be to encourage young Emberá to study environmental science and forestry, allowing them the opportunity to collaborate with both conservation scientist and also elder community members from their home.

There is no denying the important role that education has played in empowering the Emberá. The confidence the Emberá exude when describing the effects of education on the youth are visible, and have encouraged parents and students alike to prioritize access to educational opportunities. But looking beyond Emberá communities one and two, how can the indigenous of Latin America represent themselves in their national government system without by nature becoming part of it and moving away from their traditional culture? These are difficult questions the Emberá of the PCWZ are asking themselves as they prepare their children to be the next generation representing Emberá culture. It is yet to be seen how durable the culture of the Emberá in the PCWZ will be in response to

increased participation in a Latino based education system, shifting livelihood activities, and increased exposure to western technology.

Conclusion

The Emberá of the PCWZ can feel the tension between their past and their future. Of those I interviewed, none expressed interest in abandoning the forest—but rather the opposite, that they wanted to find ways to incorporate their livelihoods into conservation management. Elder members of Emberá communities still have a deep understanding of Panama’s natural environmental balance, a knowledge which has been heavily ignored in the design of conservation management of the PCWZ. This knowledge is at risk of disappearing as the Emberá are limited in how extensively they are able to practice their cultural and livelihood activities which are intricately connected to a balanced ecosystem. As Chapin argues, it is in our best interest to work with local forest based populations rather against them in our search for alternative strategies to save global ecosystems (1990). In the case of the PCWZ this would require the primary governing bodies of the area (ACP, *Fundación Natura* and the *Ministerio de Ambiente*) to include the Emberá in discussions and management of the Watershed.

It is clear that areas of conservation in the PCWZ were created to ensure a sufficient supply of water for the operation of Panama’s cash cow, the Panama Canal. The conservation model first introduced was based on “fortress conservation” or the practice restricting human presence/activity within the protected area. While the government has succeeded in protecting the watershed and stabilizing the water supply, the resulting conservation legislation has come at the cost of indigenous livelihoods, knowledge and culture. Experiences with co-managed conservation

arrangements in the Amazon basin and Central America elsewhere suggest that such approaches reduce conflict and achieve better conservation results. The Panamanian government should consider such an approach to the current system. By recognizing the full rights of indigenous groups, in particular representation in decisions made about forest-management, forest based communities have a better chance of determining the future of their culture and their livelihoods. Emberá communities in the PCWZ are up against powerful economic and political actors as they work to participate in decision-making processes, and as in other areas of Latin America, the indigenous of Panama are witnessing positive results from organizing and working together towards common goals.

Appendix A

Individual interview questions:

1. Can you tell me a little bit about yourself?
2. If you were born in the Park, what area were you raised?
3. What was life like when you were young?
4. Are your parents from the Canal Watershed?
5. How do you choose where you build a house?
6. Is it easy to find materials to build a house?
7. Do you produce any agriculture?
8. Who helps you with the work?
9. What other kinds of work do you do?
10. Did you go to school?
11. When did you find out that this had become a park?
12. How did you find out? What did you think this meant?
13. Did anyone come and talk to you or your parents before this happened?
14. Did you have any kind of documentation that linked you to a property?
15. Do you know anyone who works for ANAM/Ministerio de Ambiente?
16. Do you anticipate staying in the Park for long?
17. Have you had any family move here? Why?
18. What is life like today?
19. Where do you see your children living in the future?
20. What kind of work do you see your children doing in the future?
21. How far do you hope or see them getting in their education?
22. Do you like it here in the Park?
23. Is there anything specific you would like to talk about?

Focus Group discussion questions:

1. Can you tell me a little bit about yourself?
2. If you were born in the Park, what area were you raised?
3. What was life like when you were young?
4. Are your parents from here?
5. How do you choose where you build a house?
6. Is it easy to find materials to build a house?
7. Do you produce any agriculture?
8. Who helps you with the work?
9. What other kinds of work do you do?
10. When did you find out that this had become a park?
11. How did you find out? What did you think this meant?
12. Do you like living here now that it is a Park?
13. Is there anything specific you would like to talk about?

Appendix B

TILL THE LANDS OF THE SQUATTERS GROW COLD

*Till the lands of the squatters grow cold,
And the infinite claimants are old,
We'll scrap endlessly,
No truce shall there be,
Though lawyers may threaten and scold,
Till the Paymasters run out of gold,
And the Mysteries of law shall unfold,
We'll cling, job, to thee
And draw salar-e-e
Till the lands of the squatters grow cold.*

-Judge Feuille and the Joint Land Commission, sung by The Society of the Chagres in 1916 (a social club for elite white men living in the Canal Zone)

Notes:

A. The original canal treaty stated that the United States is required to compensate those with private land titles for damages associated with the construction, maintenance, operation, sanitation, and protection of the canal (Carse 2014). And when the canal was built, ACP did in fact compensate “non-authorized cultivators” for their improvements (homes, crops, etc.), but this no longer occurred when the Park was created in 1984 (Carse 2014). Setting a precedent for later disputes regarding Canal activities, in 1919 an engineer for the canal argued that the canal administration “could not be held responsible for establishing a precedent of compensating those affected by the transformation of the environment for canal purposes”, also concluding that “the canal’s broader economic benefits on the isthmus outweighed its social cost to affected communities” (Carse 2015). This framing to allow a “social cost to affected communities” as being an acceptable course of governance set the stage for the Panamanian method of forming areas of environmental conservation on top of established forest-based communities rather than as a partner with local communities. The pushback that followed the Park’s unilateral regulations resulted in arrest, fines and the degradation of Emberá culture and livelihoods.

Acronyms:

ACP	Autoridad Nacional de Panama (Panama Canal Authority)
AEK	Association of Employed Kunas
ANAM	Autoridad Nacional del Ambiente
CNP	Chagres National Park
FARC	Fuerzas Armadas Revolucionarias de Colombia
NGO	Non-Governmental Organization
PCWZ	Panama Canal Watershed Zone
PEMANSKY	Proyecto de Estudio para el Manejo de Areas Silvesters de Kuna Yala

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