

**Communities and Conservation Areas:
Impacts of Employment in a Regional Conservation Area
on the Quality of Life of Local Residents**

**A Case Study of the Town of Quebrada Grande
and the
Guanacaste Conservation Area,
Northwest Costa Rica**

DRAFT

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INTRODUCTION

The Guanacaste Conservation Area (*Area de Conservación Guanacaste* or ACG) in northwest Costa Rica is the setting for an important change in tropical conservation.

In the late-1980s, the fall of the cattle ranching empires in Guanacaste opened the door to an expanded Conservation Area. Acting to preserve biodiversity, the ACG bought and began reforesting large tracts of land adjacent to the already protected wildlands. To facilitate this process, it also restructured its organization to more effectively manage its staff, activities, and resources. Separating itself from Costa Rica's traditional national park management structure—in which a centralized base in the country's capital administers the park—it became a largely independently-managed national Conservation Area whose administration is contained within the Guanacaste region.

But the ACG faced a problem that challenges conservation efforts across the world, and which had recently presented itself to the Costa Rican government: Even if the ACG succeeded in physically rehabilitating the ecosystems, how could it ensure the longevity of those ecosystems? The ACG seriously considered the lessons of a biological disaster which occurred in Costa Rica in the mid-1980s: the invasion of Corcovado National Park—one of the most pristine in the country—by 1,500 gold miners. This invasion displayed the vulnerability of conserved wildlands under the traditional protectionist management system. Since the existing park system had left that portion of Corcovado National Park essentially unoccupied and seemingly “abandoned,” the miners viewed it as basically morally acceptable to “invade” and mine the gold from the rivers. Their activities destroyed the aquatic ecosystems in the eastern side of the park. However, most of the miners left during a year-long campaign by the National Park Service (1985-1986) to convince and show them that in fact these lands were “occupied,” albeit by biodiversity custodians; the remaining 10% were removed peacefully by the Rural and Civil Guards.

How could the ACG avoid a situation like the one in Corcovado where people invaded a national park to harvest what seemed like a neglected resource with no owner? The answer was to incorporate the management of the ACG in the local social and economic fabric, with the result that they both benefit directly and have a stake in its persistence. As part of the restructuring of its administrative system, the ACG aimed to involve locals in the management of the Area. Over the past ten years, the ACG has begun patronizing local businesses (rather than using vendors in the capital city), hiring local employees, and

implementing biological education programs for local residents. The ACG also switched from a traditional vertical management structure—in which park guards did everything from fight fires to cook—to a horizontal one incorporating specialization of labor.

More than ten years have passed since the ACG began to interact officially and directly with local communities. What can now be said about these partners and their relationships? Has employment of locals contributed to achieving the ACG's goals of mutual benefits for the Conservation Area and surrounding communities?

This paper focuses on how hiring local residents affects those employees' lives and whether or not hiring locally contributes to forwarding the Conservation Area's goals of promoting the longevity of the Area.

The material in this paper was gathered during a ten-month study based in the town of Quebrada Grande, a 500-person village fairly close to the ACG. I lived in the town while conducting this study to gain a realistic vision of the culture and economy of the area. My research methods centered on formal oral interviews with 28 town residents who have full-time long-term work in the ACG but also included participant-observation and informal interviews both in the ACG and the town. Participants included employees hired directly by the ACG, employees of the National Institute of Biodiversity (INBio), and research assistants to biologist Daniel Janzen who have had full-time employment in the ACG for at least nine months.

I qualitatively investigated the history of the ACG, the economic history of Guanacaste Province and Quebrada Grande, the history of the town's interaction with the ACG. But most importantly, I examined the questions of how working in the ACG has altered the employees' lives and if it has forwarded the ACG's goal of sustainable conservation.

In order to help me answer these questions, each of the 28 employees from Quebrada Grande voluntarily participated in a set of three oral interviews incorporating the following themes:

- A comparison of their employment activities and working conditions before working in the ACG with their current activities and conditions. These questions explored aspects of employment like salary, benefits, housing, schedules, responsibilities, skill development, educational opportunities, job security, autonomy, motivation, relationship with supervisor, and overall comfort in working environment.

- A self-evaluation of how their personal lives have been affected by working in the ACG. Has working in the ACG altered their standard of living, access to transportation, housing, family life, health, leisure time, exposure to people and places beyond their immediate surroundings, aspirations, or self-image?
- An exploration of whether or not their knowledge of conservation has increased due to their work in the ACG.
- An estimate of the extent to which they have shared with their family or neighbors the knowledge they have acquired by working in the ACG.
- A documentation of their perceptions of the town's relationship with the Conservation Area.

The interviewees responded eagerly and thoughtfully. Most found the questions intriguing and thought-provoking, and the majority slipped comfortably into the conversation. At times the interviews proved challenging for people who had never discussed their feelings about the ACG with an outsider. Many of the interviewees were grateful to have the chance to reflect on their own lives—to think about what they have done and what they will do. Some felt honored that someone else thinks they are important enough to chronicle their lives and opinions. When I thanked them for their participation, often, they would thank me for including them in my work. This long paper is a tribute to their eager participation and detailed responses.

Section One (Chapters 1-3) lays the necessary groundwork for understanding the ACG in geographical location and time. Chapter 1 gives a brief history of the National Park System (SPN) in Costa Rica, exploring the SPN from its foundation in the 1970s until it faced economic, social, and biological crises in the 1980s. This chapter presents the setting for the creation of the ACG. Chapter 2 outlines the economic background of Guanacaste Province, demonstrating how the fall of this cattle industry facilitated the opportunity for the establishment of the ACG. Chapter 3 provides an overview of the socially-oriented philosophy of conservation implemented by the ACG's management, and the evolution of the ACG's identity through the late 1990s.

Section Two (Chapters 4 -7) describes the ACG's efforts to incorporate local towns into its management. Chapter 4 outlines the ACG's general interaction with local towns through employment and community-level education and programming. Chapter 5 depicts my research project's study-site, Quebrada Grande, presenting the town's economic history,

infrastructure, and current demographics. Chapter 6 focuses on the interaction between the ACG and Quebrada Grande, through land purchases, programming, and informal socialization. Chapter 7 closes Section Two with the insights of the employees on the ACG's relationship with the town.

Section Three (Chapters 8-14) is based entirely on the results of the personal interviews with the employees. It compares the employment activities and conditions of the interviewees before working in the ACG with their current situation. Chapter 8 presents the background of the interviewees and how they came to work in the ACG. Chapter 9 examines the employees' working activities and environments before coming to work in the ACG, and their feelings about working in those situations. Many had spent each day doing basic physical labor in uncomfortable environments, with low salaries and few benefits.

Chapters 10 through 14 depict the interviewees' current circumstances in the ACG. Chapter 10 looks at how the employees have reacted to the freedom the ACG gives them to carry out their responsibilities autonomously. Chapter 11 describes the interviewees' reactions to the working environment in the ACG. Chapter 12 outlines what aspects of working in the Conservation Area the employees enjoy as benefits. Chapter 13 exhibits the formal and informal educational opportunities available to the employees in the ACG, and how these opportunities have fostered the employees' personal development and changed their views on conservation. Chapter 14 explains how working in the ACG has introduced the employees to other geographic locations and people that they would not have known otherwise.

Section Four (Chapters 15-18), also based on the results of the interviews, describes the changes the employees' personal lives since they began working in the ACG. Chapter 15 shows how working in the ACG improved the interviewees' private housing arrangements. Chapter 16 explores the ACG's impact on employees' families' economic, intellectual, and emotional state. It also addresses the extent to which the employees have passed on their knowledge about conservation to their families. Chapter 17 presents the employees' opinions on how working in the Conservation Area has altered their self-image, ability to deal with personal problems, aspirations, health, and leisure time, among other themes. Finally, Chapter 18 presents the interviewees' answers to the question, "What would your life have been like if you had not started working for the ACG?"

The interviews demonstrate how hiring locally benefits both Quebrada Grande residents and the Conservation Area. Working in the ACG has elevated the quality of life of a core group of local residents who now depend on the continuity of the Conservation Area to maintain their own standard of living. They now understand the biological and social value of conservation and have committed themselves to working for the benefit of the ACG. Furthermore, they have begun to share their knowledge with others. Although this is only one case study, with circumstances very specific to one town in Guanacaste Province, Costa Rica, it provides a colorful and inspiring example of sustainable social development and biological conservation.

1. NATIONAL PARKS IN COSTA RICA: THE “TRADITIONAL APPROACH”

The Guanacaste Conservation Area is often referred to as the most progressive conservation area in Costa Rica. The past ten years have encompassed an enormous amount of change in its philosophies and operative policies. In order to understand just how radical the changes effected by the Guanacaste Conservation Area were, one must first understand the history of the Costa Rican National Park Service (SPN) and how its original policies of protected-area management created the setting for the ACG's entrance into the conservation scene in Costa Rica. David Rains Wallace's book, *The Quetzal and the Macaw*, featuring a great deal of the “behind the scenes” history of Costa's Ricas National Parks, served as my main resource for this section.

Before the 1950s: Precursors to the SPN

Though management practices of protected wildlands are undergoing a major revolution in Costa Rica, the idea of conservation itself is not new. The first legislative measures taken concerning conservation sprung from the necessity to protect essential resources and from efforts to preserve the aesthetic beauty of nature. As early as 1775, the Spanish colonial governor prohibited the burning of fields and forests to protect soil quality, while in 1833 the legislature passed a law requiring “green belts of permanent farmland, pastures, and woodland around cities.”¹ Efforts to protect wildlife and watersheds and to prevent soil erosion continued through the 1800s and early 1900s.

In 1939 the legislature made its first attempt to create national parks. Like much of the other legislation passed to conserve wildlands, however, nature preserves such as those declared around Volcanoes Irazu and Poas in Costa Rica's Central Valley, ended up merely “paper parks” and were largely unsuccessful due to the government's inability or unwillingness to “allocate money to establish, enforce, and maintain [them].”²

The abolishment of the armed forces in 1948 catalyzed Costa Rica's public conservation activity, as it allowed the government to devote a considerable portion of its budget to education. Many of the primary actors in the establishment of the Costa Rican National Park Service were professors or graduates of the University of Costa Rica. Even so, it wasn't until 1967 that the Ministry of Agriculture organized a group of academics and government officials to compile and review information about conservation, forestry, and national parks. After three years of work, the committee presented to the Legislative Assembly what would become the 1969 Forestry Bill,

¹ David Rains Wallace, *The Quetzal and the Macaw* (San Francisco: Sierra Club Books, 1992) 11.

² Wallace 13.

which, among other items, mandated a national park system under the direction of the Ministry of Agriculture.³

1970s: The SPN and Land Acquisition

Costa Rican National Park Service's (SPN) made its two primary goals for the decade of the 1970s land acquisition and protection. The Costa Rican Government hired two committed, idealistic, and energetic men to head the SPN. Alvaro Ugalde and Mario Boza, respectively students of biology and agronomy, both had completed coursework in the U.S. and Costa Rica on national park management. Their involvement in the SPN was so influential and prolonged that they have been referred to as the fathers of the Costa Rican National Park System. With strong political support from the Arias and Odubar administrations and fairly strong public support—at least among residents of the Central Valley—the SPN found that its land holdings skyrocketed within the period from 1971-1977. Poas Volcano and Santa Rosa National Parks marked the first endeavors in 1971—Poas Volcano due to its previous status as a paper park and spectacular volcanic activity, and Santa Rosa indebted to its status a national monument to the memory of the battle against American “filibuster” William Walker in 1856 and battles with Nicaraguan troops in 1919 and 1955. After that the park system grew explosively. The SPN tried to acquire land across the country in every type of ecosystem possible, striving to represent the wealth of Costa Rica's biodiversity, rather than just providing pretty recreation sites. Cahuita, Tortugero, Barra Honda, Guayabo Island, Guayabo Archeological Site, and Ríncon de la Vieja became parks between 1971 and 1974, enveloping coral reefs, turtle nesting grounds, limestone caverns, shorebird nesting rookeries, ruins, and bubbling mud parts in the protective cloak of the SPN. Parks Manuel Antonio, Corcovado, Chirripó, and Braulio Carrillo soon followed. By 1978 three biological reserves—Caño Island, Carara, and Palo Verde—had joined the ranks. In less than ten years the cornerstone of the SPN had been firmly laid.

In 1977 alone, the SPN staff doubled. According to then Assistant Director of the SPN, José María Rodríguez, ““We seemed richer every day, salaries were going up, opportunities were multiplying. So the Park Service had decided that it was time to go beyond basic protection of the parks and to go into more sophisticated management, to offer more opportunities for public use.”” Ecotourism, strongly advocated by Boza, was seen as a possible source of income for the National Park Service. Hopes soared, until the economic recession hit in the 1980s.⁴

³ Wallace 14.

⁴ Wallace 83.

Land acquisition, however, was not an easy feat. Local populations living close to the proposed park sites often vehemently rejected the idea. Costa Rica is a country where the majority of the population had traditionally depended directly on small-holding subsistence agriculture, hunting, or fishing, and where land-holdings bolster the economic and social standings of an individual. Subsequently, the concept of taking land out of the grasp of direct production was not very popular in the rural areas. For example, in Santa Rosa, squatters living on Naranjo Beach faced Ugalde armed with machetes ready to aggressively protect their rights to the land. In Cahuita, locals reluctant to give up their land declared, “We are more concerned than anyone about preserving the area, because it’s our farms....They call it ‘natural resources,’ and it *is* natural resources, but it’s our farms!” Cahuita residents also feared that mass tourist development would bring along with it prostitution, crime, and drugs (a fear which has become a current reality in the Cahuita region). Only exasperating these anxieties, the SPN made little effort to work with the locals and include them in the planning process. Local residents and officials complained that the SPN administrators “made arbitrary and unpredictable regulations” concerning land use and did not inform them about changes in legislation and plans to start expropriation hearings.⁵

The lack of communication between the SPN and local populations was not surprising. Acquisition of the park territory occurred largely without planning or structure, and even in retrospect, when Mario Boza wrote *A Decade of Development* in 1981, a “handy, how-to guide on establishing and administrating a national park system in a developing country,” public support was seen as something garnered by good relations and communication with the press and public officials, rather than direct involvement with local communities.⁶

A Protectionist Approach

Although there had been talk of developing ecotourism within the national parks, the setbacks caused by the recession of the 1980s ensured that the traditional protectionist approach continued to dominate SPN management. Under the traditional Costa Rican National Park System management structure, there existed a distinct separation of society and nature. The SPN had created a system which, according to the current director of the National Institute for Biodiversity (who was previously an advisor to the National Parks Foundation) Rodrigo Gámez, “[copied] the national parks system in the United States, based on the idea that nature should be left alone to take care of itself.” In the view of the Costa Rican SPN, “The only thing required was to protect nature from threats, which of course were threats from humans. Maintaining humans at a distance, outside,

⁵ Wallace 38-39.

⁶ Wallace 37.

would solve the problem, so the thing that was needed was [park guards].”⁷ E.O. Wilson describes this ideology as the “bunker” approach to conservation, one which has been fairly successful in the United States and Europe due to their higher level of economic development. “Close off the richest wildlands as parks and reserves, post guards. Let the people work out their [economic] problems in the unreserved land, and they will come to appreciate the great heritage preserved inside, much as they value their cathedrals and national shrines.”⁸ Would it be successful in Costa Rica, a Latin American country struggling through an economic recession?

Costa Rican park guards, purposely brought in from other regions in Costa Rica, worked to keep people out of the national parks in order to preserve the areas without many direct uses besides limited, unmanaged recreational ecotourism and scientific research. The original SPN did not focus on either type of ecotourism. Alvaro Ugalde has explained this apparent divergence from the U.S. Park Service model, which from its beginnings in 1872 had set aside 2 million acres in Yellowstone “as a public park or pleasure ground for the benefit and enjoyment of the people.”⁹ According to Ugalde, “We started with a system to protect biodiversity. The world was speaking more about biodiversity than recreation. We were influenced by biologists, not just a few park planners from the U.S. So recreation and scenery were secondary.” In October, 1982, Ugalde went as far as saying, “I will not resort to tourism as a way to maintain the parks. Management of the ecosystems in the parks in perpetuity is the Park Service’s main goal.”¹⁰ The national and international tourists and researchers who arrived at national parks like Santa Rosa and Ríncon de la Vieja found little supporting infrastructure to guide and enhance their experience. Between the economic crisis and the lack of emphasis on user-friendly parks, even in 1990 the “ranger stations in Ríncon de la Vieja and Corcovado looked more like products of third world indigence than Park Service philosophy.”¹¹

Rather than studying to be naturalist guides, the park guards focused on keeping people, *especially* local residents, out of the parks. In the words of one park guard, Juaquin Gamboa, who worked in Santa Rosa in the 1970s, “I thought of myself as a policeman, and of the national park as a kind of zoo that I had to protect from the local people, the people living around the park. We didn’t feel

⁷ As quoted in Wallace 153. It should be noted that although this might have been the impression of the policy of the United States Park Service, that U.S. protected wildlands have always been highly managed. See *Playing God in Yellowstone*. (Find reference.)

⁸ E.O. Wilson, *The Diversity of Life* (New York: W.W. Norton and Company) 282.

⁹ U.S. Department of the Interior, *Management Policies* (Washington D.C.: National Park Service, 1988) 1:1

¹⁰ Wallace 118.

¹¹ Wallace 125.

that we needed those people. The important thing then was for the parks to get as much land as possible and protect it.”¹²

This insular and rather narrowly-defined protectionist approach did not take full advantage of the opportunities that arise when a complex tropical wildland is provided with reasonably secure protected status. Activities which would benefit a larger audience—like education and employment of local residents, or facilitation of national and international research—were simply not thought of under the SPN policeman mentality. On the contrary, rather from profiting from the parks, local populations felt persecuted by them. In the case of northern Guanacaste, the effects of this protectionism were felt most strongly and directly by local towns such as Colonia Bolaños, Cuajiniquil, Curubande, La Cruz, and Quebrada Grande. Park policy in Santa Rosa and Rincón de la Vieja not only excluded locals from exploiting natural resources within the park boundaries with the prohibition of hunting, fishing, and tree extraction, but also prevented local residents from benefiting economically in other ways from the existence of a park near their town. For example, park regulations deliberately prevented locals from working as guards in the park, and ecotourism programs generally were not designed in ways that would benefit nearby small towns. Backpacking tourists camped within the park, and schools bused children up from the Central Valley to see the historical sights at Santa Rosa, but neither ventured out to the nearby towns. (Liberia, however, by virtue of being the provincial capital on the Inter-American highway and already having an infrastructure with hotels and restaurants did reap some of the benefits of this tourism.) Furthermore, local residents’ economic circumstances limited their access to the parks for recreational purposes. Without a direct bus service to the parks (private cars belong only to the well-off, and taxis are expensive) very few people were able to come to the parks in their free time.

1980s: Economic, Social, and Biological Crises

Strong political support coming from the Arias, Oduber, and Carazo administrations had helped the ascent of the SPN, but the economic crisis struck in the early 1980s hit the Park Service hard. In 1980, SPN staff had totaled 409 people; by 1988 it was 320. In those eight years, however, the SPN’s land holdings had increased by 150 percent. “Staff shrank, salaries shrank, and there was always more work to do.” Rodriguez estimates that the SPN lost 80% of its buying power between 1980 and 1986. The high hopes of the late 70s vanished. Understaffed and underfunded, the SPN suddenly found itself depending even more heavily on basic protectionist policies, cutting educational programs, and thinning out its staff. To make matters worse, private owners of land within park borders started to pressure the SPN for payment. For the first time, the SPN organized an international campaign to solicit \$5.5 million over five years to cover its expenses.

¹² As quoted in Wallace 148.

The rocky relationship between the SPN and residents of towns close to protected wildlands deteriorated in the 1980s. Rodrigo Gámez remembers,

“The funds that had been raised had all been for protection and land acquisition—nothing for socio-economic planning, nothing for management, nothing for research. And the parks were being managed without any knowledge of biology. I was amazed at meetings about park matters where there was no discussion of biology.”¹³

The parks, according to Gámez, had obvious and intertwined social and biological problems, but no one was paying attention to them. And protectionism had reached such a forte, that even biologists “were seen almost as undesirables.”¹⁴

By the mid-1980s, the SPN began to pay the biological price for its narrow focus. Corcovado National Park—in many ways seen as the pearl of the National Park System for its biological diversity and seemingly pristine condition—became the seat of the conflict between the SPN and local communities. The clearest example of friction between towns and the SPN, this scenario demonstrated how ambiguous messages to the local residents about the goals and processes of conservation, and about what is permissible in a protected area, can lead to destruction. In the case of Corcovado, it led to the invasion of the park by over fifteen-hundred gold miners, and the subsequent devastation of the ecosystems in the affected area. The evaluating report stated that “game animals had been ‘practically eliminated’ from the affected area and that ‘almost all rivers’ had been converted into ‘canals, sterile and full of sediment.’”¹⁵ Conflict resolution digressed to the use of the Rural and Civil Guards to evict the miners by force, an incredible event in a country which had abolished its army 40 years before.

The report written assessing the situation in Corcovado concluded:

“The Park Service in its turn should recognize that this is the most dangerous crisis it has undergone in its history . . . To prevent another invasion, the service should involve itself deeply with neighboring communities and other planning agencies to show the benefits of the park It is fundamental that the service assure Corcovado be considered . . . in the minds of all Costa Ricans as a very important scientific, educational, and touristic institution contributing substantially to socioeconomic development, both regionally and nationally.”¹⁶

The Costa Rican government, however, did not treat the matter with urgency or attention that it should have. Ugalde, in one of his many attempts to gain government support, submitted a report

¹³ Wallace 154.

¹⁴ Wallace 154.

¹⁵ Wallace 134.

¹⁶ Wallace 136.

to the Economic Council practically begging for more funding to resolve the crisis. ““What is in danger,”” he wrote, ““is not only Corcovado but the whole Costa Rican park system. Experience in other countries shows that, once a park is lost, the others rapidly follow.””¹⁷ He was right: Corcovado was not an isolated incident of a protected area threatened by invasion by local residents. While the SPN focused on the southwest, the northeast began to unravel. Reportedly in 1990, there were over a thousand families living in Barra Colorado Wildlife Refuge north of Tortuguero National Park on the Nicaraguan border.¹⁸ The SPN, it seemed, was unraveling at the seams. A new methodology of park management was necessary, one which—as the Corcovado Report recommended—convinced all levels of society of the necessity of protected wildlands. The time was ripe for change.

Santa Rosa National Park: Headquarters of Change

It seems that people in Santa Rosa National Park realized the necessity of involving local residents before the other parks did. Juaquin Gamboa, who worked as a workman in Santa Rosa, remembered that

“In 1978 and 1979, we began to realize that we wouldn’t be able to protect the parks in the long run if we were alone, if it was just us in the park against the world outside. We used to want to please ourselves, but we’ve had to learn to please others. We realized that we should be promoting the park to local people, acting as guides as well as rangers. We started having groups of school children in, doing environmental education. We began to see that local people had things to offer us.”¹⁹

It is mostly likely *not* coincidental that this change in attitude spawned in Santa Rosa National Park. Tropical biologist Daniel Janzen began working in Santa Rosa in 1972, and in 1974 began hiring local residents as assistants to help him with his research. Gerardo Vega worked for Janzen for five years in Corcovado and Santa Rosa. Vega was exactly the type of man that the park service feared, the type who bucked the system:

In his checkered career, Vega had been a Costa Rican farmer, hunter, gold miner, squatter, liquor smuggler, and national park helper. His parents had been coffee pickers, and he had three years of formal education. His employers in the national park system were happy to be rid of him because he always felt he knew how to do things better than his bosses.²⁰

When Vega decided to head back to gold-mining, he was replaced by Roberto Espinoza, a native of the small fishing village of Cuajiniquil to the northeast of Santa Rosa, where he had been a

¹⁷ Wallace 138.

¹⁸ Wallace 148

¹⁹ As quoted in Wallace 149.

²⁰ Daniel H Janzen, Winnie Hallwachs, Jorge Jimenez, and Rodrigo Gámez, “The Role of the Parataxonomists, Inventory Managers, And Taxonomists in Costa Rica’s National Biodiversity Inventory,” *Biodiversity Prospecting*, 224.

“machete swinger, cowboy, and fishing boat helper.”²¹ Though his work for Janzen ended in 1989, Espinoza is currently working as a parataxonomist in the Guanacaste Conservation Area.

Through these assistants, it quickly became apparent to Janzen and the other biologists for whom he found local assistants, as well as to Santa Rosa’s park guards, that there existed a true capacity and interest among local residents to understand the precepts of biology and conservation, and that they could be integrated successfully into the system. Both Vega and Espinoza had extensive experience in the field, which put them immediately at ease with their surroundings (at times, quite challenging with excesses of heat, rain, insects, and snakes) and they had demonstrated “great curiosity, strength, and whole-hearted involvement in the task at hand.” It quickly became apparent that they could “accept even more responsibility and learn even more complex tasks than those given.” Furthermore, their enthusiasm, helpfulness, and logistical competence surpassed that of most Costa Rican and U.S. university students.²²

Janzen had also been responsible for the 1985 evaluation of the Corcovado crisis, and had pointed out the necessity of incorporating society with the development of the protected wildlands. Furthermore, during a trip to Australia which revealed the devastating effects of 50,000 years of burning tropical dry forest, he realized that this would be the eventual destiny Santa Rosa’s dry forest if nothing were done to stop the yearly burning. This realization compounded his conviction that the time had come to create a park large enough to restore the dry tropical forest, which would be guided by an innovative, socially-oriented management strategy—hopefully one more successful than that of the SNP.

²¹ Janzen, “Parataxonomists” 224.

²² Janzen, “Parataxonomists” 224.

2. GUANACASTE: THE SETTING OF CHANGE

As much as it is essential to comprehend the history of the SPN to grasp how the ACG differs from traditional protected wildland management, it is fundamental to understand the social and biological context of Guanacaste to comprehend how the ACG has simultaneously fit into and changed the region. As Janzen clearly pointed out in the Guanacaste National Park proposal, the “plan is extremely site- and culture-specific. It is designed to function in the exact context . . . of a small part of north-central Guanacaste Province.”¹ While it could be that large portions of the philosophy and technique used to create and run the ACG might be appropriate to other agroecosystem zones in the tropics, Janzen reminds readers of his proposal to evaluate the plan within its context, not in the context of other parts of the tropical world. What *was* the context in north-central Guanacaste? Why did it lend itself so readily to this conservation plan?

Guanacaste Province encompasses 10,141 km² of territory, or 20% of Costa Rica. Bordered by Nicaragua to the north, the western limit is the Pacific Ocean and the Gulf of Nicoya. To the east it is separated from Alejuela Province by the continental divide traversing the Guanacaste Mountain Range, *Cordillera de Guanacaste*, and to the south it meets with Puntarenas Province. May through October bring rain clouds from the Pacific over Guanacastecan lands, but the region has a distinctive dry season for six months of the year between November to May. During these months, hot and humid northeast tradewinds pour in from the Caribbean, but drop their rains on the eastern side of the volcanic cordillera, leaving warm winds to sweep down the mountains into the plains, drying out everything they touch. When the Spanish colonists arrived to Costa Rica, Guanacaste had been covered with dry tropical forest, but the current situation is quite different. A scenic portrait of the area by Marc Edelman, author of *The Logic of the Latifundo: The Large Estates of Costa Rica Since the Late Nineteenth Century*, depicts the region precisely as it was in the 1980s, and continues to be in the 1990s.

A traveler along the Pan-American highway [enters] Guanacaste Province from the north . . . in an area of torrid lowland plains dotted with occasional trees and a few rolling hills. Barbed wire fences run parallel to the two-lane route for most of its length, marking the borders of properties and assuring that livestock stay out of the way of intermittent traffic. The savannas—lush green during the rains and brown or yellow in the dry season—nurture scattered herds of cattle, and in a few spots with more abundant water, rice and sugarcane fields break the monotony of the flat landscape. This region of tropical prairie is, more than anything else, an immense pasture . . . which give[s] the land an abandoned look, as if its human inhabitants had tried to ensconce themselves and retreated in the face of the sweltering sun and the relentless secondary vegetation.²

¹ Daniel Janzen, *Guanacaste National Park: Tropical, Ecological, and Cultural Restoration* (San Jose, Costa Rica: Editorial Universidad Estatal a Distancia, 1986) 12.

² Marc Edelman, *The Logic of the Latifundo* (Stanford: Stanford University Press, 1992) 1.

Edelman interprets this scenario for us:

The scattering of cattle in distant pastures, the appearance of abandonment, and the chained, wrought iron gates securing the entrances of one or another important hacienda hint at a problem which has weighed heavily on much of rural Latin America—that of the *latifundo*, or large unproductive estate.

Latifundos, large tracts of underutilized land under concentrated ownership, have dominated the Guanacastecan plains for over two hundred years. Edelman's work extensively documents the history of land tenure and utilization in Guanacaste from Spanish colonialization to the mid-1980s, aiming to answer the question, "What accounts for the persistence of such systems . . . if lucrative alternatives to *latifundismo* appear to exist?"³

Latifundismo in Guanacaste

Latifundismo began in Guanacaste as an extension of the Nicaraguan cattle industry, where Nicaraguan cattle would be sent for fattening before being sent to market. In the late 1800s, titles to national lands in parts of Guanacaste to the north and west of Liberia were frequently granted under concession laws, which at times granted unlimited quantities of land to people who intended to use it for cultivation or ranching.⁴ The most intense consolidation of land occurred in the first several decades of the 1900s, with procedures called "rectification of land measurements" and the "titling of excess lands." The former permitted landowners to "adjust the total area of a title upward to the real area enclosed within the boundaries specified in the title," and the latter sanctioned the "titling of unclaimed public lands that had been occupied by de facto owners of adjacent properties." To give an idea of the incredible extent of expansion permitted to the haciendas via these procedures: Hacienda El Jobo, near Liberia, alone expanded its holdings from its original royal grant of 1,605 hectares to 18,618 hectares in the 1920s. Peasants often protested this rampant acquisition of lands.⁵

Many of the largest latifundistas in the first half of the 1900s were descendants of the colonial elite from Rivas, Nicaragua. Some families had arrived to Guanacaste earlier and had already established roots in Liberia, while others had arrived more recently. Several were members of the San Jose elite. According to Edelman, foreign landlords who were not of Nicaraguan descent were relatively recent arrivals in Costa Rica, such as Keith Minor (the American responsible for constructing banana-railway in Limón who traded land for paying off the Costa Rican debt), the River Plate Trust (a British mining company), or Frenchmen who hoped to start a "colony of

³ Edelman 1-3.

⁴ Edelman 60.

⁵ Edelman 62.

peasants in lowland Abangares.” The largest latifundista in Guanacaste was American George Wilson. He purchased land from former president Bernardo Soto, which once “rectified” became 133,000 hectares, 13% of the entire province of Guanacaste. In the area which now pertains to the ACG, the original haciendas mostly belonged to Nicaraguan owners, like the Barrios and Hurtado families.⁶

Up until the 1930s, Guanacaste’s remoteness and ecology protected latifundistas from state intervention. During this time, labor was a seller’s market. At times much to the resentment of the property owner, the rural population (which, as Edelman reminds us, consisted of a colorful grouping of “agriculturists, cattleman, loggers, hunters, proprietors, squatters, employers, wageworkers, rustlers, migrants, miners, artisans, clandestine distillery operators, and petty merchants”) had free access to hacienda resources—with or without the landlord’s permission—and had full control over supplying the ranch with labor and goods. In accordance with the culture of the frontier, in order to secure the loyalty of his employees the landowner often needed to adopt a paternalistic stance towards them, a type of bribery for good behavior, to maintain a constant non-damaging labor force.

Beef Exportation

The 1930s and 1940s were critical years for Guanacastecan cattle ranching. Ironically, the world depression of the 1930s “tipped the scales in favor of the [Guanacastecan] hacendados” and even created new opportunities for small producers.⁷ Latifundos were propelled forward as the saturated labor market helped them secure the dedication of their employees at a lower-price, and the protectionist state policies increased land and livestock prices. The protectionist policies simultaneously strengthened smallholding cattle producers, which by 1950 effectively replaced the Nicaraguan ranchers who had previously supplied the large Guanacastecan ranches with unfattened feeder cattle.⁸ (These smallholders, however, had very little effect on the inequitable land distribution.) By 1950, Costa Rica had significantly decreased its dependence on imported Nicaraguan cattle and had attained self-sufficiency in beef production, and had begun to export significant numbers of live cattle and beef.⁹

From the early 1950s through late-1970s, Costa Rica experienced a “cattle boom.” By the mid-1960s, beef exports were Costa Rica’s “third largest source of foreign exchange behind coffee and

⁶ Edelman 63-66.

⁷ Edelman 114.

⁸ Edelman 158.

⁹ Edelman 154-186.

bananas.”¹⁰ Many complex, interrelated forces contributed to the ascension of beef exportation. The rise of the post-1948 developmentalist state, with its support of non-traditional exports, participated on several levels. The National Banking System liberally provided credit to ranching endeavors; improvements in the country’s transport infrastructure facilitated the transportation of the cattle from the ranches, to packing plants, to ports; and the government created a network of institutions responsible for livestock-related research, technology development, and technical training. International lending institutions interested in the development of Costa Rica, like the World Bank and the Inter-American Development Bank, specifically and generously subsidized institutions, programs, and credit devoted to the improvement of livestock operations. With the pressured exerted from the newly formed powerful cattle lobby, the *Cámara de Ganaderos*, legislation often supported the beef export industry.¹¹

The Fall of the Beef Industry

The beef exportation industry flourished until the early 1980s, when Costa Rica suffered the worst economic crisis since the 1930s. Demand for meat stagnated, prices dropped, taxes increased, and operating and financial costs soared. The ranch owners staggered, and the domestic demand could not support them. Small and large producers alike found themselves in great debt, unable to recover even after the crisis ended in 1982. Ironically, these same ranches contributed to the national economic collapse through stagnating production. “While the cattle sector occupies nearly three-quarters of the country’s productive land, it creates by far the lowest amount of value-added per hectare of any agricultural activity.”¹²

It was into this scene that the Guanacaste National Park Project entered. Janzen often refers to the situation in Guanacaste as the Costa Rican “dustbowl” with large portions of unproductive land, and the consequential unemployment and mass exodus of people from the region.¹³ There were large tracts of deforested, underutilized, marginal farmland with very low population density. Many ranch owners with large debts were eager to sell, aware that future ranching would only be “realized through labor intensive farming by what amounts to human draught animals” and also aware that their children would probably not make ranching their career.¹⁴ If the park played its hand correctly, it could acquire vast plots of contiguous land holdings from the Pacific coast all the way up to the Atlantic rainforest and cloud forest in the Guanacaste Cordillera. The low population density was also critical, as it would mean less people would need to be relocated, and perhaps less

¹⁰ Edelman 211.

¹¹ Edelman 187-219.

¹² Edelman 358.

¹³ Daniel Janzen, personal interview, February 1997.

¹⁴ Janzen, *Guanacaste* 13.

resistance from local communities. On the biological side of the matter, if well managed, reforestation could be a reality in the near future. The existing tracts of each of the ecosystems would be able supply the biological resources necessary for reforesting the newly secured land, effectively working as species-banks for plants, animals, insects, and fungi. With adequate amounts of land available, effective reforestation management, fire-control, and hunting cessation, the dry tropical forest and several other ecosystems could be on the rebound within several years.¹⁵

¹⁵ Janzen, *Guanacaste* 12-15.

3. THE GUANACASTE NATIONAL PARK PLAN: A SOCIALLY-ORIENTED PHILOSOPHY OF CONSERVATION

The Guanacaste National Park (*Parque Nacional Guanacaste* or PNG), the precursor to the Guanacaste Conservation Area, was the first controversial step away from the protectionist SPN policies. Once the idea was proposed in late 1985, the urgency and excitement propelled the project forward at an unbelievable speed. Dan Janzen, Rodrigo Gámez, Mario Boza, Alvaro Ugalde, and conservationist Pedro Leon formed a commission to plan and manage the Guanacaste National Park Project.

The Guanacaste National Park Project: The Ideology

Biologically, the PNG would be a gem. The park would include Santa Rosa and Murcielago National Parks (230 km²) and 470 km² of private lands which would need to be bought. Once successfully reforested, it would be the “only dry forest reserve in Mesoamerica large enough to maintain healthy breeding populations in normal habitats of the animals, plants and habitats that were here when the Spaniards arrived.” The PNG would also be the “only preserved intersection of two major habitat types, and the only preserved dry forest elevational transect, in Mesoamerica.”¹ It would include seven Holdridge Life Zones, covering at least 16 habitats, among them mangroves, evergreen canyon forest, evergreen oak forest, cloud forest, and Atlantic rainforest.²

The PNG Commission would need to develop a management strategy which would not only protect the land, but assure the park’s longevity. It was apparent from the crisis in Corcovado that the traditional protectionism would not be able to peacefully secure the future of the existing national parks. The PNG acted accordingly with the lessons of Corcovado, which showed that exclusion of local communities could prove disastrous to a national park and that the Costa Rican government still needed to be convinced of the true value of conserved wildlands. Their goal: To make the PNG such a valuable asset in society’s eyes that it would be viewed “in the same breadth as schools, churches, libraries, and democratic government.”³

The PNG plan used as its base an ideology in conservation which is now being called the “New Environmentalism.” As demonstrated through the Corcovado crisis, unless protected wildlands can offer a concrete use to society—especially in developing countries where protected areas are generally neighbor of poor, subsistence-level communities—then they will be sacrificed to

¹ Janzen, *Guanacaste* 87-88.

² Janzen, *Guanacaste* 21-25.

³ Janzen, *Guanacaste* 14.

traditional production. The New Environmentalism addresses the issue of practicality. As described by E.O. Wilson,

A revolution in conservation thinking during the past twenty years . . . has led to [a] perception of the practical value of wild species. . . . Proponents of the New Environmentalism. . . . recognize that only new ways of drawing income from land already cleared, or from intact wildlands themselves, will save biodiversity from the mill of human poverty. The race is on to . . . draw more income from the wildlands without killing them and so to give the invisible hand of the free market a green thumb.⁴

A close biological corollary of this revolution in thinking is a shift in focus from the “star species” in conservation rhetoric (like the Giant Panda, Spotted Owl, or Redwoods) to the ecosystems in which they live. “The ecosystems for their part, containing thousands of less-conspicuous species, are assigned equivalent value, enough to justify a powerful effort to conserve them, with or without the star species.”⁵ By allowing forest reinvasion through the use of a fire control program, natural and managed reforestation, and cessation of hunting, the PNG planned to restore the ecosystems necessary to maintain the dry tropical forest, with the promise that the resulting proliferation of biodiversity within those ecosystems would be exploited for practical use.

PNG founders took the New Environmentalism one step further. They understood that mere “practicality” would not buttress the park unless it was fully utilized for the benefit of *all levels* of society. The three functions of the PNG, as on the next page, distinctly demonstrate its commitment to the full integration of society into the management and varied uses of the park. The goal of integration was based on the conviction that the long-term success of the park depends on the direct and indirect benefits it offers nearby communities, as well as to national and international users. Though the ecological benefits of biodiversity conservation should not be underestimated, for many people that justification alone would not support a major project like the PNG. From the farmers in Guanacaste to researchers in Europe, individuals would need to understand how the conserved wildland would directly serve them and see activities which offer immediate and concrete advantages—whether through employment for local residents, education, recreation opportunities, research facilitation, or the longer-term rewards of biodiversity prospecting. The PNG plan proposed activities in all of these spheres, with the intention of profiting local, national, and international communities. The PNG Commission hoped that once people learn to value the ecological, economic, social, educational, and entertainment benefits of the park they would participate, or at least respect, in its protection and development.

⁴ Wilson 282.

⁵ Wilson 283.

In 1986, Janzen published the basic proposal and plan of action for achieving the PNG, *Guanacaste National Park: Tropical, Ecological, and Cultural Ecology*. Its introduction listed three basic functions of the park:

1. Use existing dry forest fragments as seed to restore about 700 km² of topographically diverse land to a dry forest that is sufficiently large and diverse to maintain into perpetuity all animal and plant species, and their habitats, known to originally occupy the site. It also must be large enough to contain some habitat replicates that can absorb intense visitation and research use.
2. Restore and maintain a tropical wildland so as to offer a menu of material goods, such as plant and animal gene banks and stocking material, reforestation examples with native trees, watershed protections, manipulation of vegetation by livestock, recreation sites, tourism profits, wildlife management examples, agroforestry research data, educational programs (from elementary levels to international symposia), and basic wildland biology data.
3. Use a tropical wildland as the stimulus and a factual base for a reawakening to the intellectual and cultural offerings of the natural world; the audience will be local, national and international and the philosophy will be "user-friendly."⁶

The new ideology required a new management schema. Several major changes would be made in the administration of the Guanacaste National Park, all of which aimed to decentralize the chain of command from San Jose to the park within the park itself. First, though the PNG would be the property of the National Park Service, and a small portion of its budget would be derived from the SPN, the "bulk of its budget [would] be derived from the investment revenue generated by the PNG Endowment Fund" which would be managed by the non-governmental organization (NGO), the National Park Foundation (FPN).⁷ The FPN would "provide high-quality financial management, [and] manage the money so that there's a maximum amount available, like a business office at a university."⁸ The NGO, however, would not in any way determine the activities of the park. According to Janzen, running a park system is too great of a responsibility for an NGO, nor would it be recommendable to absolve government from its role in determining policy and structure of protected wildland management. There would, however, be a change in the decision-making structure. Rather than being dictated from the top down, it would begin at the park-level. Decisions would be made by the park staff in conjunction with a regional committee of local residents, the *Consejo Local*, and then approved by the SPN. The actual day to day management of the park would also change, as the PNG abandoned the concept of the multi-talented parkguards, who had been responsible for everything from trash collection to attending tourists. The PNG would now function under a horizontal, rather than vertical administrative structure, with

⁶ Janzen, *Guanacaste* 1-2.

⁷ Janzen, *Guanacaste* 74.

⁸ Wallace 173-174.

clear divisions of labor between programs in charge of protection, maintenance, fire control, ecotourism, education, and research.⁹ Furthermore, priority in employment would be given to applicants native to the region, both male and female, as the “residents of the region offer better advantages with regard to cultural identification with the region in which the PNG is developing, as well as with the region’s ecosystem.”¹⁰ These last two changes in internal management and hiring standards will be investigated in more detail in later sections of this paper.

The Guanacaste National Park: The Beginning

Janzen put himself in charge of fundraising to buy the land and to supply the endowment fund. He immediately set off with Winnie Hallwachs on a worldwide campaign, putting their enthusiasm, celebrity, and seemingly inexhaustible energy to good use. An estimated \$11.8 million would be needed for start-up and endowment. Every method of fundraising and “land-raising” was used: donations from non-governmental organizations like the National Parks and Neotrópica Foundations, The Nature Conservancy, and the World Wildlife Fund; donations from private individuals and foundations; debt-for-nature swaps with U.S. banks. Some pieces of land were acquired through were donations, others were discovered to have no owners at all and merely scooped-up by the ACG, and others were results of difficult bargaining processes reminiscent of Guanacastecan frontier culture. Janzen tells hours of colorful stories about his discoveries of potential sellers and his negotiations with them to buy the land. The results were incredibly successful. By 1987, \$3 million of the estimated funds needed had been raised and by mid-1988, Janzen reported that 58% of the PNG Project land had been purchased, with 13% pending.¹¹ By 1993, they had completed almost all of the land purchases, with the exception of the Biological Corridor between Volcanoes Cacao and Ríncon de la Vieja, whose purchase was completed in 1997.

Unlike the SPN, the PNG did not wait until all of the land had been acquired to begin developing its management structure and programs. It immediately established the Prevention and Control of Forest Fires Program and the Biological Education Program, the two most important programs in supporting the reforestation of the land, physical longevity of the park, and the integration of the park with local communities.

⁹ Janzen, *Guanacaste* 3.

¹⁰ Randall Garcia, Sigifredo Marín, Roger Morales, *Estructura de Personal del Proyecto Parque Nacional Guanacaste* (Guanacaste Conservation Area Papers, October 1988) 1.

¹¹ Wallace 162-163.

From “Park” to “Regional Conservation Unit” to “Conservation Area”

The Arias administration quickly recognized the worth of PNG-style conservation, with its decentralization, community involvement, creative fundraising, and semi-independent funding. In 1988, the Costa Rican government set out to replicate the Guanacaste National Park Project across the country. The result was the organization of a system of Regional Conservation Units (URC), based on a similar structure to the GNP. The UCRs basically combined all of the national parks, forest reserves, wildlife refuges, watershed reserves, and indigenous reserves in each region under one management umbrella. Theoretically, each UCR would have its own administration, an endowment fund, a NGO to manage its finances, and a regional committee to help direct the management of the UCR. Under this system, Ríncon de la Vieja National Park and Junquiall and Bolaños Wildlife Refuges would be managed by the UCR Guanacaste. In name, the UCR's had a short life, because by the early 1990s they had already been transformed to Conservation Areas (AC). UCR Guanacaste is now officially known as the Guanacaste Conservation Area (ACG).

The 1990s: ACG Mission Statement and Administrative Structure

Despite all of these changes in name and managing umbrella, the ACG has maintained its original ideology and plan of action since the inception of the Guanacaste National Park. Currently, the mission statement of the ACG is the following: “To conserve the biodiversity of the ecosystems and the cultural inheritance of the ACG as a model of development which incorporates the management of the area with society.” The objectives of the Conservation Area are stated as:

- 1) To develop the management and activities of the area such that they promote the restoration and protection of the ecosystems and the culture of the area.
- 2) To facilitate and promote the integration of the local, national, and international communities in the use and management of the area in a manner compatible with the conservation of their natural resources, through research and education.
- 3) To manage and generate its own financial resources in order to guarantee the perpetual maintenance and development of the ACG.¹²

Over the past ten years the ACG has expanded its land holdings to completion and has developed its infrastructure and programs, becoming the most advanced Conservation Area in Costa Rica. Administratively, the ACG is managed like a private business. There is a Board of Directors, consisting of a Director and three Sub-directors in charge of the Divisions of Ecodevelopment, Administration, and Restoration and Forestry. This Board of Directors is advised by a Technical Committee made up of ACG employees and a “Local Council” (*Consejo Local*) consisting of representatives elected by the communities, institutions, and organizations in the region.

¹² Guanacaste Conservation Area, “Estructura Administrativa” (Guanacaste Conservation Area Papers, 1997) 2.

In the administration, there are three Departments (Accounting and Finance, Human Resources, and Topography and Land Tenure) and two Sections (Computer Support and Administration of the Research Center and Biological Stations.)

The three Divisions (Ecodevelopment, Administration, and Restoration and Forestry) are composed of several programs, each of which has a specialized task. The programs in each division are the following:

Ecodevelopment Division: Ecotourism Program, Biological Education Program, Research Program.

Administration Division: Operations Program, Sectors Program (in charge of maintenance and protection of the different geographic “sectors” of the ACG), Prevention and Control of Forest Fires Program, Control and Protection Program.

Restoration and Forestry Division: Restoration Program and Forestry and Forestry Development Program.

SINAC

In May 1995, in an effort to facilitate the decentralization of conservation management, the Ministry of Environment and Energy (MINAE) created the National System of Conservation Areas (SINAC). Through SINAC, the Ministry proposed to expedite the process of decentralization of conservation management, integrating the Forestry, Wildlife, and National Park Services into one entity. Since its creation, SINAC has struggled with its own definition and mission, as well as with the definition of “Conservation Area,” but in 1996 it defined itself as

[a] system of institutional, decentralized, and participative action which unifies the rivalries of MINAE in the areas of forestry, wildlife, and protected lands, with the goal of planning and executing processes directed at achieving sustainable management of Costa Rica’s natural resources.¹³

SINAC holds to the conviction that it is necessary for each Conservation Area to work under the guidance of “its own authority and abilities” and to “include Society in decision making, while providing quality and efficiency in its service to its client.”¹⁴ The Guanacaste Conservation Area, along with the other nine conservation areas in Costa Rica, is currently under the auspices of this National System of Conservation Areas.

¹³ Ministry of Environment and Energy, National System of Conservation Areas (SINAC), “The National System of Conservation Areas, October 1997” (Guanacaste Conservation Area Papers, 1997) 5.

¹⁴ SINAC, October 1996, 5.

4. ACG POLICIES AND PROGRAMS: INCORPORATING LOCAL TOWNS

Conceptually, if strongly managed, the traditional protectionist park system could have worked to protect the ACG without the incorporation of the residents. This essentially would have been less expensive and seemingly easier. The park guards (in abundance) would have kept the locals from poaching and cutting tress. International and national research and conservation groups would have funded the project in support of the biological conservation. And the historical value of Santa Rosa and the exotic bubbling mud pots and watershed protection provided by Ríncon de la Vieja would have maintained the Area's merit in the nation's eye.

As demonstrated by the history of Corcovado National Park, however, this type of protectionist system maintains only a tenuous and momentary hold on the land. As deforestation begins to reach park boundaries, and protected wildlands become more isolated among farmlands, local residents would increase pressure on the parks as a source of natural resources. In the worst case scenario, the ACG would also need to defend itself on a national level.¹ For the ACG, the question was not how to best *react* to these encroachments, but how to take a proactive stance: How do you avoid these invasions in the first place? How do you use the land so that people feel it's being used valuably and respect the boundaries of conservation?²

The answer to this question is: *incorporate those people who might threaten the ACG into uses of the land which directly benefit both them and the goals of the Conservation Area.* A political scientist might call this co-opting one's competition. Local residents' economic circumstances and knowledge of conservation will have a direct impact on their attitude toward the ACG. One of the underlying principles of the development of the Guanacaste Conservation Area, therefore, is the incorporation of the people who live around the area into the management and activities of ACG. Though it is unlikely that the ACG places the "restoration and protection" of certain local cultural practices high on its list of priorities—as many of these are based around cattle ranching and conversion of forest to pasture—it has sought ways to interact with the local communities in a manner which speaks to their needs and desires, primarily through providing opportunities for employment and education.

¹ In the early days of Santa Rosa, during a draught in Guanacaste, the Minister of Agriculture decided to harvest the savanna in the park for hay to feed cattle. Wallace 33.

² Wallace 160.

ACG Interaction with Local Towns through Employment

The first major path of interaction between the ACG and surrounding communities is through the employment of residents of these towns. To comprehend the types of new opportunities employment in the ACG offers local residents and how radical these changes in employment strategy are, we need to understand with greater depth the traditional employment structure in the Costa Rican National Park Service. It is difficult to trace the roots of SPN employment policy back to any one origin. During the creation of the SPN most of the administration's actions were improvised.³ The employment policies in the SPN, therefore, turned out to be a mix of the models supplied by the institutions the SPN interacted with or esteemed, which included the Costa Rican Civil Service, Costa Rican traditional land management (the latter of which will be referred to in this paper as the *hacienda* model), and the United States Park Service (which is based on that of the military). The ACG diverged from the traditional SPN hiring practices in three striking, and originally controversial, ways: the hiring of local residents, the hiring of women for positions other than those of cook or maid, and the implementation of a horizontal management structure.

1. Local Residents

The SPN restriction on hiring local residents had its most apparent base in the Civil Service and hacienda models. On a logistical level, the Civil Service had the most influence on the hiring practices of the SPN. In the earliest days of the SPN, there had not been a restriction on hiring locals. For example, in the case of Santa Rosa, when the park was first created in the early 1970s, Alvaro Ugalde was forced to extemporize his workforce. He had work which needed to be done and the quickest solution was to hire the cowboys who had worked on the ranch. In essence, the work did not differ from what they had done when the property functioned as a ranch. They did grounds maintenance, swinging their machetes to keep the pastures low, and patrolled the grounds. The majority of those original employees worked well as park staff. Although some were dismissed for accepting bribes from hunters and loggers, several of them still work in the ACG today.

As more funds appeared the SPN expanded and needed to hire more people. At this point the Costa Rican Civil Service was granted the responsibility of hiring SPN staff. The Civil Service required that applicants for positions had at least a high school education, and most of its applicants resided in the Central Valley because the dispersal of announcements for positions rarely penetrated rural areas. Because of these restrictive measures, the Civil Service's hiring practices generally reinforced traditional prejudices against women and lower classes. This automatically excluded many of the local residents from candidacy for SPN positions.

³ Sigifredo Marín, personal interview, 10 November 1997.

There is another basis for this discrimination against locals which originated in the hacienda model. Historically in Costa Rica local residents have been judged as a threat to titled land holdings. “As on cattle frontiers elsewhere in Latin America, large landowners frequently feared peasants as ‘thieves’ and ‘arsonists’ or despised them as ‘vagrants’ and ‘usurpers’ of property.”⁴ Reality generally buttressed these derogatory epithets—in the early twentieth century at least half of Guanacaste’s population occupied lands to which someone else had legal title.⁵ Owners of large haciendas, therefore, tried to protect their land holdings by organizing the lives of their employees such that the latter would not threaten the owner’s claim to the land or livestock. Some hacienda owners specifically sought employees from areas far away from the ranch.⁶ Many of the paternalistic mechanisms of the hacienda in the early 1900s, such as cash advances, pasturage rights, medical attention, and at times short-term access to plots for subsistence agriculture, did not develop out of the *pátron*’s beneficence, but rather out of the need to ensure employee loyalty.⁷ Another measure which had the same protective motivation, but less paternalistic appearance, was that the staff of large haciendas generally could not bring their spouses or families to live with them on the ranch. It is likely that the owners’ fear was that this type of settlement might invoke a feeling of ownership or right-to-ownership of the land in the employees, which in turn could foster a combined sense of independence, self-confidence, and resentment, eventually endangering the owner’s sovereignty over his vast land holdings.

While the SPN did not have the same motivations of maintaining class structure as the old ruling class did, it did worry that people from nearby towns would not respect the legitimacy of the parks’ land tenure. Specifically, SPN administrator’s feared that if locals working as park guards would have a conflict of interest concerning the enforcement of park regulations. According to ACG Director Sigifredo Marín,

The local residents were seen as a threat to the parks. They were the people who would hunt and fish, they were the people who we needed to protect the park from. And at that time we weren’t certain that they would be immune to bribes or would be able to resist the pressure of neighbors or family members to permit them to hunt or extract trees from the park.⁸

Marín postulated that this mentality came from the manner in which the SPN had expropriated much of the land for national parks without paying for it, and the residents still felt that the land

⁴ Edelman 120. For a more detailed description of this issue, see Edelman, Chps. 4 and 8.

⁵ Edelman 125.

⁶ Edelman 277.

⁷ Edelman 100.

⁸ Sigifredo Marín, personal interview, 10 November 1997.

was theirs to cultivate and exploit. In some cases the locals had given proof to SPN's suspicions and in others the SPN just wanted to avoid the possibility.

In contrast to the original SPN policy, the ACG administration does not believe in the inherent corruptibility of local employees. The administration has concluded that living in the region gives many of the residents skills and knowledge about the cultural and ecological environment that make those residents better equipped to work in the ACG than people who are not from the Guanacaste region. Local residents are the people who understand and can effectively work in the context provided by the terrain, the weather, the insects, snakes, animals, and other local people. Local residents, in the opinion of the ACG, are also more deeply committed to the region, to its ecological sustainability and economic development. They will want to see the ACG succeed because they understand how it will help the land they love and future generations of Guanacastecans to improve their lives. For example, they believe in the Biological Education Program because their children, nieces, nephews, and grandchildren will benefit from it. They will want to conserve the forest so their grandchildren will be able to experience it. In this sense, Marín feels that even those ACG employees who do not come from Guanacaste need to make the commitment to live in the region.

If I lived in San Jose, and had my family in San Jose, I would have 50 percent of my mind and body there, not here. Would it truly matter to me if the roads weren't good, or if the forest was being cut down, or if the schools were in horrible condition? No, I would feel like it's not my life, so what does it matter?⁹

Furthermore, the ACG administration believes that hiring local residents will contribute to the longevity of the Conservation Area by strengthening locals' dependence on the Area and extending informal outreach. "People will get the sense that this is an essential part of their livelihood. It supplies employment, education, recreation."¹⁰ Marín believes that the employees will humanize the ACG for non-employees, and hopes that they spread this conviction among the people in their towns. "If people who have their families and friends in the region work for the parks, the parks become less celestial, more down-to-earth. The work can't end at the park boundaries."¹¹

ACG staff, therefore, are hired on the basis of their competence, and selection is biased toward local residents when people with the appropriate skills are available for hire. Although educational requirements are still formally in place, they seem to be more flexible than they were before, depending on the previous experience and skills of the person. ACG staff are also encouraged to

⁹ Sigifredo Marín, personal interview, 10 November 1997.

¹⁰ Sigifredo Marín, personal interview, 10 November 1997.

¹¹ As quoted in Wallace 150.

incorporate their families into their work. In the Sectors program, those employees responsible for the care of sectors often bring their families to live with them.

2. Women

Borrowing from the ranching and U.S./military models, the Costa Rican SPN also hired very few women to work in the parks outside of cleaning and cooking positions. Primarily, women did not fit the role of the solitary, tough, law-enforcing, gun-wielding, park guard that had evolved from the identity of soldiers and cowboys. Originally, conditions were often very challenging, with harsh natural environments, poor infrastructure, and difficult transportation. The pervading mentality was that these men were going out “to conquer the wilderness,” that it was not a setting where women belonged.¹² The few women who did join the SPN ranks often felt out of place, isolated, and at times, pursued. One of the first women to work for the SPN in environmental education commented, “I felt a little odd. The men were *machistas* and I couldn’t cut wood or climb mountains. I was the only woman in the house with fifteen men.”¹³ Another woman who worked as temporary employee in the SPN in the 1980s relayed a story about waking up at night with a male coworker in her room lurking over her bed.¹⁴ Second, women were as seen as a potential source of conflict or distraction among their male counterparts. This theory has its origins in both the military and hacienda models. Ranch owners, as explained by a ranch hand who used to work on Hacienda Santa Rosa, prohibited wives from living on the ranch not only because families were not conducive to the owner’s goals; it was also believed that women could be a disruptive force in male employees’ relationships and work patterns.¹⁵ As a harsh enforcement of this point, the SPN openly opposed close relationships between employees—if employees got married, one of them would automatically be transferred to a different location. There is a third reason for the notable absence of women in the SPN: Especially in traditional Latin American society, women were apt to stay closer to home than men. The requirement of working in a park far from one’s home surely deterred many women from seeking work in the SPN.

From the beginning of its consolidation, the ACG broke from the traditional discrimination against women in protected wildland employment practices. The first women with non-traditional roles in the late 1980s were parataxonomists, and since then there have been women involved at almost every level of Conservation Area management. Combined with the effort to hire residents of nearby towns, this change has brought many more women into the pool of potential employees for the ACG. While women gradually have pursued employment in the ACG on their own accord, the

¹² Sigifredo Marín, personal interview, 10 November 1997.

¹³ Gladys de Marco, as quoted in Wallace 149.

¹⁴ Former SPN employee, personal interview, October 1997.

¹⁵ Felix Amado, personal interview, 12 January 1997.

ACG has also specifically sought out women for certain positions, such as in the third parataxonomist course in 1991 which focused directly on training female parataxonomists.

In sum, these two major changes in employment policy have opened up access to a large group of local residents with knowledge and practical experience extending directly from living in the region. In 1997, more than 80% of the ACG's 120 permanent staff members came from towns in the Guanacaste region, the majority of which are close to the ACG. Forty percent of the entire work force was female, as was 20% of the local employees. Local residents have been hired to work in almost all aspects of conservation area management, research, and maintenance. Their roles range from administrators, educators, ecotourism guides, and parataxonomists, to forest-fire fighters, traditional park guards, maintenance and kitchen staff. Whatever the job, the work is designed to develop the professional skills of the employees, teaching them the skills they need to accomplish the task. Many local residents have also found work in the ACG under the auspices of the National Institute for Biodiversity (INBio) as parataxonomists or research assistants, or as research assistants to biologists working in the ACG. Positions are both long-term and short-term.

Women can now be found in most activities of the ACG, though traditional divisions of labor can still be seen in certain areas. For example, there are no women in the fire, security, or maintenance programs, while many women work in education, ecotourism, research, accounting and administration, as well in the more traditional roles of office clerk, cook, and cleaning staff. It is likely, however, that in Costa Rica's rural areas like Guanacaste, much of the division of labor results from decisions made by the applicants themselves, rather than by administrators reviewing job applications.

3. Horizontal Management Structure

The ACG broke away not only from SPN hiring practices, but also switched from the traditional vertical administrative structure to a strongly horizontal design. As vestiges of the Civil Service, U.S./military, and hacienda models, the SPN had maintained a strictly vertical management structure. The park guards were at the mercy of the SPN hierarchy, often sent off to places far away from their family for weeks at a time. Lines of communication were tenuous, and transportation was often unavailable. "The park service was like an army, invading strange countries."¹⁶ They had a specific goal: to protect the park lands and inhabitants from any human threats, and they worked "swinging machetes from shoulder to shoulder in Santa Rosa, living in primitive conditions, eating simple food and being away from their families for long periods of

¹⁶ Wallace 153.

time because they were building the park system.”¹⁷ There was no specialization of labor. Although the range of titles one could have included administrator, sub-administrator, director of guides, director of park guards, park guards, and guides, everyone mainly worked in protection and maintenance, with some time committed to attending tourists when necessary. The park director maintained a strict hierarchy within each park; the daily tasks of each park guard were mandated by the director every morning at breakfast—ranging from trash collection to patrolling for hunters. Marín remembers,

In those days, running a park was like running a farm. In fact, I felt like the park was my farm and the employees my laborers. The only difference was that since there were so few of us, I had to go out and work with them. There were actually very few administrative activities for me to attend to.¹⁸

According to a park guard who worked in Santa Rosa in the 1980s, for the employees there was little encouragement of skill development or room for self-direction.¹⁹

The ACG diverged from this style of administration dramatically. The most marked changes that resulted from this change are the specialization of labor among the programs and ACG employees' autonomy to do their work and control their own schedules. The varied goals of the ACG require a system which takes advantage of the development and application of distinct skills. By using a system of “programs”—for example the Programs of Ecotourism, Research, Prevention and Control of Forest Fires, Control and Protection, and Operations—the administration made the division of labor within the ACG quite specific. Each program's and employee's responsibilities are clear. The general framework of the management structure is still pyramidal. Each program has a “head” and is supervised by a subdirector, who is under the supervision of the director. The major difference, however, is the flow of command through this pyramid: it is not strictly from the top down.

Specialization of labor has allowed the ACG to offer its programs and employees a large amount of freedom in their work. Each program is responsible for developing and executing its own “plan of operation” for which it plans a budget which is then presents for review to the Technical Committee. Each staff member needs to fulfill the requirements of his or her position in accordance with the expectations of his or her particular program, but each has the authority to make decisions independently and organize his or her work as he or she desires. Staff receive basic and advanced training in their fields, as well as in some topics which do not directly relate to

¹⁷ Wallace 145.

¹⁸ Sigifredo Marín, personal interview, 10 November 1997.

¹⁹ Roger Blanco, personal interview, 11 January 1997.

their work. They are encouraged to suggest ideas and pursue new projects when funding is available. Programs collaborate with each other, and various departments and sections, like Accounting, Human Resources, and Computing facilitate their activities.

With the new varied goals of the Conservation Area, the switch to a horizontal infrastructure was necessary. The diversity of the activities in the Conservation Area makes it impossible for the Area to be run with a traditional management structure. Director Sigifredo Marín remembers, “When all that needed to be done was maintenance and patrolling, I had no problem with the vertical administrative structure. But if I had to dictate now as I used to, I would die. There’s no way that I would be able to do it.”²⁰

Though this structure requires a great deal of organization and planning, the ACG administrators expect that the combination of economic benefits, responsibility, independence, knowledge, and skills granted to the employees through their employment will foster their vested, personal, and intellectual interests in the Area’s survival. It is part of the ACG’s dual goal to forward society along with the ACG. The presumption is that improvements in the ACG work environment will translate into advancements in staff members’ quality of life, and therefore will promote a greater commitment from the employees to forwarding the goals of the Conservation Area. Implicitly, the ACG also hopes that these people will bring the lessons of conservation back to their families and communities.

The hiring of residents of surrounding towns was controversial when the ACG was first established. In addition to the feared management difficulties such a change was thought sure to bring, local hiring was viewed as a displacement of the traditional park service elite. Though this issue is no longer as contested, the horizontal infrastructure of the ACG continues to be subject to criticism from certain sectors of the Costa Rican government, which criticize the amount of autonomy the ACG grants its employees.

ACG Programs and Local Communities

The second major pathway between the ACG and the nearby towns consists of several program which interact directly with the town residents. The Biological Education Program and the Prevention and Control of Forest Fire Program have been especially successful, while the Extension Program did not last for more than a few years before being terminated.

²⁰ Sigifredo Marín, personal interview, 10 November 1997.

1. Working For Tomorrow: The ACG Biological Education Program (PEB)

The Biological Education Program (PEB) is a program for school children. ACG administrators view the PEB as catalyzing a bond between nearby townspeople and the ACG, which should help ensure the future of biodiversity conservation. The PEB works under the belief that “what you do not understand you do not appreciate; one cannot value a natural resource if he or she does not understand the function and utility of that resource.”²¹ Through developing and reinforcing local children’s knowledge about the biology, ecology, and natural history of conserved wildlands, PEB educators aim to promote critical thinking about humans’ relationship with nature, such that the children will be able to use their biological knowledge as a basis for making educated decisions concerning environmental issues in the future. It should be emphasized that the PEB is not a traditional environmental education course used to convince children not to pollute or start fires. It is primarily a biological education course.

The PEB was one of the first programs implemented by the ACG. It began its work in 1987 with one school in Colonia Bolaños. It ended that same year working with 451 students from six schools in Colonia Bolaños, Cuajiniquil, Quebrada Grande, Santa Cecilia, Mariena, and Salvador Villar. The program’s enrollment grows each year, and PEB currently is working with about 2,220 students in the fourth, fifth, and sixth grades from 42 local schools, and seventh, eighth, and ninth grades from 6 local high schools. It works with almost 100% of the schools in the vicinity of the ACG. The PEB has divided its program into three sectors according to the biogeographic characteristics of the ACG, the dry forest, the humid forest, and the coastal sectors. The program teaches students about biology and natural history using the forests and beaches as classrooms. The students have four, day-long classes per year in the sector closest to their school, and two visits per year to another sector so that they have the opportunity to explore and to learn about another ecosystem. Like the ACG as a whole, the PEB is an innovative program, striving for a horizontal educational style that is much different from the tactics normally used in Costa Rican schools. Curiosity drives the PEB learning experience: children are brought to the Conservation Area and encouraged to ask the questions they would like answered, and are then guided by their instructor as they seek the answers.

The PEB activities and facilities are creative and technologically well-equipped. Of a six hour course, students spend the majority of the day outdoors, exploring the forest, creeks, rivers, beaches, mangroves, waterholes, bubbling mudpots, and other pieces of ecosystems. They discuss mammals, insects, food chains, seed dispersal, why flowers smell, what makes volcanoes

²¹ Guanacaste Conservation Area, “The Biological Education Program” (Guanacaste Conservation Area Papers, 1997).

erupt or tides flow. They learn about many aspects of science, not just biology. PEB instructors work with a variety of educational tools, creating games and puzzles, working with puppets, showing videos, and giving quizzes. The PEB utilizes its extensive stock of biological laboratory and field equipment, including microscopes, binoculars, nets, thermometers, telescopes, a natural history library with reference books and videos, samples of animal skeletons and footprints, and insect, reptile, and animal specimens, among other things.

The PEB has workshops once a year in the Conservation Area for teachers and selected parents, with “the objective of motivating and enriching them with knowledge about biology and the biodiversity in the ACG in the country in general.”²² They also discuss the methodology and goals of the PEB and provide a forum for the two groups to talk about the sociocultural needs of the children. The educators hope that through these workshops the parents and educators will come to understand the value of the program and support its work with the children. The PEB also reaches a limited number of adults each year through permitting several parents to chaperone the groups when they come to the Conservation Area. PEB has hopes of instituting an adult education program, however, there has not been sufficient funding available to support the project. Also in the PEB’s visions of its future, should funding become available, are a computer laboratory and a children’s museum exhibiting the natural resources of the marine-coastal ecosystems.

2. The Fire Prevention and Control Program

A program which is more subtly involved with the communities than the PEB, but equally as effective, is the Forest Fire Prevention and Control Program. As the PEB, the Fire Program was a ground breaking initiative in Costa Rica, as well as in Latin America. They currently run two children’s fire-prevention brigades in nearby towns, and one adult fire-prevention brigade. The children read stories about forest fires, do worksheets on the reasons and mechanisms for prevention, and learn songs that enforce important points. The adults learn how to provide technical support for the Fire Program in the event of a large extended blaze.

3. The Extension Program

The ACG Extension Program, a program whose goal was to heighten understanding and cooperation between the Conservation Area and nearby communities, began in 1987 and went through several phases before terminating in 1992. The cause of its demise appears to be a disagreement among employees about the fundamental purpose of the program. While one group felt that the program should take a paternalistic approach, meeting all types of needs of the

²² Guanacaste Conservation Area, “The Biological Education Program” (Guanacaste Conservation Area Papers, 1997).

community, another felt that it should adhere strictly to promoting communication with and education for the towns in issues directly concerning the protected wildland.

As soon the idea for the Guanacaste National Park Project appeared, the administration of the Conservation Area began to organize itself to work with the communities. The first version of an extension program for outreach to the nearby communities began as a part of Santa Rosa National Park's Subprogram of Education and Extension in the late 1980s. The business plan for the park for 1987-89 included in the Education and Extension Program environmental education, nature interpretation for visitors, and extension. Extension's goals were the following: 1) to motivate and teach the residents of the region concerning the importance of using the renewable natural resources in a rational manner and 2) to promote extension activities in nearby towns in order to integrate those towns into the conservation efforts in the Area. They also planned a diagnostic survey about social problems in towns north of the park.²³ This proposed survey would be done in conjunction with several other government organizations, such as the Institute for Agricultural Development, the Water and Aqueduct Association, and other development organizations. The description in the business plan did not indicate which towns the program would work with, and there are no documents recording the program's actual progress.

With the development of the Guanacaste National Park Project in 1990, the Extension Program began working with Quebrada Grande, along with the towns of Santa Cecilia, Cuajiniquil, and Colonia Bolaños. By this time, the Extension Program had further specified its goals beyond just involving the towns in the management and development of the Conservation Area. The program focused on the diagnostic studies and proposed to collaborate with the towns to look for "real alternatives which will achieve both conservation and development, the elements which guarantee the improvement of the quality of life in local communities."²⁴ It seemed to want to take on the job of several different government organizations at once. A staff member would be assigned to each town, in order "to listen to the concerns of the residents and help look for solutions."²⁵ According to the business plan, the program staff would be involved in much more than just concerns about the Conservation Area. In Cuajiniquil, the extension worker would be expected to do much more than motivate residents to help with the development of Junquillal Wildlife Refuge, develop training courses for the town's leaders about themes concerning conservation and rural development, and improve the school's biology program. He would also be expected to support any organized group within the town, promote the town's women's organization, help with the

²³ Sistema de Parques Nacionales, Costa Rica, "Plan Operativa de Parque Nacional Santa Rosa, 1987-1989" (Guanacaste Conservation Area Papers, 1987).

²⁴ "Proyecto Parque Nacional Guanacaste, Plan Operativo 1989-1990" (Guanacaste Conservation Area Papers, 1989).

construction of the town's library, and organize workshops for the local fisherman on diving, motor maintenance, and the handling of fish products. In Santa Cecilia, the extension worker would be expected to help work with the community to get a road repaired and to promote programs giving technical assistance to farmers. Again, there was no written documentation of the results of that year.

Although it became more specific about its ideas on how to educate people about the ACG, the extension program still continued in the same paternalistic direction in 1991. On one hand, it proposed that each program be responsible individually for extension, and suggested several intriguing plans for developing good relations with and educating the communities about the ACG. These plans included giving talks in the towns about botany, animals, and environmental legislation, installing displays of insects and other things several towns, organizing a theatrical group among ACG employees which would perform in the towns, developing "one or two sites where residents could sell services to tourists,"²⁶ and establishing a social relationship between the ACG and the towns through starting an ACG soccer team. But on the other hand, it continued doing diagnostic studies and community workshops about social and environmental problems in the community, proposed to run programs to help solve some of the economic problems outside of the theme of conservation, and suggested work on infrastructure projects like building roads and bridges.

At this time, a lot of conflict about the extension program began to appear within the ACG administration. Many people felt that the program was too traditional and paternalistic for the Conservation Area and that they were wasting time and money on things which other government organizations should be responsible for. Furthermore, they felt that there was no need for a specific extension program, that each program should be responsible for extension. The 1992 plan for the Extension Program improved greatly in this respect, suggesting that the ACG should "develop itself as an extensionist institution, integrating the work of extension into all of the programs and training the employees as extension workers [with the technical support of the Extension Program.]"²⁷ The overall proposal, however, still resonated with the tones of traditional community extension work. By this time, many people had been convinced that an extension program was not appropriate to the ACG. These disagreements eroded into personal conflicts. The Extension Program was terminated in 1992.

²⁵ "Proyecto Parque Nacional Guanacaste, Plan Operativo 1989-1990" (Guanacaste Conservation Area Papers, 1989).

²⁶ "Plan Operativo, 1991, Subdirección de Ecodesarrollo, Área de Conservación Guanacaste" (Guanacaste Conservation Area Papers, 1990).

²⁷ "Estrategia Para el Programa de Extension, Subdirección de Ecodesarrollo, ACG" (Guanacaste Conservation Area Papers, 1992) 3.

Beyond the formal policies and programs discussed here, there are also many other levels of relationships between the ACG and local communities. The history of the Guanacaste Conservation Area's relationships with nearby communities is colored with stories of land purchases, fire-fighting and vandalism by fire, enforcement of conservation regulations, course-offerings initiated and facilitated by the ACG, participation in nationally-run summer-time youth employment programs, celebrations of Guanacaste's Annexation to Costa Rica and the culture of the cowboy, and the development of micro-research communities, among others. Some of these interactions will be discussed later on in this document.

5. STUDY SITE: QUEBRADA GRANDE

Quebrada Grande is one of the communities closest to and most accessible from the ACG. Seven kilometers east of the Inter-American Highway from the town of Potrerillos, at the base of Volcano Cacao, it can be reached by car from the Santa Rosa administration area or Sector Cacao in about 25 minutes. Although the District of Quebrada Grande (formally the District of Mayorga) totals 226.67 km² including many small farms and several haciendas, for the purposes of this study "Quebrada Grande" consists of only the town of Quebrada Grande plus Barrio Lourdes, a housing development one-half kilometer to the west of Quebrada Grande built in the early 1990s. A census done in December, 1995 by the Ministry of Health covered 50 km² and 22 localities centered around the town of Quebrada Grande. It calculated a total population of 1,450 people and 276 occupied houses in the 50 km². In the actual town of Quebrada Grande, the census calculated that there were 389 people and 70 occupied houses, and in Barrio Lourdes there were 188 people and 34 occupied houses. In sum, the 1995 population of the two towns was about 577 people who lived in 104 occupied houses.

I completed a census for this project in February and May, 1997. In Barrio Lourdes, the census included all of the houses. In Quebrada Grande, three households were not included because no one was home during the two week census-period, and another three houses excluded because the families live on farms outside of the town for the majority of the year and were not living in the houses during the census. The data presented in percentages in the following report had a response rate of 75%-100%; data with a lower response rate will be presented as numbers for examples.

The census came up with the following population data:

Population	Quebrada Grande		Barrio Lourdes	
	Number	Percent	Number	Percent
Male	212	48%	135	52.1%
Female	230	52%	124	47.9%
Total population	442	100%	259	100%
Inhabited houses	84		53	
Average no. of people/household	6.7		5.2	

(The average number of people per household in Costa Rica for 1996 was 4.10.¹)

¹ *Costa Rica at a Glance*. (San Jose, Costa Rica: INICEM Group, 1997) 8.

It was difficult to estimate the population in either town since the structure is very fluid. During the course of the year, many families moved into houses which had been closed up or individuals left to look for work elsewhere. Many times family members from other regions would come to visit and stay for several months, making it difficult to know at the time of the census if they were residents or guests. Grandparents, who seem to never escape the responsibility of child rearing, have a constant flow of grandchildren in and out of the house, depending on where the parent is working. And of course, there is the natural stream of births and deaths which constantly shift the population.

Before moving into a social characterization of present-day Quebrada Grande, the following is a history of Quebrada's economic base.

History of Quebrada Grande's Economic Base

1. Subsistence Agriculture: The 1800s

The history of Quebrada Grande is typical for the region of Guanacaste north of Liberia. The earliest inhabitants of the zone, according to the understanding of some of the older town residents, arrived in the early to mid-1800s with the goal of extracting wood and rubber from the abundance of medlar trees. The products were then transported to Liberia for sale. They stayed in the region only during the summer months from December to April, in houses constructed of wood and palm. Supposedly they camped along the edges of the river, which provides the origin of the name *Quebrada Grande*, Big Creek.

The permanent settlement of the zone began in the late 1800s by a group of Nicaraguan colonists fleeing from the violence in their country. According to oral history, these first families included the surnames Cortés (from Rivas, Nicaragua), Morales (Santa Teresa, Nicaragua), García (Santa Teresa, Nicaragua), Campos (Santa Teresa, Nicaragua), Brizuela (Granada, Nicaragua), and Díaz (Masaya, Nicaragua). In time, these families were joined by people from Liberia, including families of the surnames Palma, Barboza, Valencia, Estrada, and Mejías. These settlers established subsistence farming operations—with corn, beans, rice, yucca (cassava) and other roots, sugar cane, coffee, and tobacco—and engaged in light trade with their neighbors. Commerce with Liberia and the nearby settlement of Cañas Dulces was limited due to the difficulties of transportation, especially in the rainy season when the rivers were high and roads were muddy. They obtained meat and fish from the forests and rivers.

The land which the newcomers originally settled on was supposedly owned by the state owned, but it was not before long the colonists, knowingly or unknowingly, occupied lands which had

been swept up by latifundistas. The first tract of land located directly in Quebrada Grande with an official owner at that time was 2,000 hectares owned by Spanish immigrant José Lorenzo Barreto. The land on the upper cordillera, with its abundance of green grass nurtured by the humid Atlantic trade winds in the dry season, was “the most coveted area in the post-1880 rush to title land north of Liberia.” Using the “rectification of land measurements” and the “titling of excess lands” procedures (see “Guanacaste” section) intended to stimulate agricultural and cattle production, nearby haciendas like Los Ahogados and El Pelón de la Altura grew rapidly.² One of the largest landholders north of Liberia, Francisco Hurtado Guerra came to own a total of 39,075 hectares in the zone. Hurtado’s holdings included Haciendas El Jobo, El Encimal, Guapote, San Rafael, Santo Tomás, maritime mile, and Cañas Dulces.³

2. Conflicts with the Latifundistas: The Early 1900s

Soon the conflicts which came to characterize the frontiersque behavior of Guanacaste arose between the colonists and hacienda owners. In the 1920s, a group of Quebrada Grande residents occupied a section of Hurtado’s land called San Antonio. At first Hurtado attempted to settle the conflicts “legally” with apparently bribed government surveyors, acting without the permission of the courts, who tried to assert Hurtado’s claim to the land. While some peasants agreed to sell the land back to Hurtado for the cost of the “improvements” (cleared land, crops, buildings) they had done, others took a more confrontational path. In March and April, 1921, Quebrada Grande residents “attacked the main house of El Jobo with gunfire, forcing Hurtado to flee with his family to San Jose, burned Finca La Fortuna (part of El Jobo), destroyed 2,000 of Hurtado’s coffee bushes, and killed the police agent stationed in the village.” The conflict diminished only when the government expropriated 421 hectares of Hurtado’s land (in El Encimal) in exchange for an equivalent amount of state lands of his choice.⁴ This is only one of many stories of this type which describe the colonists’ defense of their right to land ownership. In 1946, Fernando Lorenzo traded his 2,047 hectares to the government, supposedly in the name of agrarian reform, and this land became the site of what is currently the town of Quebrada Grande. Although probably acting partially acting out of good will, Lorenzo was most likely trying to rid himself of any conflict with local residents, as 34 occupants had taken over 100% of his land.⁵

² Edelman 141; Gabriel Brizuela Cortes, “Informe Final, Practica Docente,” Universidad Estatal a Distancia, Costa Rica, 5.

³ Edelman 364.

⁴ Edelman 143. Local lore holds that Hurtado escaped only because he “disguised himself as a woman and fled on horseback,” though nothing confirms this legend.

⁵ Edelman 369, 131.

3. *Dependence on the Latifundistas: 1930s-1980s*

Though there were isolated uprisings, the control gained by the latifundistas from the 1930s to the present left the Quebrada Grande residents almost entirely dependent on them for both land and employment.⁶ As the population of Quebrada Grande consisted almost entirely of poor villagers—with a middle-class smallholding family scattered here and there—their situation can be equated with that of their fellow rural-poor throughout Guanacaste.

From the 1950s through the 1980s, the Guanacastecan rural poor continued to depend on the little land they could find for their livelihood. In 1963, subsistence agriculture was still the sole function of over a quarter of Guanacastecan farms, and even in 1984, an average of half of the production of beans and yellow and white maize were consumed in the household. The situation was difficult. Though the number of small farms (under 10 hectares) in Guanacaste rose by 57% in between 1950-1984, the average size dropped by 40%. “In effect . . . the poorest stratum has been unable to find new land for production, and its members, whose numbers have grown significantly, have had to wrest a living from ever smaller plots.”⁷ Between 1950 and 1973, almost a quarter of the farm holdings were acquired through a variety of “irregular” or “informal” land agreements, which means that they were rented, sharecropped, borrowed, or occupied with permission. The majority of these farms were small plots of land used by the poorest producers, who “borrowed” the land from hacienda owners in exchange for “improving” it. The owner loaned the land for two or three years of cultivation with the agreement that the recipient would clear all the forest or brush and plant grass before he left. For the owner, it was an effortless, cost-free way to expand pastures. Obviously, for the recipient, the problem with this system was that eventually the landlord had little reason to continue loaning the land. Perhaps this accounts for the drop in the number of these informal agreements to only 10 percent of the farms between 1973 and 1984.⁸

According to the memories of residents, this was exactly the case in Quebrada Grande. The owners of the haciendas would permit people to work small tracts of land for a limited time in exchange for creating pasture. Though memories may be misleading, the residents recall that it was generally 10 hectares of land for five years. The recipient would cut down the trees, cultivate his crops for several years, and then plant grass before he left. Although the huge latifundios were broken up with time, as land was passed on through the generations or portions of farms were

⁶ Since there is no written history of Quebrada Grande, besides oral histories taken by two students in Quebrada, the following is compiled from informal interviews with Quebrada residents, using Edelman as a base for the Guanacastecan context.

⁷ Edelman 255.

⁸ Edelman 256.

sold, the land often remained in the hands of wealthy Liberians, San Josefinos, or foreigners. The threat of expropriation due to agrarian reform motivated some of the larger land owners to sell small plots of their land, and some of the luckier Quebrada Grande residents were able to purchase them with their savings, as in the case of the land owned by the Araya family bought from the owner of Hacienda Los Ahogados.

4. The Crisis of the 1970s and 1980s

Though the beef industry was still booming in the 1970s, the common Guanacastecan did not receive the benefits. By this time, the majority of Quebrada Grande residents found themselves completely squeezed out of the market for land. To compound the problem, the huge expanses of pasture which were left absorbed very little labor. Though current residents complain that there is not as much employment as there used to be, one wonders if there ever was as much employment as people claim there was. Due to technological advances, like better fencing and mechanical milking machines, work on the haciendas generated relatively very little employment. To compound the difficulty, the labor laws implemented by the state require a base wage and mandate fringe-benefit payments for all employees who work for longer than three months. These regulations spurred hacienda owners to lower the number of permanent staff and only hire temporary staff when necessary. Many haciendas began to hire undocumented Nicaraguans in order to evade paying these high salaries and benefits. Though some haciendas had turned to successful crop production in things like sugar cane, dry-land rice, sorghum, and cotton, these plantations offered only seasonal employment. None of the employment opportunities paid well. Still, by necessity, for lack of any other options, and in accordance with their traditional labor, many men—especially the landless—continued to devote themselves to work as cowboys on the meat or milk producing haciendas or as laborers on crop plantations. Though the majority no longer works on haciendas, this cowboy-culture still reigns in Quebrada Grande, which prides itself on being a traditional Guanacastecan town.

Though there was some resistance to the poor distribution of land and economic opportunity—like rustling and land occupation—the rural poor’s response has been surprisingly passive considering the aggressive frontier culture in which it had been raised. In Guanacaste as a whole, according to Edelman, “Most chose either to stay and ‘conform,’ at least outwardly, to changed and unfavorable conditions or to leave.” This is where the mass exodus reminiscent of the American Dustbowl begins. An “avoidance protest” pushed migration rates from Guanacaste Province to an astounding level, with 50,000 people leaving the province in between 1963 and 1973. Guanacaste’s natural rates of population increase had previously exceeded national rates, but between 1973-84 it slowed to .9 percent; some cantons actually had a negative population growth

in that decade.⁹ Though there are no statistics available for the population growth in Quebrada Grande, residents confirm that this migration has also been the case in Quebrada. (See below section on current Quebrada Grande for their destinations.)

5. State Intervention

The population growth in Guanacaste slowed in synch with the rising momentum of the cattle boom from 1963-73, and the poor economic conditions which halted population growth were exasperated by the economic crisis of the 1980s. At this time, many haciendas based in milk and beef production closed down and sold their land due to both increased costs and falling profits of the industry. Owners eager to rid themselves of debt often sold land as soon as the opportunity presented itself. As will be discussed later, a good number of these farms have been purchased by the ACG as part of its recent growth, especially of Sector Cacao, the sector near Quebrada Grande.

The state has made attempts at relieving the economic pressure in the community. To date the most active organization has been the one agency in charge of agrarian reform, the Institute for Agricultural Development (IDA). IDA buys or expropriates private lands, divides them up into smaller plots, and either sells or donates them to the poor for production. IDA became active in the zone in the 1980s, when it financed the creation of five nineteen-hectare small farms to the north and west of the village which were granted to Fidel Fernandez, Norberto Peralta, Pablo Zuñiga, Luis Montiel, and Francisco Ruiz. Since then IDA has participated in the creation of the housing development Barrio Lourdes, the farming community "El Consuelo," and is currently working on another agricultural settlement in Santa Clara. El Consuelo is located on land which had been part of Hacienda La Sombra, originally belonging to the Alvarez family. When the original owner died in the early 1990s, several parts of the farm were sold to neighboring haciendas, but about 200 acres which were sold to the government and then donated to IDA have been turned into 8 hectare plots. Despite its proximity, however, there are only about five families from Quebrada Grande who have plots there. IDA is currently working with the Quesada Family, the owners of Santa Clara Farm, to buy 100 hectares of their land. The nucleus of Santa Clara currently functions as a tourist lodge; the parts sold to IDA will be turned into 42 small farms. Typical for Quebrada Grande, the process of granting the land to its future owners has been slow due to poor management on the part of the resident originally in charge of coordinating the project, but the director has been changed and the Santa Clara Settlement was about to become a reality in October, 1997. At that point, there had been 42 applications, 23 of which came from Quebrada Grande residents.

⁹ Edelman 210-261.

The Current Economic Base

The economic situation in Quebrada Grande continues to be difficult. Many ranches have shut down, and current ranch owners have been forced to downsize their labor force due to further technical advances in mechanization and growing costs of ranching. These remaining larger ranches—whose land holdings are not as large as the traditional latifundistas—do not have the capacity or the income to provide a lot of long-term employment to such a large population. The only farm close to the town which provides a lot of employment is La Josefina, a dairy farm to the east, and its number of employees is still limited. On the other side of the issue, although at times there might be employment available on these ranches, it appears that fewer of the young men today are willing to do the high-intensity physical labor required by work on farms for the low-level of pay offered (about ¢1.300 per day, about \$5.60 per day).

There are many types of ranching and farming currently taking place in the vicinity of Quebrada Grande, from the subsistence agriculture of the farmers in the IDA settlements to the enormous milk production of La Josefina. The IDA farms generally consist of eight hectares and depend on production of crops like corn, red peppers, plantain, banana, *cuadrado* (a type of banana), yucca and other roots, beans, squashes, herbs, and avocado. They generally have not existed long enough to have fruit-producing trees. Some of the farms have a few of cattle, but the terrain generally does not have sufficient area for prolonged grazing of many animals. Milk is generally consumed in the household. Pigs and chickens abound on some of the IDA farms. Some farms' products are successful enough for subsistence as well as for sale in the town. Often the children living on these small farms go from door to door in the town selling vegetables or baked corn-goods. IDA insists that the family live on the plot or show that they are maintaining it properly. Usually all of the capable family members contribute to the maintenance of the land. San Lorenzo Farm was privately divided into 14.5 hectare plots several years ago, and also provides several families with land for subsistence agriculture.

The next step up from the IDA farms include small farms like La Grecia, owned by the Vargas family. La Grecia consists of 80 hectares. The land was bought in 1956 by the Brizuela family, which was then joined by marriage to the Vargas family. The farm has been involved in many types of production. For years it has produced furniture from wood farmed from the same land, like cedar, laurel, and guanacaste. There are several other types of wood which they use for furniture that they buy from other sources. The trees which they do not use for furniture, they use for posts in the corals or for fencing. They have 55 cows, which in the dry season of 1997 were grazing in ACG lands rented for a fee of 400 colones per month per head of cattle. The cattle are used for milk in the household or are sold directly to the slaughter house once fattened. Pigs,

chickens, and turkeys are both for household use and for sale. They have planted corn, beans, and yucca, but have found the arid and windy climate inhospitable to the crops. They have been participating for two years in a government-sponsored reforestation program, which pays a certain amount of money per hectare per year and offers amnesty from land taxes on the quantity of reforested land. La Grecia has 20 hectares of their land devoted to reforestation with pine trees. The program is run by the Ministry of Agriculture (MAG) and commits them to reforestation for ten years, at which point they can do whatever they like with the trees. The MAG provides technical advising at a fee and will expect a percentage of whatever they sell after the ten years. La Grecia is a family run operation, which works to supplement the owner's pension from his many years working for the state. Three people work on a consistent basis, and others contribute time occasionally. They have one paid laborer from Quebrada Grande who earns 1,500 colones (about \$6.00) per day with meals. Water on the farm is drawn from the river and there is no electricity.

There are many mid-range farming and ranching operations in the vicinity of Quebrada Grande, and the amount of labor they require depends more on whether or not they focus on production of milk or meat and their technological level rather than the amount of land that they have. The following list provides examples of the spectrum of farms in the area:

- *Finca La Sombra*, owned by the Lopez family from Liberia has 430 hectares of land and works primarily in milk production, which is then sold to Dos Pinos. They claim to have 500 head of cattle, milking 75 cows once per day to produce 200 liters of milk per day. The farm has an administrator and five full time employees, all from Quebrada Grande. Since they have purchased a tractor, electric fencing, and milking machines, and other made other technological improvements, they have cut six people from their staff. They are hoping to update the milking machinery that they are using now. Their employees work seven days a week for 1,500 colones (about US\$6.20) per day, and supposedly receive labor benefits.
- *Finca Los Angeles* is owned by Cuban Adolfo Jimenez. Los Angeles has 400 hectares of land and about 600 head of cattle. They milk two times daily with technologically advanced machinery, and claim to produce 1000 liters of milk per day which is sold to Dos Pinos. One hundred of the cattle are devoted to meat production, and there is a nursery which produces pine and laurel saplings for a reforestation project the owner has in La Cruz. The ranch's infrastructure is very modern. The owner buys much of the materials from Nicaragua because it is cheaper. In April, 1997 there were 17 workers; many were on short-term contracts in the nursery, fieldwork, and construction. There were six employees in the milk production.
- *Hacienda Cerro Grande* has been owned by Francisco Arrata since 1951. His land totals about 1,200 hectares. Estimations on the number of cattle varied so much in between employees interviewed, that it was impossible to tell how many the farm actually has, but it

appears to be greater than 600 head. On Cerro Grande they milk once a day by hand to produce 500 liters of milk. The majority of the milk goes into the manual production of smoked cheese which is sold in Liberia. The cheese provides their main source of income, though they also breed pigs and sell young cows for fattening. They have about seventeen employees, two from Liberia, five from La Cruz, one from Dos Rios, and nine from Nicaragua. Arrata says that he has had bad experiences with employees from Quebrada Grande. The farm administrator says that all of the employees receive benefits, though the employees report differently. They earn maximum 1,300 colones (about US\$5.40) per day.

- *The Rivas Family* works primarily in the production of cattle for beef. They hold properties throughout northern Guanacaste in Buenos Aires (San Lukas, 240 hectares), San Cristobal (La Auxilia, 130 hectares), Cañas Dulces (Los Madroños), Quebrada Grande (El Pueblo, 25 hectares), Las Caboyales (El Aromal, 251 hectares and Ríncones de Roble, 191 hectares), and Bagaces (El Nuevo Cafetal, 385 hectares). They have a total of 1,350 head of cattle and produce 160 liters of milk a day by hand. The three brothers, all of whom are agricultural engineers, run the operation with the help of only seven employees, three of whom are from Quebrada Grande. The employees work seven days a week for 1,300 colones per day (about US\$5.40).
- Also included in this category but not reviewed are Finca La Perla (owned by Juan Carlos Burgos), Sutton Ostrich Ranch (American-owned), and Finca Nueva Zelandia (owned by the Brizuela family).

On the top of the production charts in northern Guanacaste is *Hacienda La Josefina*. La Josefina is the most advanced producer of milk in the region, producing 2,000 liters of milk daily, which they sell to Dos Pinos. They attribute their high level of milk production to milking two times per day and the high quality of their cattle. In 1994 they only had 6 workers running the milk production, but in 1997 they hired a substantial number of men on short-term contracts to build a second building for milking. Other large ranches in the area include Los Mogotes, which is owned by an Italian, and Hacienda Potrerillos which is owned by a man from San Jose.

Employment

Excluding housewives, students, children, and retired adults, it has been calculated that 181 people in Quebrada Grande (41% of the population) and 99 people in Barrio Lourdes (38% of the population) are of age and social status to work. Of these populations with "working potential," 71.8% in Quebrada and 79.8% in Lourdes are actually working outside of the home. In Quebrada Grande, 80.7% of the working population are men, and the other 19.2% are women. In Barrio Lourdes, 73.4% are men, and 26.6% are women.¹⁰

In Quebrada Grande, among the population with working potential, 27.1% do not work outside of the home. In Barrio Lourdes, 18.2% do not work outside of the home. This group provides an interesting illustration of the distinct division within domestic labor in Costa Rica. Almost unanimously, the females describe themselves as "staying at home," a position which requires cleaning, cooking, washing clothes, and child care, while the males in this group describe themselves as "unemployed" and often can be seen spending the day watching TV, sitting on the street corner, or in the local bar with his buddies. In both Quebrada and Lourdes, the number of women and men in this group are about even.

Very few of the women work outside of the home. Those who do generally have traditional jobs in housekeeping, child care, or food preparation. A fair number of women work from their homes, selling baked goods or raffle tickets, or sewing. It appears that only recently it has become more common, though not necessarily more socially acceptable, for women to seek paid employment outside of the home. Women who do not have children are generally not subject to as much criticism for working as women who do have children.

Apart from the ACG, long-term work is difficult to find around Quebrada Grande. Only 60.8% of those working in the main town of Quebrada Grande have long-term employment. In Quebrada, the largest group with long-term employment are the cowboys on the local ranches and subsistence farmers (15.2% in each), with laborers on ranches (*jornaleros*, literally translated as a day-laborer but referring to someone who does unspecialized labor on a ranch) in second place (11.4%). There are similar numbers of merchants (restaurant owner, cattle trader, fruit/meat/clothing vendors), convenience store owners (*pulperia*), and small farm administrators (7.6% in each). There are small quantities of people with long-term employment in housekeeping (5.1%), the ACG, chalk mines, and education (3.8% in each), as well as in government positions like the police, Ministry of Agriculture, and the judicial system (OIJ) (2.58% each). Finally, there are

¹⁰The national percentage of total employed population by sex is 70.6% men and 29.4% women, so these two towns fit almost perfectly with the trend though out Costa Rica. *Costa Rica at a Glance* 19.

scattered long-term positions as a logger, truck driver, factory worker, tour guide, business assistant, cook, or helper on the nearby farm devoted to children with social and health problems.

In Barrio Lourdes, 60.2% of the working population has long-term employment. An overwhelming 47.0% of the long-term employment is provided by the ACG, in positions ranging from cook to parataxonomist. Individuals also find long-term employment as bus drivers (8.2%), as cooks, cowboys, or workers in the nearby ostrich farm (6.1% in each). Housekeeping, ranch administration, the police (always in other towns), and security for private business also provide a small amount of employment (4.1% in each). Various individuals work as a pulperia owner, a park guard in a private reserve, a car owner, or with machinery. In Barrio Lourdes there is a notably smaller number of people working on ranches than in Quebrada Grande.

Short-term employment opportunities are taken advantage of by 39.2% of the working population in Quebrada Grande and 38.0% of the working population in Barrio Lourdes. Again, in Quebrada Grande, the largest percentage of the short-term laborers work on nearby ranches (27.5%). Construction contracts (11.8%) provide the only other substantial source of employment. Car/truck owners and those who work in "whatever turns up" depend on other people's projects in town or on ranches, hauling cattle or construction material, or doing odd jobs (7.8% in each). There is a family of young men who classify themselves as "bull riders" who travel the rodeo circuit (7.8%). Housekeeping and work in the ACG (5.9% in each) provide consistent work opportunities, though for short-periods. Then there are those who work as drivers or as assistants on the farm which adopts children with problems (3.9% in each), and individuals who work for short-periods as a farm administrator, a cook, a carpenter, an assistant on the ostrich farm, a laborer on the banana plantations in Limón, and a car-painter. Short-term labor in Barrio Lourdes is divided among the following: whatever turns up (30%), construction (20%), the ACG (16.7%), housekeeping or day-labor on ranches (10% each), "cowboy"-ing (6.7%), mining or work in the Ministry of Health (3.3% in each).

As at times it can be extremely difficult to find work in Quebrada Grande or on the surrounding farms, people typically need to commute back and forth to work on a daily, weekly, bimonthly, or monthly basis. These people work, for example, on far-away ranches, as bus or taxi drivers, on banana plantations in Limón, as security guards in private reserves. Sixteen people from Quebrada Grande and nine people from Barrio Lourdes report traveling for their work, though this number is in constant flux.

It is difficult to calculate the average income per worker or per household. On a cultural level it is a very sensitive question, and it can be expected that the responses will be inflated or deflated according to the interviewees' concerns. With that said, however, it is also doubtful that they would be changed more than ten to fifteen percent.¹¹ Keep in mind that the average monthly income per employed person in Costa Rica is 66,992 colones (US\$276.83).¹²

Long-Term Employment Income	Barrio Lourdes		Quebrada Grande	
	colones	US dollars	colones	US dollars
Average income/month	60,536	250.15	44,432	180.60
Standard deviation	23,637	97.67	23,262	96.12
Maximum	120,000	495.87	100,000	413.22
Minimum	10,000	41.32	7,000	28.93
Sample Size:	44 people		23 people	

Short-Term Employment Income	Barrio Lourdes		Quebrada Grande	
	colones	US dollars	colones	US dollars
Average income/month	41,294	170.64	34,497	142.55
Standard deviation	17,149	70.86	13,851	57.55
Maximum	80,000	330.58	130,000	537.19
Minimum	12,000	49.59	9,200	38.02
Sample Size:	17 people		23 people	

Quebrada Grande and Barrio Lourdes residents report that many people have moved out of Quebrada Grande in recent years because of the lack of employment opportunities. The project census revealed that at least 144 of the children of the household heads in Quebrada Grande and Barrio Lourdes (119 and 25, respectively) had left the zone to seek their fortunes elsewhere. Liberia, San Jose, and Limón have received the most of those people: 42 went to Liberia, 38 to San Jose, and 16 to Limón, a total of two-thirds of the migrating population. Seventeen live on farms in the Quebrada Grande area, working in traditional roles of men and women on ranches.

¹¹ In 1996-1997, the national monthly average income per employed person was ₡66,992.20. *Costa Rica at a Glance 22.*

¹² *Costa Rica at a Glance 22.*

The overall numbers of men and women (78:62) leaving were similar, although their motivations often differed. Men's motivations for leaving were always work-oriented, while many of the women, according to their parents, were "carried off" by their husbands to be a housewives in another place. This is particularly true of Limón and Liberia. In San Jose, however, many of the women work in housekeeping or childcare, or sometimes as a secretary. Men in Liberia work in construction, security, in a business, or as police officers. In San Jose, men work as construction workers, drivers, security guards, factory workers, or as accountants. Limón attracts mostly young men who can bear the difficult work in the banana plantations or on cattle ranches. Research done in the 1980s has shown that Guanacastecans constitute the largest group in the banana plantation workforce, and postulates that this is because Guanacastecans are accustomed to working in extreme heat and in poor living conditions "that would horrify workers from more developed central Costa Rica."¹³ One interviewee who has worked in the Gerber factory in San Jose also commented that Guanacastecans were often the only people who would accept the most physically-demanding positions. Other men have dispersed themselves to Alejuela, Cañas Dulces, Upala, Buenos Aires, Coco, Dos Rios, La Cruz, Sardinal, Cuidad Neily (to work in the palm plantations), and Turrialba to work. One man, the son of one of the few natives of Quebrada Grande with a significant amount of land, is a lawyer in Sweden. It is typical that the children of the middle classes left to go study, but they did not appear in the census because often their parents did not remain in the town either. Though at one point there used to be more "middle-class" residents who had decent-sized farms or ranches, most of them have already left the zone and moved to Liberia or San Jose.

The residents of both Quebrada Grande and Barrio Lourdes range widely in economic levels. Although many families consider themselves members of the "middle-class," the majority of the residents are in the "working class." Cooking methods range from wood-burning fires to electric stoves to gas ovens. Wood is generally considered a last resort for the younger population, but many older women still cook with wood by tradition. Most of the houses in Quebrada Grande are cement block with corrugated metal roofing. Only a few original wooden houses still stand. All of the houses in Barrio Lourdes are concrete. Most of the newer houses were constructed with the help of government grants for housing construction. Most houses, though not all, have at least a black and white television, and a radio/stereo, and a refrigerator. Economic differences are often reflected in the quality or absence of these items.

¹³ Edelman 262.

Current Population Demographics

The population of Barrio Lourdes is younger than that of Quebrada Grande, with a total of 44.4 % of Barrio Lourdes under age 20 in comparison to 33% of Quebrada Grande under age 20.¹⁴ This difference is not surprising, as the main motivation for constructing Barrio Lourdes was to alleviate the overcrowding in Quebrada Grande; many of the younger residents moved out of their parents homes to Lourdes with their own families.

The following chart gives the numbers and percentages of known people in each age group, and the percentages out of the total population:

Age Distribution	Quebrada Grande		Barrio Lourdes	
	Number	Percent	Number	Percent
0-7	75	16.9%	55	21.2%
8-14	72	16.3%	60	23.2%
15-19	59	13.3%	30	11.6%
20-44	146	33.0%	89	34.4%
45-59	43	9.7%	17	6.6%
60+	45	10.2%	6	2.3%

Other interesting demographics are the following:

- About 90% of the population of each town was born in Costa Rica, with 7.2% and 6.2% of Quebrada Grande and Barrio Lourdes populations, respectively, born in Nicaragua. There are only 2 members of Quebrada Grande who were born in El Salvador.
- In both towns the number of people married by the church and by common law or living together (*union libre*) appeared to be similar (64 and 66, respectively, in Quebrada of 391 responses, 38 and 40 in Lourdes of 231 responses).
- In Quebrada Grande, 72% of the women above age 18 have children, and in Barrio Lourdes, 79%. The average number of children per female above age 18 is 3.65 in Quebrada and 3.08 in Barrio Lourdes.
- In Quebrada Grande there are 24 single mothers, with an average of 4 children each, and in Barrio Lourdes there are 6 single mothers, with an average of 5 children each. This means that 26.4% of the mothers in Quebrada Grande, and 10.2% of the mothers in Barrio Lourdes are single.

¹⁴ In 1993 the national percentage of people under age 20 was 45.1%. *Costa Rica at a Glance 7*.

Infrastructure and Organizations

A paved road reaches Barrio Lourdes and Quebrada Grande from the Inter-American Highway, and extends for just four kilometers beyond town, where it passes various haciendas and provides better access to 24 government-granted small farms and a farming settlement called Las Lilas. All of the houses in Quebrada Grande and Barrio Lourdes have electricity and chlorine-treated water. The houses in Quebrada Grande are divided almost equally in the use of septic tanks and latrines, while all of Barrio Lourdes uses septic tanks. Quebrada Grande has a primary school which is attended by almost all of the children, ages 5 to 11. A bus brings some older students to Liberia to attend the high school. There is a kindergarten as well as a type of nursery school, which does not always function. There is also a small medical center where a doctor sees patients on social security once or twice a week. To meet the social needs of the town, there are a large community social hall used for town dances, meetings, and private parties, three bars (two of which have pool tables), and one restaurant. Various small stores called *pulperias* provide basic dry goods, meats, and vegetables (some even have ice cream!) and several individuals sell fruit, vegetables, and meats out of their homes.

There is beautiful wooden Catholic church with a red-shingled roof and steeple in the town plaza. There are Sunday masses about once a month. A much smaller Evangelist church is hidden on a dirt side street to the west of the plaza. There are several residents who are Jehovah's Witnesses, but they do not have an formal meeting place. There are a variety of committees which organize three soccer teams for men, teens, and boys. A Health Committee runs the clinic, and a Nutrition Center helps take care of babies and young children in the mornings. The Health Committee also helped organize a garbage pick-up once a month to help solve the issue of waste disposal.

There are two town development associations. The Quebrada Grande Development Association is overseen by the National Board of Communities. It is based directly out of the town, and its board is elected directly by the populace once a year. It is prohibited by its overseeing organization to allow politics to influence the activities of the organization. It offers many services to the community, like putting drainage gutters into the plaza to prevent flooding, running the yearly town *fiestas*, doing repairs at the school, and organizing public courses. It raises its money through sponsoring dances in the town and renting out the community social hall. The other development organization is actually based out of Liberia, and holds elections only among those who are invited to participate. They are very politically oriented, and have been working with IDA on the issue of distributing land from the Santa Clara farm. There is a significant amount of conflict between the two groups for influence in the town.¹⁵

¹⁵ Jose Eras, personal interview, 18 October 1997.

Education

The Quebrada Grande grade school has good attendance for grades one through six. Most children currently finish the sixth grade, though some of the boys drop out early to work on farms. Some students currently travel daily to high school in Liberia in a bus that leaves at 5:30 a.m. This number is generally high in the beginning of the year, but dwindles as the year goes on, as exams are failed or classes become boring. A small percentage actually graduates from high school, and an even smaller number goes on to the university. Girls who do not go onto high school stay at home and help their mothers, and the boys find work when they can and when they desire to, depending on their necessity. [Though this may be an over-simplified observation, it appears that many of the younger males work only when necessary, to pay bills and buy food. A work-ethic appears to be lacking which promotes continual work to *improve* quality of life (through savings, etc.) in the younger generation of males. Many young men in Quebrada work just to get by, or when they need the money for something in particular.]

The students' ages in the towns ranged from six to twenty-one. The following table shows the number of students in the towns:

Students	Quebrada Grande		Barrio Lourdes	
	Number	Percent	Number	Percent
Total	118	100%	87	100%
Female	63	53.3%	44	50.6%
Male	55	46.7%	43	49.4%

The following table shows the institutions the students were attending:

Institutions Students are Attending	Quebrada Grande	Barrio Lourdes
	Number	Number
Quebrada Kindergarten	9	5
Quebrada Elementary	73	69
Private Elementary	1	1
Liberia High School (Instituto)	21	6
Liberia Technical High School (Agropecuario)	6	3
University	3	2
Other	5	1

The following table shows the education levels of the population age 20 and older. (This question had a 95% response rate in Quebrada Grande and a 93% response rate in Barrio Lourdes):

Education Levels (age 20 and older)	Quebrada Grande		Barrio Lourdes	
	Number	Percent	Number	Percent
No response	17	7.3%	10	8.9%
No education	28	12.0%	6	5.4%
Primary incomplete	42	18.0%	15	13.4%
Primary complete	80	34.2%	54	48.2%
Secondary incomplete	35	15.0%	18	16.1%
Secondary complete	21	9.0%	6	5.4%
University	11	4.7%	3	2.7%

Many people have also taken courses through the National Institute for Learning (INA) and other government organizations. For instance, several women have taken a course on how to fend for one's own rights legally and within the home. Women have also taken sewing, embroidery, cooking, breadmaking, and typing classes. Several younger women have attended school to become beauticians. People have taken night classes to finish grade school or high school. Men reported taking classes on themes relevant to ranching, like artificial insemination of cattle, tractor driving, soil conservation, corn planting, cheese-making, and mechanics.

Why Quebrada Grande is the Focus of this Study

Quebrada Grande has been chosen as the study site for several reasons. Twenty-eight permanent ACG staff members reside in Quebrada Grande, including people in a variety of positions (parataxonomists, fire fighters, accountants, maintenance and dining hall staff, people in charge of or assistants to sectors, and security.) Such occupational diversity will provide a sample that is not biased toward a particular type of job. Another advantage of working in Quebrada Grande is that it is close enough to the ACG to travel back and forth as necessary to work with people in the ACG and to have access to computing and other resources.

Of course, these same factors—good numbers of ACG employees present and close proximity to the administration area of the ACG—make Quebrada Grande especially privileged community in terms of its relation to the ACG, as compared to other nearby towns. It must be kept in mind that it would not be appropriate to use Quebrada Grande's situation as an example of what is happening

all the towns around the ACG, because the ACG's relations with other towns are substantially different, and often not as rewarding.¹⁶

¹⁶ Observation based on informal interviews with various ACG staff members, particularly in Security and Sectors.

ACG INTERACTION WITH QUEBRADA GRANDE

The ACG has interacted with the town of Quebrada Grande on many levels. Here we look at those interactions apart from employment. The purchase of a lot of land near the town of Quebrada Grande has been a topic of contention since the outset of the Guanacaste National Park Project. Some residents believed that the Conservation Area was taking away employment on ranches, but it is difficult to assess what the actual impact on employment in the town has been. Over the years, the involvement of ACG programs in Quebrada Grande has met with both disappointment and success. The Extension Program failed due to misunderstandings concerning its goals. Guanacaste Youth, part of a national program which involved young men in conservation activities, was not continued due to organizational problems. But these defeats have been matched by even greater accomplishments. The Biological Education Program (PEB) has proven incredibly effective in teaching grade school children about ecology and conservation and establishing a link between the ACG and kids' parents. In late 1997, the Forest Fire Prevention and Control Program also embarked on the organization of young men in a fire brigade in Quebrada Grande which appeared very promising. Finally, there is a strong off-hours social link between the ACG and the town, which helps the townspeople think of the ACG as friendly faces rather than a foreboding, anonymous institution.

Land Purchases Near the Town of Quebrada Grande: The Impact on Employment

The first notable interaction the ACG had with the town of Quebrada Grande was in the late 1980s when the ACG began buying land to expand the conservation area. The ecological reasons for buying the land were:

1. The conservation area needed to be big enough to support healthy populations of animals and insects.
2. The ACG wanted to connect the existing lands, mostly dry tropical forest, to wetter ecosystems further to the east so that the species would have all the habitats they need.
3. The ACG wanted its property holdings to be large enough such that the land could tolerate human use.

With these goals, the ACG set out to buy property in the area.¹

¹ Daniel Janzen, personal interview, February 1997.

I found it very difficult to assess the effect of these land purchases on the residents of Quebrada Grande and the extent to which, if at all, the purchases contributed to unemployment. The ACG believes its impact on the town was minimal. In speaking with the administration, I learned that much of the land the ACG purchased had been used only marginally and that very few employees lost their jobs due to the purchases. The ACG asserts it did not pressure anyone into selling their land, that most people had wanted to sell, and that the ACG had paid fair prices for the land. Some of the ranch employees were automatically hired by the Conservation Area to continue working in the ACG. The ACG also says that the expansion of the ACG, especially into the Quebrada Grande region, provides more and better work for town residents than if the ACG had not expanded.

While the ACG insists that very few people lost their jobs, there are some residents in Quebrada Grande who believe that the Conservation Area land purchases did contribute to unemployment. The testimony I received in Quebrada Grande was not completely contradictory from that of the ACG, however it certainly had a different slant. The town is currently suffering from significant unemployment and under-employment. When the residents try to explain their difficult situation, it is easy to blame the fact that much of the land near the town is being used for conservation rather than ranching, especially since ranching had historically supported the town economically. The result is the conclusion—whether justified or not—that the Conservation Area has caused the unemployment. Therefore, I heard a lot of complaining in the town that the ACG had caused unemployment. According to the interviews I conducted with ACG employees from Quebrada Grande, there were several individuals who live in or near Quebrada Grande who did lose their jobs when the ACG bought land. Although in numbers it may have been only a few people, it still constituted several families whose income was shut off for a time. In a small town like Quebrada Grande, when someone loses a job the impact is magnified by rumors and gossip.

For all of the complaining that I heard about the Conservation Area, however, I also heard a lot of positive feedback from the residents. Most of the family members of ACG employees are very grateful to the ACG for the employment opportunities that it provides. Some individuals even went as far as saying that the ACG is the “salvation” of Quebrada Grande for the amount of work that it provides.

Due to the wide range of strong opinions on what impact the land purchases had on Quebrada Grande, and my own reluctance to get involved in what appeared to be an

unsolvable (at least from an historian's perspective, maybe an economist could have figured it out) and relatively sensitive issue, I have not attempted to assess the impact of the land purchases on the town.

The Extension Program: Confusion in Goals Leads to Demise

Confusion about the goals of the ACG's extension thwarted and eventually terminated the its Extension Program. The ACG is not a traditional conservation institution, and its administration believes that it needs an extension program specific to its own goals. The program set up in the early-1990s adhered to a conventional method of extension, basically using a paternalistic method aiming to solve the communities problems which did not pertain to conservation. Many people in the ACG disagreed with this method, but efforts to revise the methodology and goals of the program were unsuccessful. The resulting discord and frustration led to the demise of the program.

According to social worker Ligia Ortiz, the coordinator of the ACG Extension Program in the early 1990s, Quebrada Grande was one of the first four towns that the ACG began to work with. The ACG administration originally viewed Quebrada as one of its biggest challenges. Many people in the town were originally opposed to the ACG, and they had actually overcome their typical organizational problems to form an active resistance group. The ACG began working with Quebrada in 1990, with the goal of "fulfilling mutual interests" of the town and Conservation Area.

One of the first activities the Extension Program organized was a two-day retreat to the station at Hacienda Santa Maria at Ríncon de la Vieja Volcano. Twenty-five people were chosen to be representatives of the community (it is unclear how those people were chosen). At this meeting the extension workers discussed with the town residents their concerns about the Conservation Area, and identified the following three key categories of interest:

1. **Land ownership:** The town residents felt threatened because the ACG had bought so much land near their town. Though very few residents had actually owned land, they assumed that the ACG buying the land from the ranch owners meant that many people would lose their employment. Land had always been the key to survival, so with the land out of their reach, the residents began to worry.
2. **Involvement in decision-making:** The town residents felt strongly that they had not had the opportunity to participate in the ACG decision-making process, and that there had

been an obvious lack of communication between the ACG and the town. Despite that most of the residents did not own the land purchased by the ACG (which had belonged to wealthy Costa Ricans and foreigners), they still felt that the mere presence of the ACG close to their community would affect their lives enormously. They would have appreciated being informed about the purchases so that they could have asked questions, and so they would not have felt "run over" by the Conservation Area.

3. Environmental issues within Quebrada Grande: The representatives from Quebrada Grande also expressed concern about several environmental problems in their town, like contamination of water and garbage disposal.²

In response to the community's concerns, Ms. Ortiz set out to organize several different programs. She quickly researched the first concern about land tenure, and put together a presentation demonstrating that a small number of people actually lost jobs and that few residents had actually owned property bought by the ACG. One resident, who had been a part of the protest group and who now works for the ACG, commented that this presentation really helped to quell the group's dissatisfaction with the ACG. Unfortunately, no copies of that presentation exist on file at the ACG.

Ms. Ortiz asked Quebrada Grande residents how they could achieve better communication with the ACG. They responded that they would like to have a town committee which deals with the ACG, but that they felt they needed to learn how to organize themselves better to do so. Ms. Ortiz arranged to have the National Institute for Learning (INA) come to the town to give a course on "The Organization of a Group" from June to July, 1991. As result of this course, the group of people working with Ms. Ortiz formed the ACG-Quebrada Grande Commission, which sought to organize projects with the ACG, like the establishment of a museum at Hacienda Aguas Buenas, a ranch currently owned by the ACG which had once been owned by a family long established in Quebrada. (The project never became a reality after the extension program folded.)

Ms. Ortiz also arranged an INA course on how to use nature themes in art to sell to eco-tourists. There were several trips for the group members to the ACG, and some talks about how to deal with the contamination of water in the town. The group had even planned to have an eco-radio show through a radio station in La Cruz (Radio Cultural de La Cruz).³

² Ligia Ortiz, personal interview, March 1997.

³ Ligia Ortiz, personal interview, March 1997; "Taller de Capacitacion: La Organizacion de un Grupo" INA Course Manual, June, 1991 (Personal Papers, Quebrada Grande Resident); "ACG Plan Operativo, 1990"

The Extension Program worked with Quebrada Grande from 1990 until 1992. When the program ended, so did the ACG contact with the Commission which had motivated the group, and the group fell apart.

Since 1992, there has been at least one formal activity bringing the ACG to Quebrada Grande. In preparation for the proposed All Taxa Biodiversity Inventory (ATBI), the ACG hired a consulting group to help it present the project to four of the surrounding communities: Cuajiniquil, Santa Cecilia, Quebrada Grande, and Colonia Blanca. The agenda included presentations by members of the Costa Rican National Institute of Biodiversity (INBio) and the ACG discussing each of the institutions, the role of the parataxonomists, and the ATBI. Eighty-seven people attended this meeting in Quebrada Grande (37 adults, 35 teenagers, and 10 children).

After the presentations, which the town residents divided up into groups for a participatory section and answered the questions, "What is your opinion about the ACG?" and "How can you take advantage positively of what the project offers?" The answers to the first question about their opinion indicated appreciation of the ACG's protection of natural resources and ecosystems, and listed rules like not killing animals, not cutting tress, respecting trees, fungus, and insects. Answers to the second question about the benefits of the project listed things like employment, knowledge about plants, medicines, and perfumes. There was a crucial flaw in the design of the program, however, in that the town residents did not have the opportunity to answer these questions before they had listened to the presentations.

At one point in time, several of the employees from the ACG who live in Quebrada Grande attempted to start trash collection and recycling efforts in the town. The ACG said that they would provide the vehicles to bring the materials to Liberia. The program seemed to work well until the ACG employees tried to have other people in the town organize it, at which point it failed.

In talking with adults in Quebrada Grande in 1997, I still got the impression that they would appreciate more communication between the town and the ACG. Only a few individuals still expect paternalistic help from the ACG; most just desire a more active relationship. For example, during my last months in Quebrada Grande, the ACG bought a

(Guanacaste Conservation Area Papers, 1990); "ACG Plan Operativo, 1991" (Guanacaste Conservation Area Papers, 1990).

large piece of property to the east, bordering the town of Dos Rios. One man commented to me that both towns would have appreciated an opportunity to talk to the Conservation Area about the purchases, about what the implications were for the towns and what the best way to handle the changes would be. As far as I know, nothing like that ever occurred, nor was considered by the ACG.

Guanacaste Youth

The Guanacaste Youth Program (*Guanacaste Joven*) was a productive attempt to involve young people in conservation in a mutually beneficial way, but poor organization prevented it from becoming an ongoing part of ACG activities.

In 1996 the Costa Rican Ministry of Labor and Security initiated a project called “Costa Rica Youth.” The program incorporated unemployed youths across the country in a work program which benefited Costa Rica’s natural resources while teaching youth to protect them. In Guanacaste, the program was organized by the Tempisque Conservation Area (ACT), and included the Tempisque, Arenal, and Guanacaste Conservation Areas. Over 2,200 young people participated in Guanacaste Youth.⁴ The participants were to work for two months, January and February, for 40,000 colones per month (about \$162.00). Fifty young men from various towns worked for the ACG in a variety of programs. The following table lists how many people came from each town:

Quebrada Grande	25
Cuajiniquil	7
Santa Cecilia	5
Curubande	3
Liberia	3
Farms near Upala	2
Unknown	5

All of the applicants from Quebrada Grande wrote down “lack of work” in Quebrada Grande as their reason for interest in the Guanacaste Youth program. The applications indicate that most of the men from Quebrada Grande were between the ages of 21 and 29,

⁴ Gabi Soma Rivas, personal interview, June 1997. As far as Ms. Soma Rivas remembers, there were no female participants in Guanacaste due to the “difficult nature of the work.”

and many of them were single. They came from families with four to twelve people, with an average of seven people. In most cases the families were supported by one income, if there was any income at all. They indicated that their families survived through subsistence agriculture, help from other family members, or temporary employment.⁵

The men worked with several different programs in the ACG. With Operations they cut the grass, dug ditches, and helped with repairs in Nancite and Junquillal. The group that worked with Control and Protection helped with patrols and cleaned beaches. In the Fire Program, the youths helped cut and burn fire breaks, transport materials, repair roads, and do work in general maintenance activities. At Horizontes Experimental Forestry Station they contributed to the upkeep of the plants and cut firebreaks. Finally, in the Ríncon-Cacao Biological Corridor they worked in the plant nursery filling bags with soil, planting trees, and digging trenches for the irrigation. All of the programs reported successful cooperation with the young men. The men whom I spoke with in Quebrada Grande who participated also looked back upon the experience favorably. Unfortunately, there were a lot of problems with the Ministry of Labor and receiving the money from the government to pay the participants. Up to one year later, four men from Guanacaste, two of which came from Quebrada Grande, had not received their pay for their work. There had been so much confusion about this issue, resulting in many hard feelings on the part of the participants, that the Conservation Areas in Guanacaste all decided not to participate in the program again despite its apparent success.⁶

The Biological Education Program: Successfully Education Children

Apart from employment, the most frequent, consistent, and productive interaction between Quebrada Grande and the Guanacaste Conservation Area is the Biological Education Program (PEB) for grade school children. It is by far the most successful program-interaction with local towns and is the pride of the Conservation Area. The Biological Education Program is a remarkably modern and effective tool for teaching local children the essentials of ecology and conservation. The PEB is described in detail in the section of this paper entitled "The ACG and Local Towns." Since the inception of the program in the mid-1980s, the children in the fourth through sixth grades in Quebrada Grande have participated in this program. This past year, the program also expanded to include the new

⁵ "Application forms from Quebrada Grande participants in Guanacaste Youth, 1995" (Tempisque Conservation Area Papers, 1995).

⁶ "Informe Mensual de Avance y Desarrollo de Proyecto, Ministerio de Trabajo y Seguridad, Dirección Nacional de Empleo, Departamento Nacional de Generación de Empleo, Enero 1996" (Tempisque Conservation Area Papers, 1996).

grade school on the farm community directly to the east of the town, El Consuelo. Unfortunately, at the time of the research for this paper, PEB's records concerning how many children from each town have participated in this program were not yet fully computerized and accessible.

I had the opportunity to spend several days with the PEB program. It was inspiring to see how the children anticipated the excursions weeks ahead of time, how their faces lit up when they entered the Santa Rosa driveway covered by towering trees or when they approached the bubbling mudpots of Ríncon de la Vieja volcano. PEB certainly has a strong influence on the children who participate. I met one boy who had excelled in PEB and due to its influence was planning on applying to universities to study marine biology when he graduates from high school in two years. Several of the younger employees in the ACG participated in the PEB while they were in grade school as well. One of the most surprising aspects of the PEB program in Quebrada Grande is what a competition it had become among the mothers to be able to chaperone the trips. Mothers wanted to go again and again, and the teachers had to come up with criteria for picking who could participate.

The Quebrada Grande Fire Brigade: An Effort to Involve and Teach Young Men

The Fire Program is also incorporating young town residents into educational and productive activities. Toward the end of 1997, the Fire Program had begun to organize a fire brigade in Quebrada Grande. The objective is to train a group of mostly young people in fighting forest fires to provide support for the main ACG fire-fighting team during large, extended fires. About twenty people were originally interested in participating, and the ACG coordinators thought that about ten very committed members would emerge from the group. The participants would be educated not only in fire-fighting, but also in the biological and conservational importance of their work. Though the brigade would be voluntary, participation was encouraged with benefits like free admission to the ACG, field trips to the beach and other sectors, and a free pair of work boots to use while working with fires. Both young men and women came to the introductory meetings, though the implicit understanding was that the women would be more likely to work in support of the fire-fighters, in aspects such as cooking. The progress of the program will be interesting to follow over the next year. If it works well, it could be an excellent way to educate young men about conservation and involve them in promoting the longevity of the ACG.

Social Interaction: Turning an Institution into Friendly Faces

The town of Quebrada Grande also provides a social base for many ACG workers. Of course, there are employees who are from Quebrada Grande who are active in the town, but there are also a number of other employees who frequent activities in Quebrada. There are several dances held in the town throughout the year, and ACG employees participate regularly. They also come to Quebrada Grande to have dinner in the sole restaurant or to play pool in one of two pool halls. Several ACG employees also play on the town soccer team and come to the town to practice and for games. Town residents are accustomed to seeing ACG employees; they anticipate their visits and enjoy their company. These interactions personalize the ACG for the town residents. When they think of the ACG, instead of thinking of a faceless, sterile, foreboding institution, they think of their friends and neighbors.

7. ACG-QUEBRADA GRANDE RELATIONS THROUGH THE EMPLOYEES' EYES

The employees are the people who straddle the two worlds in between the town and the ACG. Because they are familiar with both realities, their opinions about the Quebrada Grande-ACG relationship are especially important:

- What do their neighbors think about them working in the ACG?
- What impact have they had—as ACG employees—individually in the town?
- What are the points of conflict between the ACG and the town?
- What are the positive aspects of the relationship?
- Do they have suggestions for how the relationship should be improved?

ACG Employees' Neighbors: How do they react to your work in the ACG?

The employees' responses concerning how their neighbors and other people in the town have reacted to their work in the ACG are difficult to summarize. The employees' responses for how their neighbors have reacted to their working in the ACG are below:

Neighbors' Reaction to Employee's Work in the ACG	Number	Percent
Positive	5	17.9%
Negative	4	14.3%
Originally negative, but became positive with time	3	10.7%
Continuously convey mixed sentiments	2	7.1%
No change	1	3.6%
Unknown reaction	10	35.7%
No answer	3	10.7%

The neighbors who have reacted positively seem to be genuinely happy that the employee has found well-paying stable work, or is working for a good cause. The people who have responded negatively appear to be envious, accusing the ACG employees of believing that they are better than other people because they work in the ACG, wear the ACG uniform, and/or drive through town in an ACG car. Other negative reactions frequently sensed by the employees are that their neighbors believe that they are “snitches” or “rats” always watching to get other people in trouble. The interviewees also mentioned that it annoys some of the residents of Quebrada Grande that more than one family has several members working in the ACG. Consequently, they assume that the hiring practices are unfair and that others been shut out of the opportunity. Some employees were accepted by their neighbors with time. For example, one interviewee explained,

When I first started working in the ACG it was really hard. People automatically assumed that I thought I was better than them, and I felt uncomfortable, too. So they stopped talking to me, and I stopped talking to them because I felt so awkward. It was very isolating. But now, everything is normal, and I even find that they invite me to more meetings and events.¹

Some employees have found that explaining what they do to their neighbors has helped their relationship with their neighbors. The interviewees were asked if they thought that their neighbors understand what they do in the ACG. The following charts shows how the employees responded.

Neighbors' Understanding of What the ACG Employee Does	Number	Percent
Most understand what they do	7	25%
Some understand what they do	8	28.6%
Most do not understand what they do	9	32.1%
No answer	4	14.3%

The majority of those employees who feel confident that most of their neighbors understand what they do in the ACG had taken time to explain it. But those neighbors who do not understand are at times truly off the mark: One parataxonomist commented, “[My neighbors] think that I am just another park guard going out to patrol and get hunters in trouble.”² Educating the general populace about what people in the ACG do—for instance, a forum in which the different employees talk about what they do and answer questions—would be incredibly beneficial to improving Quebrada Grande-Conservation Area relations.

One notable indicator about how ACG employees feel about being representatives of the ACG in their town is how they feel wearing their ACG uniforms while in Quebrada Grande. The question did not apply to everyone, since not everyone wears their uniform to work regularly. Out of nineteen responses, 52.6% said that they feel good wearing the uniform, commenting that it is a symbol of their work and that they are proud of it. 47.4% said that at times they feel uncomfortable wearing their uniform in the town. Some people are uncomfortable to the extent of making a point *not* to wear it in Quebrada Grande. For these people, though the uniform makes them proud, it also makes them—and others—distinctly conscious of their good fortune. Several people made comments similar to the remarks of one parataxonomist:

¹ Employee 22, personal interview, 25 September 1997.

I don't like wearing my uniform in Quebrada, the people don't like seeing it It makes them uncomfortable. They think that when I use it I am saying that I am better than them. So I use the ACG t-shirts instead, they don't seem to make people as uncomfortable.³

Many people opt to use the ACG t-shirts instead of their uniform.

The Employees As Informal Extension Workers

The employees have been fairly effective in spreading knowledge about the ACG informally. Out of 28 responses, 50% felt that they had successfully influenced people's opinions about the ACG, 42.9% felt that they had not, and 7.1% did not comment. Those that did not think that they had influenced anyone's opinions generally responded that they do not talk about work when they are not working, or that they have felt uncomfortable with their own ability to discuss the issues with other people. The following are some examples of their comments:

When I am not working I try not to talk about my work. If I go out, I want to relax, and if someone brings my work up, I try to avoid talking about it.⁴

People don't ask, and I don't want to lecture.⁵

I don't think that I have influenced what people think about the ACG because I have a really hard time explaining. . . . [People have such negative images of the ACG], it makes me uncomfortable.⁶

Those who feel that they have been successful at influencing people's opinions about the ACG have found young men to be their most captive audience. The young men often approach employees with questions, asking what the ACG is all about, and the employees give them answers, explaining methods and goals of conservation. One younger man had a experience which was particularly special for him:

I have a friend, and when I first began working in the ACG he used to criticize me, make fun of me for it. He is the type of boy who would fish and hunt, and light pastures on fire just for fun. . . . But I took the time to explain my job to him, what I do and why I do it, why conservation is important. It makes me happy now, because I think that what I said changed how he acts, his opinion about the ACG, and his opinion of me, too!⁷

² Employee 2, personal interview, 28 July 1997.

³ Employee 22, personal interview, 25 September 1997.

⁴ Employee 28, personal interview, 16 October 1997.

⁵ Employee 27, personal interview, 10 August 1997.

⁶ Employee 2, personal interview, 28 July 1997.

⁷ Employee 13, personal interview, 30 August 1997.

Fortunately, one of the ACG employees has been the President of the Development Association for the town for several years. He has frequently spoken for the ACG and explained things to people in the town, for example he explains the purpose of the *Consejo Local*, the Local Advisory Board. He has also helped collaborate with the ACG to plan ACG functions in or with the town, like organizing a class on fighting forest fires and finding two students to participate with an exchange program with Canada.⁸ Several people who work in the Sectors Program also mentioned that they had been successful in explaining things about the Conservation Area to people in other towns, like Cuajiniquil, a nearby fishing village.

Positive and Negative Aspects of the ACG-Quebrada Grande Relationship

In the employees' view, employment is overwhelmingly the most positive aspect of the relationship between Quebrada Grande and the ACG. Beyond that, they also mentioned help with fighting forest fires, transportation, educational activities like PEB, and how in the past the ACG has helped improve the towns infrastructure.

At least ten people think that there are no conflicts in the relationship between the town and ACG. However, among those who did comment on conflicts, the one most frequently mentioned was the resentment due to the misunderstanding that the ACG has taken land and work away from the town. Hunting was also mentioned numerous times as a conflict, which might result from the fact that the ACG has had problems with hunting with one or two farms in particular near the town. Fires for retribution, hiring too many people from one family, and also lack of outreach for adults and few educational activities were also listed as points of contention. "In the beginning," said one employee, "the ACG did a lot so that the community would understand them. But now, they have stopped. They should be doing more so that the town will understand the reality and importance of the ACG."⁹

Suggestions for Improving the Relationship Between the ACG and Quebrada Grande

- *Improved Communication:* The practically unanimous consensus among the employees who offered suggestions for how the Quebrada Grande-ACG relationship could be improved was that more communication and adult education are the keys to improvement. Primarily, the employees feel that Quebrada Grande residents just want to feel like the ACG cares about their opinion and to understand what is happening.

⁸ Employee 11, personal interview, 24 August 1997.

One particular comment conveys this idea quite accurately: "The people need to feel that they are better informed, like they are partners with the ACG, that they are informed when land is purchased or about things that the Conservation Area is doing, what its successes have been."¹⁰ One employee referred to a very large land purchase near a town to the east of Quebrada Grande, Dos Rios. Despite the fact that the town would essentially be surrounded by ACG lands, the ACG made no effort to open a forum to discuss this with the town, what it would mean for both them and the ACG. Instead, rumors fly and people became angry and resentful. A talk like this would have also been helpful in Quebrada Grande to help alleviate the notion that the ACG is taking over Guanacaste.

- *More Educational Outreach:* According to the employees, the adults in Quebrada Grande need to learn more about the ACG. Employees suggest having representatives from different programs in the ACG come give talks on what they have been working on. For instance, the Fire Program could present their annual report of the fires they have fought, the parataxonomists could display their collections, or the Ecotourism Program could show videos made about the ACG. This would also help with the issues of communication.
- *Making Contacts for the Town with Other Organizations:* Another suggestion for improving the ACG-Quebrada Grande relationship was that the ACG should use its influence to facilitate cooperation between the communities and other organizations which can help it. The ACG is not an institution which is responsible for traditional extension, for instance, giving the towns money to paint their schools or to build sidewalks. However, it could help the towns get in touch with the correct government or non-government organizations to achieve what the town wants. There are many issues crucial to conservation that fall outside of the realm of themes the ACG should address directly, but it could influence them indirectly in Quebrada Grande. For instance, the ACG could motivate work on reforestation, water contamination, trash collection, and burning practices. Undoubtedly, this attention and effort would improve the relationship between the ACG and Quebrada Grande.
- *Other suggestions* were to waive the entrance fees for local people to get into the ACG, to continue to educate the children, and to not employ so many people from one or two families so that the wealth of the ACG would be more uniformly spread through the community.

⁹ Employee 11, personal interview, 24 August 1997.

¹⁰ Employee 2, personal interview, 28 July 1997.

Spreading the Wealth

Having people who work in the ACG who live in Quebrada Grande has helped others in the town significantly. There are more people living in Quebrada Grande who have more money to spend. This helps the small stores and the service industry. All of the women with children who work in the ACG have hired household help, and several of the families have also hired people in construction for home improvements. Of twenty-eight interviewees, 35.7% said that they have been able to help people outside of their families financially, whether through loans, hiring people to do work, giving food to families who need it, or supporting local organizations fund-raisers. In the course of my stay in Quebrada Grande, I found out that one ACG employee alone had loaned money to at least five different families; he also frequently hired people for services. His case is unusual, but it shows the impact of having even one person who is earning a relatively substantial salary. In two cases, ACG employees were able to get the Conservation Area to donate the wood from abandoned farm houses on newly-acquired ACG property to families who needed it to build homes.

ACG employees have also on occasion (according to the interviews, seven times) helped neighbors get jobs in the ACG through recommendations, letting them know when a position is available, or if they are in the position to do so, hiring them for part-time work in the dining halls or in sectors.

Several ACG employees have also helped the town through working with organizations. For instance, one man has helped the church make posters on his computer and helped the grade school connect a computer the government gave it. One employee serves as the current President of the town's Development Association. The soccer team also has several members who are ACG employees. Overall, however, most employees feel that they do not really have the time to be active in community organizations.

8. EMPLOYMENT FOR QUEBRADA GRANDE RESIDENTS IN THE ACG: A PROFILE OF THE PEOPLE AND HOW THEY CAME TO THE ACG

While there are many different levels of interaction between Quebrada Grande and the ACG, the one which has the most immediate and dramatic impact on people's lives is the employment in the Conservation Area. There are both long-term and short-term positions in the ACG open to local residents, and Quebrada Grande as a whole has benefited greatly from them. The ACG hires many people for short-term jobs, ranging from one day to three or four months, and in 1997, there were twenty-eight people in Quebrada Grande who had full-time work in the ACG in a variety of programs.

Quebrada Grande residents occupy a high number of the positions offered by the ACG. Heads of various ACG programs offer several reasons for this. Quebrada Grande is very close to the ACG, and there are a variety of means of transportation to and from the Conservation Area. They have also found that the residents of Quebrada Grande are willing to work. In some communities, the ACG has to spend a lot of time looking for people to take a job, but in Quebrada, they are almost always immediately successful. Also, the large number of people from Quebrada working in the park contributes to a self-feeding cycle. Often, when the ACG administration needs a temporary employee, it is very easy to ask an employee to ask a friend or neighbor if he or she is interested in the job. The cycle is further self-feeding: as the word spreads that working in the Conservation Area is good employer in salary and its respect for its workers, more people want to work there.

Short-term Employment

Short-term employment exists in every program in the ACG. Quebrada Grande residents have worked temporarily in positions cooking, cleaning, fighting forest fires, constructing or repairing buildings, maintaining the grounds, and assisting researchers in the Conservation Area. Some of the positions are not actually paid by the Conservation Area, but by private individuals working in the ACG, like cleaning and laundry services, cooks for private field biology programs, and biologists' research assistants. Though there is more temporary work available for men—mostly for young men who are willing to do the physical labor—the cooking and cleaning jobs frequently provide opportunities for women, many of whom are single mothers with several children. Short-term positions generally are not formalized with contracts and do not require interviews. Although they officially require at least three years of high school education, the education requirement is often not

enforced. There are also informal contracts for day to day positions, like cooking or grounds maintenance. These do not have any prerequisites. The ACG is supposed to take out a temporary insurance policy for the worker, though this is not always done. Often, in cases where the ACG needs to hire more than one person for a project, they will hire a "contractor" from a town and tell him how many people they need. This person will then be responsible for finding the number of people necessary for the job. The ACG will pay him for the entire work force, and he will pay the workers individually. The ACG does this because it decreases the amount of work they need to do to hire people, and also because it frees them from the responsibility of buying short-term insurance policies for these people and places it on the contractor.

Long-term Employment

This study focuses on the twenty-eight residents of Quebrada Grande who have long-term employment in the ACG. As of December, 1997, there were 19 men and 9 women living in Quebrada Grande who fit this category. Twenty people worked directly for the ACG, four were employees of INBio who work in the ACG, and four worked for Dr. Janzen. The INBio employees and Janzen's assistants were included in the study because the work they do is essentially identical to the work of the ACG parataxonomists. Their schedules, salaries, and benefits are also very similar to those of the ACG employees.

The Background of the ACG Full-time Employees

In 1997, the average age of the employees interviewed was 31 years old; the youngest was 21 and the oldest was 46 years old. Of the twenty-eight individuals, fourteen (50%) grew up on farms, twelve in rural villages (42.9%), and two (7.1%) in the town of Liberia, the provincial capital of Guanacaste. Seventeen (60.7%) are native residents of Quebrada Grande, and almost all grew up in Guanacaste. Ten moved there recently, and have been living there for an average of almost five years. Several moved to Quebrada specifically due to their work in the ACG, whether it was because transportation was easier, he or she had married an ACG employee from Quebrada Grande, his or her income allowed them to move off of a farm and into a house in town, or because costs of living were lower in Quebrada than in Liberia. Most say that they continue to live there because it is closer to their families and economically more affordable than other places.

It is important to note the familial background of the employees. The parents of the full-time employees have (or had) a variety of part-time and full-time jobs. With a plural response, nine of the fathers of the employees worked in subsistence agriculture. Nine

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worked in permanent positions, including a guard in the Santa Rosa National Park, a farm administrator, police officers or Costa Rican National Guard, a mechanic, and a teacher. Eight had temporary employment as cowboys, ranch hands, construction workers, and a photographer. Several interviewees did not know what their fathers did. Of the mothers of employees, seventeen stayed at home and worked as housewives and mothers, and then an additional six worked selling food out of the home or on farms as well; two worked in the school lunch room, and one as an office receptionist. Only two employees did not know his or her mother's employment history.

The level of formal education of the full-time employees varies widely. Since Costa Rica requires school attendance through the sixth grade, all of the employees have completed the sixth grade. The average education among them is through the eighth grade (which is in high school in Costa Rica). The following chart shows the levels of completed education among the employees.

Level of Education	Number of Employees	Percent
Sixth grade (grade school)	11	39%
Seventh grade	4	14.28%
Eighth grade	4	14.28%
Ninth grade	3	10.71%
Tenth grade	2	7.14%
Finished high school	2	7.14%
Entered university	2	7.14%

Neither of the individuals who entered university have completed their degrees. There were various reasons for why the employees left school before graduating from high school or college. Eleven people said they left school because of economic need. Many of these people came from families with lots of children, and the parents could not afford to keep them in school or needed their help taking care of the farm or the house. Four people left because they were bored, three people got married, and one woman left because her parents would not let her continue school because it was not expected that she would need an education.

The full-time ACG employees are mostly married or living together with another person in a type of civil marriage called *union libre*. There are 12 people who are married, 9 in *union*

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libre, 1 single mother, and 6 people who are single. There are 6 couples, whether married or in *union libre*, in which both members work in the ACG. (Four of those couples met through their work in the ACG.) Three wives of men working in Sectors live with their husbands at their posts and are given a small amount of money in recognition of their contribution to the work that their husbands do. One wife of an employee finds temporary work through the ACG on a fairly regular schedule as a cook for private educational groups on courses in the Conservation Area.

The average number of children among the ACG employees is 2.07. They have fewer children than the average 21-46 year-old in Quebrada Grande (2.48) or Barrio Lourdes (2.78). The older employees generally have at least three children, but some have up to six. The younger generation of ACG workers, in their twenties and early-thirties, generally have one or two children, and many comment that they do not plan on having more because it is so expensive. This marks a definite shift in mentality from an age when children were viewed as assets due to the work they could do in a house or a farm, to an era when fewer people are subsisting off of farms, and children are more expensive due to the education which is required to find work.

Obtaining Long-term Positions in the ACG

The full-time employees from Quebrada Grande work in a variety of jobs in the ACG.

- Ten people work in the Sectors Program, effectively working in the more traditional roles of maintenance, vigilance, and assistance to tourists and biologists in different biological stations and their respective lands. Of these ten people, five are the heads of their sectors, while the other five are either assistants or cooks.
- Four people work in the Research Program as parataxonomists.
- One person as a parabioprospector (an assistant to INBio's biodiversity prospectors).
- Four people work as research assistants to Dan Janzen.
- Three people work in the ACG's dining halls, a subdivision of the Operations Program; one is the administrative head of the dining program, and the other two are full-time cooks.
- Two people work in the Fire Program, one of whom is the Assistant Director of the program, the other is a year-round firefighter.
- One person from Quebrada Grande works as a cashier in the Accounting Department.
- One person works as a night watchman for the Control and Protection Program.

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- One person runs the Supply Warehouse, which distributes office supplies and keeps track of all of the material possessions of the ACG.
- One person works the secretarial assistant to the *Junta Directiva*, a group of people similar to a board of directors.

These people came to work in the ACG in a variety of ways. For each individual, the process combined two steps: 1) realizing that he or she was interested in working for the ACG, and 2) securing a job within the Conservation Area.

Each person became interested in working in the ACG due to a variety of reasons. The numbers given here, however, note only the *primary* motivation of interest in working in the ACG. Of the twenty-eight full-time employees, 17.8%—mostly those who were hired at the inception of the ACG—had never considered working in the ACG but were actually sought out by the ACG or happened upon work in the ACG due to a particular situation. For example, one man was hired by the ACG after the farm he worked on was bought as a part of the Guanacaste National Park Project. Another was asked by a friend working in the ACG to be in charge of a sector. Several women who work as cooks were sought out by the ACG's dining hall administrator who lives in Quebrada Grande. (The administrator generally tries to find single mothers or women in families with serious economic need to employ.) 14.3% also came to work in the ACG permanently after having worked there temporarily in activities like construction or grounds maintenance. Often those individuals did not continue to work in the same exact job, but if he or she had demonstrated good working habits the head of the program would place them in a permanent position when one opened.

39.3% of the employees, most of whom are the younger ones, noted that they became interested in working in the ACG through helping family members, parents, uncles, aunts, or brothers who already worked there. In these cases, the person learned about working in the ACG and the rewards one earned through this work, and decided to pursue it. One son learned about collecting insects while helping his father take care of a biological station where parataxonomists work. A woman learned about accounting when her husband brought home his work at night and she had to help him with it.

Sometimes, there are several familial links to the ACG: One young woman learned basic parataxonomy techniques from her aunt, who in turn had been exposed to the work

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through her husband's job in the ACG. This woman also spent time living in the ACG with her uncle and brother, both of whom ran sectors of the ACG. After so much exposure, she decided that she wanted to work in biology. Another young woman became excited about parataxonomy while helping her aunt cook for a parataxonomist course.

The professional and financial opportunities and convenience offered by the ACG piqued many people's interests. Although only 14.3% of the interviewees said this was their sole reason for their original interest in working in the ACG, many more mentioned it as one of the main motivations. Not only is a wide selection of jobs available in the ACG, but the ACG pays as well as, if not better than other employers in the region. Many employees listed the opportunity for improving their standard of living as their primary motivation for seeking work in the ACG. In the words of one employee, "I had heard from so many people how good the work was in the ACG. I didn't care what they hired me to do. I just knew I wanted to work there."¹ Another said, "I had always been poor. I wanted to be able to buy myself the things I need: rice, beans, some meat every now and then, my clothing, a bed, a dresser, maybe a refrigerator. I saw that through the ACG I would be able to do this."² Furthermore, since the ACG offers transportation in the morning and afternoons from a pick-up point close to the town, it is fairly easy to work there. A father of six young children, who had been commuting back and forth to Liberia leaving at 5:30 AM and returning at 9:30 PM when most of his children were asleep, mentioned that he looks forward to coming home at 6:30 PM and spending several hours with his children in the evenings.³

Only 10.7% mentioned actually being motivated from the very beginning to seek a job in the ACG because they had always loved biology or working in the outdoors, or because they believed in conservation. The vast majority had never even thought about conservation before. A little less than half of the full-time employees from Quebrada had grown up on farms. While they had been aware of nature, felt comfortable in the outdoors, and known a great deal about animals, plants, and ecosystems from their practical experience, many of them had taken their surroundings and knowledge for granted. For them, it was a progression of events which led to that discovery that they really enjoyed working in conservation. "I grew up on a farm," one parataxonomist said, "I spent most of my time close to nature, but I never paid attention, I never ever imagined how wonderful

¹ Employee 3, personal interview, 2 August 1997.

² Employee 24, personal interview, 11 October 1997.

³ Employee 11, personal interview, 24 August 1997.

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it was.”⁴ For some individuals, working with nature attracted them. One man in charge of a sector said, “I grew up in a rural area. [I worked for years on ranches.] I really wanted to continue working outdoors. It is in my blood.”⁵ The ACG tapped into a valuable resource, the people who are products of the Guanacastecan land. Yet, their commitment to the ACG did not always evolve out of an inherent connection to the land. One man who had originally aspired to join the church commented,

I’ll admit that my first motivation for applying for a job in the ACG was the money, but once I started working here, I realized that through working for conservation I would be able to achieve my goal of working for the benefit of humanity, even if I didn’t work as clergy.⁶

For most of the women, the ACG offered the only opportunity they would have had to work. There are very few opportunities for cleaning and childcare positions within Quebrada Grande and positions are limited even in Liberia. Furthermore, apart from domestic work it is very difficult for undereducated women to find jobs. The ACG not only offers jobs which are traditionally done by women, but also has provided training for women who want to work in field biology. One parataxonomist remembered how she decided to apply for training course in the ACG,

I saw it as an opportunity. I wanted to do something, but I didn’t know what. After leaving high school [before graduating], I had spent all of my time taking care of my sisters’ kids. . . . I wasn’t really interested in the work in the ACG. . . . My family had to make me practice touching bugs before the interview! . . . [But] I didn’t have anything else, so I thought that I would try my luck and see what happened.⁷

Another woman said, “I saw this as my only opportunity to get out of my house and get away from my parents and the house chores.”⁸ Although working in the ACG has certainly been a liberating and empowering experience for most of the female employees, it is interesting to note that out of the nine women who have full-time employment, four commented that they do not think that they would be able to work in the ACG if their husbands did not currently work there. In these cases, the women work directly with their husbands, who would not consider it appropriate for their wives to work in the ACG on their own. One of these women was planning to quit her job when her husband’s temporary position ended.

⁴ Employee 25, personal interview, 6 October 1997.

⁵ Employee 9, personal interview, 15 August 1997.

⁶ Employee 28, personal interview, 16 October 1997.

⁷ Employee 22, personal interview, 25 September 1997.

⁸ Employee 10, personal interview, 14 August 1997.

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The people who have full-time employment in the ACG consider themselves lucky, because for many people mere interest in working in the ACG does not mean that that goal will ever be attained. Obtaining a job in the ACG is particularly competitive. On paper, the ACG has a very rigid application process. Applicants must submit a form, two recommendations, and a picture. Then, if there is a position available, they must attend a lecture on what the ACG is and then participate in an interview. The basic formal requirements for most full-time positions is a high school diploma; to work in the Ecotourism Program it is also required to have a functional knowledge of English. INBio has similar requirements and process, though Dr. Janzen does not. Applicants for ACG positions, according to policy, are generally found through an open search, with announcements made on the radio and in the newspapers. Though some positions are filled through open searches, often applicants hear directly from other employees in the ACG when there are positions available, or are persistent in visiting the ACG administration area to find out when a position is opening. Those who were offered a job after having worked in the ACG in a temporary position did not have to go through an application process.

When it comes to the education requirement, however, the ACG is often flexible, accepting practical experience for classroom learning. Many of the current employees mentioned in their interviews that they had never truly expected to be able to work in the ACG because they did not have the level of education required by the application. One female parataxonomist said, "Never, not even in my dreams, did I imagine that a girl with my education [6th grade] would be able to get to this point. I never thought that I would get the job."⁹ Her brother, who works in Sectors made a similar comment, "I thought that with my lack of education that I would be stuck on ranches in terrible jobs."¹⁰ Comments like these appeared frequently throughout the interviews. But most of the current employees in the ACG can boast a great deal of practical experience, whether through working on ranches, in construction, in security, or in business administration, and that experience is what helped them get their jobs. If they did not have either or the education or experience, such as many of the parataxonomists, the ACG interviewed them and assessed their critical thinking skills and motivation, and then trained them for the job.

⁹ Employee 2, personal interview, 28 July 1997.

¹⁰ Employee 9, personal interview, 15 August 1997.

9. BEFORE THE ACG: EMPLOYMENT, BENEFITS, EDUCATION, AND ENVIRONMENT

One of the goals of this study is to understand how the employees' lifestyles have changed due to their work in the Conservation Area. To do this, it is necessary to examine how their previous jobs and working environment had shaped their lives. The current ACG employees worked in many different types of jobs before coming to work in the ACG. What were their jobs like then? How much control did they have within their working environment? What kind of opportunities did their jobs offer beyond just earning a salary? What did they most enjoy? Or most dread? With an idea of their previous lives, we will be able to clearly envision how working in the ACG has altered their lives. In many cases, it will become apparent that their working activities and benefits have improved greatly with employment in the ACG.

Employment Before the ACG

The current full-time employees of the ACG had variety of jobs before they came to work in the Conservation Area. Of the men, a large number were working in jobs which can be described as physical labor: 6 worked as hands on ranches, 2 in construction, 1 on a banana plantation, 1 in commercial fishing, 1 in a factory in a particularly strenuous part of production, and 1 taking care of plants in a nursery. Among the other men: 2 worked as store managers, 1 as a police officer, 1 as a shoemaker, and 1 as a photographer.

The women's backgrounds were notably less varied: 7 stayed at home taking care of their houses and families, 2 worked as cooks on ranches, and 1 worked as a tour guide for an ostrich farm near Quebrada Grande which doubles as a tourist attraction. In total, of those people working outside the home, 14 had permanent positions and 7 had temporary.

Previous Responsibilities

Many of the jobs interviewees had before working in the ACG were basic blue-collar positions, consisting of fairly repetitive, physical labor directed by a supervisor. The people working on ranches milked cows, herded cattle, worked in the fields, fixed fences, ran tractors, sprayed pesticides, and planted crops. Days could easily last up to twelve hours, starting with milking cows before dawn and ending with chores around the farm. Cooks found themselves working seventeen hour days, waking up before the ranch hands to prepare breakfast and going to bed only after the last dinner dish had been washed. Those people working in construction dug trenches, laid pipes, built water tanks, and

erected houses. On a banana plantation, one would cut and haul 300 to 400 bananas daily, working from 2 AM until 8 PM. Housewives or single young women spent their days at home cooking, cleaning, washing clothes, ironing, and taking care of children. Police would walk their beats and man the radio. Only the store managers had more variety in their tasks, buying and selling, running the register, and managing inventory.

When asked what their responsibilities were in their jobs previous to working in the ACG, many of the interviewees took the word “responsibility” quite literally. Rather than just listing off the activities that they had to do during a day, they thought about which tasks’ completion depended solely on their work and decision making skills. Several people found it appropriate to respond, “I wasn’t responsible for anything, they just told me to do something and I did it!”

Previous Supervision and Scheduling: At the Will of the Supervisor

This brings up the question of who decided what these individuals would do during a day. In eighteen cases, the direct supervisor of the employee directed the person throughout the course of his or her day. Seven people, mostly women running households, made their own schedules and worked in a manner consistent with their own ideas about how a job should be done. Two women’s parents told them what they should be doing.

How did people feel about being directed by their supervisor? Of the eighteen people who answered, half were comfortable with their situation, and the other half were not. Those who did not have a problem with their situation generally had maintained good communicative relationships with their supervisors, had not cared to take responsibility within the job, or had felt good helping their families. Those who were uncomfortable with being directed by their supervisor articulated their feelings clearly:

We were always being watched, I felt like my boss did not trust me at all. . . We had few chances to rest . . . ‘Don’t take so long,’ he would say, ‘Time is gold.’ . . . It made me feel badly, like I was trapped.¹

My supervisor always told me what to do. I never knew in the morning where I would be going or what I would be doing. I would plan for one thing, and end up doing something else. . . It made me uncomfortable. We wasted a lot of time working like he told us to. He would tell us that we had to spend “x” hours doing a job—so we would take that long. . . . If I had been responsible for figuring out how to get it done, I would have gotten it done a lot more quickly.²

¹ Employee 15, personal interview, 30 August 1997.

² Employee 7, personal interview, 10 August 1997.

I had to take care of forty employees and the owner of the farm. . . . The administrator controlled my whole life, what time I would wake up, what I would do, what food would be bought and how I should cook it. People complained about the food, but there was nothing I could do. . . . [Also] I had to run between two kitchens, cooking steak for the owner and rice and beans for the workers. I never got used to that, having to treat one person better than the others. It made me very uncomfortable and unhappy.³

It is apparent that relationships with one's employer and supervisor can make a large difference in how individuals feel about themselves and their jobs.

Nor were people always happy with the schedules their employers held them to. Of those who worked outside of the house, only half were happy with their work schedules and the other half were unhappy with them. Those that were happy generally worked five days a week, had employers who could be flexible about time off, or were women who worked in their homes. Eleven people, however, worked six days a week, and another five worked every single day without ever receiving days off. "My schedule was hard, and uncomfortable. . . . I was sad, but I had to learn how to put up with it to survive."⁴

Another person said, "I was always rushed, and never felt like I rested. And I never really did because I had to be at work at 6 AM every day of the week."⁵

Previous Salary

It was challenging to calculate what the ACG employees earned in their last jobs. In some cases, the people had not worked outside of the ACG for five to ten years. Many people could provide only estimates of what they had earned and then those estimates would have to be adjusted to 1997 colones/dollars. In this situation, the best way to compare the past earnings of ACG employees to their present earnings (average about US\$360/month) is to determine how much they would be currently making if they had continued to work in their previous jobs. For instance, the census of Quebrada Grande showed that men working on ranches currently earn about \$124 to \$165 per month. A cook working full-time would earn \$115 per month (an ACG cook earns twice as much). A person working full-time in construction might earn between \$82 and \$200 a month. A factory worker would earn about \$200 a month (though this is probably a generous estimation). A store manager would earn approximately \$200 per month. The figures speak for themselves: the average ACG worker has practically doubled his or her income since working in the ACG. The ACG employees have also surpassed the town average income per month for long-term

³ Employee 6, personal interview, 9 August 1997.

⁴ Employee 16, personal interview, 12 September 1997.

⁵ Employee 15, personal interview, 30 August 1997.

employment (in Barrio Lourdes, \$250.15; Quebrada Grande, \$183.60) and the national monthly average income per employed person (\$276.83).⁶ [See Chapter 12, "Benefits of Working in the ACG" for more information on ACG salaries.]

Previous Benefits

As will be shown, the formal and informal benefits of the interviewee's previous jobs pale in comparison to those that they currently receive in the ACG. Only three people of the fourteen working outside of the home had the opportunity become members of an employees' association. These men worked in a factory, in the police, and on a banana plantation. The association in the factory, a production center for an American-based baby food company, was the most comprehensive, having parties throughout the year for different occasions, celebrating birthdays, giving employees free products and uniforms, as well as opportunities for loans. This company also gave scholarships to pay for up to half of a person's education, provided grade school and high school classes on the premises and allowed employees up to two hours a day to attend, had an on-site physician, and gave the father of a newborn time off to help take care of the child, along with a bonus and many products for the child. This, however, is a atypical situation for factory labor in Central America. The other employees' associations in a banana plantation and the police force offered benefits like loans, savings, and good prices on food. The police also offered opportunities for courses.

Of the twenty-one people who worked outside of the house, 62% were insured by their employers. Most, however, were not offered any of the other workers' rights they legally should have gotten, like days off, vacation days, holiday bonuses, and severance pay. One woman never had days off, and if she needed to take a day to see her children (whom her mother-in-law was taking care of) she would have to find and pay a replacement. One man who worked on a milk-producing ranch remembered that they never had days off, and if they could leave in the afternoon or evening they always had to be back before dawn to milk the cows. His situation was particularly difficult. "I didn't even know what benefits were. . . . They told me that I had insurance, but then I broke my arm and went to the hospital, and it turned out that they hadn't even paid for it."⁷ When asked how he felt about not getting treated fairly, one person said, "Well, I put up with it, and got used to it. . . . really, I didn't have any other options."⁸ Another replied, "I didn't even know that there

⁶ *Costa Rica at a Glance*. (San Jose, Costa Rica: INICEM Group, 1997) 22.

⁷ Employee 9, personal interview, 15 August 1997.

⁸ Employee 7, personal interview, 10 August 1997.

was something better out there If I had to go back now [after working in the ACG] it would be very hard for me.”⁹

For those who did not have employees’ associations, apart from insurance and compensation for their work (which was frequently low and at times never even given to the employee) there were very few benefits associated with their employment. Six people mentioned that the only advantage of their jobs was the money they earned. “For me, there weren’t any benefits,” one former ranch hand replied. He shook his head, “Besides wasting my life. At least I had a steady job, and some money to buy things with.”¹⁰ Eleven people were given housing by their employers while they were working and another 6 people mentioned that they learned skills through their previous jobs or had the opportunity to meet people. But 6 people also stated that there had been no advantages to working in their previous jobs. One woman’s response: “If you call a lot of hard, hard work a benefit, well, then I guess there were some!”¹¹

Concerning benefits for families, four people mentioned that their families had been insured by their employers. Apart from the income provided to a family by having one member working, there were no other advantages to family members.

Education in Previous Jobs

People’s previous jobs offered them significantly fewer opportunities for education than they have received in the ACG. Sixteen people did not have even one course or formal learning experience offered them through their work. Five people took classes, most of them offered at the National Institute for Learning (INA), on topics like food preparation and selling techniques. One person who worked as a police officer took many courses offered by his employers. The women who stayed at home rarely took classes. As will be shown, the ACG’s educational opportunities contrast greatly to these scenarios.

Nor did people’s work inspire them to take, or even think about taking other classes. Three people took classes on their own: on driving, diving, and to complete high school; three others said they had wanted to take classes on English, reading blueprints, and using machinery.

⁹ Employee 15, personal interview, 30 August 1997.

¹⁰ Employee 9, personal interview, 15 August 1997.

¹¹ Employee 6, personal interview, 9 August 1997.

Most employees said that they did learn from their previous jobs though—as we will see—the topics people learned about do not extend into the varied knowledge they reported gaining through working in the ACG. Half of the people interviewed (14) commented on the skills that they learned for their job, ranging from construction and masonry, to farm work, to how to sell tools to people and work with clients. Four people detailed how they had learned how to survive and continue working in very difficult working conditions, with either very physically demanding jobs, poor housing and food, distrustful and psychologically abusive managers, or any combination of those. A former ranch hand remembered, “Twenty-five men had to sleep in one small room, it was impossible and we didn’t have any privacy. I asked to be put in another room, and they let me, but wouldn’t give me a mattresses [F]or every meal we would get rice and beans, maybe a tortilla. . . [I]t was awful.”¹² One person replied that he had learned patience and responsibility, and another learned how to communicate with people.

Transportation Benefits in Previous Jobs

In their previous jobs, people had to depend completely on themselves for transportation to and from work. Of twenty-one people, however, 57% thought that transportation was basically convenient; for the other 43% transportation was not convenient. Eight people walked to their work, five used public transportation, and three used horses. Not a single case existed in which the employer helped the employee with transportation, except at times allowing them to use the ranch’s horses in cases of emergency. Especially for those people working on distant ranches, this often meant many hours of walking to or from their jobs. Several people, especially those who were working far away from their children and families, reflected on how difficult this was. One couple worked on a ranch that is over an hour from Quebrada Grande driving, but they frequently had to walk the entire distance, at times with their children, and cross a river which was very dangerous in the rainy season. Sometimes they would find themselves walking well into the night or through driving rain. Half of the employees who worked outside of the house reported encountering regular problems with transportation.

Housing at Previous Job

A little more than half of people who worked outside of the home before working in the ACG spent the night in employee housing where they worked (11), and the others (10) commuted on a daily basis. Of those who spent the night, five spent at least one month at a time, three spent between two weeks and one month, and three would spend less than a

¹² Employee 16, personal interview, 12 September 1997.

week at one time. Several people spent months at a time, and one man lived on a ranch for three years with hardly any time away. Half of those who stayed at their previous employment felt that it was a difficult experience. Several referred to it as boring, or sad and lonely. One person felt like she was always exhausted because of her tiring work and hours. Another thought that working on a ranch was okay, but he didn't make any money because they charged him so much for the food. The generally poor conditions of the housing— no running water or electricity, overcrowded and small rooms, sharing with “uneducated” people whom one could not trust and who would act maliciously— contributed to the isolation. Only 40% were happy with the state of the residences.

Women Who Worked In the Home

If you spend a day wandering around Quebrada Grande, it is easily apparent how girls and women spend their days. They wake up before dawn to make breakfast for their husband, father, brothers and/or children and spend the morning washing clothes—often by hand— and cleaning the house to impeccable standards of cleanliness. The radio or TV blasts throughout the house as they do this, and since so few channels are received, often a symphony of sound is emitted from various houses. You can walk down the street and not miss a single beat or line. By noon, most of the work is done, but it is time to make lunch, and it is not until 2:00 PM or 3:00 PM that they are finally able to shower and sit down to watch television for a while before ironing the dry clothes and making dinner. Child care, of course, is intertwined with all of this. In the evening, they often take time to chat with their friends on their front porches or watch TV, but go to bed early to be ready for the next day's work.

It is important to note the lifestyle of the women who worked in the home before they began working in the ACG. They remember spending their time cooking, housecleaning, washing and ironing clothes, taking care of children—at times not their own but another relative's— and grandparents, and working in the garden. One woman whose parents own a farm spent a great deal of time helping her father work their land. Another woman remembers, “When I finished my work in the house, I slept or watched TV, but I slept a

lot. . . . And I ate, I used to spend all my time eating, too. I was fat then.”¹³ Several of the women attest to being quite bored. Apart from public transportation, they had little means of going anywhere outside the town. Only one woman, whose husband was very interested in computers, took two classes on computers. The others had dropped out of school due to financial difficulties, disinterest, or because their families wouldn’t let them study or socialize outside of the house. One woman’s recalled, “My parents wouldn’t let me study, nor leave the house for that matter. They were jealous that I might learn something they didn’t know. . . .”¹⁴ All of the women were insured, either by their parents, siblings, or the state, and most could depend on their families to give them money when they needed it, except for one woman who borrowed from neighbors.

Favorite Parts of Previous Work

When asked what their favorite part of their job was, the employees came up with very job-specific answers. They listed activities that were a part of their jobs, rather than feelings that resulted from their work. Apart from the four people who said that they had not like anything about their job, very few of the responses repeated. Some examples of favorite activities: milking, working with machinery, carpentry, cleaning, electrical work, carrying bananas, working at a cash register. For others, getting away from their work or routine was what they most enjoyed: getting out of the house, running errands, lunch hour, times when a person would be in charge of herself, or chances to get out of the city. And for others, the social aspect was very important: meeting new people, explaining things to others, and being with one’s family.

Most Challenging Aspects of Previous Work

For some people, working conditions made their jobs difficult, and for others it was a certain activity or skill. Those people who were working on ranches or in factories listed the following working and living conditions which challenged them:

- working in the rain or doing jobs in which they were wet most of the time
- working in extreme heat
- waking up extremely early to work or to travel to work
- working in a refrigerated area
- not having the freedom to make decisions
- being far away from one’s family
- living in a poor environment with uncomfortable housing

¹³ Employcc 4, personal interview, 2 August 1997.

¹⁴ Employee 10, personal interview, 14 August 1997.

- undrinkable water or bad food
- working in a situation where one often had to carry the load of coworkers who did not do their share of the work
- the inability to get time off when needed

Those who found activities difficult generally worked in more administrative jobs, like store managers, policemen, and photographers. They remember that doing inventories, saying no to clients, guard watch, or keeping clientele bases frequently challenged them. A few people found certain skills difficult to master, like ironing, making drains, or preparing the foundation for a house.

Things That People Disliked About Their Previous Work

Rather than particular activities, people's dislikes about a job usually related to poor working conditions. The aspects of a job that people disliked were often consistent with those things that made the job challenging for them. For instance, several people commented on not liking their relationship with their supervisor. As mentioned earlier, people did not enjoy being over supervised, or feeling that they were not trusted. One man disliked that he felt like he "was treated like a slave, without respect."¹⁵ Long working hours, waking up very early, and traveling long distances to work also caused several people to feel tired all the time. People disliked working in situations where they were wet all the time and the averse health affects of working with pesticides or breathing in construction dust. Boring work, low salaries, the lack of benefits, and bad food were also disliked. Only two people pointed out specific activities that they disliked: digging ditches and doing inventories.

A Narrow Scope

In their previous jobs, the current ACG employees had very few opportunities to become familiar with places or people outside of their hometown range. Out of the 28 interviews, only 28% were given opportunities to visit other parts of Guanacaste, only 18 visited other parts of Costa Rica, and only 25% met people from different countries, generally Nicaraguans.

Did They Think Their Work Was Important?

All but one of the interviewees felt that their work outside of the ACG had been important. Of those who explained why, sixteen (59%) thought that their work had been important for

¹⁵ Employee 7, personal interview, 10 August 1997.

the economic support it provided them and their families. Their jobs helped pay bills, buy food, and put children through school. Eight people (30%) felt that the service they had been providing the public had been important, like educating people about ostriches, checking baby food for quality, providing people with bananas, and helping their employers have a better farm. Though not prompted to answer the question of whether or not they felt their current work in the ACG is more or less important than the work they used to do, seventeen people answered this through their own reflections. Of those, thirteen people (76%) said that they feel that the work they do now is more important than the jobs they had had before they worked in the ACG:

My old job was important to me economically, but what I am doing now is more important. What they are doing in the ACG is helping all of humanity, not just me.¹⁶

Before I was working at home [to help my father] . . . That was important . . . but I was just helping one person. Now I am working for lots of people, my country, and for conservation.¹⁷

My [last] job was important to me because it made me money. But this job is more important . . . very few other people in the country, or even in the world, are working on what I am doing.¹⁸

One person also indicated that this job is more important because it is helping not just him, but other people improve their quality of life.¹⁹ The others felt that their jobs were of equal importance as their job now.

Working in the ACG is obviously very important to the interviewees. The following chapters investigate how their current work activities and environment compare to the situations we have just explored.

¹⁶ Employee 24, personal interview, 11 October 1997.

¹⁷ Employee 10, personal interview, 14 August 1997.

¹⁸ Employee 18, personal interview, 17 September 1997.

¹⁹ Employee 7, personal interview, 10 August 1997.

10. ACTIVITIES IN THE ACG: SPECIALIZATION AND AUTONOMY

Working in the ACG, according to the interviewees, is a world apart from their previous jobs. In most cases, management structure is also vastly different. As discussed earlier, the majority of the employees were accustomed to an extremely strict authoritative working environment. The Conservation Area, however, operates under the philosophy that each person does his or her best work when granted the freedom to make decisions and work in the style most appropriate to his or her personality. This theory almost completely contradicts the traditional manner of public administration which would assign each person specific tasks—rather than entire projects—for them to complete before they returned to their supervisors to receive the next task. As explained earlier, the ACG's system requires a specialization of labor. People, therefore, would not work in research one day, ecotourism the next, and on garbage detail the next. Rather, they would develop their skills in a more specific field. This way the employees become professionals. Each person has a job with a general goal, and then it is up to each individual to figure out how he or she will divide up and schedule their work to accomplish that goal.

How do the employees manage to accomplish everything that they need to do? Is the philosophy that the freedom to make one's own decisions and to organize the work as he or she pleases actually a reality, or in the end is there still a "supervisor" who programs the employee? If this autonomy does indeed exist, how do the employees feel about it? What parts of their work do they like? What parts do they dislike? In the interviews, the employees were asked to talk about these themes.

Specialized Responsibilities

Each position in the ACG has a certain set of responsibilities which often incorporate a wide variety of tasks. For instance, people from Quebrada Grande who work in biological research spend their time collecting insects and plants in the field, raising collected larva through their adult stage, mounting specimens, and recording and entering their data into computer databases. The employees who work in the Sectors Program take care of their posts, maintain trails, patrol for hunters, prevent and fight fires, help tourists, and maintain good relations with their neighbors. They work in conjunction with many of the other programs, like Ecotourism, Fire Prevention and Control, and Security, and provide support for the biological research. The people who work in Administration, Accounting, and Supplies need to manage inventories, paperwork, bank accounts, and budgets. The head of the dining halls must supervise the kitchens, plan menus, order food, shop for

supplies, and organize the menu and billing for groups. The cooks need to organize the kitchen, clean, cook, and attend the needs of ACG dining-hall customers.

The Positive Effects of Self-Direction

Who decides what the employees will do with their day, how they will accomplish their work? Out of the twenty-eight employees interviewed, all twenty-eight said, "I do!" Only Janzen's employees who work together in Santa Rosa mentioned that they make many decisions as a group. "From the first day that I worked here, they told me that I would be my own boss," said one parataxonomist who has worked in the ACG for over ten years. Self-direction is required by the isolation of many of the posts where people work. The ability to make decisions without consulting a supervisor is crucial. One Sector Head explained, "No one else would be able to tell me how to work this sector. No one else knows what needs to be done here like I do. The head of my program only comes here several times a year. I am the one who spends all my time here."¹ Another Sector Head replied similarly, "If my boss were in charge, he wouldn't know what needed to get done."² Though it might be expected that such liberty might be overwhelming, 96% feel confident, comfortable, and happy with their ability to make decisions for themselves.

According to the employees, the freedom to work independently builds trust, encourages responsible behavior, and teaches people to take initiative. Many people echoed the reflection of one of Dr. Janzen's research assistants:

It shows me that he trusts me. . . . I feel good working this way, without anyone watching over my every step . . . It makes me work harder because I feel like I cannot disappoint him. I have to live up to his expectations because I don't want to lose that trust.³

Another employee expressed the same feeling: "I feel more responsible this way, more obligated to do my job well."⁴ And, "[Managing] my time . . . makes me feel good, like I can take care of myself . . . I work harder because I know that it is my responsibility and no one else's to produce good work."⁵ One woman in the Research Program noted that she feels uncomfortable when her supervisor does look over her shoulder:

¹ Employee 7, personal interview, 10 August 1997.

² Employee 15, personal interview, 12 September 1997.

³ Employee 24, personal interview, 11 October 1997.

⁴ Employee 9, personal interview, 15 August 1997.

⁵ Employee 18, personal interview, 17 September 1997.

Ninety percent of the time I work on my own [and I feel good] But when my supervisor comes for several days she is always second-guessing my decisions, it is much more stressful. I feel like she does not trust my work.⁶

One older man reflected on the difference between working as a highly supervised ranch hand and on his own as an ACG Sector head. The difference, he said, was that on the ranch, if the job was done poorly, it was the foreman's fault. The worker didn't care. Here in the ACG, he said, if something isn't right, it's his fault, he is responsible. So he does the job right the first time.⁷ A man who works in accounting said, "I've learned to take initiative in my work. I never would have learned that if I had had someone standing over me telling me what to do. . . . [and] I think that learning to take initiative has also helped me in my personal life."⁸

The interviewees also conveyed that they feel better when they do not think they are being watched like a child. They enjoy working on their own, and even having the freedom to make mistakes. This comment made by a man working in the Sectors program was echoed by other employees:

I figure out my schedule. I work as hard as I think I need to work, according to my conscience. . . . I feel good about it. I feel confident. There is no one pressuring me or judging me or telling me how to do my job or how to do it better. . . . If I need help on something, I ask. If I make a mistake . . . they explain it to me so next time I do it better.⁹

One man working in the Fire Program said, "I've learned from my mistakes My job has given me the opportunity to grow up."¹⁰ Several other people also mentioned that people in the ACG understand that "we are all human" and that "it's okay to try things on your own and make mistakes."¹¹

Determining one's own schedule allows employees to organize their day to take the best advantage of the time available and constraining conditions, and to plan an interesting day. "I make a schedule every night . . . and I rarely spend all day doing just one thing. . . . If I had to wait for someone to tell me what to do . . . I would not be able to get anything done."¹² Another frequently repeated comment was, "I enjoy the variety and flexibility in

⁶ Employee 22, personal interview, 25 September 1997.

⁷ Employee 7, personal interview, 10 August 1997.

⁸ Employee 3, personal interview, 2 August 1997.

⁹ Employee 21, personal interview, 24 September 1997.

¹⁰ Employee 28, personal interview, 16 October 1997.

¹¹ Employee 4, personal interview, 2 August 1997.

¹² Employee 1, personal interview, 27 July 1997.

the work. I know exactly what needs to get done [but] I can plan according to how I feel or what the weather is like.”¹³ If people are sick, they can take some time off without penalty, or can plan an easier day. If they are tired, in a bad mood, or bored, they can take a break. Likewise, if they get excited about a project and decide to work until 3 AM, they do. If the rain suddenly breaks and the perfect opportunity to do something else arises, they can. In total, according to the employees, this flexibility and independence allows them to be much more productive and happier in their work.

The one person in Sectors who was unhappy with the amount of responsibility in his job said, “I feel very pressured . . . I think that I would like a job with less responsibility.”¹⁴

Work Schedules

The number of consecutive days each person spends working before taking days off depends on the program which he or she works for and the location of his or her post. Sixty-four percent of the employees from Quebrada Grande work either twenty-two or twenty-four days for eight or six days off, depending on their program. Most of these people work either in the Sectors or Research Programs. Because they frequently work in sectors which are difficult to reach, it is not possible or convenient for them to commute from Quebrada Grande daily. The men in the Fire Program, the cooks, and the security guard work for eleven days with four off, although their schedules allow for more commuting if necessary since they work in the Santa Rosa Sector. Employees in administrative roles work five days a week with two days off, usually on the weekends.

The majority of people like their work schedules. (68% like it, 18% do not, 14% like it at some times and not others. This stands in stark contrast to the mere 32% who were happy with their work schedule in their previous jobs.) Although several individuals—especially those who had never worked on ranches—indicated that it had been difficult to adjust to the extended length of time they are away, most have come to appreciate it. Having concentrated periods of time spent working with lengthy intervals off allows them to be productive in both time periods. “I wouldn’t be able to get anything done in either place if I had to spend all my time running back and forth.”¹⁵ Others commented that they enjoy having the uninterrupted time to spend with their family or truly relaxing. Several people who didn’t get days off in their last jobs love having the free time now. Those who do not

¹³ Employee 9, personal interview, 15 August 1997.

¹⁴ Employee 17, personal interview, 16 September 1997.

¹⁵ Employee 15, personal interview, 12 September 1997.

like their 11 or 22-26 day schedules feel that they do not get enough opportunities to pursue activities or interests out of work, or that they are away from their children for too long. The one person who does not like just working on weekdays says that it is very difficult for her to do errands or make doctor appointments, and that she would like to work on an eleven-day schedule.

Favorite Aspects of Working in the ACG

When asked what their favorite parts of their previous job had been, the interviewees named activities, like milking cows or running the tractor. When describing their favorite aspects of working in the ACG, however, they chose more general environmental, emotional, and intellectual aspects. The opportunity to work outdoors is consistently people's favorite part of working in the ACG. Over one-third of the employees responded that their favorite part of working in the ACG is being able to spend the majority of their time outside in a rural setting or that their jobs' goals, activities, or special events relate to the wildland atmosphere of the ACG. People enjoy working in a peaceful atmosphere. "Working outside makes me very happy," said one researcher, "there isn't a lot of noise, and the scenery here in Guanacaste is beautiful . . . here there is a little bit of everything."¹⁶ Working outside also feels natural to these rural Guanacastecans, who grew up spending much of their time working outdoors. A man in Sectors summed this up: "Working outside is fun. It keeps me in good health. I would never be happy in an office job."¹⁷ Another person working in Sectors said, "[My wife and] I love working outdoors . . . We would really suffer if I lost my job here and we had to move back to the city and working in factories."¹⁸

Other favorite aspects of working in the ACG are the following:

- For four people, their favorite part of working in the ACG is working toward the goal of conservation. As part of working in conservation people mentioned that they enjoy "teaching other people about conservation," "feeling like a part of a larger goal," and "the fun of working toward a goal."
- One woman, who works in administration, said that seeing the deer in Santa Rosa is her favorite part of working in the ACG.
- Several of the people in research also commented that collecting insects and plants is the most exciting part of their work.

¹⁶ Employee 19, personal interview, 18 September 1997.

¹⁷ Employee 9, personal interview, 15 August 1997.

My collections are my favorite. I enjoy going out everyday to look for something new, and then the excitement of finding something new. We practically have a party every time we find something we have never seen before, and sometimes we have competitions between ourselves to see who can find the best new thing.¹⁹

- For these people, and also for at least four other, learning new things is their favorite part of their job.
- For one of the fireman, the rush of fighting fires is his favorite part.
- The social and financial aspects were also listed as favorites. The employees enjoy the chance to meet lots of new people, whether they are coworkers, tourists, or visiting researchers. One woman enjoys going the games of the ACG soccer game, and another appreciates the chance to work with her husband. The salary, not surprisingly, is also a favorite: "For my level of education, I could never expect to earn this much, and it has really allowed me to better myself."²⁰

Most Difficult Aspects of Working in the ACG

Almost every employee had a different response to the question, "What is the most difficult part of your work/working in the ACG?"

Communication with foreigners and ACG neighbors is a challenge for some employees. The most frequently mentioned difficulty, with four responses, is not being able to speak English. Because there's such a large number of international tourists and researchers who visit the ACG, the employees feel that not being able to communicate in English limits their ability to do their jobs. Conflict negotiation with hunters is an even more sensitive communication challenge. Employees often need to confront neighbors, and occasionally friends, in delicate situations. Trying to be a good neighbor while simultaneously enforcing ACG policy can be difficult and uncomfortable.

Other social issues that employees find difficult are working in a gossipy environment, working in isolation, and being away from their children and families for extended periods of time.

¹⁸ Employee 1, personal interview, 27 July 1997.

¹⁹ Employee 2, personal interview, 28 July 1997.

²⁰ Employee 3, personal interview, 2 August 1997.

Some people are also frustrated by challenging, hard-to-master skills such as filling out specific forms, working on computers, separating insects by sex, giving talks, and managing long tiring days.

Work schedules, tricky relationships with a program head, coordinating between programs, and feeling as if they can be shunted from sector to sector at any moment also bother employees.

Dislikes

When asked, few people could think of things that they dislike about working in the ACG. Thirteen of the people interviewed said that there isn't anything that they don't like about working in the ACG. Beyond that, the most frequently mentioned things were scheduling, gossip and rumors, and the difficulties of managing working for INBio and in the ACG simultaneously. Also mentioned were the feelings that there is a preferential system in giving the employees perks, that the ACG only gives people fast introductory courses without allowing them the chance to actually master new material, and that it is very difficult to continue studying while working at the ACG.

ACG Employees Believe That Their Work Is Very Important

The question of whether or not people feel that their work in the ACG is important was certainly open to each individual's interpretation, but it received a very positive and articulate response. Every person interviewed feels strongly that his or her work is important, whether because it is integral in supporting conservation in general, the ACG, or their personal lives and families. Eleven people responded that their work is important because it helps support conservation on a local, national, or international level. The following are some examples of their responses:

[My work] is important because I am working towards understanding nature. . . . [I] am helping to translate the forest from a big green stain which only had wood for construction to something which is more complex and beautiful. . . . [And] it is important to me because I believe that what I am doing will help future generations.²¹

My work is important because I am working on something that very few people know anything about, and the things I collect are being used to look for medicines for cancer and to help lots of people in the world.²²

²¹ Employee 19, personal interview, 18 September 1997.

²² Employee 22, personal interview, 25 September 1997.

My work is important, mostly on a national level, because I preserve nature for the next generation of people, and keep it a place for ecotourism. What I do also makes certain that people after me will have employment here.²³

Nine people feel that their work is important because of the particular service they provide within the ACG. Several individuals, all in different programs, commented that they feel their work is the most important in the ACG and that the Conservation Area would not be able to function without their role being fulfilled.

[My work is important because] if I weren't here the tourists would have no idea what they are seeing or the importance of what we are doing for conservation. They feel much more secure and confident with me there. . . .²⁴

. . . [I]f the research program weren't here the ACG wouldn't exist because . . . research brings a lot of money into the ACG . . . and if it weren't here the ACG would never be able to sustain itself as well as it does now.²⁵

In one sentence, I feel that my program [the Fire Prevention Program] is the most important in the ACG.²⁶

Many people feel that their work is important for their personal development and their families:

I never thought that I would get to this point in my life, working with important people and doing work that is the level of a university student. I am proud that I have made it this far, and have achieved so much for my level of education.²⁷

On a personal level, the responsibility is really important to me. I have something to look forward to every day and I have really grown as a person. I hope to stay with the ACG as long as I can . . . it makes me proud to be a part of it.²⁸

When I worked on a ranch, I had dreams but I didn't spend much time thinking about them because I never thought that I would be able to accomplish them. I didn't know about the ACG or that any of those things would be possible in my life Now I know and do things that I never would have thought possible. I have a motorbike, a house. My work is important for everything that it gives me out of life.²⁹

My work is important because it has helped me and my family [five children] a lot. It pays for light and water and gives us things we didn't have before.³⁰

²³ Employee 1, personal interview, 27 July 1997.

²⁴ Employee 9, personal interview, 15 August 1997.

²⁵ Employee 24, personal interview, 11 October 1997.

²⁶ Employee 28, personal interview, 16 October 1997.

²⁷ Employee 12, personal interview, 26 August 1997.

²⁸ Employee 2, personal interview, 28 July 1997.

²⁹ Employee 16, personal interview, 12 September 1997.

³⁰ Employee 26, personal interview, 7 October 1997.

invest their 8.33% severance pay in ASACOG and another 5% of their salary as a voluntary savings, which the ACG matches. In return, the associated employees receive the following benefits: annual dividends on their savings, the eligibility to take out low-interest loans from ASACOG (pending approval, and based on the amount of money which they have saved with the organization), discounts on ACG t-shirts and other purchases made through ASACOG, the right to participate in ASACOG's yearly planning meeting and vote on proposals, and an invitation to take part in the yearly raffle and end-of-year party. It also allows them to bring their children to the end-of-the-year children's party, and if the ACG employee or a direct family member dies, ASACOG will help defray the costs of the funeral. The associated employees also receive life insurance.

Conversations with the employees about ASACOG revealed several interesting perceptions about the advantages membership offers. One person mentioned that even the opportunity to be involved with something like an employees' association, after working for years in a region where the employers tried to prevent the employees from organizing, is a benefit.² The benefits which have made the biggest impression on the seventeen affiliated employees were the ability to save and take out loans, the party for the children, and the life insurance. One young woman mentioned that she never would have thought about saving her money until she joined ASACOG, and now she feels that she is planning more for her future than she would have otherwise. ASACOG affiliates apply for loans to help them when they need cash urgently, for instance when a family member is ill, or they borrow to buy things like refrigerators, living room furniture, ovens, or to pay for their children's education or important family events. One man has taken out a loan for his daughter's college education, something neither he nor his wife were able to achieve. For him, it is wonderful to know that he will have the support of ASACOG while his children are studying. Borrowing money from ASACOG is done quite frequently by associated members; it provides an excellent means of borrowing for people who would only be able to secure bank loans at extraordinary rates, if at all. At least 16 of the 28 employees interviewed have borrowed money from ASACOG.

It is worth noting that there were four ACG employees eligible to join ASACOG who opted not to. They were generally reluctant to specifically explain why they had made that decision, but the common factor among those who did explain is that they felt that the lending practices were biased toward certain individuals.

² Employee 28, personal interview, 16 October 1997.

INBio employees have the opportunity to belong to an employee's association very similar to ASACOG. The benefits include the ability to save 5% of their salary (which INBio matches) to take out different kinds of loans on your savings including personal, school, and housing loans—each of which have a different rate of interest. Employees can also get low interest credit and discounts on things like furniture, stereos, and refrigerators through INBio. The INBio association also has a school supplies sale for its affiliated employees which sells items like notebooks, pens and pencils, and uniforms for school children. Only two people from Quebrada Grande mentioned having taken out loans from INBio.

Dr. Janzen provides many benefits for his employees. He often provides loans—without interest—to his employees so that they can buy things like houses, cars, and motorbikes. Eight people from Quebrada Grande mentioned having borrowed money from him. Dr. Janzen also allows his employees to use his vehicles when there are emergencies which require transportation or in their free time, pending that they use them wisely and responsibly. His assistants have taken family members to the hospital or to doctor visits, done their grocery shopping in Liberia, and traveled to play in soccer games in nearby towns. This is a benefit which cannot be extended to ACG employees due to government regulations insisting that public vehicles be used for only official business. Finally, Janzen's assistants can easily get permission for a day off when they need one. His employees can become affiliated with, but not full voting members of, ASACOG. They can save 5% of their salary, though Janzen does not match their savings. In return, they may borrow money, though due to the lower amount saved, they cannot borrow as much. If affiliated, they can also participate in the raffle and party, and buy merchandise at a discount. Out of the four of Janzen's employees living in Quebrada only two have chosen to affiliate, mostly because they appreciate the opportunity to save.

Employee Education: Formal Workshops

Many employees expressed that other advantages of working in the ACG are the frequent and diverse courses offered to them as a part of training for their work. Employees take courses mostly on topics directly related to the intellectual and practical nature of their work. The ACG sponsors a large number of courses yearly, which the INBio employees usually attend if the subject pertains to their work. INBio also gives courses in San Jose, which only the INBio employees travel in to attend. Janzen's assistants have their own workshops and attend some of the ACG courses. The themes of these courses will be discussed later on in this paper. [See Chapter 13 on "Education in the ACG."] Employees

who do not work directly with conservation, for instance those who work in more administrative roles, also commented that they have enjoyed the opportunity to learn more about conservation as well as more about administration, organization, and computer skills. Two of the younger men interviewed feel that the courses that they have taken and the knowledge that they have learned through their work have been critical to building their résumé, so that if the time comes in the future to look for another job, they will be well-trained and experienced enough to obtain another job in conservation.

Perks: Economic Benefits, Transportation, and Autonomy

When asked what other aspects of working in the ACG they perceived as advantages—besides the ones formally offered them through their contracts, employee’s associations, and specific jobs—the employees mentioned a very wide variety of economic benefits and conveniences. Many of these benefits apply to all ACG, INBio, and Janzen employees. Several of these perks are results of working for a large institution which enjoys using its resources to improve its employee’s standard of living. For some people working close to their hometown and family is also important to them. Parataxonomists and Sector Heads using ACG housing consider the housing and supplies provided to them by the ACG a great financial benefit. While most of them have a separate house in Quebrada Grande, over the course of a month they save on electricity, gas, water, and basic supplies like cleaning materials and toilet paper. Others appreciate the transportation to and from work. Several individuals mentioned that they appreciated the human resource capacities of the ACG and that there is always someone there to help you.

“Freedom” and the ability to make and execute decisions without having to report each one to a superior were also noted as benefits. “My coworkers and supervisor trust me,” said one man who works in the fire program, “I have the opportunity to prove myself through my work and my good attitude.”³ People mentioned feeling confident and relaxed in their work because of this ability to work as they see fit without someone second-guessing them. [See Chapter 10 “Activities in the ACG.”]

³ Employee 28, personal interview, 16 October 1997.

Personal and Familial Benefits: The Support of the ACG, Self-Confidence, and Meaningful Work

The employees commented on the ACG as a employee-friendly and family-friendly environment. Many said that one of the best parts of their relationship with the ACG is the flexibility of their supervisors. Vacation time can often be taken when the employee desires, providing that it is scheduled in advance. In emergencies, the ACG will do everything it can to allow the person to take his or her vacation time immediately. When it is necessary, it is not very difficult for employees to get permission to take days off to attend to personal or familial needs. On the same note, several people extolled the moral support, positive outlook, and friendship they receive from the head of their program. They frequently look to their supervisors for support and advice. Perhaps the most widely mentioned benefit was that the ACG often helps its employees and their families in medical and familial emergencies. Parents commented on times when a child needed to be rushed to the hospital and the ACG provided a vehicle for transportation, or when a child was sick and the parent was able to come home from her work to take care of it. In many instances, there would not have been any other timely and affordable mode of transportation. Several parents expressed their appreciation of the ACG beliefs in sharing one's work with other family members—for instance, wives and children are allowed to come live in the Sectors with the Sector Heads, and people in administrative positions are allowed to bring their children to work with them occasionally. People have also insured their spouses, children, and parents through their insurance coverage. [See Chapter 16, "ACG and the Family."]

Self-confidence is another beneficial result of working in the ACG. A young woman told the story of her father, a very traditional Guanacastecan cowboy, meeting her supervisor.

He just walked up to my father and said 'You know, your daughter is an excellent, efficient worker, and one of my best employees.' I have never felt so good before, my parents were so proud, I was so proud Never, never in my life did I ever imagine that I would get to where I am today.

She reflected on how her professional development has affected her personality, "I used to be much shy than I am now. I didn't know how to talk to other people, I never knew how to behave. . . . Now I feel like I can talk to anyone—I've even met a president of Costa Rica!—and say hello. I am much more comfortable now."⁴

⁴ Employee 2, personal interview, 28 July 1997.

Although only one person directly mentioned “popularity” and “feeling important” as a perk of working in the ACG, this young man made an interesting commentary. He smiled shyly when he began, but then animatedly explained,

I like being . . . popular. I have had the chance to meet all sorts of people, other Costa Ricans from Guanacaste and all over, tourists from Italy, the United States and other places, government officials from Costa Rica and other countries. . . . Now, I feel like wherever I go people say hello to me, invite me places, send regards to my wife and son. Really, though I suppose this doesn't sound very humble, I feel more important because of my work.⁵

Several other people expressed their happiness at meeting people through their work and coming in contact with important people. One person mentioned receiving postcards from tourists he has helped, and another that certain tourists come to his post every year and ask for him. Several of the parataxonomists and Janzen's assistants explained how privileged and special they feel when they have the opportunity to meet world famous biologists, and how good they feel when those biologists come to them with questions or compliment their work. One administrative assistant mentioned that the continued contact she has had with people has made her less timid. For one man, just having a place where he belongs is enough: “In the ACG, they treat me like I belong . . . I am not an outsider.”⁶

Working in the Outdoors

Not unexpectedly, individuals working in the Sectors program detailed how they appreciate being able to continue working in the outdoors as they had on ranches. For them, feeling “free and not enclosed” is an important factor in their quality of life that their job in the ACG has been able to fulfill. Working in the natural environment of a conservation area is also appreciated by those who haven't worked on ranches. One person who works in accounting mentioned, “I used to do similar work, but in a city. I would be inside all day . . . and in the streets all I would hear were cars . . . It was very loud. . . . Now I get to see monkeys and deer, and lots of different birds . . . I am much happier.”⁷

Transportation

Since there are so many employees commuting daily from Liberia, Quebrada Grande, and other nearby towns, as well as many employees whose positions require them to live in ACG posts which are unreachable by public transportation, the ACG has incorporated into its management transportation for most of its employees. Over half of the employees from

⁵ Employee 1, personal interview, 28 July 1997.

⁶ Employee 18, personal interview, 17 September 1997.

Quebrada Grande depend on the ACG for transportation to and from work. For those who commute daily to and from the Santa Rosa sector, this means that they must pay for a ride to the Interamerican Highway where they wait for the ACG minibus bringing in employees from Liberia. For people in Sectors, parataxonomists, and Janzen's assistants, it often means that they get picked up at their homes and brought to their work residence, then dropped off at their homes after their twenty-two day working period. Depending on the location of the sector, however, sometimes the employee must report to Santa Rosa in the morning to be dropped off. Eight people regularly depend entirely on public or private transportation to and from the ACG, and four use a combination of both. It should be noted that in some of the cases of private transportation, INBio or Dr. Janzen have helped individuals with loans to buy motorbikes.

An overwhelming majority of 21 people say that transportation is usually convenient for them; for five people the level of convenience varies, and for two it is not convenient at all. The people who feel it is not convenient are discontent with the inconsistencies in the Sectors Program's drop-off and pick-up schedules and the fact that people from Liberia never have to pay for transportation while people from Quebrada have to pay for a taxi or bus to and from the Interamerican Highway. People that do not benefit from any ACG transportation because they start shifts in the afternoon and leave in the morning are also frustrated with transportation.

The ACG and Dr. Janzen have also played an instrumental role in supporting their employees with transportation needs in their personal lives. Twenty-four people gratefully acknowledged that the ACG had helped them with transportation. The most common situations were transportation to the hospital for themselves or sick family members, for funerals of family members, to doctor appointments, and of purchases made in Liberia, as well as the use of an ACG vehicle to take the driving test if a person needed a license for his job.

ACG Employee Housing

The ACG provides on-the-job housing for many of its employees who live in Quebrada Grande. Twenty-one people from Quebrada stay overnight in the ACG for some period of time while they are working. Except in a few cases, this housing generally does not take the place of a permanent home in the town for the employees to use during their days off and vacation time. The accommodations can vary from a room in a dormitory with meals

⁷ Employee 16, personal interview, 30 August 1997.

provided in the dining facility, to a complete house with a kitchen, bath, and bedrooms for children or guests. While most of the residences have electricity, some of the more isolated do not. All do have running water. Seventeen out of the twenty-one interviewees were happy with the conditions of the housing, while four felt that the security or physical condition of the housing was not adequate. Eighty percent of ACG employees from Quebrada are happy with their living arrangements in the ACG, as compared to the 40% of interviewees who were content with their housing at their previous jobs.

The number of consecutive days regularly spent in ACG housing varies according to the individual's position, and can often vary according to their work-load or scheduling. Fourteen people, mostly those working in the Sectors or Research programs—including Dr. Janzen's assistants—spend twenty-two to twenty-four days at a time at their posts, with six to eight days off per month. Five people, who work as cooks, research assistants, and firefighters, spend eleven days at their posts divided up with intervals of four days off. Employees of the fire program, however, at times have had to stay in the ACG without a break for up to two months depending on the severity of the fires in the dry season. Their days off accumulate and they use them during the rainy season.

Sixteen of the interviewed employees who live in the ACG while they are working feel comfortable with the arrangement, though many admit that it certainly required an adjustment period. "At first it took a lot of getting used to. We don't have electricity, and keeping food is always a problem, especially meats and vegetables. By the end of our stay we are almost always eating out of cans."⁸ One parataxonomist said, "In the beginning, whenever they changed my site, I would cry and cry. I didn't like being so far away, and the adjustment to new places was hard. . . . [B]ut now I have gotten used to it."⁹ For several people the isolation is close to second nature: "I grew up on a farm, I really enjoy being in rural places."¹⁰ "Life is much simpler here, I like it."¹¹ For others, the company of other employees in the residence makes their stay less lonely: "When I used to work at posts all by myself, with no one to talk to, I would get depressed. . . . [But] now there are usually other people around and I enjoy being here."¹² Three people, however, are not happy living in such isolated circumstances. For one man, it means that it was very difficult to do other things in his life, see friends, run errands, play soccer. For mothers

⁸ Employee 9, personal interview, 18 August 1997.

⁹ Employee 22, personal interview, 25 September 1997.

¹⁰ Employee 25, personal interview, 6 October 1997.

¹¹ Employee 20, personal interview, 19 September 1997.

¹² Employee 19, personal interview, 18 September 1997.

who have to leave their children while they are working, it can be tough. One mother of five children lamented, "It's okay the first few days, but then I start to wonder about them and how they are, and then I feel very bad being away from them. It's too long to be away."¹³ Nineteen out of the twenty-one employees, however, feel that they have good contact with their families while they were away, generally through the use of radio and telephone or messages through more mobile coworkers.

The Result of the Combined Benefits

The most overwhelming benefit for employees is the result of the all of the combined benefits above: an improved quality of life. One young man who had never had steady work before working in the ACG and who had previously had problems with alcoholism said,

I have learned about nature and how we have been destroying it Now I know we are paying the price, and I feel good about the role that I can play in saving what we have left. . . . My life is better now than it was before. I can buy the things that I want . . . I feel calmer, more stable . . . I know that I have a steady job, and that if I take care of it, I will have it forever. . . . My life both in and outside of work is better because of this.¹⁴

Another said, "Now I have the opportunity to move ahead, to surpass my own expectations. . . . I never feel like I am stuck in one place, but that the door to growth is continually open."¹⁵

¹³ Employee 26, personal interview, 10 July 1997.

¹⁴ Employee 21, personal interview, 24 September 1997.

¹⁵ Employee 28, personal interview, 16 October 1997.

13. EDUCATION IN THE ACG

The multi-purpose room in the Research Center at the Santa Rosa Sector of the ACG can rarely be found dark and empty. More often than not, it is bustling with activity, whether there are Costa Rican school students listening to a lecture by the Ecotourism Program, an American field biology course learning the mysteries of the dry tropical forest, several international scientists discussing the intricacies of studying microorganisms in the ACG, or a group of ACG employees studying maps, volcanoes, bats, or plant diversity in a particular eco-system.

The ACG's full-time employees benefit greatly from the ACG's emphasis on education. Keep in mind that at least 80% of the staff come from local communities, which generally means that at most their education extended several years into high school. In the case of employees from Quebrada Grande, the average level of education is the 8th grade. While they have acquired learning skills, they often do not have the specific knowledge and skills that they need to excel in their work in the ACG. It is these themes which are covered by the courses offered to them in the ACG. Most of these courses are sponsored by the ACG, but INBio also gives courses for its employees, and at times the ACG will send employees to a course sponsored by another institution.

This formal training, however, is in addition to all the opportunities people have to learn within the ACG. Employees generally learn a great deal on the job, and at times are motivated to pursue education on their own time. Three questions are discussed here:

- Which courses have you taken as a part of your job?
- Has your work motivated you to take any classes in your free time?
- Apart from your formal training, what have you learned through your work?

Answers to the final question were at times surprisingly personal, noting developments in personality and confidence, rather than task-specific skills. The employees also described how their views on conservation have changed due to their work in the Conservation Area.

Courses Sponsored by the ACG/INBio

The ACG employees often gather together to have breakfast in the Santa Rosa dining hall in the early morning before a course begins. Imagine this scenario:

It's breakfast time, and the Santa Rosa dining hall is unusually packed with uniformed employees. Over the soft hum of conversation and the clanking of dishes, a voice breaks

through, hailing a friend who hasn't been seen for a while. Most of these employees of the Sectors Program live in isolated posts across the ACG, and though they frequently communicate over the radio, they rarely get to see each other. People catch up on ACG gossip, talk about their children, often an newborn infant will be admired by other staff members. Beyond the congeniality of reunion, however, there is a sense of importance in the air. Everyone here has a purpose. Today they will begin a three day course on volcanology given by experts in the field.

If one spends even a week or two in the Santa Rosa administrative headquarters of the ACG, it would be easily apparent that there are a constant stream of courses provided by the Conservation Area for its employees. Several times a year, employees take a couple hours to several days out of their work schedules for intensive classes on themes relating to the intellectual or practical nature of their work. At times, if there is extra space in a course, a person will be invited to participate in a class that does not directly relate to his or her work. These courses are integral to the ACG's successful operation. Many of the employees hired have the intellectual capacity to handle their jobs, but lack the formal training required to master their work. Each ACG program plans and sponsors courses on themes it feels are necessary for its employees to master. INBio parataxonomists have the benefit of being invited to the courses at INBio as well in the ACG.

During the ten months that I lived in Quebrada Grande, I had the opportunity of watching many of my neighbors participate in courses. Including courses taken with INBio and other institutions, in the duration of their employment in the ACG, thirteen people from Quebrada have received one to three courses, six people have participated in four to six courses, and another eight people had taken nine or more courses. Their involvement in the classes impressed me in several ways. The intellectual content of most sessions not only proved intellectually challenging, but was also taught in an intensive manner, with long class hours sometimes extending well into the night. This challenge, however, did not daunt the participants. They approached the experiences enthusiastically. They were eager to learn and rarely complained about the time commitment. While the classes often required that they work together during the official course hours, at times the employees would continue working together even after the class had ended. One night, around nine o'clock, I was walking through the town on the way home from visiting a friend, and I encountered two ACG employees walking with notebooks. They had just returned from a course on cartography in Santa Rosa, but instead of going home to bed, they were heading to third employee's house to get "extra help" on some topics so they would be able to

participate fully the next day. For me, it was a heartwarming sight. None of the three men had continued school after the sixth grade, none had had either the interest or finances to do so. And now, there they were, curious, eager, and motivated, excited about the opportunity to learn and to understand something new. Even more inspiring was their confidence that they could learn it; they believed that complex intellectual issues were something that they could comprehend and utilize.

Taking courses in the ACG often makes the employees feel important and privileged. In a setting where knowledgeable people are revered, knowledge equals status. For someone who grew up in a poor working-class family, knowledge also equates privilege. One woman, a mother of four who spent many years working as a cook on a ranch where the management treated her quite poorly, commented after the course on volcanology,

It was a beautiful experience. . . . we learned so much, things that I never even thought existed to know. . . . [And] I came into contact with people who I never even dreamed that I would have the opportunity to meet.¹

Her faced beamed as she spoke. As a woman raised in rural Costa Rica, she recognizes that the opportunity she has had to not only work, but to work in a job which educates her, is truly special. Conversely, one can often sense the disappointment and dissatisfaction of employees who have not been invited to participate in many courses. This sentiment appeared most frequently among members of the Sectors Program, especially among assistants who often do not get invited to courses because the sector head has priority. One employee from Quebrada Grande, although he had worked in the ACG for a total of nine years as a sector head and assistant, had not been invited to join any classes. He clearly expressed his resentment that others had received so many opportunities while he had not.

The parataxonomists, fire program employees, and sector heads dealing with frequent tourism have received the most training opportunities. The ACG and INBio parataxonomists have perhaps the most extensive training among the employees interviewed. Their careers began with participation in one of three parataxonomist courses which occurred in the ACG. Spanning several months, these courses covered an incredibly wide array of themes which the students would need to collect and identify specimens of plants and insects. They studied the basics of natural history, taxonomy, evolution, and ecology, along with the fundamentals of subjects like genetics, math, natural products chemistry, physiology, and anatomy. Introductions to sciences like ornithology,

¹ Employee 6, informal interview, date unknown.

herpetology, entomology, cryptogamic botany, and field botany were also included in the curriculum. Beyond this, the course also included the rudiments of environmental legislation, conservation propaganda, research funding, and non-governmental organizations. The parataxonomists also learned basic collecting and preparation techniques, practical skills like how to use a microscope, drive a car, operate a chain saw, care for and use horses as pack animals, use a computer and topographic map, use a field guide in a foreign language, manage funds, and “fathom and tolerate” the foreigners with whom they would often have to work. Some people even graduated with a new pair of eyeglasses. This comprehensive course also set people on the course to losing weight, overcoming fears of working in the forest at night, learning how to accept constructive criticism. As a graduation requirement, the students also had to go to a Conservation Area that they were not familiar with and conduct a month-long research project, something which was not always easy for those who had never been far from home.²

Beyond their introductory course, the parataxonomists regularly take classes and courses offered by the ACG and INBio to update and advance their knowledge and technical skills. The spectrum of study includes many biology courses on subjects including spiders, parasites, birds, mammals, fungus, beetles, wasps, moths, and mollusks. The parataxonomists are responsible for much more than collection and identification of specimens in the field. Often their work provides the base for important international research, so they must systematically record their findings, and often need to present their work to their sponsors, co-workers, or other interested parties like student groups. This requires a great deal of technical skills, so their classes have also included themes like photography, computers (including how to scan and utilize photographs in documents, create and manage data bases, and use word-processing programs), letter-writing, and preparation and delivery of a presentation on one’s work. Some parataxonomists have also participated in classes on first aid, volcanology, and GPS (Global Positioning System).

Due to the complex technical and social components of its work, the Fire Program also sponsors many courses for its employees. Though there are only two permanent employees of the Fire Program living in Quebrada Grande, they each have participated in at least ten courses. Their coursework includes themes like legislation of conservation areas, prevention and combat of forestfires, control of educational fires, cartography, GPS, driving safety, chainsaw repair, and computer courses on word-processing, data bases, and the internet. One of the men, who has a senior position and is the community liaison

² Janzen, “Parataxonomists” 226.

for the program, also has also completed coursework in human relations, conflict resolution, methodology for community education on fires, first aid, and instructor training.

Due to its employees' varied responsibilities, the Sectors Program also offers a variety of courses for its employees. The people who work in the different sectors of the ACG are responsible for the care of the physical property, and also for attending to all the different visitors who come to their sector—whether neighbors from nearby towns, vacationing ecotourists, or biologists. There is, however, a wide range in the number of courses that each employee has received, ranging from zero to eleven. At times this can be explained by seniority and/or the number of years a person has worked for the ACG, and sometimes it appears to be dependent on the number of tourists a sector head must deal with; however, there are some times when an explanation for a discrepancy is not as apparent. Sector heads have participated in courses on themes like legislation of conservation areas, first aid, conflict resolution, cartography, volcanology, control of forest fires, and use of fire arms, and several biological themes like botany, insects, and bats. There have been several first aid courses offered, and some of the sector heads have attended more than one. Sector assistants have taken several of the above courses. Female sector assistants have taken classes in food preparation and how to help tourists. One woman was sponsored by the ACG in a three-month intensive course to train local ecotour guides which included English, Costa Rican history, and many classes on natural history and themes like plants, insects, and mammals.

Dr. Janzen's research assistants who live in Quebrada have taken anywhere from two to six formal classes. They take considerably fewer courses than the parataxonomists take, however, the consensus among the assistants is that what others have learned about taxonomy and collecting through courses, they have learned informally through Dr. Janzen. All have taken basic computer classes and a course on botany; several have taken a course addressing moth larva; one has attended all of those, plus a course on fighting forest fires.

The administrative staff and cooks who live in Quebrada have had fewer opportunities to take courses than the people who work in research, fire control and prevention, and the various sectors of the ACG. They have, however, taken classes to help them with their jobs. Those who work in accounting have taken anywhere from one to four computer classes, and the woman who works as the administrative assistant for ASACOG took a

course on the management of employees' associations. The head of the dining halls has taken classes in food preparation and basic computing skills, as have the cooks. The cooks were also looking forward to taking an English course to facilitate their communication with visitors.

Training the ACG Employees Would Like to Have

When asked what training they feel they need to do their jobs better, the employees gave the following responses:

- Twelve people responded that they feel it is necessary to learn English.
- Twelve employees would like more courses on natural history, plants, and animals.
- Five people would like courses on human relations and communication to help them deal with coworkers and tourists.
- One person mentioned that he would really like a course on what other programs within the ACG do so that they could better coordinate how to work together:

I would like to know more about the other programs and what they do. I have found that I have needed this knowledge in my work and in Quebrada Grande, and that I haven't had it. . . . The employees should understand not only their own programs, but the whole ACG so they can talk the some language and cooperate among each other better.³

- Eight employees want to learn more about using computers and managing databases.
- Other suggestions were courses on first aid, ecotourism, conservation and sustainable development, taxonomy, accounting, more in-depth courses on volcanology and cartography, laboratory skills, and fighting fires.

Several employees took this opportunity to voice their complaints about the educational programs provided by the ACG, saying that they are too cursory and not practical enough to really learn from and use.

Courses Motivated By Working in the ACG

Working in the ACG places an individual in an environment which encourages and necessitates learning and which consistently presents its employees with new challenges. For many people, this can be a motivating force to pursue educational opportunities not required by their work. In some cases, a person could be motivated to pursue training that would further his or her career; in other instances, an individual might be interested in developing a hobby. Among the ACG employees in Quebrada Grande, almost two-thirds

³ Employee 28, personal interview, 16 October 1997.

indicated that working in the ACG had led them to consider opportunities for continuing education. As will be detailed below, some have managed to pursue those classes while others have not.

Working in the ACG has motivated at least eight employees to get their driver's license for cars and pick-ups and at least two employees to get their license to drive a motorbike. Many of these people realized that they would be much more productive in their work, and would have a lot more freedom and responsibility if they had a means of transportation. The parataxonomists, Dr. Janzen's assistants, and INBio assistants often need to drive in order to get to the site where they want to collect. Also, for those who spend the majority of their time at an isolated collecting site, having a license for a car or motorbike often provides them with a means of transportation to visit family or friends, to pick up groceries, or come into the ACG administrative area if necessary. In the Fire Program, having a driver's license is at times essential for complying with the requirements of the job. Especially in the dry season, the firefighters need to be mobile to attend to emergencies in remote locations immediately. It should also be noted that having a driver's license and appearing in Quebrada Grande driving a car is in reality a status symbol, especially considering how few town residents own cars.

Apart from taking the course and test to obtain one's driving or motorbike license, very few Quebrada Grande residents working in the ACG have taken classes. One woman who works as a cook invested a substantial amount of her salary in a set of books and tapes to learn English and another instructional package on cooking, while another man took a course on computers.

What is most revealing, however, are not the courses that people have taken, but the courses they say they would like to take, and the reasons they give for not having taken them.

- Six people would like to take English classes.
- Five people said that they would like to get their driver's license.
- Four mentioned wanting to finish their high school education.
- Two would like to learn more about computers.
- One person each would like to learn more about first aid, plants, and karate.

The courses that people noted that they would like to take demonstrate how working in the ACG has enlightened them to what skills they will need to succeed in their jobs, how they can generally improve their learning capabilities, and what their personal interests are. The fact that so many people want to learn English is mainly due to the number of international tourists and researchers who come to work in the ACG. The employees have found that their inability to speak English impedes their work. Whether they organize meal plans with student groups, advise tourists on what trails are safe to take, or work with biologists collecting mushrooms, they have discovered that English would greatly improve their ability to communicate, and therefore, excel in their work. The other interests can be explained easily: A driver's license permits freedom and grants greater responsibility. Those who want to finish high school are those individuals who appear to have become interested in learning for the first time through their work, and who have realized what they missed by not finishing their studies. The people interested in learning about computers felt that it would help them organize and manage their work more effectively, and that it would be a way to help boost their job security in the ACG. First aid was mentioned as another way to better prepare oneself for emergencies on the job. Plants and karate were highlighted as themes that the individuals had discovered as hobbies they would like to pursue further.

Time, access, and permission were the most widely credited reasons for people's tardiness or inability to pursue their interests. People who work in the Sectors find it virtually impossible to enroll in long-term courses because they spend most of their time living in an isolated area and their days off are concentrated over one week. Even if they can do the coursework independently, they find that it is difficult to impossible to get help when they need it. Those who commute from Quebrada Grande to the ACG daily find it tough to travel to Liberia in the evenings to take classes because transportation back to the town can be scarce and/or costly. Two people mentioned that they did not think that their supervisors in either the ACG or INBio would let them take time from their work to study. Of course, there are always the questions of how to finance the courses, and of each individual's motivation and determination to pursue their interests.

Though many of the employees' interests are intriguing, it is generally not the responsibility of the ACG to make certain that they can pursue them. In light the above information, however, it would be in the ACG's best interest to investigate how they could incorporate English language training into its employees' education.

Informal Learning: Personal Development

From its inception, the ACG has believed that employees could learn more on the job than any course or degree could teach them. When asked what they had learned through their work, apart from the actual technical skills required by their own work, people responded with a variety of compelling answers. For many, the experience has taught them not only skills to use in the work place, but also has had a profound affect on their personalities, their social lives, and their understanding of the world they live in.

It is difficult to separate the different skills people have learned through their jobs into categories because of the manner in which so many the abilities developed in the workplace overlap to help a person in many areas of his or her life. The following divisions, therefore, might seem slightly artificial, but they are the best way to present what people have learned as a result of working daily in the ACG. Recall that the Guanacastecans have lived in a very homogeneous environment, often in fairly isolated localities. Even in small towns, people tend to keep to themselves beyond superficial, daily contact in the streets. Furthermore, their work has often been mandated to them, step by step, and often required alteration and persecution of the natural environment rather than its preservation.

Many interviewees commented on how their ability to communicate and work with a variety of people has improved. Almost half of the interviewees commented that working in the ACG has helped them to learn how to relate to and collaborate with many different kinds of people: men, women, coworkers, supervisors, foreign tourists and researchers, high government officials, people from rural areas, and wealthy urbanites. Several individuals commented on their initial difficulties in interacting with others. There were problems between gossipy coworkers, misunderstandings between researchers and assistants, frustrations in accommodating and working with foreigners, tensions between men and women. One parataxonomist tells stories of not having the patience to deal with foreigners' questions. They stories are funny in retrospect, but were frustrating at the time:

'Why do you do this? Why do you do that?' they would ask. And then I would have to stop what I was doing to explain it to them, and they didn't even understand all the Spanish anyway! . . . In the beginning it was so difficult. It drove me crazy. And I won't lie, sometimes it still isn't easy; but now, I have much more experience in dealing with foreigners, and that has really helped.⁴

⁴ Employee 22, personal interview, 25 September 1997.

The process of learning how to deal with so many different people involved the development of different skills and knowledge for each person. Of course, practice and experience helps enormously. Some have developed their patience and are now more willing to take the time to understand the other individual with whom he or she is working. One person found that he needs to introspect, to discover exactly what his own needs are and then communicate those to others to have successful relationships with his coworkers. For one parataxonomist from an area less rural than Guanacaste, living in Quebrada Grande and working in the field has taught him about the experiences and values of rural life, which in turn helps him relate to his coworkers and residents of the town near where he works. Several women and one man mentioned that merely being in contact with so many people and developing their professional skills has endowed them with self-confidence; that confidence then helps them communicate and interact more effectively. Learning to defend oneself and not let other workers take advantage of you was also mentioned by several women as an element of improving their ability to work effectively with other people. (One woman, however, mentioned that she felt that working in the ACG had stimulated her to become aggressive, defensive, and competitive to a fault.) Four people have found that practice in giving talks and working with groups has made working with others a much more comfortable experience for them. One man commented that he has learned to act like a professional: "I've learned that how I interact with people is important. What I said or how I said it never mattered before. Now it does. I think that acting like a professional has really helped me in my work."⁵

One employee made a point of commenting on having learned to respect women through his work in the ACG. His remarks clearly convey how his perceptions of women have changed:

The [Costa Rican] man is typically *machista*. . . . He doesn't respect the woman, or the work that she does . . . he only sits there and asks for more. . . . I grew up in a household which was like that. My father just sat down and watched my mother do all the work in the house. Women have always done everything for him. It was the woman's work, the woman's responsibility, her obligation. . . . I am beginning to grow out of the culture I grew up with. . . . I am learning that it is something that I should be able to do. I help out more in the kitchen at work and at home. Yes, I am doing women's work, but that is helping my own development. . . . I am realizing that women should have the same rights as men, sometimes they are even better for certain jobs. They are more reasonable, they discuss things more. . . .

⁵ Employee 3, personal interview, 2 August 1997.

Though this one man's opinions might seem old-fashioned in the United States, for a 41 year-old man raised in rural Costa Rica—one of the older men from Quebrada Grande working in the Conservation Area—this change in perspective is remarkable.

As a clear example of the effectiveness of the Conservation Area's policy that practical experience effectively trains employees, many people attest to the improvement in their performance and management skills. Here it is important to remember that many of these people did not have any previous work experience which demanded specific skills, attention to several ongoing projects, or the complete responsibility of one individual for any particular task. Working in the ACG requires all of those. Many people learn specific skills by example from other more experienced staff or through trial and error. "I learn from my work everyday," said one employee in the Accounting Department. "Not because anyone is teaching me, or because I have taken a course, but because I am doing the work. When I need help, I ask. Otherwise, I figure it out."⁶ A sector head who had previously worked taking care of cattle on a milk-producing ranch said,

When I arrived to my sector, I had no idea what to do, but they gave me some guidelines, and I sat down and thought about it. . . . I was motivated. I wanted this job, and wanted to do it well. . . . Now I feel like I really know what I am doing. . . like I could go to another conservation area and manage a sector there without a problem.⁷

While a few employees mentioned learning specific skills to help them in their work—like record keeping, accounting techniques, math calculations, or orientation in the forest—many more remarked on learning how to plan out the jobs that they need to do and then effectively complete them. "I've learned how to do a job well. [You have] a task and you have to figure out how to do it well. . . . Now I know how to plan a job from start to finish."⁸ They commented on improved organizational skills, and better abilities to allocate their time, recognize when it is important to work in teams rather than attack a project by oneself, and to take initiative to solve problems on one's own, rather than consistently consulting a supervisor.

Learning to be responsible and how to "take care" of one's job was noted by several individuals. One young research assistant said, "I realized pretty quickly that if I didn't take care of the larva we had growing in the bags that they would die. That's not good for

⁶ Employee 14, personal interview, 30 August 1997.

⁷ Employee 9, personal interview, 15 August 1997.

⁸ Employee 20, personal interview, 19 September 1997.

anybody, the project or me.”⁹ A mother of a newborn said, “My job is important to me. Now it’s not just me that I have to support. I need to take care of my job and work well so that I can keep it.”¹⁰ Others commented that they realize the value of honesty more than they had before they began working in the ACG. Working well does not, however, stem just from a sense of responsibility. “I’ve learned to put love into my work,” said an assistant in the Sectors Program, “I was never really happy in [my factory job in the city] . . . and I really enjoy what I do now.”¹¹

Employees also learned about independence, companionship, and curiosity through their work. One male parataxonomist who spends most of his time at an isolated post said, “I have learned how to live alone. Most of my life I have had someone taking care of me. Now I know how to cook [and] how to wash my clothes.”¹² An older man says working in the ACG is one of the first times he has had friends. “Though it was difficult to get to know people at first, I now know and am friendly with many more people than I would have in my life otherwise.”¹³ Another older woman, who never finished grade school, remarked, “I find that everything that I learned makes me want to learn more! I look things up in the small library we have at the biological station, I ask my coworkers lots of questions and accompany them while they work.”¹⁴

There are so many opportunities for employees involved in different projects to help each other, or at least observe what each other does, that many people have learned about themes completely unrelated to their jobs. Several people, especially those in sectors, have learned about fighting forest fires through their involvement in helping the Fire Program extinguish fires in the dry-season. They also learn about security through supporting the Control and Protection staff. The most widely-mentioned skills acquired through working in the ACG, however, are the collection and mounting of plants and insects. Since the parataxonomists work at almost all of the sectors, and reside at some, they have been very influential in teaching other ACG employees about their work. Six people mentioned that they had learned these techniques from the parataxonomists, as well as a great deal about plants and insects in the sector.

⁹ Employee 13, personal interview, 30 August 1997.

¹⁰ Employee 22, personal interview, 25 September 1997.

¹¹ Employee 1, personal interview, 27 July 1997.

¹² Employee 19, personal interview, 18 September 1997.

¹³ Employee 11, personal interview, 24 August 1997.

¹⁴ Employee 6, personal interview, 9 August 1997.

Finally, when asked about what they have learned through their work, people said that they have gained more understanding about conservation and values in life. At least nine employees specifically remarked how much they have learned about conservation through their work, about the importance of protecting nature for future generations. Three men commented on how their values have changed toward killing wild animals; whereas they might have hunted before, they would never do so now, and would even hesitate at killing a snake (though he qualified: unless it was a poisonous one found in a home). A member of the Fire Program remarked quietly, "I've learned that when there is a forest fire, that you should save a person's life before saving the forest."¹⁵

Changing Views on the Natural Environment and Conservation

This brings up a question the ACG program heads frequently asked me to investigate: Has working in the ACG, with its setting within protected wildlands and continual focus on conservation, had any affect on how its employees think about nature and conservation? When directly asked about this theme, the interviewees responses showed that they almost unanimously believe that their perspective on nature had changed. Several people also reflected on how their family members' had learned about conservation through them.

When asked if how they view their natural environment had changed since they started working in the ACG, most people acknowledged that it had. They described how their appreciation and understanding of nature has changed, how their behavior has changed in response to what they have learned, newfound desires to care for and protect nature, new intellectual curiosities about the way nature works, and realizations that their livelihoods depend on an intact wildland.

Parataxonomists, accountants, cooks, night-watchmen—almost every individual—gave examples of how his or her views on nature have changed, and many expressed that they have also learned about conservation:

Before, nature didn't matter to me. I used to hunt birds with stones and arrows, kill snakes that I found while walking. I lit fires in fields just for fun. I dreamed of being old enough to go out and get a gun so that I would be able to hunt. My friends and I would raid parakeet nests for babies, bring some home for pets and toss the other ones out and leave them to die. When I walked in the forest, I killed everything I saw. Now, all of that has changed. I can't even imagine enjoying those things.¹⁶

¹⁵ Employee 5, personal interview, 5 August 1997

¹⁶ Employee 13, personal interview, 30 August 1997.

Before, I saw everything in the forest as green, and now I know about all of the parts that put that green together.¹⁷

I really enjoy working in the field, and I see a lot more of nature working in the ACG. Before, I didn't think about nature. My work was to cut trees . . . and I tried to do it as well as I could. I was so surprised when I came to work for the ACG and found out about conservation and saving nature. Now, I always think about how different the world would be if people had know this all along.¹⁸

Sometimes when we are done in the kitchen at night, and everything is quiet, we go and lie down in the road and just look at the leaves and the sky . . . I feel it helps me get back some of what people have lost about nature.¹⁹

[Nature] didn't mean anything to me before. I would hurt something without even realizing that I hurt it. Now I think about taking care of nature. It feels like a more pure way of living, much more enjoyable, to let other things live. Also, now I know that I depend on nature for work.²⁰

Before I would cut trees, it didn't matter to me where they were. Now, I think more about it, and I also feel like I can explain to other people why it is important.²¹

I grew up on a farm, I have been around nature my entire life, but not until [working in the ACG] did I realize how much I didn't know. Now, I know so much more about the importance of natural resources. . . . And now I look at a deer as a special animal rather than food.²²

At least twenty employees also believe that they have had a substantial impact on how their family members think about nature and conservation. They commented on their children's extensive knowledge about and experience with nature and conservation, gained through spending time with their parents and in the Biological Education Program. One mother whose children have grown up practically living in the ACG commented,

My daughters are of a new generation, they grew up in a conservation area and now they know differently. . . . For example, when we go to [town] they do not throw trash on the ground, and get very upset when they see adults—who they think should know better—doing it. They really enjoy seeing animals and at times when they hear shots at night they get very upset to think that someone is hunting. . . . They are defenders, not destroyers, of nature.²³

Several parents commented on how their children have started treating animals and insects much more kindly, and how they have even begun to defend animals in the village when the other children torment them, for instance kicking frogs or killing birds. I even saw one

¹⁷ Employee 12, personal interview, 26 August 1997.

¹⁸ Employee 16, personal interview, 12 September 1997.

¹⁹ Employee 26, personal interview, 7 October 1997.

²⁰ Employee 2, personal interview, 28 July 1997.

²¹ Employee 9, personal interview, 15 August 1997.

²² Employee 11, personal interview, 19 September 1997.

son of an ACG employee stand up for a kitten who several boys were hurting, though much to his disappointment by the time he got to it, it was already dead.

People also commented on how their parents' perspectives had changed. Parents who had spent their lives cutting trees for pasture have now stopped to think about how things could be different: "My parents used to cut down trees before and now they try not to do it. Before people also used to be able to come and hunt on the farm, and now my parents don't permit it."²⁴ One family, who has several members working in the ACG, has begun reforesting their farm.

Nine months ago I started a reforesting project and got all of my uncles and brothers involved. Now, my father, who used to spend all of his time making certain that he had good pasture, works on reforestation. So far we have planted over 1,000 trees. People in my family also used to hunt and now I am certain that they don't.²⁵

Several people also commented that their parents seem to watch more nature programs on television, and just seem to be more aware of issues in conservation in general. This theme of family members learning about conservation will be explored further in Chapter 16, "ACG and the Family."

²³ Employee 25, personal interview, 6 October 1997.

²⁴ Employee 16, personal interview, 12 September 1997.

²⁵ Employee 28, personal interview, 16 October 1997.

14. BROADENING HORIZONS

Due to their economic situation, and perhaps also to tradition, few people in Quebrada Grande can claim experiences beyond the beaten foot and bus paths of northern Guanacaste. Transportation is difficult and expensive for those who have minimal economic means. For practically all of the ACG employees living in Quebrada Grande, working in the ACG has provided them with opportunities that they never would have had otherwise to visit other parts of Guanacaste and Costa Rica, and to meet people from across the country and even the world.

Getting to Know Guanacaste

People who rarely had opportunities to even leave their town or its general vicinity are now being introduced to the world right outside their front door. For instance, almost 80% of the employees from Quebrada Grande have worked in or visited at least four sectors of the Conservation Area, and many of those people claim to be familiar with practically all of the ACG sectors. Ten percent have visited up to three sectors of the ACG, and another 10% have visited other towns in Guanacaste through traveling with the ACG soccer team. One research assistant said, "I've worked in all of the sectors, and I have really enjoyed it because I have discovered that there are so many beautiful things right next to my own home that I never knew about before."¹ Another said: "I've worked in [eight sectors] I feel like it helps me get to know the places, and now I can bring my family there and guide them, or take my friends to go mountain biking."² An assistant in the Sectors Program who has worked for the ACG since its inception said, "I've been to all the sectors. . . it feels good because I have been able to watch them grow from pasture to forest."³

Costa Rican Experiences

Almost 80% of the employees have also had significant opportunities to visit other parts of Costa Rica or to meet other Costa Ricans from different parts of the country. Most of those who have been able to travel have been to several places, not just one or two. For the parataxonomists and research assistants, many of these excursions result from attending courses in different conservation areas, or if they work for INBio, from working in different areas. These people can now boast experience in wildland preserves across the

¹ Employee 2, personal interview, 18 July 1997.

² Employee 13, personal interview, 10 August 1997.

³ Employee 8, personal interview, 15 August 1997.

country like Manuel Antonio, Tapanti, Carara, Manzanillo, Braullio Carrillo, Barva Volcano, Barra Honda, Palo Verde, Monteverde, and Tortuguero. Some of the people who work in the Sectors Program used to participate in trips to different conservation areas to practice certain skills or learn about different ecosystems and administrative systems. The program has made trips which included destinations like Poas Volcano, Guayabo National Monument, San Jose (to visit INBio), Braullio Carrillo, and Chirripo. These trips are not run anymore, so new employees will not have the opportunities that the ones hired previously have had. Employees of the Sectors Program also visit other conservation areas as part of training courses, like a first aid course at Volcano Irazu. One man went to the Talamanca Mountains to help train the employees there.

Members of the Fire Program at times go to different parks to help them when they are low on staff, like one man who spent three weeks helping with patrols in Corcovado. The Fire Program also participates in training programs on a national and Central American level. Finally, administrative employees are also included in travel opportunities, for example, joining the Biological Education Program on trips with the students to other conservation areas, going with the Sectors Program on their trips, or visiting a private nature reserve's kitchens to learn how they are managed. Employees from all programs of the ACG have also been to Cahuita National Park as part of the celebration of National Park Day.

For many of the interviewees, these trips not only opened their eyes to the diversity of Costa Rican ecosystems, but also reinforced their positive feelings about the ACG and Guanacaste. They have found that other conservation areas are not necessarily as organized as the ACG and many times don't pay as well, that they do not generally place as much emphasis on research, and that their employees are not given as much autonomy. They also realize how special it is that they can work so close to their hometown and be close to their families.

Whether within the ACG or while traveling, several employees have also had the chance to meet important figures in Costa Rican politics or media. These experiences impress them and they often remember every detail. One woman who went to a function at the house of the former president of Costa Rica while he was still in office was introduced to the president and many other high government officials, one of whom complimented her on being from Guanacaste. "I felt so proud to be Guanacastecan," she said while remembering

the experience.⁴ A woman who cooks in Santa Rosa also recalled feeling very privileged to meet people from TV stations and the legislature. -

International Connections

Every ACG employee from Quebrada Grande has had the opportunity to meet and spend time with people from other countries. While this might not seem like a unique or special experience for someone from the United States, or even a more cosmopolitan Costa Rican, it is a very important interaction for someone from a small town in Guanacaste. Many of the visitors are biologists from around the world—particularly from the U.S., Europe, and South America—as well as international ecotourists. To the locals, foreigners are a combination of entertainment, status symbols, and learning tools. They have different styles of dressing, eating, and interacting socially, and represent an encyclopedia of knowledge about other places and often years of formal education. The employees report that, at first, their interactions with foreigners are intimidating and perhaps exasperating. They are not certain what to say or how to act, and often are bothered by the over-zealous curiosity of the visitors. But with time and experience, they realize that often the respect is mutual and relax into an enjoyable relationship. Some of their responses are quite revealing about the relationships they have developed:

I've met many biologists, and I have really enjoyed the experience. I learn a lot from them, and have realized that they are also interested in what I am doing. That makes me feel really good When they go home, they even keep in touch, sending us Christmas cards and presents for our baby.⁵

A lot of foreigners come to visit our sector. . . . I often get thank you notes from them, or when they come back they ask for me. It makes me feel important, and proud of my work, knowing that I was an important part of the time they spent and why they enjoyed [the ACG] so much.⁶

I have learned a lot from foreigners about different cultures and foods, far away places. . . . The respect they give me is very important to me One of the biologists even said he may even name a new species after me!⁷

⁴ Employee 2, personal interview, 18 July 1997

⁵ Employee 22, personal interview, 25 September 1997.

⁶ Employee 15, personal interview, 12 September 1997.

⁷ Employee 18, personal interview, 17 September 1997.

15. PRIVATE HOUSING

For many Guanacastecans owning their own home is a luxury. People's income often barely covers their family's basic living needs. Rarely is there enough left over to be able to save to purchase a house. Bank loans may be available, but at an incredible cost. Young men and women end up living with their parents or their spouse's parents even after they are married and have children. It is not uncommon to find the equivalent of two or three families living in one home, with each family sharing a bedroom. If they are fortunate enough to have a good, steady income, young families at times can afford to rent homes. Even then, it is difficult to furnish the house with the appropriate furniture and appliances. It was in response to this kind of housing shortage and overcrowding in the main town of Quebrada Grande that the government financed grants to families toward the building of the houses in the Barrio Lourdes housing development. While these grants played a large role in helping young families establish their own home, the ACG has also paved the road for many of its employees to improve their housing situations.

Previous Housing Arrangements

Before working in the ACG very few of the employees had their own homes:

- Only seven people (25%) were living in houses that were their own.
- Ten people (36%) were living in rented houses.
- Eleven people (39%) were living with their families either in a town or on a farm.

Employees remember living in cramped quarters with other family members plus their children, or in rental homes which would fall apart upon the first rains of the season or could be easily broken into. Others lived on farms which did not have electricity or running water. Some lived in other parts of Guanacaste or Costa Rica.

Current Living Arrangements

Fifty percent of the employees stated that their living situation changed due to their work in the ACG. Currently, twenty-two of the employees live in Barrio Lourdes, three live in Quebrada, and three live on farms.

- Nineteen (68%) of the employees own their homes. Seven of those were able to take out loans from ASACOG or Dr. Janzen to purchase homes, six saved enough money from their salary to buy a home themselves, five received government grants for their homes, and one inherited his house from his parents.
- Now only two people (7%) are renting homes

- Only six people (21%) are currently living with their families.

One person resides practically permanently in the ACG, but will be moving to her home in Lourdes soon. Out of sixteen responses, 100% said that their housing has improved from their previous situation. Now, they say, they have more space, more comfortable homes, more freedom, and for some, a more secure environment.

But more than the four walls of a house, electricity, and running water compose a home. Furnishings also make a house habitable and comfortable. Through loans and their salaries, ACG employees have been able to buy the items which can drastically improve an individual's or family's quality of life. In the time that I spent in Quebrada Grande, I was able to visit twenty-five employee homes (the other three employees live on distant farms). All of them were at least the average of the standard of living in the town. Many of those were generally much nicer than the typical home. About half of the ACG's employee homes were indisputably above the standard, three of which were among the most elaborate homes in the town. When asked what purchases they have been able to make since working in the ACG, most of the items the employees listed were for their homes. For instance many people mentioned buying large color televisions, stereo/radios, living room furniture sets, kitchen table and chair sets, beds/mattresses, dressers, irons, fans, refrigerators, washing machines, sewing machines, ovens, coffee makers, rice cookers, and blenders. Many of these items are things that are not present in the average Quebrada Grande house. An average home might have one or two of those items, but only the well-off households have several or all of these things like the ACG employee homes do.

The ACG salary and loans do much more than furnish people's homes. Other purchases ACG employees have made include English language text books, a microwave, a computer, VCRs, a cell phone, and a ceiling fan. Employees have also used their money to buy small plots of land, cows, clothes, fashionable sneakers, and jewelry. One young girl is studying at a private school outside of Liberia on her parents' ACG salaries.

16. THE ACG AND THE FAMILY

When one person in a family gets a job in the ACG, the effects of their employment has repercussions for the other family members. The employees who participated in the interviews were asked several questions about how their employment in the ACG has affected their families. Overall, their responses were overwhelmingly positive. People told inspiring stories of families which have been fortified by the economic and psychological benefits of working in the ACG. Some families were even pieced back together under the ACG's influence. Out of twenty-one responses, only two people said that working in the ACG had detracted from their family life; from the other nineteen, I frequently heard, "On the contrary, things have gotten better!"

The Family's Opinion

Most of the employees' families have reacted well to their working in the ACG.

- Nineteen people say their families are "happy" that they work in the ACG.
- Four said their families are "proud."
- Four think that "at first it was hard" for their families to adjust, but now it is okay.
- Two employees' families find the situation is consistently difficult.

After seeing all the advantages of the jobs in the ACG, most families are happy about having a member who works there, and many are proud. "My family is really content with my job," said one young research assistant, "because it helps our household. . . . [It's also] something anyone in Quebrada Grande would want for themselves, and I have it."¹

A female parataxonomist said,

My family is happy because they never saw another future for me besides cleaning houses. They are proud of me for having a job which people respect and envy, and for having achieved so much even though I don't have much education I think that [my younger brother] really admires me. He thinks he might want to work in ecotourism. And it has definitely has a positive affect on my younger sisters to see that I work.²

For kids, it is very exciting to have parents or siblings who work collecting insects or taking care of a biological station. An older man said, "My kids think that my job is great. If anything, they pray that I will always have it. . . . They always want to miss school so that they can come to work with me."³ One mother said, "My daughters play

¹ Employee 13, personal interview, 30 August 1997.

² Employee 12, personal interview, 26 August 1997.

³ Employee 8, personal interview, 15 August 1997.

'parataxonomist' taking on the roles of the different women I work with, and they always fight among themselves to see who will come with me when I go to collect."⁴

For those individuals whose families originally did not understand the nature of their job or why they have to be away working for so long, however, the transition was tough. One young woman had a lot of prejudices to overcome:

At first it was really difficult. My family was very strict and did not think that the ACG was a place for women. . . . I really had to struggle When they found out that I had shared a room with a man [as is customary in many biological stations] they just assumed that I had had sex with him, and when I came home they all acted very strangely toward me Eventually I explained myself. But with time they all grew used to [what I do.]⁵

Another woman's husband made her quit until the ACG found work for him too because he did not want her there by herself. Now it has become a positive experience for her family. "It was even difficult for the kids to adjust to [me working], but now they are learning by example from their mother about how to take control of their lives."⁶

This brings up an important point: The ACG employees from Quebrada Grande are setting a new standard for lifestyle in Quebrada Grande. They are demonstrating to their families and to the rest of the community that it is possible for a person escape the subservient ranching positions and attain a job which allows an individual and his or her family to live above the standard. They exemplify to others that women can work outside of the home, and that those women can also have a successful family. They are proving that it is possible to learn how to do something new, even without a formal education. Several interviewees also feel that they have shown their family and friends that it is possible to have more control over your life, and not just accept situations passively.

Spreading the Knowledge

The family members of ACG employees learn through example, and also because they are frequently directly exposed to what their parent or sibling does. One of the requests I heard most frequently from the program directors in the ACG was to seek evidence whether or not the knowledge gained by the employees in their jobs about conservation spreads to other people in the community. While it is difficult to measure the extent to which knowledge spreads throughout an entire community, one can try to determine what is

⁴ Employee 25, personal interview, 6 October 1997.

⁵ Employee 22, personal interview, 25 September 1997.

⁶ Employee 6, personal interview, 9 August 1997.

passed on through people to their family members. In many cases people talk to their families about what they do, and as mentioned above, families learn by example, but first-hand learning experiences are much more impressionable and educative. The employees were asked to about their family members' direct interaction with the ACG.

Nineteen of the employees said that family members have accompanied them while they work, most frequently children and siblings, then spouses, cousins, and nephews. The following are examples of some employees' comments on their families involvement with their work:

My cousins and sister come with me when I go to collect at night so I won't have to go alone, or sometimes they come with me when I go someplace that that they have never been.⁷

My kids take turns going with me to the different sectors where I work. But while they are there, they almost never keep me company, they run off with the parataxonomists to help them collect or go on trails themselves and look for animals and birds.⁸

My dad and sisters and brother came to visit me . . . and we hiked up to the peak of the mountain together through the forest. My father has worked cutting trees to make his living, and where they live there are no trees left. It really made an impression on him that the trees [here] are so large. He felt good being back in such a tall, big forest.⁹

In some cases, the employees teach the family members who come to visit the skills that they would need to assist them in their work. Twelve employees said that family members have helped them with their work. This happens most frequently among the parataxonomists and research assistants, whose relatives—mostly younger siblings, cousins, and nephews—have accompanied and helped them collect, but it has also occurs in the Sectors Program. There are examples of times when brothers have helped with trail maintenance, and the following example is particularly special:

My mom has volunteered here . . . guiding tourists and working in the information center. I trained her in everything she needs to know. My dad comes every now and then to help me clear trails and patrol, to keep me company so I don't have to work alone. They do it to help me, but also because they like it. They enjoy meeting foreigners and learning about other places.¹⁰

⁷ Employee 13, personal interview, 30 August 1997.

⁸ Employee 8, personal interview, 15 August 1997.

⁹ Employee 24, personal interview, 11 October 1997.

¹⁰ Employee 9, personal interview, 15 August 1997.

The knowledge passed on from employees to their families is not only about parataxonomy and ecotourism. For instance, a man who works in administration has taught his wife to help him with accounting. The ACG also benefits from the knowledge of the employees' families. For example, the wife of a firefighter who works with communities has a degree in community social work and has helped him organize activities for the communities.

Family members of ACG employees benefit from occasional educational and social activities in the ACG. Several employees said that their parents or siblings have attended organized programs in the ACG, for instance, celebrating Costa Rica's Independence Day or the culture of the cowboy. Some have gone to presentations in Quebrada Grande given by the ACG and INBio on biodiversity, parataxonomy, and prospecting. The daughter of an employee attended courses in the ACG on different biological themes, and several employees' wives have taken a cooking class through the ACG. One man working in sectors says his children learn a great deal from videos he borrows from the ACG Research and Biological Education Programs and from going to collect with the parataxonomists at the biological station. Several employees also said that they make a conscious effort to explain their work to their families. In sum, it appears that there are many occasions in which the family members of ACG employees have been able to come to the ACG, experience its environment, and learn about what happens there. One can assume that those individuals would also spread what they have learned, thus slowly educating the community over time. In the words of one employee, "Of course my dad helps me. He helps me by explaining to other people in the town what I do!"¹¹

Spreading the Economic Gains

The economic circumstances in Quebrada Grande are extremely difficult. Frequently, large families must try to support themselves on the income of one person, who most likely does not earn more than \$5-\$10 per day. They have difficulty meeting even the household's most basic necessities and sending children to school. Often, items like washing machines, stereos, new clothes, blenders, or rice cookers become luxuries and often are unattainable. The increased income and economic stability of ACG employees has allowed them to improve their and their children's quality of life, and in some cases also to assist their parents' and siblings' families as well.

¹¹ Employee 21, personal interview, 24 September 1997.

Twenty-four people (86%) of the employees responded that they have been able to help their extended families economically since they began working in the ACG. Of these, thirteen said that they have lent or given money to their siblings for a variety of purposes. For example, one person has put his younger brother through high school, while another supports her sister's child. Another person has bought his brother furniture and is considering giving him a plot of land he owns so his brother can build a house for his family. One younger man bought his brother new cleats, and gives his younger sister her spending money. Another person has paid off his brother's debts, and another frequently loans money to his brothers, neither of whom have steady work.

ACG employees have also helped their parents regularly since they began working in the ACG. Twelve people said that they help their parents with gifts of money and/or food. Many individuals present these gifts frequently, for instance, every time they receive a paycheck. Six people have been able to give substantial gifts to their parents. One woman, over the course of her career in the ACG, has given her parents a washing machine, a refrigerator, a gas cooking range, shoes, clothes, and medicines among other gifts. In 1997, her present to them was engraved wedding rings that they had never been able to afford themselves. The parents of another man have been given living room furniture, a color television, a stereo, and a coffee maker.

Eleven employees said that they are able to give gifts more frequently to their extended families as well. For example, nieces and nephews who might not have gotten both a birthday present and a Christmas present now open presents on both occasions, often of things that the child's family would not be able to afford—a new sweater, a doll, a truck, some earrings.

Several people also commented that they have been able to help family members attain medical attention and treatment that they would not have access to otherwise.

Perhaps the best way of helping a family member economically is helping him or her to find work. Job openings for long-term positions appear infrequently in the ACG, and when they do, there is usually a formal search, but short-term positions are often filled quickly and announced informally. Seven ACG employees said that they have been able to facilitate the placement of a family member in one of these short-term positions, usually by letting them know when a position has opened, recommending them to the administration

when once they have applied, or putting them in touch with the right individual in the ACG.

Finally, ACG employees have insurance which allows them to insure their spouse, children, and one parent. This has helped many families with insurance coverage. Though most people were covered before they started working in the ACG, for some this means that the payments no longer come fully out of their pocket and/or that their parents no longer have to pay for their own insurance.

Non-material Changes in Family Life

Interview questions can easily document the material differences in a family's well-being, but only a few individuals reflected at length about how their families' personal lives have changed because of their work in the ACG. A few of those peoples' family lives have completely changed because of the ACG. Their stories demonstrate the powerful effects of increased financial stability, education, and working for an employer which actively concerns itself with its employees on people's lives..

The calm, trusting, egalitarian working environment appears to have filtered down to the family level in parent-child relationships. For example, one woman worked on a ranch as a cook before she worked in the ACG and had difficult employers who criticized her frequently and disliked having her children around. Now, she says,

I feel better about myself. I am not as tense and critical, and not as hard on my children. Now, they don't fear me. My family is more unified now than it was before. . . I have more confidence in my children, and give them freedom and responsibility like the ACG gives me, because I have learned that that is what makes people grow.

There is also evidence that male-female relationships have been altered as well. The simple fact that men are now working in an environment where women are treated as equals intellectually and financially has had a remarkable impact on their views about women and family. One man who spent many years working on ranches before he came to the ACG said,

In me, I have seen a change from living with the culture of a farm to the culture that is of the ACG. . . . In the ACG, you have more respect for the people you are working with, especially for the women. If a woman is nice to you, you do not assume that she wants to be with you sexually. You respect the familial structure more, and respect the wives of the men you work with. Working in the ACG you

see that people are more educated, the custom on the farm is to treat people with very little respect.¹²

This respect for women has appeared not only in the workplace, but also has become apparent in several of the marriages between ACG employees. One woman said,

Now that my husband and I are working in the ACG there is more confidence between us. I can go where I want to when I want, and so can he. . . we learned through the ACG that relationships can be that way.¹³

It also will have an impact on the families of ACG employees. A man whose wife is also working in the ACG said, "I support and guide her in her work, but it makes me happy that she is learning to be independent, and I hope that my daughters will learn to be independent too."¹⁴

In some instances, marriages on the brink of disaster were saved because of the ACG's influence. There were certain commonalities among the cases. In most, the father of the household—an ACG employee—generally drank too much. His drinking frequently had led to extramarital affairs, compromised his job security, made his family's home environment extremely uncomfortable, and in one situation, resulted in abuse of his wife. In these cases, the man's supervisor and, at times, the ACG Director intervened, explaining what the ground rules for proper behavior are. One program director involved in the scenario with wife abuse said, "We told [the employee] that his wife was also our *compañera*, our coworker [she is given a small salary for her work taking care of the sector post], and that we could not tolerate his abusing her."¹⁵ The paths to rehabilitation varied in each case, but the results were similar: the marriages and family lives of those people appear to be exponentially happier than they were before. In several cases, I was a witness to these men spending lots of time at home and almost no time drinking, and in one case, the husband brings his wife out with him wherever he goes.

Working together in the ACG has generally been a special experience for couples. Four out of the six couples who work together in the ACG met through their work in the ACG. When asked how they felt working together, six individuals responded "excellent," and four responded "good." "I feel excellent [working] with my wife," said one man, "We work together and take care of each other."¹⁶ Another said, "I really enjoy it. We have

¹² Employee 7, personal interview, 10 August 1997.

¹³ Employee 6, personal interview, 9 August 1997.

¹⁴ Employee 3, personal interview, 2 August 1997.

¹⁵ Roger Blanco, personal interview, 22 January 1997.

¹⁶ Employee 9, personal interview, 15 August 1997.

more time together, joke around together. And we are able to share what we learn and find together, and talk about it. We have more of an intellectual relationship because we work together.”¹⁷ And, “We feel the best we ever could, better than ever before. Now we solve all of our problems together.”¹⁸

For family members who work with siblings or cousins, the response was not as definitive. Most found that there was little difference in working with family rather than non-family or that it “felt good” to work with family. A few people said that they feel more comfortable working with other family members, because there is more “trust,” “confidence,” “friendship,” and “willingness to help each other.” Only one person finds it claustrophobic to work with family.

¹⁷ Employee 19, personal interview, 18 September 1997.

¹⁸ Employee 6, personal interview, 9 August 1997.

17. AFFECTS ON THE PERSONAL LIVES OF ACG EMPLOYEES

Working in the ACG has had a substantial impact on both employees' professional and personal lives. The final interview specifically explored individual's thoughts on how their private lives have changed due to their work in the ACG. For instance, have they noticed any change in their self-image? In their family life? In their aspirations? In their social life? In their health? In their thoughts about conservation?

When asked to think about how their lives had changed overall since they had begun working in the ACG, the employees' most frequent responses were that their overall economic situation has improved greatly (half of the group mentioned this), their family-lives are better, their confidence has improved, they are generally happier than they had been before, and that their views on conservation have changed markedly. Other themes mentioned included professionalization, increased responsibility, better health, improved life-management skills, and feeling more educated. A number of people were so overwhelmed at the idea of actually having to think about all the ways in which their lives had changed, that they just said, "Well, everything is different!"

Improved Self-Image

One of the major changes in people's lives was a change in their self-image. Even as part of the question of how their lives have changed in general, increased confidence was frequently part of their answer. The interviewees responded that they feel more active, useful, respected by their coworkers for their work and their opinions. When asked specifically if their self-image had changed, only seven people (33%) said that it had not.

Among the other twenty-one (67%), people mostly said that they generally feel better about themselves. Some people, however, responded more specifically, saying that now they feel more mature, more important, more educated, more responsible, more secure, and/or proud of themselves. One woman even said she feels "like [she] is a better mom." The following are some excerpts from their comments:

I feel more mature now. I was young when I started working in the ACG. I didn't appreciate the value of an education, of having a good job, of any of that, but now I do.¹

¹ Employee 22, personal interview, 25 September 1997.

I feel better educated now. I know how to talk to people with more respect and manners. I am less rude. I used to always address everyone as *vos* [the informal “you” pronoun, in Costa Rica used traditionally only among good friends] it didn’t matter who they were, now I use *usted* [the formal, respectful “you” pronoun] for almost everyone.²

I feel much more confident in myself. I have learned how to interact with people. I no longer fear talking in front of other people or presenting things in front of groups. Yes, it is that insecurity that I do not feel anymore. I am less timid.³

I feel more important. I feel like my coworkers value me. Even when I am on my days off, they will come to my house to get my opinion or help with something. . . . [It’s because] of everything I have learned.⁴

Before, I didn’t ask so many questions about the world, I just lived. Now, I am a lot more curious, I live to learn and I ask many more questions. My whole mentality has changed . . . every day I think about bettering myself.⁵

When I lived on the farm, I didn’t even know that something like this existed . . . I feel really good about how far I have come from that farm mentality.⁶

A Source of Help for Personal Problems

In rural Costa Rica, apart from other family members, there are few people who are willing and able to involve themselves in resolving challenging situations other individual’s lives. Those outside the situation simply lack the resources, or have adopted a “save ourselves,” “it’s not my business to meddle in” mentality. So when a person has a problem, he or she is often left alone to struggle with the situation, even if the predicament is beyond the families’ ability to rectify. This is not to say that the community never comes to the aid of its members, it just happens less frequently than in more prosperous areas.

Though the ACG does not make it policy to involve itself in the personal lives of its employees, there have been times when the ACG has been able to help individuals overcome difficult times in their lives. The availability of loans through ASACOP, INBio, and Dr. Janzen have helped people in times of financial need, but the ACG’s involvement has also been more intricate than that. For instance, six men reported that the ACG helped them combat their drinking problems, either through motivating and encouraging their participation in a detox program in San Jose, or through firmly stating what the consequences would be for their work and supporting them morally as they quit themselves.

² Employee 6, personal interview, 9 August 1997.

³ Employee 5, personal interview, 5 August 1997.

⁴ Employee 9, personal interview, 15 August 1997.

⁵ Employee 19, personal interview, 18 September 1997.

The ACG also readily grants leaves for employees to see a doctor when necessary, and has also helped in other familial health issues, for instance, rushing a family member to the hospital or helping with the logistics of funeral arrangements for an immediate family member.

In my time living in Quebrada Grande, however, I observed that it was not always the logistical and technical assistance provided by the ACG that the employees valued so much; it was the camaraderie and moral support that they appreciated. For example, if an employee was having a problem at work or a difficulty with a coworker, it was not uncommon for the supervisor to show up at his or her house in the evening to talk about it. Or, at the few funerals of family members of ACG employees which happened over the course of the year, there were always coworkers of the employee present. During her pregnancy and the first few months of time off after having a baby, a woman was consistently checked and helped by her coworkers and supervisor.

The Advantages for Women Working in the ACG

For women working full-time, being at the ACG has been an incredibly unique opportunity to find employment outside of the home, and they have found it to be an educating and empowering experience. But in their new roles as working women, these women in many ways are experiencing the challenges women in the U.S. went through years ago when they began to work.

Though the interviews did not allow for an in-depth investigation of the women's particular experience in the ACG, it did reveal several interesting facets of their situation. All ten of the women from Quebrada working full-time in the ACG want to work there. Eight of them say they do not have to work, only two are single mothers who must work. Of the nine who responded, eight are comfortable working and maintaining a home. Eight women said that they have had to hire another woman or girl to help them with child and home care; the only one who said that she does not have hired help does not have children. Nine of the women plan to continue working in the ACG; the tenth quit in December, 1997 after a year of working there because her husband was uncomfortable with her working. Her children, however, according to her, wanted her to continue working because they understood how much it helped their family with their material needs. One hundred percent of those who responded feel that they receive the respect of their coworkers.

⁶ Employee 25, personal interview, 6 October 1997.

Aspirations

Working in the ACG has increased the educational and socio-economic levels of the employees, and also improved their self-image, confidence, and their family lives. As they have expressed, it has elevated them to lifestyle that they had never imagined possible before. What affect has this had on their visions about their own futures? Do they see themselves continuing on this path, do they plan on surpassing it to attain something else?

When asked what they want for their future, people said that they generally have visions of continuing exactly where they are or continuing to advance within the same track of work. Four parataxonomists/research assistants said that they want to continue doing exactly what they are doing now. Another ten people expressed that they enjoy they type of work that they are doing now, but that they would like to progress professionally. For instance, parataxonomists and research assistants said that they would like to specialize more, to do more technical work or become the principal investigator on a research project. Two mentioned that they would like to become biologists/naturalists like Dr. Janzen. Employees in the Fire and Sectors Programs said that they would like to become leaders in their fields, and two people who work in administration said that they would eventually like to own and operate their own businesses. Two others said that they would eventually like to complete university degrees and have a profession, though not necessarily in conservation activities. One of the cooks said that she has realized that she would like to be a tour guide, but that she does not think that she will ever be able to attain that position. There are also ambitions to be a bilingual secretary and a policeman on horseback in San Jose.

Twenty-three (82%) of the employees think that their aspirations for the future have changed since they started working in the ACG. Many say that they expect to have a better life than they did before. "Before, I always thought that I would be living and working on a farm, I thought that all my other dreams were impossible. I didn't even like any of my other options, like going to San Jose and working there. Now, I think of a different, better future."⁷ People are inspired by new dreams for their future: "As a child I thought that I would be with my parents for the rest of my life, I never imagined reaching this point. Then, I could never even dream of the things that I dream of now."⁸ They feel that they can confront whatever problems come their way: "Now I feel like I can overcome any problem, in or out of work. Before, I didn't have enough experience . . . and now I feel

⁷ Employee 16, personal interview, 12 September 1997.

⁸ Employee 2, personal interview, 18 July 1997.

that I am more capable and have more resources available.”⁹ New relationships and economic means open doors for a better future: “I expect different things from my relationships. . . . I know more people, I have more friends, and this helps me enjoy my work. . . . I am better off economically and this has changed what I feel I can attain.”¹⁰ Some people never had a vision of the future before they worked in the ACG. In the words of one former day-laborer on ranches, “Before, I only worked for a day at a time. I was never certain about my future. Now I feel like I have something to look forward to.”¹¹

Most frequently, people commented on their new expectations to have a more intellectual life and desires to become leaders. One woman who has been working as a parataxonomist since she was a teenager said,

When I first met [the parataxonomist who inspired me to become one] I never thought that I would be able to learn as much as he knows. Since then, I have always thought about learning more. Through my job, I have realized that it is not so hard to learn if I try. Now I am always looking for new things, and I even feel like I can make new discoveries myself.¹²

And a woman who works in Sectors said:

Now, I have more desire to study and to train myself. I think a lot about improving my skills for my work, and I never thought about those things before. Now, I also know that if I ever leave the ACG that I will always have my husband’s support to study and better myself in the future.¹³

A man in Sectors wants to better himself, and to become more important. “Before, I had the aspirations of a ranch worker. I originally changed work for the better salary in the ACG, but now I think about bettering myself, learning more, becoming more important.”¹⁴ People think about becoming leaders. Another individual reflected, “I came to the ACG to put out fires and earn a better, consistent salary. Now, I have earned a leadership position, and I am hoping to advance even further in the ACG.”¹⁵

Their Children’s Futures

Having learned the benefit of an education, 91% of the employees who have children said that they hope that their children continue studying after grade school. 62% of those responses specifically said that they hope that their children go onto university, graduate

⁹ Employee 6, personal interview, 8 August 1997.

¹⁰ Employee 11, personal interview, 24 August 1997.

¹¹ Employee 20, personal interview, 19 September 1997.

¹² Employee 12, personal interview, 26 August 1997.

¹³ Employee 10, personal interview, 14 August 1997.

¹⁴ Employee 9, personal interview, 15 August 1997.

with a profession, and become able to support themselves. In Costa Rica, a person is generally viewed as a professional only if he or she has a university degree in that field. That credibility is a ticket to a better job and salary. A father said: "I want my daughters to study and hopefully go to the university. I think that it is important that they be prepared to take care of themselves before they get married. They should be able to earn their own money."¹⁶ Another woman said, "I want to be able to give my son the education and profession that I don't have. I will do whatever I have to do for him to have that, so he can really *be* someone."¹⁷ Another person said, "I really hope that my son studies, then he will have the opportunities that I didn't have. . . He will have the freedom to decide what he wants to do with his life."¹⁸

Many of the younger parents have decided to have only one or two children so that they will be able to afford their education. People want their children to be educated so that they can "defend" themselves, and so that they can work in "something that [they] feel is important" or in a job which "will help our country." A far cry from spending time swinging a machete, these dreams most likely stem from the parents' understanding that it has been rewarding for them to work in the ACG for something which they feel is important. Two people said that they would like their children to work in the ACG, and one said that he would like his child to work with nature.

The Employees' Worries

When asked what worries them about their future, the employees most frequently responded with some variation on their continued ability to provide for themselves and their families. People expressed insecurities about becoming ill or dying and not being able to work, losing or changing their jobs and then not having enough education to find a job that pays as well outside of the ACG. They worry about their ability to continue with the standard of living they have grown accustomed to if they ever lost their job in the ACG: They fear that they would have to go back to lives they led before, which would be much more difficult now that they have known better lifestyles. Other concerns include not achieving one's goals, not getting married/being alone, health, and children's futures. One woman worried that she would lose her family and home if she continued working in the ACG against her husband's will. She quit several months later.

¹⁵ Employee 5, personal interview, 5 August 1997.

¹⁶ Employee 11, personal interview, 24 August 1997.

¹⁷ Employee 22, personal interview, 25 September 1997.

¹⁸ Employee 16, personal interview, 12 September 1997.

Health

While most people did not feel that there had been much of a change in their actual health, they did indicate that their access to health care has improved. The following are several questions asked to the employees and their responses:

How is your current health?

Out of twenty-eight responses,

- 60.7% said that their health is currently “good”
- 35.7% said it is “regular”
- 3.6% said it is “bad.”

Has your health changed since you began working in the ACG?

No one feels that their health has deteriorated since working in the ACG; on the contrary

- 28.6% feel that their health is better than it had been in their previous job
- 71.4% think that it is the same as it was before.

Those who feel that their health is better cited factors like not living in a city with air pollution, not working in construction where breathing in the materials gave a person coughs and colds, and having access medical care whereas they hadn’t earlier. The person who believes her health has worsened stated that working outdoors in physically strenuous work when she doesn’t feel well has taken a toll on her health.

How is your current access to health care?

- 86% feel that their current access to health care is good.
- 14% feel that their current access to health care is regular.

How does your current access to health care compare to your previous access?

- 60.7% think that their access to health care is better than it was before.
- 28.6% felt that it is the same as it was before.
- 3.6% said that it is worse than it was before.
- 7.1% did not respond.

Access to health care has improved for many reasons. People who were not insured before now are. Whether through insurance, savings, or loans, people have immediate access to medical attention rather than having to wait to save money to go to the doctor. In cases of emergency, they have radios and access to transportation through the ACG. In comparison to some horrifying stories told about working on ranches where the administrator would get mad at and even fire a person who was hurt on the job, the ACG takes care of its workers and does not penalize them for injuries. The most significant difference, however, is the number of people who are now financially able to forgo the public medical system and use private physicians. Before working in the ACG, only two people had access to private medical care regularly, four people used both private and public services, and twenty-one used public health services. This differs drastically from the current situation, in which nine people use private physicians regularly, ten people use both, and only eight people use only state medical services.

Food

Quality of food is inextricably linked to quality of life. In well-off households, people generally take for granted the availability and affordability of a wide variety of foods. Especially in rural areas of Costa Rica, availability and affordability strictly limit the variety and quality of what people eat. The basic diet consists of rice and beans, and meat or vegetables in limited amounts. From my observation, many households financially were not able to purchase the foods needed for a balanced diet. Many people have to buy their groceries on credit from local stores, which have a very limited stock of meats and fresh vegetables. The large grocery stores in Liberia have a much wider selection, and products tend to be less expensive than in the smaller shops. However, shopping in Liberia requires having the cash to pay up front and paying to transport bulky groceries.

Through working in the ACG and having an increased salary and better access to transportation, many of the ACG employees have noticed a significant difference in their diets. Twelve of the employees buy their food regularly in Liberia at large supermarkets, six buy in both Liberia and Quebrada Grande, seven only in Quebrada, and three in various small shops in towns near where they work. They can also purchase fruit and vegetables from a truck which comes to Santa Rosa once a week. Twenty people think that they are eating better than they did before working in the ACG. Seven think they are eating similarly, and one feels that he or she is eating worse.

According to the interviewees, there are several characteristics of the improved eating habits: People's diet consists of a wider variety of food, especially including more meats and vegetables; they buy and consume a larger quantity of food; they have purchased refrigerators and can store meats and vegetables; they can afford more canned foods; and they now feel that they can eat according to their tastes, rather than just eating what is available.

Several employees commented that working in the ACG and being exposed to the cooking in the dining hall and of foreign researchers has broadened their eating tastes, and they now are eating different things than they would have eaten before. Parents also commented proudly that now they can afford cereals, juices, and cookies for their kids.

Entertainment

The employees' social lives and hobbies have also been altered by their work in the ACG. For instance, increased income and mobility, as well as exposure to generally wealthier foreigners with different customs, have motivated and allowed people to eat out at restaurants much more frequently. Twenty people say that they go out to eat every now and then, and thirteen of these go out to eat more often than they did before working in the ACG. Six go out as frequently as before; two go eat out less often.

Whereas very few people had vacation time before they began working in the ACG—and if they did they would spend it at home—at least ten people now regularly spend their vacation time outside of Quebrada Grande. They often choose a spot within the ACG, whether beach, mountain, or just another sector that they have not had the opportunity to visit. Several people have also gone to visit friends they have made through their work in other parts of Costa Rica, for example, two parataxonomists who went to visit another INBio employee working in another protected wildland.

It was difficult to get a reading on whether or not people feel that their social circle has changed due to their work in the ACG: A few people feel that the majority of their friendships stem from the ACG, but most feel that they have friends both inside and outside of the Conservation Area. It was apparent, however, that people have had rewarding experiences meeting others through their work, and enjoy the sense of belonging that being a part of the ACG gives them.

One of the most interesting changes in the interviewees' personal lives is how working in the ACG has stimulated their intellectual curiosity and prompted some to pursue interests as hobbies. At least five people, none of whom are parataxonomists or research assistants, said that they have used what they learned from the parataxonomists to start their own insect and plant collections. Several people also mentioned that though they may not collect, that they have been much more interested in learning about plants and insects and spend more time with the parataxonomists when they can. Bird watching was also mentioned as a new hobby. Five people said that they read more now than they did before, and three said that they have taken up photography as a hobby. Several men have taken up soccer through the ACG team. One man has become so interested in computers that he now has his own personal computer and color printer. He has his budget on the computer and his daughters have lots of educational games that they play. Another man who works in the fire program has taken on writing as a hobby and is writing stories for children about conservation and how to prevent forest fires. A decision about whether or not one of his stories would be published and distributed nationally was pending in December, 1997.

When asked to consider the amount of free time they have in comparison to before they worked in the ACG, almost equal numbers of people said that they have more free time now as those who think that they have less. Those who have more free time refer to days off, vacations, and regular working hours; those with less are basically doing a lot more now than they did before.

18. WHAT WOULD LIFE HAVE BEEN LIKE WITHOUT THE ACG?

One of the questions which the interviewees found the most interesting was “What do you think that you would be doing right now if you hadn’t found work in the ACG?” They enjoyed the chance to think about where they have come from and how this opportunity had changed their lives.

Seven of the women think that they would be in the house taking care of a lot of children—whether theirs or someone else’s—though two of those thought that they would also probably be selling things out of their homes to help earn money. One woman who is married to a man who also works in research in the ACG and has one child said,

I would probably be married to a ranch hand and have three or four kids. I probably wouldn’t own my own home [like I do now] or have money to buy myself or my son nice things, like those shoes he has on—do you like them?—I talk to [my friend] from high school who is in exactly that situation. She really regrets that she hasn’t worked. I would probably be sad. . .very sad, like [my friend].

Two other women, who also met their spouses through the ACG, said that they would still be single because their parents were so strict that they never would have had the opportunity to meet any men.

Most people think that they would be working in a field similar to what they used to do, whether working on a banana plantation in Limón, in construction, on a ranch, in the police, or in a store. Some people said that they would have had to move to the capital, San Jose, or cities near the capital to find work. Only one person thinks that he might have continued his education through college and continued in an administrative career. Eleven people think they would be working in a temporary position, and thirteen were confident that they would be in permanent work.

Twenty-two out of the twenty-eight (76%) decided that they would probably be earning less money than they are currently earning. Three (11%) guessed that they would be earning a similar amount, and only one (3.6%) said that he would earn more if he were not working in the ACG.

CONCLUSION

In the late 1980s, in an effort to avoid a scenario in which local residents undervalue, encroach upon, and threaten conserved wildlands, the Guanacaste Conservation Area (ACG) set as a goal the incorporation of local towns into its management infrastructure and educational programming. Essentially hoping to co-opt its primary contestant, the ACG sought to hire local residents, patronize local businesses, generate income, goods and services for northwestern Costa Rica, and educate local children concerning tropical biology and conservation. If the local communities could be convinced of the economic and social advantages offered by a nearby wildland conservation area, then the relationship could prove mutually beneficial.

This paper explored the question: Has employing local residents proved advantageous for both the individuals hired and the Conservation Area?

Broken down, this query provides two more specific questions:

- How has hiring local residents to work in the ACG affected those employees' lives?
- Has hiring local residents forwarded the Conservation Area's goal of promoting the longevity of the Area?

ACG Employees' Lives Change for the Better

After over a hundred hours of formal interviews with 28 employees, and ten months of participant-observation in their working lives in the ACG and private lives in Quebrada Grande, I can confidently report that working in the ACG improved local employees' lives.

Many of the jobs ACG employees had held before working in the ACG were basic blue-collar positions—ranching, factory-work, construction, or plantation-work—consisting of repetitive, physical labor directed by a supervisor. Women who were not employed outside the home worked hard taking care of their families. Two-thirds of those who worked outside the home had stable employment, the other one-third moved between temporary positions. In most cases the pay was low, sometimes nothing at all. Very few of the jobs offered benefits like insurance, employees' associations, transportation, or educational opportunities. Often the employees worked in socially and physically challenging environments. Schedules were demanding and relentless. While their work was important to them because it supported them and their families, for many of the

interviewees their jobs generated little intellectual interest and lacked more profound meaning. At times their work did not allow them to spend much time with their families, and their incomes did not provide for a decent standard of living.

According to the interviewees, working in the ACG has changed their lives in many respects. The economic stability provided by regular and generous salaries, and the benefits provided by their contracts and the ACG employees' association, have promoted their families' standard of living. They have improved their living arrangements, buying or renting their own homes and furnishing them with ample material goods like couches, televisions, refrigerators, and ovens. The variety in their diet has increased and they have better access to public and private health care. They can buy themselves and their children new fashionable clothes. Children can purchase the correct materials for school. All of these changes contribute to a more stable and rewarding family life.

The employees' lives have also been enhanced by working in a comfortable environment for an institution which grants them autonomy and educational opportunities. Rather than conducting menial labor in which every task has been prescribed by a supervisor, the interviewees now work independently on intellectually challenging projects. The ACG gives them the education they need to do their jobs, and they also learn skills through practical application. Consequentially, they are intellectually captivated by their work and feel more confident in themselves. Through working in the ACG, people who had been told their whole lives that they were good only for herding cattle, wielding a hammer, or washing clothes came to realize that they can think critically, understand complicated theories, and plan and execute a project. Now, their supervisors and coworkers respect and trust them. They also are introduced to other parts of Costa Rica, prominent Costa Ricans, and an array of foreign visitors to Costa Rica. The interaction with these people further expands their knowledge and boosts their confidence.

According to the interviewees, working for conservation makes their work rewarding because they believe that they are working toward an important goal— the attainment of which will help their family, their town, their country, and the world.

Finally, working in the ACG has profoundly touched the private lives of the employees. As detailed above, greater financial stability and security has greatly improved their quality of life. The interviewees have also learned new interpersonal skills and discovered a new support network, both of which help them deal with personal problems. In some cases,

the ACG has contributed to the resolution of serious health and familial problems. The employees' newly gained self-confidence, security, and access to opportunity in the ACG have fostered new aspirations for their future.

Contributions to the Goals of the ACG

Hiring local employees has contributed to forwarding the ACG's goal of promoting the longevity of the Area. Primarily, it has incorporated a group of diligent, intelligent, and committed individuals to working for the progress of the Area. It has also educated a core group of local residents about the value of conservation, and some of these individuals have begun to teach what they learned to their family members. To a lesser degree, they have also influenced the beliefs of their neighbors. Some of the employees act as informal extension workers, encouraging their families and neighbors to participate in ACG educational and social functions.

These employees now fully depend on the continuity of the ACG for their livelihood, and will be certain to favor conservation in their future political and social decisions. Some of their neighbors also understand that the employees' quality of life depends on the success of the ACG, and would presumably support the ACG and other conservation projects for that reason.

Furthermore, hiring locals has given many of those employees the skills that they need to become respected and active members of their community. The ideal situation would be that these people would actually become community leaders, but the reality portrayed in the interviews is that many individuals' jobs are so time-consuming that people have not had the opportunity to become involved in town organizations. At the least, they will lead others through their example.

It should be noted, however, that hiring local employees should remain only one facet of the ACG's work to convince local communities of the worth of the Conservation Area. It is a necessary element of a wider array of activities and programs designed to educate local residents about conservation. ACG employees mentioned that while the Biological Education Program and Fire Program have successfully educated the local youth, there is a large gap in the understanding between the ACG and the adults. They feel that the ACG needs to focus more attention on the older populations.

Overall, the experience of hiring local employees from Quebrada Grande has proven an incredibly successful mechanism for forwarding the goals of a local town and a large conservation area simultaneously. Although this is only one case study, it provides an inspiring example of the possibilities of sustainable development for society and conservation.