

Dependent Environmentalism: A Case Study of *Orer*os and the Corcovado National Park in Costa Rica

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I use the phrase “dependent environmentalism” to describe the process in which a conjuncture of three interests—local environmental elites, international environmental elites, and the state—structures and shapes environmental conservation in less-developed countries. In the case study presented, the imposition of a U.S. national park model and a U.S. environmental ethic of “wilderness thinking” in the establishment and management of Costa Rica’s Corcovado National Park had deleterious effects on the local gold-mining-based economy and peasant *orer*os (gold miners). This paper examines the environmental, economic, and social context of the park’s establishment and demonstrates a need for more inclusive strategies of natural resource protection that show more concern for affected populations of rural poor.

Introduction

COSTA RICA is for many reasons one of the most remarkable countries in the world. Two achievements set it apart: the abolition of a standing army after a civil war in 1948, and the dedication of its government and leaders to environmental conservation and preservation. This paper takes a sympathetic but critical look at one of Costa Rica’s celebrated environmental achievements.

Costa Rica’s achievements have, at least statistically, taken on extraordinary dimensions. Over a period spanning just three decades, a succession of Costa Rican governments has set aside more than a fourth (28 percent) of the country as protected land. This includes 11 percent of the country in national parks (Figure 1), 4 percent in indigenous reserves, and 13 percent for a variety of purposes including national forests, monuments, wildlife refuges, and biological reserves. Today, Costa Rica stands as a shining example of what



Figure 1—National parks of Costa Rica. (Adapted from Evans 1999, 9.)

a country with limited resources can do. It has indeed become, following the title of historian Sterling Evans’s 1999 book, a “green republic.”

Set in context, this achievement is even more laudatory. Like all of Central America, Costa Rica suffered terribly over the same period from a host of economic and environmental afflictions, including the loss of most of its remaining forest cover due to the highest deforestation rate in all of Latin America (Sader and Joyce 1988, 14; Jones 1992); a related crisis in soil degradation through erosion (Faber 1993, 64); a high per capita debt load (231) and rapid population growth (75); inflation and diminished spending power among most segments of society; periods of high unemployment (Evans 1999, 109–10, 144); and the dedication of much of the country’s most productive land to export crops and ranching rather than subsistence agriculture (Williams 1986, 115–17; Nations and Komer 1987).

Given these conditions, Costa Rican environmentalists would probably not have accomplished much without encouragement, expertise, and financial support provided by environmental groups and agencies from the developed world, particularly the United States. Therein lies the rub: there are always strings—even invisible strings—attached to such support, and sometimes these strings involve expectations rooted in North American environmental assumptions that take too little account of local human needs and conditions.

In 1979, Peter Evans published an incisive analysis of the political economy of development in Brazil titled *Dependent Development: The Alliance of Multinational, State, and Local Capital in Brazil*. Evans argued that dependency theories failed to explain how or why diverse groups formed coalitions as less-developed countries interacted with the world economy. In his case study, Evans demonstrated how Brazilian development had been structured by a three-sided conjuncture of interests—local capital, international capital, and the state—that had joined as partners in economic investment and growth. “Dependent development” was Evans’s label for this tripartite coalition.

I apply Evans’s analysis to environmental development in Costa Rica in this paper, arguing that environmental conservation efforts followed a similar pattern of “dependent *environmentalism*,” structured by a conjuncture of interests representing local environmental elites, international environmental elites, and the state. I argue that when the assumptions of North American environmentalists are applied to less-developed countries, with insufficient concern for the welfare of inhabitants of conservation areas, the impacts on local economies and the rural poor can be harmful if not devastating.

During fieldwork conducted on the social impacts of the establishment and expansion of the Corcovado National Park on the Osa Peninsula, I found dependent environmentalism to be very much in evidence, undermining the welfare of hard-working people. Because this park was based on North American notions of how a wilderness should be conserved, local inhabitants were denied access to resources such as placer gold that for decades had formed the basis of a local economy.

The creation of Corcovado National Park in 1975 very much followed a U.S. “national park model” of wilderness conservation.¹

The coalition of interests behind park formation included the Costa Rican government, Costa Rican environmentalists trained in U.S. conservation and park management programs, and U.S. institutions and scientists who provided education, expertise, encouragement, and funding. Local inhabitants, who were not consulted in the process, were forcibly ejected from the park with little concern for their welfare, and much of their economy was destroyed as a result.

My fieldwork was conducted in 1984 and 1985. Subsequently, Costa Rican environmentalists endeavored to bring a greater sense of social justice into their environmental planning (Evans 1999, 154–81), and by no means do I wish to indict their earlier efforts—all things considered, their achievements were truly extraordinary. Rather, I hope to add a cautionary note to the assessment of environmental initiatives in less-developed countries.

Gold Rush History of the Osa Peninsula

The gold-rich core of the Osa Peninsula is composed primarily of incredibly rugged ridges of volcanic origin, rising to a maximum height of 745 meters and cut so tightly by a complex system of rivers and tributaries that few people besides hunters, miners, scientists, and sanctuary-seekers are attracted to the area. The peninsula receives between four and six meters of rainfall annually with a short dry season.

The power of rain and rushing water is a daunting force of nature on the peninsula. As the rain drenches the hillsides, it pours into the rivers and cascades towards the ocean. Rivers and streams comprise the main routes of travel. One is always wet and always removing river-borne grains and pebbles from one's boots. Rivers have taken a number of miners' lives and can be especially dangerous when swollen after a heavy downpour, especially as they near the sea. The mouth of the Madrigal River, at Madrigal Beach, emits a roar like a dozen bulldozers at work. There the water meets a thundering Pacific Ocean with breakers so strong and constant that even gold can hardly escape. Madrigal is one of the few beaches on earth where heavy particles of gold are thrown back upon it.

Oreros (gold miners) came in numbers to the Osa Peninsula during the first modern gold rush in the late 1930s. According to local lore, the rush began in 1937 when a man named Ernesto, who was for-

aging along Madrigal Beach, picked up a shell and shook it only to discover a large nugget of gold rattling inside. Within two years, more than 2,000 miners were crowded along this extraordinary beach and foreign buyers (largely German merchants) were using airplanes to ferry money and supplies in and gold out.

Miners from the 1930s gold rush panned the dark volcanic sands of Madrigal Beach and found gold everywhere. They would haul five-gallon cans of sand up the beach to a little stream in which the work of panning could be done. Miners would either do the panning themselves or sell their sand to panning specialists. On average, five gallons of sand would yield between five and seven grams of gold, a gold so fine in texture that it became famous to jewelers worldwide as *Oro Madrigal* (Madrigal Gold).

The early *oreros* prospered in almost complete physical isolation from the rest of the world. There were fights, deaths, and tales of theft and betrayal, but there were also families, births, stories of love, and measures of contentment. It was an active, thriving community until World War II, when the money/supply chain was cut off because so many of the airborne merchants had been German. Most of the miners and mining families subsequently dispersed.

Those who stayed were not to see a similar economy return to the peninsula for almost thirty years. The price of gold had been linked to the U.S. dollar and frozen in 1935. Not until Richard Nixon's presidency did the United States go off the gold standard, and not until January of 1974 did it become legal once again for U.S. citizens to own gold. In the intervening decades, the life of an *orero* was generally uneconomical and few remained on the peninsula. According to one veteran who had settled there in the mid-1960s, the entire population of the gold rivers of the peninsula in 1967 comprised just eleven families.

This changed quickly as the price of gold rose from U.S. \$35 per troy ounce in 1974 to as high as U.S. \$800 by 1977, and eventually settled in the U.S. \$300–\$400 range, where it remains today. Over the next two decades, growing numbers of Costa Ricans migrated to the Osa Peninsula. Old miners returned and new miners learned the trade working beside *oreros* who had been there undisturbed for decades. The populations of makeshift villages swelled, forcing some inhabitants to scavenge necessities by begging or thievery.

The influx of needy strangers to a thriving local economy created a crisis that in part led to the establishment of the Corcovado National Park in 1975 and extensions to the park in 1978, 1980, and 1985. Gold mining was outlawed in the new park, despite the fact that park boundaries encompassed the most productive gold rivers on the peninsula (Figure 2), and officials made periodic, if often unsuccessful, attempts to remove humans from the park.

Damage from mining was not the only or even main environmental concern behind the creation of the park. Livestock production had cleared many lowland areas of the peninsula (Figure 3), and a timber company, Osa Productos Forestales, which owned large tracts of the lush rainforest that it periodically cropped, had threatened to subdivide larger sections for real estate development; it had also begun discussions with a foreign (Japanese) corporation to begin more aggressive logging. In addition, a U.S. corporation was considering investing in a citrus plantation. Of greatest concern to environmentalists, however, was the growth in the number of *precaristas* (peasant squatters) who had begun laying claim to vulnerable sections of land (Christen 1994, 60–63; 81–82).

The thriving economy that sprouted so quickly after the price of gold began to rise explains why the creators of the Corcovado National Park (and those who later expanded it) had to seek international funding to help the government buy out the *oreros*, farmers, merchants, and traders residing within its boundaries. Although these individuals might not have owned park property in a legal sense, Costa Rican law requires that squatters be compensated in full for any “improvements” they make to land occupied for 3 months or longer before they can be removed. No compensation, however, was provided for their lost income or for the lost opportunities for prosperity that mining was bringing to the region.

Life Among the *Oberos*

Fieldwork among the *oreros* of the Osa Peninsula in the mid-1980s was an extraordinary but disturbing experience. To be identified as a scientist in this remote Pacific Coast location, as happened to me on several occasions, could be deadly. A month prior to the 1975 establishment of the park, a foreigner—Swedish environmentalist Olof Wessberg—was murdered by machete by a local man while surveying the area for the government. A subsequent decade of ten-

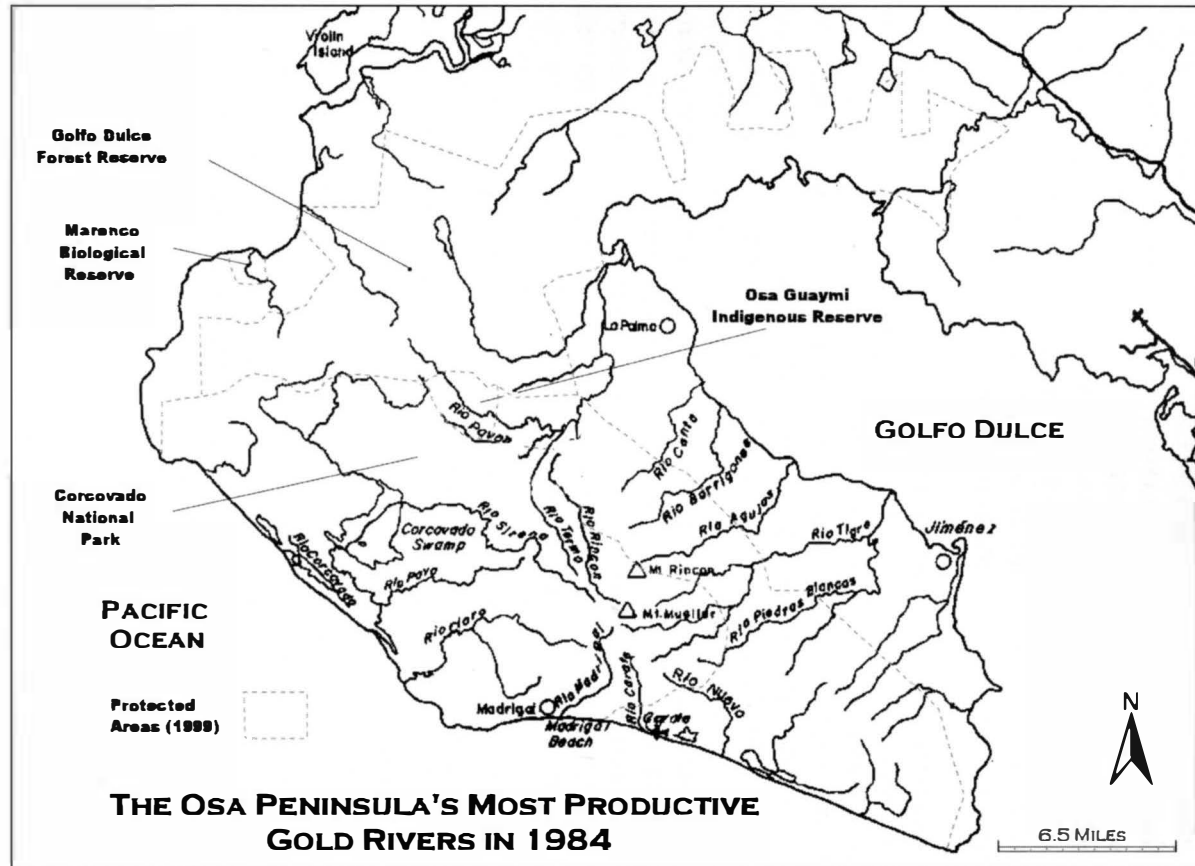




Figure 3—Lumbering and forest clearing continue to threaten areas adjacent to the Corcovado National Park in 1984. (Photograph by author.)

sions between miners and park officials was reaching a moment of crisis when I arrived.

At the time, I was less interested in national parks, environmentalism, and social fairness than in gold. I was there to meet miners, listen to their stories, and observe their work for a book I was writing. Toward that end I recorded the oral history of gold rushes on the Osa Peninsula from an expatriate American adventurer, Patrick Jay O'Connell, who had prospered as a resident gold trader for more than twenty years. Growing to share my informant's love and respect for the peninsula and its inhabitants, I published my research in *Goldwalker: Tales of the Osa Peninsula of Costa Rica from the Life of Patrick Jay O'Connell* (1989). Looking back with new theoretical insight, I find that this lingering love and respect—an insider's view—both colors and adds color to my analysis.

By the time of my first encounter with *oreros* in 1984, the miners and park officials had reached an uneasy standoff. The closing of the banana plantations in nearby Golfito had brought a recent in-

flux of needy and politically sophisticated migrants into the mining community, perched in settlements at the park's fringes. *Oberos* made occasional forays into prized spots along the gold rivers, living in shelters made of little more than poles and polyethylene sheeting, panning nervously, and disappearing back into the rugged hill-sides whenever they feared discovery. There was anger and occasional violence. Park officials, intimidated by the miners as much as they intimidated the miners, no longer acted with authority to expel the interlopers. Instead, they called for special units of Rural Guard commandos (police) from the capital to do the unpleasant and dangerous business for them. As a result, miners became more timid when commandos were in the area but bolder when they were gone (Figure 4).

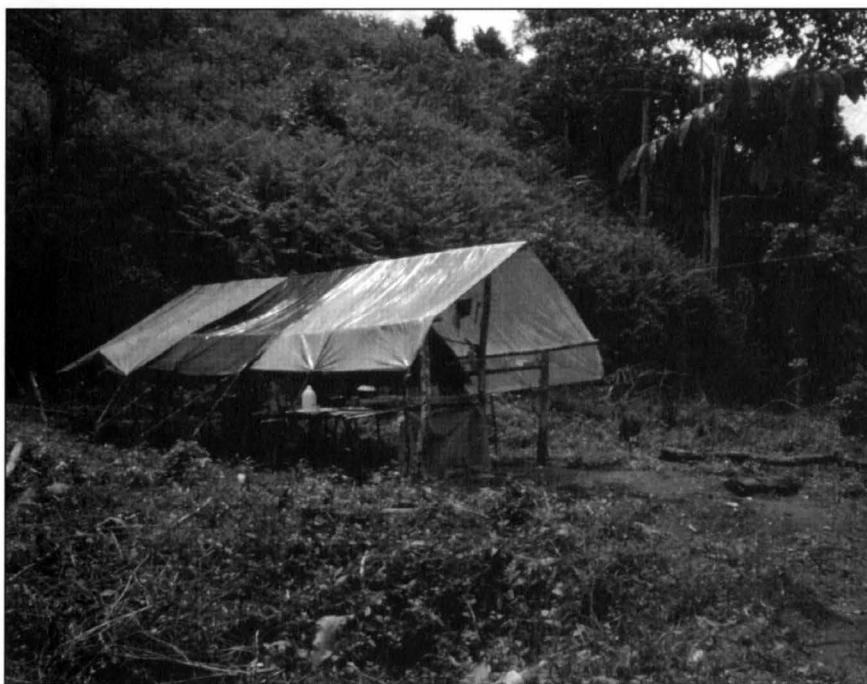


Figure 4—Squatting illegally within national park boundaries, the oreros living in this makeshift shelter fled into the rainforest at the sound of approaching strangers, leaving warm food on the table. (Photograph by author, 1984.)

Most miners lived and worked in families. They built homes in the open *rancho* style suited to the warm, wet climate. They worked in the rivers and saved, aspiring to acquire the small private *finca* (farm)

that was every *campesino's* dream. There were several criminals and desperados among them—unsavory characters, known by nicknames and often the subject of legends—but they frequently became productive members of a society that did not judge them and offered meaningful work. One miner, known locally as Juan Torte (Juan the Screw-Up) threw a legendary party after finding a nugget weighing fourteen pounds on Violin Island north of the Osa Peninsula. An eight-pound nugget was pictured on the cover of *Argosy Magazine* in the 1970s and the discovery of other large nuggets was a frequent occurrence (Figure 5). (The record pan was measured at half a kilogram.)



Figure 5—This splendid nugget, weighing nearly two pounds, was worth about ten years' wages for the average Costa Rican. (Photograph by author, 1984.)

Oreros seldom needed to leave the settlements that had sprung up along the gold rivers. A group of perhaps twenty petty entrepreneurs, including my informant O'Connell, regularly traveled the rivers and footpaths of the peninsula to trade for gold and deliver medicines and supplies. Tiny stores among the hills allowed miners to acquire staples such as beans and rice, chilies, saltines, tinned fish, and flashlight batteries. Some of these *pulperias* also sold alcohol, on which so much of the local social life hinged. The occasional *cantina* in the larger settlements sold hot food and cold beer

and often stayed open into the night under electric lights supplied by generators (Figure 6).

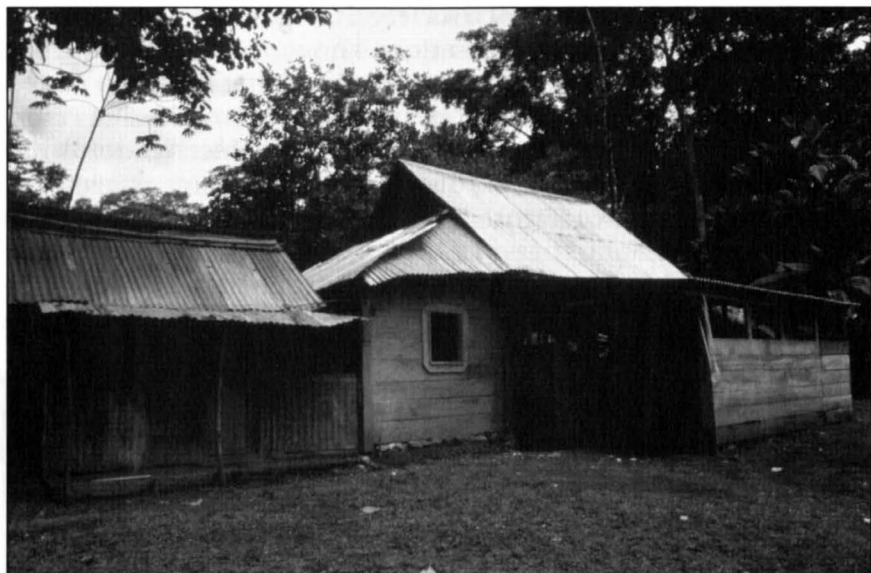


Figure 6—This pulperia, or small store, represented small-scale economic development and provided miners with necessities such as canned fish, saltines, flashlight batteries, and news from the outside world. (Photograph by author, 1984.)

By 1984, cattle were grazing in lowland areas and miners had settled in all the productive rivers beyond the park boundary. There were several dozen small settlements and a growing community on a section of Madrigal Beach just beyond the park's edge. Puerto Jiménez, the peninsula's oldest permanent community with a relatively protected harbor on the Golfo Dulce, had grown into a thriving town and port. In addition to a bank and post office, Puerto Jiménez contained motels, flophouses, two Chinese restaurants, and a large well-stocked hardware store. It was served by buses, several new roads, and two airfields, and local entrepreneurs were doing brisk business in trade, transport, hauling, agriculture, real estate, and construction.

Miners on the Peninsula had a common saying: "*El río es mi patrón y su ley es un gramo al día*" ("The river is my boss and its law is a gram a day"). To find and pan a gram of gold daily took an average

of four hours' heavy toil and represented a healthy income within the local economy; its value varied, but a gram was in the range of U.S. \$10. People came and went, but O'Connell estimated that there were 2,000 miners working in the rivers and on the beach in 1984. A government study confirmed that 1,500 *oreros* were working illegally in the park in 1985 and an additional 3,500 were working in nearby areas (Evans 1999, 144). According to my estimate, the community above Madrigal Beach had approximately five hundred inhabitants living in two hundred makeshift houses. Working half-time, miners were bringing at least U.S. \$10,000 into the local economy each day. Total earnings would have reached several million dollars each year without considering the occasional rich strike. According to traders I consulted with, this is a reasonable estimate of the extent of the local industry before the extensions of the park and enforcement of evictions. The estimate is also supported by a government report showing the country exported refined gold valued at \$3,558,080 in 1982 (Evans 1999, 144), most of which came from the Osa Peninsula and nearby areas.

The gold industry was leading to what political economists define as "articulated"—as opposed to "disarticulated"—development (De Janvry 1981), because it was an inclusive rather than exclusive economic activity and put spending money into the pockets of a wide range of people. With a very small initial investment—a pick, a shovel, and a pan—a worker could be in business. It was a democratic (even anarchistic) economy, with rules and customs of rights and behavior established through practice and negotiation by the local population. Rights of access were denied to no one, but qualities of persistence, intelligence, experience, and intuition brought rewards to the ablest veterans. The gold industry involved a renewable staple commodity in the sense that gold was continually eroding from the hillsides and tumbling into the rivers. Gold mining led to the proliferation of businesses linked to the staple resource by small investments, a spirit of entrepreneurship, and a market. A number of other multiplier effects had begun to materialize from gold mining; it was even playing an important, if minor, role in helping the government address the national debt.

Environmental Impacts on the Osa Peninsula

Orero Mining

Orero practices were virtually indistinguishable in their environmental impact from the powerful natural processes at work upon these

river valleys. Although there were some *orero* concession mine cops (described below), most peasant miners worked alone or in small groups, choosing sites by instinct or experience, interpreting the terrain and its evolution, and looking for pockets in ancient riverbeds in which heavy chunks of gold might once have settled. In a few instances a discovery led to tunneling, but in local practice this was extremely dangerous and favored by few. Most of the *oreros* I saw worked in or near the rivers, digging and panning in quiet contemplation. Disturbances they made added minuscule amounts of particulate matter to rivers that were already heavily laden with soil, pebbles, rocks, and boulders that constantly tumbled downward from the rain-soaked, eroding hillsides. Scars in riverbanks left behind by *oreros* washed away in a few months.

One experienced group of miners I met (two partners and their families) applied a very systematic technique to their claim. They had set about the laborious task of moving every rock, pebble, and grain within their stretch of river valley—about a hundred meters long and half as wide—from one side of the river to the other, panning every shovelful (Figure 7). With patience and persistence, in a process taking several years, they were determined to capture every grain of gold in their claim. What boulders they could not move by hand they smashed into pieces with sledges. They worked quietly and left behind a river valley looking virtually undisturbed. They were making a solid, independent living and contributing to the local economy. The leader of these miners, I should add, was seventy years old, looked fifty, and had been mining on the peninsula for more than forty years.

Only two significant environmental problems were caused by the growing number of *oreros* on the peninsula. The first was the use of mercury in the process of securing traces of gold from the bottom of a pan.² The second was hunting for food and pleasure.

Hunting

Wild pig, which had always been abundant in the region, was a favorite game. The large herds of several hundred beasts that had brought my informant O'Connell to the peninsula in the first place had diminished dramatically over the previous decades. Tapir, the large mammals for whom the peninsula is named (although *osa* translates as "she-bear" it is used locally to describe the tapir), had become exceedingly rare. Alligators had been a favorite prey during the quiet times on the peninsula; and hunters had been able to sell



Figure 7—The impact of this orero's practices, moving every rock and pebble by hand from one side of the river to the other, was virtually indistinguishable from the powerful natural processes at work upon the rivers. (Photograph by author, 1984.)

hides for quick income when the price of gold was low. They also boiled alligator fat to make *manteca*, an oil they sold for medicine. As a result, most of the larger alligators had been wiped out by 1984. Other favorite prey were *gallina de palo* (literally "tree chickens," referring to iguana) and *tepezquintle* (paca, opossum-sized nocturnal rodents reputed to be of particularly delicious flavor).

Hunting, however, ceased to be a necessity once the price of gold began to rise. Miners could afford the rice, beans, and chilies that were the local staple diet, and they could purchase milk, eggs, and meat from local farmers. Also, they could clear small patches of ground to grow roots crops such as yucca and malanga, takiski (a fruit), and squash, papaya, plantain, lemon, and sour orange. As long as gold profits fueled the economy, there was always money for food. One effect of the incorporation of the best gold rivers into the national park was the depression of this economy and the increased need for locals to supplement their diets through hunting.

The park may have protected those species within its boundaries from excessive poaching, but this exacerbated the problems in the surrounding ecosystems. Costa Rican environmentalists began to address this problem by emphasizing management of "buffer zones" beyond national park boundaries rather than acquisition of more national park land (Evans 1999, 145).

Concession Mines

As practiced by individual *oreros*, mining was potentially, although not necessarily, environmentally destructive. But there was a second group of miners on the peninsula whose impacts on the economy, politics, and environment cannot be underestimated: these were professional miners representing international capital from the United States, Canada, Japan, and Europe. Joined by local partners, they obtained contract agreements from the Costa Rican government giving them gold rights to specific locations; such outfits were called "concession mines" and their local reputation was poor.²

Concession mines had serious impacts on the economies and environments in which they operated. They evicted all squatters within their concession areas and hired armed guards to keep people away.³ Mine operators employed few locals and rarely for long, hiring carpenters and heavy equipment operators just long enough to set up facilities. Perhaps a cook or a bulldozer operator would find permanent work, but most of the professional miners were foreigners whose wages were many times the local scale. From these enterprises gold profits were mostly expatriated or spent on imported fuel and machinery, with few multiplier effects to enrich the local economy.

Environmentally, the difference between bulldozers and men with picks and shovels was profound. Concession mining brought noise, fumes, and complete disturbance of the river valleys (Figure 8). Although environmentally devastating "hydraulic giants" were outlawed on most of the peninsula, typical concession mine practice used bulldozers to drive every bit of loose matter from the floodplain through a sluice, leaving a large area of scarred terrain, piles of tailings, and heavy siltation downriver. Government requirements for restoration were either ineffective or not followed. Concession mining lent credibility to expert reports blaming excess river siltation on mining and calling for such practice to be outlawed in the park.



Figure 8—Foreign-owned concession mines greatly disturbed rainforest ecosystems while providing few resources for the development of local communities. (Photograph by author, 1984.)

Dependent Environmentalism in Action

Evictions

The miners and citizens of the Osa Peninsula resisted the encroachment of the national park upon their livelihoods. Repeatedly I heard angry complaints that the park was “*internacionalista*” (internationalist) when it should have been “*nacionalista*” (nationalist), indicating an underlying feeling it had been incorporated for an international purpose regardless of its claim to be a “national resource.” In the eyes of the locals the land was being reserved for the interests of a handful of scientists (which was a fairly accurate assumption at the time—its value as an ecotourism attraction with jobs and opportunities for locals had yet to be established). Whenever a group of miners gathered, one would inevitably quote former President León Cortés, a politician from the 1930s, who upon thwarting an earlier imperialist encroachment, declared: “All the rivers of Costa Rica are free for all people with pick and shovel!”

Oreros were aware of the conservation efforts that supported the park’s establishment. As rural peasants, they too had a special rev-

erence for the land and its preservation and were fully prepared to support such an effort. What they could not understand, however, was the way conservation was structured to deny them access to resources, even if they found ways to exploit placer deposits with a limited environmental impact. They proposed alternative strategies; according to one, miners would be licensed and enlisted as unpaid park guards, vigilant against hunting and the use of mercury, in exchange for the right to work in the rivers.

Their suggestions went unheeded and in 1986 the Costa Rican government decided to drive all *oreros* from the Corcovado National Park. On March 2, the Rural Guard evicted them, destroying their shelters and seizing their mining equipment. Although the evictions were meant to proceed without payment, the government ended up paying out U.S. \$3,800 to each *orero* in 1987 (Evans 1999, 145). Illegal mining resumed in the park and surrounding areas several years later, and the uneasy standoff between *oreros* and park guards persists to this day.

The Tripartite Coalition

International Interests

There are multiple actors and motives behind any major accomplishment such as the creation of the Corcovado National Park, but the role of the international scientific and environmentalist community in this effort cannot be underestimated. According to environmental historian Catherine Christen, whose 1994 dissertation describes the creation of the park in great detail, a cadre of more than 1,000 students and scientists who conducted fieldwork from 1962 through 1973 on the Osa Peninsula at the Tropical Science Center's Rincón station formed the backbone of a powerful and influential conservationist constituency that lobbied for the creation of the park. Christen (1994, 136) argued: "Corcovado's conception and creation were inextricably tied to professional estimates of the region's scientific merit," and she ascribed very deliberate and self-seeking motives to this largely foreign-born and foreign-trained constituency:

By the 1960s and 1970s, the once contented tropical scientists found that if they wanted to continue to pursue their Costa Rican studies in the style to which they had become accustomed, they might be obliged to enter the fray of the always ongoing Costa Rican debate about land use rights, privileges, policies, and practice. They would have to introduce a new paradigm,

conservationism, one which directly competed with the traditional Costa Rican concept that land should be worked and “improved” if it were to serve the country’s interest. Scientists and a growing cadre of allies had to begin to think about what might be the political, economic, and social justifications of preserving land in its natural state. Just as importantly, they had to determine how they might convincingly communicate those values to Costa Rican policy makers without running afoul of the continual menace of being branded foreign or elite interventionists. (1994, 28)

In introducing the new paradigm of conservationism to Costa Rica, this international conservationist constituency employed notions of land management arising from a mostly U.S. context of dealing with wild or sparsely-populated territories.

Ramachandra Guha (1989) provides an informative interpretation of the nature of North American conceptions of environmentalism and shows how they do not always translate appropriately within other contexts. According to Guha, there are three main approaches to environmental ethics, each of which posits a social utopia and each of which bears a distinctly U.S. origin. *Agrarianism*, founded in medieval Europe, has a long tradition in the settling of the United States and the writings of Thomas Jefferson. *Scientific industrialism* represents a philosophy of resource use exemplified by U.S. Forest Service policies. It seeks to replace the anarchy of market economics with rational programs of state control and management. *Wilderness thinking*, Guha argues, is the dominant paradigm among U.S. environmentalists. It gained early currency in the writings of New Englander Henry David Thoreau and naturalist John Muir, and has become a fundamental tenet of organizations such as the Sierra Club, the Nature Conservancy, and the World Wildlife Fund. Taking nature appreciation as an indication of a culture’s maturity, wilderness thinking substitutes biocentric for anthropocentric values. In its most radical formulation, wilderness thinking takes pre-Columbian America as its utopia and espouses a 90 percent reduction in human population worldwide as a precondition for long-term survival (Hall 1990).

In more recent environmental discourse, especially in the face of worldwide destruction of habitats such as the Amazon rainforest, wilderness thinking has become a philosophy of desperation. It has given rise to its own journals, such as *Wild Earth*, and has inspired a growing cadre of voices, led by Gary Snyder (1996, 1967), Donald

Worster (1997), and Wendell Berry (2002), extolling the virtues of untouched places. It has also given rise to a cadre of critics, including William Cronon (1996), Richard White (1996), and David Demeritt (1994), who suggest that wilderness thinking stems from a mostly elite construction of a cultural myth of a mostly nonexistent world presumed to be untouched by human hands. This myth sees centuries of North American depredations on the land as an almost unstoppable force that can be curbed only by removing humans from protected places. For Americans who bear a collective guilt for centuries of unhindered plundering of a continent—and for whom there are so many alternative and environmentally benign ways to make a living—wilderness thinking represents a logical and noble mode of resistance. It also represents a very attractive cause for donations.

Enormous sums of money are collected by North American, European, and international environmental organizations that promise wilderness preservation initiatives in places of desperate need (see Bonner 1993). It is only natural that these initiatives reflect the environmental ethics of the donors. It is also to be expected that environmentalists from less-developed countries internalize to some degree the environmental ethics of donor societies, especially when they receive training and guidance from donors as well as financial support.

Local Environmentalists

Costa Rica's success in attracting money and training from environmental agencies and institutions in donor countries has been remarkable. Sterling Evans has documented this story in great detail in *The Green Republic* (1999). According to national lore, the story begins with two Costa Rican naturalists, Alvaro Ugalde and Mario Boza, who heroically spearheaded a national environmental movement that began with almost no local resources. Boza became the first and only national park employee in Costa Rica in 1970, the same year that Ugalde became the unpaid superintendent of the Santa Rosa Battlefield National Park. Both were profoundly influenced by mentors steeped in the North American wilderness-thinking tradition, especially those associated with the Tropical Science Center and its Osa Peninsula field station. Both took training courses sponsored by the U.S. National Park Service, and Boza sent a number of employees to training programs run by the U.S. National Park Service. At one point, Ugalde took a leave of absence to get a master's degree in environmental management from the Uni-

versity of Michigan. For their work, including the creation of the Corcovado National Park, Boza and Ugalde in 1983 shared the most prestigious international honor for environmental activism—the J. Paul Getty Wildlife Conservation Prize.

According to Christen (1994), however, the story of the establishment and expansion of the Corcovado National Park began not with Ugalde and Boza but with direct interventions by the constituency of mostly North American scientists and environmentalists associated with the Tropical Science Center's Rincón station. The station had been run by North American scientists during the eleven years of its presence on the Osa Peninsula, but closed in 1973 after relations deteriorated with the timber company from which it leased land. Its displaced scientists, by nature and training disposed to wilderness thinking, were motivated not only by a desire to see ecosystems preserved on the peninsula, but now also by the need for a permanent place from which they could continue "concerted, long-term scientific study of the kind that had been carried out at the Rincón station" (135).

A complementary group that had also been run mostly by U.S. scientists, the Organization for Tropical Studies, also sought a permanent station on the Osa Peninsula "to insure local continuity for its own long-term scientific research and training programs" (Christen 1994, 136). Both of these organizations had a tremendous influence on the growing cadre of Costa Rican environmentalists and scientists who had received training in biology, ecology, and conservation in Costa Rica and abroad. Both Costa Rican and foreign individuals associated with the two groups became aggressive lobbyists for the creation of the park, especially after they arrived at a consensus as to where and how much of the Osa Peninsula was to be preserved (138).

U.S. Peace Corps volunteers were instrumental in creating and implementing the consensus. Beginning in 1971, when the Peace Corps sent 120 volunteers to Costa Rica, Boza and Ugalde often had more Peace Corps volunteers under their supervision than regular park service employees. One former volunteer, wildlife biologist Christopher Vaughan, wrote the management plan for the future park in 1971, and another, Tex Hawkins, helped develop a public relations program for Boza's department (Evans 1999, 85–87).

The consensus was cemented in 1973 after another group of scientists—biologists from the University of Florida—published and distributed an emotional and convincing brochure extolling the rich natural heritage of the Osa Peninsula and the threats posed by squatters seeking arable farm land. The brochure, *La Cuenca del Corcovado* (The Corcovado Basin), included “a plea to its readers to advocate the accumulation of political support and funding to effect protection” of what it defined as the Corcovado Basin, an area that corresponded to the most productive gold rivers on the peninsula. One of the brochure’s authors, ecologist Jack Ewel, identified the proposed location of the park and was thus responsible for much of its character (Christen 1994, 264).

Ewel and other members of the mostly U.S. conservationist constituency made sure that Costa Ricans perceived the Corcovado conservation project as “a Costa Rican venture” (Christen 1994, 265). In the years leading up to the park’s creation, they maintained a low public profile while working behind the scenes. They rejected an earlier notion of establishing an international refuge and began describing the park as a showcase national resource for Costa Ricans. This was an essential element in achieving buy-in from the Costa Rican environmental elites.

Costa Rican Government

The Corcovado National Park finally became a reality when the third party to dependent environmentalism’s tripartite coalition—the Costa Rican government—realized its interests in the park’s creation. In 1975, the conservationist constituency convinced newly elected President Daniel Oduber that it would be a wise political move, both nationally and internationally, to establish the park. Alvaro Ugalde, who became Oduber’s national parks service director, stated publicly that the Corcovado conservation effort was one of his agency’s top priorities, reaffirming its identification as a national project and making it possible for the President to support it politically (Christen 1994, 350).

A succinct and moving letter to Oduber from Italian scientist Paolo Cappelli also caught Oduber’s attention (Christen 1994, 369), and an extremely influential lobbyist—Karen Olsen de Figueres, the Danish-born and American-raised wife of Costa Rica’s most revered political figure, President José Figueres—caught his ear (Evans 1999, 76–77). Members of international conservation organizations made

a promise to find a decoration with which to reward Oduber if he were to establish the park (Christen 1994, 373). He did so, by decree, and was presented with the Albert Schweitzer Award from the World Wildlife Fund in 1976 and the Green World Award by the New York Botanical Gardens in 1977 (387).

Oduber played a significant role in the coalition of interests, committing substantial national resources to the creation of the Corcovado National Park and other conservation initiatives. The national government acquired most of the Corcovado basin through a land swap with the timber company. Ugalde's original estimate of \$176,000 for setting up the park (mostly to buy out squatters) later rose to at least \$1.2 million, but Oduber agreed to spend it (Evans 1999, 99). Government officials and the scientists who determined the location of the park had spent so little time in the Corcovado basin that they had not realized how many settlers had been attracted by the rising price of gold. In fact, gold mining was often not even mentioned in letters and documents lobbying for park creation. It was not until 1985 that another North American, University of Pennsylvania biologist Dan Janzen, conducted a study on the impact of *orero* mining in and around the park and it was his recommendation that led to the complete eviction of miners in 1986 (145).

Overall, Christen (1994, 281–85) estimates that the Costa Rican government spent more than \$2 million on its Corcovado conservation project. This turned out to be a remarkably astute investment, for it opened the floodgates for international contributions to other Costa Rican conservation initiatives. Conservation agencies, such as the World Wildlife Fund of California, had been anxious to donate funds to support these initiatives but were waiting for the right kinds of projects, i.e., projects that would attract donors steeped in the wilderness-thinking tradition. Corcovado, held up as a model national park and unpopulated wilderness dedicated to scientific study, was exactly what they had in mind. The World Wildlife Fund and the Rare Animal Relief Effort donated seed grants of \$10,000 each in 1975 and again in 1976. Joined by the Nature Conservancy, these organizations raised and donated more than \$240,000 to support the Corcovado project by 1977 (Christen 1994, 284–85). The importance of these grants should not be underestimated, for in 1976 the entire budget of the Costa Rican Park Service was only \$600,000 (Evans 1999, 101).

Funding for the Corcovado National Park and other Costa Rican environmental initiatives became so heavily dependent on the generosity of outside donors that in 1979 Mario Boza established the *Fundación de Parques Nacionales* (National Parks Foundation) to solicit grants and channel funding to the most important priorities (Evans 1999, 113). Over the years, millions of dollars flowed into the country in grants and loans to support conservation causes. This included loans and foreign aid from the United States, Canada, Sweden, Finland, Denmark, Norway, Germany, and Great Britain; donations from other environmental agencies including the Sierra Club, Caribbean Conservation Corporation, New York Zoological Society, International Union for the Conservation of Nature, and the Natural Resources Defense Council; and grants from the Rockefeller, Ford, and MacArthur Foundations.

Conclusion

The establishment of Corcovado National Park vividly illustrates the workings of dependent environmentalism. A conjuncture of interests involving the state, international interests, and Costa Rican environmental elites came together to create the park. But why would Costa Rican leaders, in a country of predominantly poor and rural citizens, and facing difficult economic times in the 1970s and 1980s, choose to adopt such a strongly U.S. strategy for environmental conservation, especially if doing so meant denying financial security to thousands of their fellow citizens?

The fact that most Costa Rican environmentalists were trained in the United States or by U.S. scientists provides part of the answer. The powerful impact of U.S. cultural hegemony on ideas, values, and practices throughout the world provides another part. However, the most basic issue was money. Overwhelmingly in Costa Rica the resources and support upon which environmental conservation efforts depended came from the United States. U.S. organizations and agencies donated cash for projects that conformed to their own expectations of environmental conservation. The idea of saving a rainforest, or establishing a reserve in wilderness for perpetuity, has always held enormous appeal for American donors.

Costa Rican environmentalists joined international scientists and environmentalists in lobbying the state to create and extend the Corcovado National Park and expel the *oreros*, not just to satisfy the expectations of American donors, but because they deeply believed

in what they were doing. Given the unruliness of *orero* life and the preciousness of rainforest ecosystems, perhaps there was no other realistic choice. But the uneasy standoff and continual competition between *oreros* and park officials over the resources of the Osa Peninsula has provided one stimulus for the development of a more nationalistic environmental ethic. Today, Costa Rican environmentalists have added concern for human needs and local community welfare to their conservation planning. Although *oreros* have yet to be given permission to return to the gold rivers of the park, administrators now consider locally based economic uses in their management guidelines for other parks (Evans 1999, 161–65).

As this case study demonstrates, dependent environmentalism can impose unnecessary hardships upon the rural poor but it also may be just a stage in the evolution of natural-resource management in less-developed places. Once the tripartite conjuncture of interests takes hold and establishes an enduring legacy in a place like Costa Rica, and once the desperation that initially motivated these interests begins to subside, the three partners can take a critical look at the human consequences of their actions and begin to bring the local needs of human beings back into the picture.

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Notes

1. Although mining can be a permitted use in U.S. National Parks and in National Forest wilderness areas, the *Wilderness Act of 1964* was designed to promote the establishment of places free of roads, resorts, or other human-made intrusions, and defines wilderness as “an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain” (1).
2. The process of mercury amalgamation represents the most significant environmental risk posed by gold placer mining today. Miners apply mercury to the residue in their pans so that tiny particles of gold adhere to the mercury, making it easier to separate from other elements. Using heat, they evaporate the mercury and are left with pure gold. However, this places them at risk of mercury poisoning (Reto 2002). In the

process of recovering evaporated mercury for reuse, miners also risk losing small amounts to the environment. These small amounts can add up to a great deal. Hundreds of thousands of pounds of mercury remain at many sites of the California Gold Rush in the Sierra Nevada (USGS 2003), and fifteen million pounds of mercury were lost to the Carson River watershed during the historic mining of Nevada's Comstock Lode (Lechler 1992). Although mercury amalgamation has caused severe problems in Brazil, Venezuela, and Papua New Guinea, my informant O'Connell considered it to be a minor problem on the Osa Peninsula. Although mercury had been used commonly during the first gold rush on Madrigal Beach, where the grains of gold were so fine they were difficult to recover from a pan, the costly substance was less likely to be used in the steep river valleys of the Corcovado Basin, where the gold particles tended to be larger and easier to recover.

3. Although a few were profitable operations, many were suspected of mining mainly investors. In fact, I met several traders who admitted to having sold gold to concession mine operators for the purpose of salting—that is, fraudulently enriching—their sluices when potential investors were expected. The success of such schemes was a subject of much discussion on the peninsula, and one informant told me, comically, that he had seen an American lawyer rip the breast pocket of his shirt pulling out a checkbook to write a check for a substantial sum after seeing piles of glittering metal at the bottom of a concession mine sluice.
4. Professional squatters, known colloquially as *casucas*, dogged the concession miners persistently, erecting temporary shelters whenever possible in order to be evicted repeatedly and compensated for improvements.

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