
Conservation Narratives in Costa Rica: Conflict and Co-existence

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ABSTRACT

This article examines narratives about nature conservation in Costa Rica, specifically those related to wildlife and biodiversity, and their evolution with the growth of tourism and bioprospecting industries. It outlines a traditional conservation narrative and two streams of an emerging counter-narrative, and discusses problems and prospects for each in contemporary Costa Rica. The use of narrative and counter-narrative follows Roe (1991, 1995), Fairhead and Leach (1995), and Leach and Mearns (1996). The article focuses particularly on the ways in which the narratives are increasingly drawing on, informing, and sometimes conflicting with one another; it is based on the author's research undertaken in various protected areas in Costa Rica since 1994 and on research published by others.

CONSERVATION NARRATIVES

Over the last twenty years, nature and wildlife conservation policies have shifted away from promoting approaches that exclude local people from parks and protected areas and prohibit their use of resources, towards attempting to reconcile conservation with development needs. The latter emphasis is evident in policy statements by the major wildlife conservation organizations, for example in *The World Conservation Strategy* (IUCN, 1980) and *Caring for the Earth* (IUCN, UNEP and WWF 1991). Using the concept of 'narrative', I have in other works characterized the shift as one from a traditional conservation narrative to a counter-narrative, discussed reasons behind the shift, and considered the problems of replacing the traditional with the counter-narrative in practice, in general and at specific field sites in Costa Rica (Campbell, 1997, 2000, in press). Key features of the traditional and counter-narratives are reviewed briefly here.

The traditional wildlife conservation narrative supports a 'parks and protected areas' approach to conservation. It is often a narrative of 'crisis' and it is traditional in that it is long-standing and continues to be a key

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influence on contemporary conservation practice. The traditional narrative describes wildlife populations in developing countries as threatened directly with extinction by human exploitation, and indirectly by habitat degradation and fragmentation that results from increased human populations and their demands for development. Local people do not value wildlife, at least not in the same ways that outside and often Northern¹ people do. With the crisis thus defined, the solution becomes providing wildlife with protection, a place where it is not subjected to human exploitation or competition and where certain non-extractive activities are privileged. The extent of the crisis is determined by wildlife biologists and protection is enforced by the state. Local people are removed and, if they do not respect the conditions of their removal, they are labelled 'poachers' and 'encroachers'. Thus, they reconfirm beliefs about the source of the crisis and, as they are breaking the law, the solution becomes more and better enforcement (Campbell, 1998). Ample evidence of this narrative exists in early IUCN documents, for example, in conference proceedings (IUCN, 1964, 1974). While the traditional narrative is less dominant at later IUCN conferences (IUCN, 1993), it emerges in times of specific crises, for example in the 1990s when conservation organizations pushed for a ban on trade in African elephant ivory (Bonner, 1993). Furthermore, divisions of conservation agencies responsible for parks and protected areas continue to rely on key elements of the traditional narrative, as seen in the Nature Conservancy's *Parks in Peril Sourcebook* (The Nature Conservancy, 1995).

The conservation counter-narrative is epitomized by two key concepts; 'sustainable use' and 'community-based conservation.' Sustainable use is defined in the Convention on Biological Diversity as: 'the use of components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations' (Jenkins and Edwards, 2000: 3). Use can be either consumptive, defined as 'when the entire organism or any of its parts is deliberately killed or removed either as a goal in and of itself ... or for a product' (Freese, 1996: 7); or non-consumptive when no such removal occurs (such as wildlife viewing and so-called ecotourism). Sustainable use rests on the argument that wildlife and biodiversity must be valuable if they are to be conserved, and that value is often derived through utilization (Freese, 1994, 1996; Swanson and Barbier, 1992).

The second concept, community-based conservation, implies 'at least some of the following: local-level, voluntary, people-centered, participatory, decentralized, village based management' (Little, 1994: 350). The logic of community-based conservation argues that local involvement in and some-

1. While the division of the world using any arbitrary classification scheme is problematic, in this article North is equated with developed and South with developing countries.

times control over conservation undertakings is critical to their success, and that economic benefits alone may not be enough to secure local support for conservation (see for example, Wells and Brandon, 1992; Western and Wright, 1994).

The combination of sustainable use and community-based conservation stands in contrast to the traditional conservation narrative; basic differences between these approaches are summarized in Table 1. The source of the conservation counter-narrative can be traced to the practical difficulties of, and philosophical objections to, transferring the traditional narrative, which is rooted in North America and Europe, to developing countries (Anderson and Grove, 1987; Marks, 1984; McCormick, 1989); to an emerging critique of the objectives and value of exclusionary protection (Ghimire and Pimbert, 1997; West and Brechin, 1991); and to the overall emphasis on sustainable development (Frazier, 1997; Leach et al., 1997; Lele, 1991; Sunderlin, 1995; Westing, 1996). While sustainable use and community-based conservation are evident in this counter-narrative, however, their successful adoption in practice to date is limited. This article will examine some of the reasons for this in the Costa Rican context.

An important component of the counter-narrative, for our purposes, is the classification of wildlife viewing and ecotourism as non-consumptive use. While ecotourism can impact negatively on species and ecosystems, a definition of consumptive use based strictly on ‘deliberate removal of a species’ excludes ecotourism. Direct harvesting of resources for food, materials or scientific testing are, in contrast, deliberately consumptive, albeit with varying levels of impact. As consumptive and non-consumptive approaches to sustainable use have different implications for conservation practice, they are treated as separate streams of the counter-narrative in this article.

Costa Rica’s implementation of the traditional narrative and the two streams of the counter-narrative is considered below, to illustrate the challenges that arise for each narrative, how the narratives compete and sometimes co-exist with each other, and implications arising from this for

Table 1. Elements of the Traditional and Counter-Narratives of Wildlife Conservation

| Traditional Narrative | Counter-Narrative |
|-------------------------------|--------------------------|
| Exclusive | Inclusive |
| Parks and protected areas | Land use patterns |
| Restrictive/prohibitive | Sustainable use |
| Institutional (state) control | Community control |
| ‘Modern’ | ‘Postmodern’ |
| Top down | Bottom up |

Source: Campbell (2000)

conservation in practice. The roles of international, national and local stakeholders in promoting and sustaining the various narratives will also be highlighted throughout, and the final section of the article considers how groups of stakeholders stand to benefit from the implementation of the various narratives.

This study is informed by the author's research conducted since 1994, specifically at Tortuguero National Park, Ostional Wildlife Refuge, Gandoca and Manzanillo Wildlife Refuge, and Leatherbacks of Guanacaste National Park (for detailed methods and results, see Campbell, 1997, 1998, 1999, 2000, in press). Data (mostly unpublished) collected by Costa Rican government agencies, and editorial and other newspaper articles are also incorporated. However, the article is broadened further to incorporate the work of others on the various issues (including parks and protected areas, ecotourism, environmental policy, community development) that come into play in the articulation and practice of conservation narratives, but which are often treated separately. This approach is undertaken with two objectives: to add to and bring together existing work, and to situate the author's site-specific research in the wider Costa Rican context.

BACKGROUND ON COSTA RICA

Costa Rica is an anomaly in Central America. Politically, it has been labelled the 'unarmed democracy' (Bird, 1984) and it enjoys a reputation as an 'oasis of peace' in a region plagued by civil wars (González-Vega and Céspedes, 1993). Costa Rica suffered one short civil war in 1948, following which the army was, and remains, disbanded (Bird, 1984). The country has resisted being pulled into regional conflicts; while relations with neighbours, particularly Nicaragua, are sometimes strained, Costa Rica claims a neutral position in Central American politics.² Costa Rican President Arias (1986–90) brokered the Central American Peace Accord and won the 1987 Nobel Peace Prize as a result. The country has maintained good relations with the USA since the Second World War; with the exception of a break in 1980, when President Carazo (1978–82) ejected the IMF from Costa Rica, these good relations have continued, with Costa Rica's contemporary acceptance of IMF/World Bank lending policies.

Socially, Costa Rica has experimented with a welfare state (Carriere, 1991; Nelson, 1983), and during the period of social reformism in the 1940s it implemented a social security system (1941), a Labour Code (1943), and universal health care and education (1943). These were paid for originally by

2. This position was most compromised before and after the Sandinista revolution in Nicaragua, when both authorized and unauthorized use of Santa Rosa National Park for military training purposes occurred (Evans, 1999).

the 1949 nationalization of banks and by a 10 per cent tax on wealth. The disbanding of the army released further funds for significant social expenditures; health and education were the main public expenses between 1970 and 1985 (López, 1996). High social expenditure has had its rewards; in 1998, Costa Rica ranked thirty-fourth on the UN human development index, second only to Chile in Latin America (ranked thirty-first), and considerably higher than countries with similar per capita incomes (UNDP, 1998). Nevertheless, Costa Rica's social structure has been under considerable pressure throughout the 1990s, as a result of structural adjustment policies (discussed further below) (Edelman, 1999).

Having a small population (approximately three million people) and a limited domestic market, Costa Rica has facilitated economic growth via an export-oriented, open economy, centred on coffee and bananas. From 1950 to 1984, real GDP grew at an average of 5 per cent per year, but this growth slowed during the 1980s global recession. For Costa Rica, GDP growth rates and GDP per capita fell (González-Vega and Céspedes, 1993: 28), and public external debt as a percentage of GNP grew from 13.8 per cent in 1970 to 81.8 per cent in 1988 (Meyer et al., 1992). At one stage, public external debt per capita was US\$ 1500 per person, giving Costa Rica the highest level of per capita debt in the developing world (Carriere, 1991).

Costa Rica suspended debt service payments in 1981. In 1982, it implemented USAID, World Bank and IMF structural adjustment that entailed reduced government spending, social sector reform, and currency devaluation. Real wage reductions and increased unemployment and under-employment resulted (Meyer et al., 1992); but, while Costa Rica was clearly impacted by the debt crisis and continues to be affected by structural adjustment, by 1989 its economy was growing (Psacharopoulos et al., 1995). This is at least in part a result of rapid growth in the tourism sector that began in the latter half of the 1980s. By 1993, tourism was the most important source of foreign exchange, earning US\$ 577.4 million, compared to US\$ 531.1 million from banana exports and US\$ 203.5 million from coffee exports (ICT, 1993). In 1997, tourism generated US\$ 719.3 million and accounted for 21.9 per cent of total export earnings (ICT, 1998).

Elements of Costa Rica's political, social, and economic systems are reviewed here as they are linked to the evolution of the traditional narrative, and to the more recent consumptive and non-consumptive use streams of the counter-narrative. For example, the importance of tourism to the Costa Rican economy has supported the evolution of the non-consumptive use stream of the counter-narrative. Tourism is unlikely to have developed without political and social stability; stability is an attraction itself and has also facilitated investment in the national parks system. Stability has also fostered a democratic tradition for which Costa Rica is known, one compatible with the community-based conservation components of the counter-narrative. While Edelman (1992, 1999) challenges Costa Rica's reputation as a peaceful agrarian democracy and criticizes the disenfranchising of rural

people via current structural adjustment policies, the country's reputation for democratic traditions, deserved or not, is widely repeated. For example, O'Brien (1997) identifies Costa Rica as 'advanced' along the road of participatory democracy, and Silva (1997) discusses grass-roots participation in some forestry initiatives.

CONSERVATION NARRATIVES IN COSTA RICA

Costa Rica is a signatory to most major international conventions on the environment.³ Ballar-Rafael (1981) argues that environmental 'norms' and related regulations for exclusively protecting nature in Costa Rica have sprung from these international conventions and ideals, rather than domestic sentiment. 'Lacking home-grown support' is a common characterization of environmentalism in Latin America, and the role of US-based organizations as instigating environmental activism has been the focus of some attention (Meyer, 1993, 1996, 1999; Price, 1994). However, evidence regarding environmentalism in Costa Rica's case is mixed. While foreign scientists played a role in 'awakening' modern environmental awareness (Fournier, 1981), Costa Rica's first environmental legislation can be traced to the mid-nineteenth century (Evans, 1999; IUCN, 1992; Price, 1994). Nevertheless, Costa Rican analysts mark the 1970s as the solidification of national environmental consciousness (Boza, 1993; Fournier, 1981, 1991); as we will see below, the traditional narrative — while emerging much earlier — also gained momentum in this decade.

The Traditional Narrative

The traditional approach to conservation via protected areas emerged in Costa Rica in the early twentieth century, but for many decades these efforts had minimal success (see Table 2). By the 1950s, foreign-led protection initiatives were beginning to experience some success: foreigners both pressured the government to protect specific areas and undertook protection privately (see Table 3).

During the 1970s, however, national efforts to establish protected areas were more successful. Key to this was Forestry Law No 4465 (1969), which established categories of protected areas and a process for their creation via

3. Including the Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere (1940), Convention on International Trade in Endangered Species (1975), the World Heritage Convention (1977), the Convention on Wetlands of International Importance (1992), and the Biodiversity Convention (1992). It also participates in UNESCO's Man [sic] and the Biosphere Programme (MAB), with two designated sites (est. 1982 and 1988).

Table 2. Early Attempts to Establish Protected Areas in Costa Rica

| Year | Action | Instrument | Effect |
|------|--|--------------|---|
| 1913 | Poás Volcano declared 'protected' | none | <ul style="list-style-type: none"> • no monitoring or enforcement |
| 1939 | 'preserves' declared around Poás and Irazú volcanoes | Law No. 13 | <ul style="list-style-type: none"> • law lacked enforcement or delineation clauses |
| 1945 | 220-metre zone on either side of the Pan American highway declared a 'national park' | Law No. 197 | <ul style="list-style-type: none"> • first time 'national park' used • never put into effect • abrogated in 1973 |
| 1955 | Costa Rican Tourism Institute established. Mission includes designating 1.2 mile radius around volcanoes as 'national parks' | Law No. 1917 | <ul style="list-style-type: none"> • no technical criteria for park establishment • economic reasons impeded execution |
| 1961 | Two-kilometre zone surrounding all of the country's volcanoes protected | Law No. 2825 | <ul style="list-style-type: none"> • no impact |

Sources: Ballar Rafael (1981); Brüggemann (1997); Evans (1999); IUCN (1992)

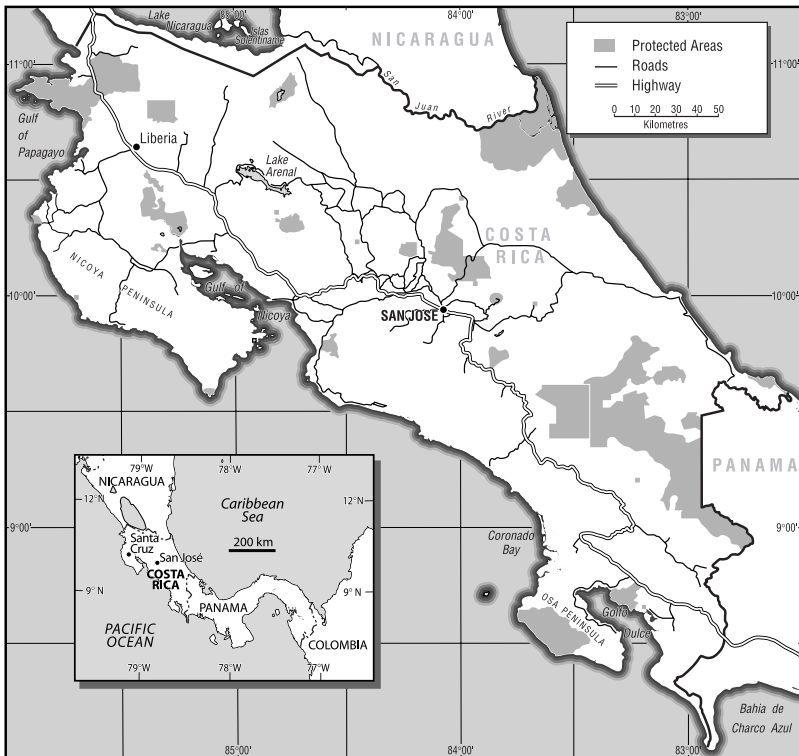
Table 3. Foreign Involvement in Establishing Protected Areas in Costa Rica

| Protected Area | Est. | Foreign Lobby or Initiators |
|--|-------|---|
| <i>Early Protected Areas</i> | | |
| Monteverde Cloud Forest (private) | 1950s | US Quakers from Alabama |
| Cabo Blanco Nature Reserve | 1963 | Scandinavians Olof Wessberg and Karen Mogensen |
| La Selva biological station (private) | 1968 | Organisation for Tropical Studies, formed as consortium of 6 US Universities and the University of Costa Rica |
| Rincón de Osa biological station (private) | 1970s | Tropical Science Center, formed by US biologists Leslie Holdridge, Robert Hunter, and Joseph Tosi |
| Tortuguero National Park | 1975 | Brotherhood of Green Turtles (now the Caribbean Conservation Corporation), formed by supporters of US biologist Archie Carr to support his work |
| <i>Recently Protected Areas</i> | | |
| Ostional Wildlife Refuge | 1983 | US biologist Douglas Robinson, employed by the University of Costa Rica |
| Leatherbacks of Guanacaste National Park | 1985 | US biologists James Spotila (Drexel University) and Frank Paladino (Indiana-Purdue University) |
| Gandoca and Manzanillo Wildlife Refuge | 1985 | Association ANAI, co-founded by US biologist William McClarney |

Executive Decree. The process includes defining biological objectives of protection, delineating the area, studying its population, and preparing maps. The law allows for notification of landowners to cease all activities, and for (required) land expropriation. Once established, park boundaries are alterable only by congressional law (IUCN, 1992). Ballar-Rafael (1981) suggests that Law No 4465 facilitated the proliferation of parks that followed; while only two parks were established in the 1960s, fourteen were created in the 1970s along with five biological reserves. These figures dropped in the 1980s and 1990s when seven new parks were established (IUCN, 1994). Costa Rica's protected areas system is widely acclaimed (Boza, 1993; Evans, 1999) and predates most others in the region; 76 per cent of Central America's protected areas have been established since 1982 (The Nature Conservancy, 1995). Figure 1 shows publicly and privately protected areas in Costa Rica.

Law No 4465 also established a National Parks department. This department (which operated under various names over the years) was led through-

Figure 1. Nationally Protected Areas in Costa Rica



out the 1970s and 1980s by two key figures in Costa Rican conservation, Mario Boza and Alvaro Ugalde. Both men studied parks management in the United States, and their activities on returning to Costa Rica were crucial to both the size and 'success' of Costa Rica's current parks system (Evans, 1999). Nevertheless, external support, particularly financial, was critical to their efforts (Brüggemann, 1997). Funding for park creation came, and continues to come, from a variety of external donors, including conservation organizations (such as World Wide Fund for Nature, The Nature Conservancy, Conservation International), bilateral assistance agencies (including those from the USA, Canada, Sweden, Denmark, Finland, Norway, and the UK), and the Global Environmental Facility of the World Bank (Boza, 1993).⁴ Furthermore, in spite of the increased success of nationally led initiatives, foreigners continue to lobby for protected areas, as was the case at three more recently established sites studied by the author (see Table 3).

The 'received wisdom' of the traditional narrative is evident in Law No 4465. Increasing human populations and resulting degradation, particularly deforestation, are seen as necessitating a parks system (Evans, 1999). The state and its agencies are responsible for protection. Once established, protected area boundaries cannot be altered. Protection is established based on scientifically determined biological criteria, and local people are excluded and can be removed forcibly from strictly protected areas, like National Parks. Costa Rica's adoption of the traditional narrative is reflected in the extent of its protected areas systems (see Figure 1). Under IUCN's classification system, 12.5 per cent of the country is protected (IUCN, 1992), and a goal of 17 per cent has been set (Boza, 1993). Additional land is protected in privately owned reserves.

Problems with the Traditional Narrative

Environmentally, Costa Rica's national parks system is juxtaposed with degradation outside of its boundaries, particularly through high levels of deforestation (Rosero-Bixby and Palloni, 1998; World Resources Institute, 1991): an estimated 65 per cent of forest cover was lost between 1950 and 1990 (Fundación Neotropical and Conservation International, 1988). As a result, the country's protected areas exist as isolated 'islands' (Boza, 1993; Evans, 1999; Hartshorn, 1982; IUCN, 1992) — one of the general criticisms of a protected areas approach. Furthermore, in spite of highlighting scientific

4. To facilitate the rapid transfer of funds from donors directly to the parks system, Costa Rica established a non-profit, non-government organization, the National Parks Foundation, in 1974 (Boza, 1993). Again, this action predates similar ones in the region. In the 1980s, most Latin American countries established similar organizations or arrangements (Meyer, 1997).

criteria in Law No 4465, Boza (1993) acknowledges that early emphasis was on protecting areas of scenic beauty, historic importance, and natural value to ensure public support. Wildlife in particular is not managed properly, with few applied investigations, lack of funding for research, and inadequate regional co-ordination (Vaughan et al., 1990). The IUCN (1992) suggests that only national parks and biological reserves are sufficiently funded to meet their protective aims, and Boza (1993) cites severe financial constraints on operating the national parks system.

Socially, local support for protected areas has often been lacking (Anger, 1989; Brüggemann, 1997; Evans, 1999; Kutay, 1991; Utting, 1994). Resistance was encountered with the first park established under Law No 4465, Santa Rosa National Park established in 1971 (Evans, 1999; Haber, 1992), and with those established more recently. When the Ostional Wildlife Refuge was established in 1985, for example, resistance peaked when some local villagers burned down the biologist's house (Campbell, 1998). There was also resistance to the establishment of Gandoca Manzanillo Wildlife Refuge (est. 1985), although it was not uniform among the impacted communities (Anger, 1989). While each case of protected area establishment is unique, four factors are generally identified as contributing to social tensions arising from protection efforts. Firstly, protected areas have often been created without prior consultation with local people. Secondly, compensation for lost land has often been inadequate, delayed, or non-existent. Thirdly, due to high population growth rates, high population density, and increased levels of private land ownership, landless peasants have increasingly been forced to encroach on protected areas. Finally, restrictions on resource use in reserves work against small farmers while major logging and hydro-electric schemes continue unabated (Utting, 1994). The IUCN concurs that protected areas are not used 'to full economic potential' (IUCN, 1992: 130). Restrictions on resource use have been particularly relevant at Tortuguero National Park, Ostional Wildlife Refuge, Gandoca and Manzanillo Wildlife Refuge, and Leatherbacks of Guanacaste National Park, where one of the prime objectives of establishing protected areas was to limit and sometimes eliminate use of marine turtles by local people, while simultaneously promoting their 'use' by tourists (Campbell, 1998, in press).

Utting (1994: 238) concludes that the 'conservationist' approach via exclusion has failed to come to grips with crucial social issues, and has ignored 'the socio-economic and cultural situation of thousands of families who live in the areas affected'. Lack of consultation with and participation by local people has 'provoked social conflicts which often undermine the possibility of implementing protected area status and achieving basic environmental objectives' (ibid.: 239). Rather than attempt to overcome these limitations, the government appears to rely on non-enforcement to avoid or reduce tensions (Carriere, 1991) and this, combined with financial constraints, means that protected areas often exist only on paper (Utting 1994). The Ostional Wildlife Refuge in 1994–95 appeared to be a good

example of a 'paper park', with no government presence or operational budget. Nevertheless, the full extent of Utting's (1994) conclusion does not apply in Ostional, where community support is facilitated via a sustainable use programme based on harvesting marine turtle eggs (Campbell, 1998). This is one of the few examples of consumptive use in practice.

In 1991, the Ministry responsible for parks and protected areas (then MIRENEM) began re-structuring the national parks system by joining smaller separate areas together into larger Regional Conservation Units, containing original protected areas, development zones, and linking corridors for the passage of wildlife. The aim was to eliminate duplication of administrative duties, to improve the biological soundness of the entire system, and to make the park system more responsive to local development needs. In 1995, MIRENEM became Ministry of Environment and Energy (MINAE), the national parks department was replaced with the National System of Conservation Areas (SINAC), Regional Conservation Units became Unified Conservation Areas, and SINAC divided the country into eleven of these (INBio, 2000). The success or failure of this consolidation and decentralization is yet to be determined, although co-ordinated activity is occurring in the Arenal Conservation Area (Beauvais and Matagne, 1999) and the Guanacaste Conservation Area (<http://www.acguanacaste.ac.cr/1997/index.html>). Both proponents and opponents to the approach exist, with the former believing that local support gained through devolution of control from a central agency will be critical to long term success (Brügge-mann, 1997) and the latter fearing it will encourage further degradation around and encroachment into protected areas (Evans, 1999) or, alternatively, constrain agricultural development (Brügge-mann, 1997).

The Counter-Narrative: Non-Consumptive Use

Notable increases in international tourist arrivals began in 1950 (Latham, 1994). As international tourism grew, it was seen increasingly as a panacea for the economic woes of developing countries (Mings, 1978). Tourism was predicted to raise foreign exchange earnings, gross national product, and tax revenues and to decrease unemployment (Lea, 1988) and, because it is labour intensive, tourism was seen as suitable to the population structures in developing countries. In this enthusiastic atmosphere, 'Latin America realised that tourism could contribute to the fast recovery of the economies of its devastated nations' (Schlüter, 1993: 364). Costa Rica established the Costa Rican Tourism Institute (ICT) in 1955 (Table 2), and in 1960, Decree No 2706 established tourism as an 'industry' and offered incentives for investors, including exemptions from import duties on construction materials and from federal and municipal taxes on profits and land. Costa Rica's national bank developed a tourism policy and set up financing schemes for infrastructure in the 1970s (Monge, 1975), and the National

Chamber of Tourism was established to represent private investors and to encourage the government in facilitating tourist development.

Since its designation as an industry, tourism to Costa Rica has grown consistently. Using ICT data (ICT, 1993, 1998), the average annual growth rate in international arrivals from 1969 to 1982 is calculated as 9 per cent. A small downturn in growth occurred between 1982 and 1986, after which a distinct 'boom' in the industry began. From 1986 to 1994, arrivals increased 190 per cent, representing average annual growth figures of 14 per cent. Growth peaked in 1992 at 27 per cent and dropped off from year to year until 1995. From 1995 to 1996, the absolute number of tourists fell. This was the first time negative growth had been experienced since 1986, but positive growth resumed in 1997. While other factors may have influenced growth rates in the late 1980s and early 1990s,⁵ the global rise in popularity of so-called ecotourism (Boo, 1990; Ecotourism Society, 1998; Filion et al., 1994) has undoubtedly played a role.

Costa Rican President Carazo (1978–82) once described Costa Rican parks as 'splendid natural laboratories which we offer to the international scientific community, and also to children, young people and adults who should not be denied the joy of direct contact with nature in its pristine state' (cited in Haber, 1992: 91). Scientists, environmentalists and, increasingly, tourists have taken him up on the offer. As tourism developed in Latin America, Costa Rica realized quickly that it could not compete with 'the well developed infrastructure for basking on tropical beaches that people can find in Mexico and the Caribbean' (Boza, 1993: 244). As early as 1975, the ICT identified Costa Rican flora and fauna as main attractions 'that are a delicacy of hunters and collectors' (*La Nación*, 1975). Costa Rica has become "'the" ecotourist destination', finding in the 'ecological awareness of the industrialised countries a market niche that would consume their flora and fauna' (Schlüter, 1993: 366). While many Latin American countries lacking white sandy beaches have pursued a similar strategy, Costa Rica has been especially successful. Perhaps only Belize equals it as a perceived ecotourism hot spot (Mowforth and Munt, 1998).

That tourists are now coming to Costa Rica on a 'green wave' is reflected in an ICT survey of tourist activities. In 1994, of 901 international tourists visiting for the primary purpose of pleasure, 60 per cent visited a National Park and 26.3 per cent visited a Wildlife Refuge. Furthermore, 41.3 per cent claimed to have experienced 'natural history', 39.9 per cent went on a tropical adventure, and 33.6 per cent went bird watching. The only activity undertaken more frequently was visiting the beach (by 80.8 per cent of tourists) (ICT, 1995). Wildlife viewing is the primary reason for tourism at

5. Aylward et al. (1996) suggest an improved global economic outlook and the fall of the Sandinista regime in Nicaragua may have had an influence, while Evans (1999) cites Arias' winning the Nobel Peace Prize and Costa Rica's hosting of the IUCN conference.

two of the case study sites considered by the author, Ostional Wildlife Refuge (Campbell, 1999) and Tortuguero National Park (Jacobson and Robles, 1992), and is an important attraction at Leatherbacks of Guanacaste National Park (Campbell, in press).

The separation of the traditional and non-consumptive narratives in Costa Rica is somewhat artificial, as the government has recognized the potential of the parks system to attract tourists since the 1970s (Evans, 1999), before ecotourism was a named phenomenon. Ecotourism is often associated with protected areas and conceived as a way to make such areas 'pay for themselves' (Boo, 1990; Bookbinder et al., 1998; Cater, 1994; Ross and Wall, 1999). Nevertheless, the parks system in Costa Rica developed and expanded in the 1970s and early 1980s without the tourism potential being realized. And, while economic benefits of protected areas were promoted in the passage of Law No 4465, parks personnel initially resisted the tourism and protected areas link (Evans, 1999). It has only been since the late 1980s and early 1990s that the links between ecotourism and economic gain were made by the wider Costa Rican community, particularly the business community. The counter-narrative of non-consumptive use through ecotourism, which promises employment, foreign exchange, and enhanced environmental protection, is now well established in Costa Rica, repeated by government (Brennan, 1995c; Evans, 1999), and evident in any tourism guide to the country (Blake and Becher, 1994; Haber, 1992; Rachowiecki, 1997). As will be discussed below, the community-based conservation component has been less prominent in the articulation of the counter-narrative.

Problems with Non-Consumptive Use

A lengthy discussion of the meaning of ecotourism is beyond the scope of this paper. Suffice to say that it is a much-debated term and has fallen short of many of its initial objectives. It can act as a double-edged sword, with its 'success' causing the eventual destruction of the resources being protected (Burton, 1998; Cater and Lowman, 1994; Lindberg et al., 1996; Ross and Wall, 1999; Wild, 1994; Yu et al., 1997). In Costa Rica, the stress of the rapid growth in ecotourism is most evident in the national parks system. Manuel Antonio National Park (683 ha) received 131,500 visitors in 1998, and Tortuguero National Park, in spite of a remote and difficult to access location, received and estimated 35,000 foreign visitors in 1999 (unpublished data from MINAE-SINAC, 1999). Ecotourism at this level begins to resemble 'mass ecotourism'.

In September 1994, the Ministry responsible for protected areas attempted to address the 'park problem' by raising entrance fees for foreign visitors, from the Costa Rican equivalent of US\$ 1.60 to US\$ 15. The reported objectives of the increase were to decrease park visits by 25 per cent,

direct tourism to other areas of the country (i.e. its private reserves), and to increase revenues in the under-funded park system (Harris, 1995c, 1995d). The decision was criticized by the ICT, the National Chamber of Tourism, and by tourists themselves.⁶ The move, which ultimately failed, was initially successful on two fronts. Firstly, from the September 1994 increase until year-end, park visitation was down 58 per cent for the same period of the previous year (Harris, 1995c). Secondly, revenue for the four-month period (low visitor season) was US\$ 633,000 compared with US\$ 382,000 earned in the first eight months of the year (high visitor season) (Harris, 1995c). However, the objective of redirecting tourists to other parts of the country was not met. In the privately owned Monteverde Cloud Forest, one of the most popular tourist sites in the country, Aylward et al. (1996) found that visitor levels — particularly among high fee paying foreign tourists — and overall revenues fell. They suggest that Monteverde and other private reserves are complementary to the national park system, and link the decrease to a decrease in international arrivals in general, which, in turn, may have been a result of the increased national park entrance fees (ibid.). Regardless of the reasons for decreased arrivals, in April 1996 the national park entrance fee was lowered to US\$ 6 (Mowforth and Munt, 1998).

Economically, foreign exchange earnings have been realized at the national level in Costa Rica. Whether or not these earnings have contributed to increased commitment for further conservation (in other words, a constituency) is debatable, as few parks have been established since the tourism boom, and Costa Rica's national parks system is under funded (Boza, 1993). Furthermore, the overall economic importance of tourism to the country makes for contradictions in government policy. For example, while recognizing the importance of natural resources to its tourism industry, the government continues to pursue large-scale tourism projects, such as the Papagayo development, a resort complex with close to 20,000 rooms under construction on the Nicoya Peninsula in Guanacaste, and opposed by environmentalists (Harris, 1995b; Mateo-Vega, 1999). Efforts by the government to further profit from tourism are resisted by the National Chamber of Tourism (Brennan, 1995a, 1995b; Harris, 1995a) and, as suggested by their reactions to increased park fees, by tourists themselves. The National Chamber of Tourism in particular, as the representative of the country's most important economic sector, has become a 'political and economic powerhouse' (Evans-Pritchard, 1993), one that supports mega-projects and resists any form of industry taxation (Harris, 1995a). Thus, the government faces a need to raise foreign exchange, pressures on its national parks system, and a business sector resistant to government interference and taxation. While the Figueres government (1995–99) recognized problems of mass tourism and emphasized the need for sustainable tourism (Brennan,

6. See letters to the editor, *The Tico Times* (6, 13 and 20 January 1995).

1995c, 1995d), the current government continues with projects like Papagayo, which was finally approved in November 1999 (Niето, 1999).

Whether or not economic benefits are realized at the local level is debatable. Wang (1981: 4) argues that tourism in Costa Rica is a function of 'free market economic forces that generally benefit the five percent of upper class groups, who have the economic resource — money — to participate in what is effectively a banking image of economic development', and that foreign investors have dictated Costa Rica's tourism activities. Many government policies (such as the Tourism Development Incentive Law, 1985, and the Costa Rican Investment and Trade Development Board, 1987) have promoted large-scale, foreign-owned tourism development (Honey, 1999).

The difficulties of ensuring local participation in ecotourism have been noted in general (Scheyvens, 1999), and in Costa Rica specifically (Campbell, 1999; Honey, 1999; Nygren, 1998). In Tortuguero National Park, for example, 10 per cent of hotel beds are owned by original inhabitants of the town, 52 per cent by other Costa Ricans, some of whom live in Tortuguero, and the rest by resident and non-resident foreigners (Campbell, in press). In Ostional, which is in the very early stages of tourism development (two small hotels and 852 estimated overnight visitors in 1995), foreigners have already begun to invest and local people see their options as limited (Campbell, 1999). Thus, while revenue generated by ecotourism may fulfil the sustainable use objectives of the counter-narrative, high levels of leakage and low levels of local ownership suggest that objectives of community-based conservation are unlikely to be met.

The Counter-Narrative: Consumptive Use

The consumptive use stream of the counter-narrative is evident in Costa Rica and is, perhaps, the most contentious for the conservation community. While non-consumptive use via ecotourism is an accepted feature in the protected areas system, examples of consumptive use are few. There are, however, notable exceptions. In Guanacaste National Park and the wider Guanacaste Conservation Area, US scientist Dan Janzen has promoted a management plan that provides economic incentives for community-based protection, through limited consumptive use of resources, for example, via managed cattle grazing (Evans, 1999). A legalized marine turtle egg harvest takes place within the Ostional Wildlife Refuge, and is based on a management plan initially devised by US biologist Douglas Robinson (Campbell, 1998). There are also instances of legal consumptive use of wildlife species outside protected areas, including green iguana farming by German scientist Dagmar Werner (International Wildlife, 1989) and (until 1999) green turtle fishing based out of Limon, on the Caribbean Coast. In each case, the objectives are to meet local demands for wildlife products, and in turn to gain local support for conservation. The extent to which they have succeeded

can be debated, but the sustainable use and community-based conservation components of the counter-narrative are evident and, in the cases of use taking place within protected areas, coexist with the traditional approach. These types of projects, ones that treat consumptive use as a component of conservation, tend to be treated as 'exceptions' by conservationists, the tenants of which are not easily transferable (Campbell, 1997). Consumptive use of wildlife in parks and protected areas is generally prohibited (under Wildlife Conservation Law No 6919) and Evans (1999) provides anecdotal evidence that employees of the National Parks Department are opposed to consumptive activities. There is resistance to use of wildlife outside protected areas as well; the recent cancellation of the green turtle fishery in Limon was a result of legal challenge brought forward by several environmental NGOs (Taft, 1999).

A larger scale application of consumptive use within the protected areas system, one that shows potential to put this strain of the counter-narrative on par with the others, is bioprospecting.⁷ Costa Rica houses an estimated 7 per cent of global biodiversity (IUCN, 1992) and, in 1989, the Costa Rican National Institute of Biodiversity (INBio) was formed, 'to preserve, scientifically classify, and integrate Costa Rica's biodiversity into an overall strategy for sustainable development' (Zebich-Knos, 1997: 181). While Evans (1999: 238) claims INBio's formation 'indicates their [Costa Ricans] sincere determination to secure the environmental welfare of the country', his view underplays the financial benefits received from doing so. Costa Rica holds commercial contracts with companies interested in bioprospecting, the best known of which is with US-based pharmaceutical firm Merck & Co (Meyer, 1996; Zebich-Knos, 1997). Under an initial 1991 agreement, Costa Rica received US\$ 1 million as a flat fee and US\$ 135,000 for scientific equipment from Merck, in return for chemical extracts from insects, plants and micro-organisms. If extracts result in commercial products, INBio will receive sales royalties (Meyer, 1996). A second two-year contract, with similar terms, was signed in 1994 (Zebich-Knos, 1997), and a third in 1997 (Merck, 1997). In 1999, Merck ended its agreement with INBio in order to concentrate on analysing the collected samples (pers comm, Merck Customer Services, 29 March 2000).

While INBio's agreements with Merck have received most attention, there are others, for example with British Technology Group and Kew Gardens, and with Bristol Myers Squibb and Cornell University (Meyer, 1996; Zebich-Knos, 1997). With all such contracts, 10 per cent of research budgets are directed to the national parks system, as are 50 per cent of royalties earned on commercial products. INBio also receives funds from a variety of US-based private foundations, international environmental NGOs, and

7. For the purposes of this article, agricultural biotechnology is excluded from the discussion of biodiversity and bioprospecting. For a review of issues related to agricultural biotechnology in Costa Rica, see Sittenfeld et al. (2000).

bilateral assistance agencies. Again, contributions from these agencies include funds earmarked for national parks, human capital development and technology transfer, and inventory activities (Meyer, 1996).

The sustainable use component of the counter-narrative is strong in the language of bioprospecting, particularly regarding economic benefits and their direct diversion to conservation activities. Meyer (1996: 463) outlines the logic of the counter-narrative as it relates to bioprospecting: 'As the country benefits with economic development and an increased appreciation for the biological wealth contained in the forests, pressure on wildlands should be decreased'. While the benefits of sustainable use accrue at the national level with INBio, the community-based conservation component of the counter-narrative is less evident. Nevertheless, there has been some attempt to include it. INBio, for example, acknowledges the importance of local knowledge of medicinal uses of plants (Nygren, 1998). Local people participate in inventory activities as parataxonomists — along with university students and government officials — and thus local employment is generated (Evans, 1999; Janzen et al., 1993).⁸

Problems with Consumptive Use

Criticisms of the consumptive use narrative as it relates to bioprospecting in Costa Rica are difficult to separate from those of bioprospecting as a whole. The issue of 'ownership' of biological resources with potential value is a contentious one. Nevertheless, it is possible to identify problems with this stream of the counter-narrative in the Costa Rican context.

From an economic standpoint, questions have been raised regarding the relative benefits of bioprospecting, and these are illustrated with the Merck deal. While the royalties to be earned by Costa Rica should Merck develop a commercial drug are unknown, they are believed to be less than 5 per cent (Hurlbut, 1994; Meyer, 1996). Given the limited likelihood of samples resulting in commercially viable drugs, Zebich-Knos (1997) identifies the up-front fees paid as most important for Costa Rica. The US\$ 1 million payment made by Merck in 1991, for example, represented 20 per cent of

8. The long term prospects for bioprospecting in Costa Rica, and the replicability of Costa Rica's success in securing commercial contracts for other countries, may be limited (Meyer, 1996). Costa Rica already has land under protection that can be prospected and INBio can channel money into this existing system rather than purchase new land for protection. Commercial partners may deem the marginal value of purchasing additional hectares for protection as minimal, both in Costa Rica and in other countries. Furthermore, Costa Rica's political stability and education system make it an attractive partner, and Merck acknowledges that these and related socio-economic features of Costa Rica were as important in the choice of partner country as was the level of biodiversity (Zebich-Knos, 1997). Thus, bioprospecting may prove to have a rather limited geographical application.

INBio's annual budget (Evans, 1999). For Merck, the most obvious benefits are exclusive access to collected samples, and reduced labour costs — parataxonomists are paid wages in Costa Rican currency (Zebich-Knos, 1997). A less obvious but important benefit is derived via advertising: 'As an environment-friendly organization pursuing state-of-the-art technology, and pioneering property-rights relationships that provide incentives to preserve tropical rainforests in a country well-known for its ecotourism and its stable democracy, INBio provides a valuable boost to the public image of Northern commercial partners' (Meyer, 1996: 468).

The US\$ 1 million paid up-front to Costa Rica by Merck was a small fee for a company with annual profits in excess of US\$ 8 billion. Even if no samples are developed into commercially viable drugs, the deal was a 'cost effective' advertising campaign that earned Merck 'invaluable publicity and goodwill' (Zebich-Knos, 1997: 183). That the original Merck deal coincided with the run-up to the UN Conference on Environment and Development capitalized on advertising potential (Meyer, 1996). Thus, the balance of benefits lies with pharmaceutical companies, and bioprospecting deals can be seen as one more way for the rich North to buy the resources of the South at a relatively low cost (Nygren, 1998). As developing countries often cannot afford the pharmaceuticals developed from the 'raw' genetic materials they supply, these unequal terms of trade are further exacerbated (Hurlbut, 1994; Mott, 1993).

Socially, Evans (1999) points out that much of the language regarding parataxonomists is paternalistic and condescending and that, with only thirty parataxonomists employed in the early 1990s, employment is fairly minimal (INBio describes its current workforce as 'a small army' [INBio, 2000]). Also problematic is the way local knowledge is treated as 'culturally and socially free "human capital"' to be exploited in the service of biobusiness' (Nygren, 1998: 208). As seen in the Merck case, benefits from bioprospecting become relative. While the value of 'local knowledge' is acknowledged and parataxonomists are paid wages for their services, intellectual property rights to resultant products are ceded to Merck (and, by extension, lost to the parataxonomists). These are of great economic value, and their ownership by Merck implies that its research and development activities are more important than the local knowledge used in material identification.

The question of how to determine adequate compensation for local knowledge is a difficult one, and the property rights issue is perhaps the most contentious in biodiversity prospecting. Biodiversity is traditionally considered a public good, and its status as such raises questions about both the private nature of INBio and the sale of intellectual property rights to commercial partners (Camacho and Rodríguez, 2000). In the first instance, INBio benefits financially from its monopoly right to collect, categorize, and enter into commercial contracts for research on Costa Rica's biodiversity. In the second, public goods are typically categorized as such to ensure all members of society benefit from them and, while the reinvestment of profits

into further conservation arguably benefits all Costa Ricans, benefits of contracts are not distributed equally (Meyer, 1996). Again, the economic returns via bioprospecting may meet sustainable use objectives at the national level (although this is questionable when relative benefits are considered), but the community-based conservation component appears marginalized.

STAKEHOLDERS IN THE NARRATIVES

The traditional narrative and two streams of a counter-narrative exist in Costa Rica, and the extent to which the narratives guide practice is linked to the power of their stakeholders. Stakeholders in the various conservation narratives are many and their interests are often competing. At the national level, Carriere (1991) identifies three nexuses in Costa Rican politics: the capital accumulation nexus, the social development nexus, and the eco-development nexus. This article uses Carriere's nexuses; following a description of them, their mutual and conflicting interests in the various narratives will be discussed.

According to Carriere (1991), the capital accumulation nexus dominates contemporary Costa Rican politics, and is comprised of the two main political parties,⁹ business lobbies (such as chambers of commerce), and public sector agencies involved in planning for growth (for example, agriculture). This nexus is united by a 'common vision of development strategy, one which is based on the need to promote growth and capital accumulation within the existing system of domestic and global power relations' (Carriere, 1991: 196). It has embraced structural adjustment and public sector spending cuts and rarely refers to environmental matters except when degradation threatens immediate economic interests.

The second most powerful group is the social reform nexus, comprised primarily of left-leaning trade unions and (marginal) political parties, rural social movements concerned with poverty and landlessness, progressive urban social movements, and public sector agencies concerned with land distribution. This nexus promotes a development strategy based on a rejection of structural adjustment, reduced dependence on agricultural exports and increased emphasis on diversification and land re-distribution.

Finally, the weakest nexus is that of eco-development, composed of government ministries responsible for natural resource protection, environmental NGOs, and environment-related departments at the University of Costa Rica and the National University. This nexus is under-funded and divided into those wanting a radical-left development alternative, and the US-influenced institutions who see environment in isolation from the social

9. The Partido Unida Social Cristiano is currently the ruling party in Costa Rica, and falls clearly into the capital accumulation nexus. The Partido Liberación Nacional is also part of this nexus, although a radical minority faction falls into the social reform nexus.

context and ‘would soon convert Costa Rica’s forests into fenced-off green museums surrounded by starving peasant families’ (ibid.: 198).

Carriere described these nexuses based on research conducted in the late 1980s, and his assessment of their relative strengths and of the lines between them can be reconsidered in light of the proceeding decade, and the emergence of the conservation counter-narrative. The general emphasis on sustainable development has also shifted the dynamic, with environment generally getting more attention from all groups. This is reflected in Nygren’s (1998) classification of Costa Rican stakeholder groups according to their adopted discourse on environment; environment for nature, environment for profit, alternative environmentalism, and environment for people. Nygren identifies some of the same government ministries as Carriere, but the central organizing principle of environment is a key distinction. For the sake of simplicity, this article will employ the nexuses as identified by Carriere (1991) and refer to Nygren (1998) where appropriate.

Theoretically, all three nexuses can identify with one or both streams of the counter-narrative, and the previous discussion suggests components of all three narratives are often mixed. The capital accumulation nexus will appreciate the profits earned via ecotourism and bioprospecting — the use component of the counter-narrative — and can thus support parks and protected areas, the ‘infrastructure’ for both of these industries and the tools of the traditional narrative. This support is not new, and Law No 4465 emphasized the importance of protected areas to Costa Rica’s economic development when it was passed in 1969. Evans (1999) details how different leaders, regardless of political party, have supported the expansion of a protected areas system based on the potential for tourism. Nevertheless, the growth of the ecotourism and bioprospecting industries represents a realization of economic potential, and allows for a more widespread acceptance of both streams of the counter-narrative by this nexus. Thus, while Carriere (1991) categorizes this nexus as ignoring environmental issues, Nygren (1998) sees its interests in ‘environment for profit.’

The eco-development nexus finds that in ecotourism specifically it has the sought-after economic justification for the overall goal of furthering the cause of protected areas. Again, employing an economic justification for protected areas is not new to this nexus. Boza recognized the need in 1969, and while Ugalde originally resisted justifying Costa Rica’s parks in terms of tourism, he softened his position as the industry grew (Evans, 1999). The exclusion of people from protected areas, regardless of whether or not they could be compensated, has been paramount for this nexus — except when people are scientists or tourists, and now ‘parataxonomists’. Economic profits gained from non-consumptive use make educating people regarding the necessity of conservation and human exclusion easier. Again, the counter-narrative is adopted in theory, while the traditional narrative is pursued in practice. This nexus, which Nygren (1998) suggests supports an ‘environment for nature’ discourse, has less interest in the consumptive use

component of the counter-narrative. Nevertheless, bioprospecting appears to be a tolerable option, in spite of concerns regarding its commercial nature.

Theoretically, due to its emphasis on community participation in, and control of resources, the community-based conservation component of the counter-narrative should appeal to the social development nexus, as it resembles closely the 'environment for people' discourse identified by Nygren (1998). For example, the democratization element of the restructured Unified Conservation Areas highlights the importance of local people. Nevertheless, Unified Conservation Areas have the potential to increase the amount of area protected and decrease that available to local farmers (for example through expanded buffer zones). Also, the language around biodiversity prospecting acknowledges the importance of local knowledge, but financial agreements value 'developed' pharmaceutical products more highly. Finally, with both bioprospecting and ecotourism, the real and relative benefits to local people have been questioned (Campbell, 1999; Nygren, 1998). Sustainable use has fared better than community-based conservation in both the articulation and practice of the counter-narrative, and the practice resembles closely the exclusionary mechanisms of the traditional narrative. Thus, it is not surprising that the social development nexus finds the least appeal in either stream of the counter-narrative

The interplay of the various narratives is evident at the local level, where communities, NGOs, private industry, government agencies, and tourists may be stakeholders. In Tortuguero, for example, the environmental NGO Caribbean Conservation Corporation (CCC) has been active since the 1950s; it lobbied for the creation of Tortuguero National Park. This US-based organization historically adopted a traditional conservation narrative. However, the recent rise in the importance of ecotourism to Tortuguero has allowed the CCC to adopt the non-consumptive use counter-narrative, with an emphasis on profits to be made by the local community (the current research director's motto is 'a turtle is worth more alive than dead'). Thus, the CCC employs the language of the counter-narrative while enjoying the logical outcome of the traditional narrative (a national park). The most powerful stakeholders in Tortuguero — the CCC, park staff, the tourism industry and, arguably, tourists — have found their narratives currently compatible. While members of the local community benefit economically from tourism and appear to support it, there is still some desire for consumptive use of marine turtles (Peskin, 2001). Consumptive use, however, is for all intents and purposes prohibited.

CONCLUSIONS: IMPLICATIONS FOR CONSERVATION AND DEVELOPMENT

In 1994, Utting suggested that the eco-development nexus had gained standing in Costa Rica, and the IUCN (1992) saw the creation of a separate

government ministry responsible for the environment with relatively high status in the government structure as a positive step for environmentalism. Utting (1994) also suggested that a meeting of minds had occurred between the dominant capital accumulation nexus and the eco-development nexus. Given the economic importance of ecotourism in Costa Rica, and the reliance of ecotourism on the nation's protected areas, this meeting is easily conceived; increased tourism increases profits (the objective of the capital accumulation nexus) and, in turn, increases justification for protected areas (the objective of the eco-development nexus). More recent bioprospecting activities further this mutuality of interests. However, rather than having been met in the middle, it is just as likely that the eco-development nexus has been co-opted; three examples are provided to illustrate this possibility.

Firstly, as ecotourism grew, 'the business and investment community in Costa Rica did not fail to notice this market niche' (Evans, 1999: 218), and there has been a "repositioning" of capital to take advantage of the profits, subsidies and fiscal incentives associated with environmentalism' (Utting, 1994: 250). The tourism sector has adopted 'eco' and 'green' labelling practices (O'Brien, 1997), but the value of such labels can be questioned. For example, Evans (1999) traces the re-packaging of standard tours by travel agents in San José and, in an evaluation of lodges claiming to be ecologically friendly, Blake and Becher (1994: viii) found that only forty-five out of ninety lodges met their criteria to be listed as 'practicing sustainable tourism'.

Secondly, the National Chamber of Tourism calls for increased development of environmentally sensitive tourism — a good example of the 'greening' of the capital accumulation nexus — but resists government attempts to regulate such development or to increase returns from tourism to nature conservation (as evidenced by their resistance to the 1994 increase in national park entrance fees). Its continued support for mega-projects like Papagayo suggests that its interest in ecotourism is based on profitability rather than conviction, and raises the question of what will happen if the popularity of ecotourism diminishes. Allusions to such an eventuality are made in the November 1999 issue of *Business Costa Rica*, where the president of the National Chamber of Tourism, Rúben Pacheco, bemoans Costa Rica's lack of mega-project beach developments. He states: 'Costa Rica's central attraction should always be nature, but we shouldn't make the mistake of only promoting flora and fauna. . . If we want to grow, we can't only promote ourselves as a natural destination' (Costa Rican-American Chamber of Commerce, 1999: 19).

Thirdly, Evans (1999) raises concern over some privately protected areas that, in an effort to attract tourists, fence off areas and feed wildlife to ensure clients have the experience they pay for. What is more, the amounts being paid are such that the experience is inaccessible to most Costa Ricans.

These examples suggest that the alliance between the eco-development and capital accumulation nexuses is an uncomfortable one, and possibly temporary. For the capital accumulation nexus, and in the discourse of

'environment for profit' (Nygren, 1998), profit remains key. Thus, if the popularity of ecotourism wanes, the capital accumulation nexus's support for it, and by extension for protected areas, may dissipate. With the decentralization efforts of SINAC, the eco-development nexus will lack a centralized agency to meet the challenges arising from a 'divorce' of interests. A further by-product of this uneasy alliance is that, in uniting in support of ecotourism and bioprospecting, both of which fall within the mandates of the IMF neo-liberal agenda of economic restructuring, the capital accumulation nexus and eco-development nexus have eclipsed the social reform nexus. This nexus has the most interest in the community-based conservation element of the counter-narrative, and yet has gained the least via either of its streams. In the current balance of power, the dominance of certain components of the counter-narrative is evident. While the 'sustainable use' component (with its attention to conservation and economic profit) is faring well, the 'community-based conservation' component (with its attention to local control and empowerment) remains illusive. Furthermore, as long as the counter-narrative supports protected areas as the infrastructure for tourism and bioprospecting, the shift from the traditional to the counter-narrative is essentially rhetorical, and the fundamental problems with the tools of the traditional approach will remain.

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