External economic pressures and park planning: a case study from Dominica

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Established in 1975, Morne Trois Pitons National Park protects one of the most spectacularly rugged landscapes in the Caribbean. Situated on the island of Dominica, the 17,000-acre park encompasses a variety of habitats ranging from lowland tropical rainforest to high-elevation elfin woodland. Much of the area is nearly impenetrable, characterized by dense forest cover and precipitous slopes. A series of steep-sided volcanic cones flanked by eroded lava flows and ash deposits dominate much of the park's interior. The highest of these volcanic peaks, Morne Trois Pitons, rises to an elevation of 4,672 feet within five miles of the ocean.

The high peaks and ridges of Morne Trois Pitons National Park form a barrier to the easterly trade winds, delivaring trampolous quantities of prographic rainfall to the

the easterly trade winds, delivering tremendous quantities of orographic rainfall to the center of the island. Many interior park locations receive more than 300 inches of precipitation annually (Evans and James 1997). This combination of high rainfall and

rugged terrain gives rise to an abundance of water resources and some of the most spectacular waterfalls in the Caribbean (Torres et al. 1998). Roughly half of Dominica's drinking water comes from streams that originate inside the park.

In 1998, Morne Trois Pitons was added to the global list of United Nations World Heritage Sites. It is the only terrestrial world heritage site in the Caribbean designated solely on the basis of its outstanding natural features. Much of the justification for this designation was based on the unambiguous role of the park in protecting biological diversity. Morne Trois Pitons supports a number of plant and animal species that are diversity. Morne Trois Pitons supports a number of plant and animal species that are endemic to Dominica, including a bromeliad (*Pitcairnia micotrinensis*), a tree frog (Eleutherodactylus amplinympha), and two species of parrot: the imperial parrot (or sisserou) (Amazona imperialis) and the red-necked parrot (Amazona arausiaca) (Christian et al. 1994; Evans and James 1997). It also provides an important habitat for other rare species such as the blue-headed hummingbird *(Cyanophaia bicolor)*, which is endemic to the Lesser Antilles.

The diverse assemblage of biological resources protected by the park is comple-

mented by an equally impressive array of unique geological attributes. Active geothermal features are common throughout Morne Trois Pitons, reaching their most spectacular expression in the area of Grand Soufriere (the Valley of Desolation). Boiling pools, fumaroles, and mineral-laden streams of varying colors and temperatures create a unique, treeless landscape. Much of the area is covered with mosses, bromeliads, and grasses that are uniquely adapted to the harsh growing conditions. The Boiling Lake, located in the center of the park, is the second largest lake of its

kind in the world.

Primary responsibility for the management and protection of Morne Trois Pitons National Park rests with the Forestry, Wildlife, and Parks Division of the Ministry of Agriculture, Planning, and the Environment. Established in 1949 as the Dominica Forest Service, the Division is responsible for the protection of the island's natural resources, including its parks, forests, wildlife, watersheds, and soils (Forestry and Wildlife Division 2000). Concomitant with its mandate to protect the country's re-

sources, the Forestry Division also plays an active role in educating the public on issues of conservation and sustainable resource use.

Consequently, conservation and park management issues maintain a remarkably visible presence in Dominican society. The 1998 designation of Morne Trois Pitons as a world heritage site made front-page headlines in each of the country's major newspapers. Much of this environmental awareness can be attributed to the diligent work of the Forestry Division. The effectiveness of this agency is further illustrated by the fact that roughly two-thirds of the island remains in natural forest cover, a rate

higher than that of any other Caribbean nation (Evans and James 1997).

In the creation of Morne Trois Pitons National Park the people of Dominica demonstrated a strong commitment to environmental protection (Wright 1985). However, there are a number of emerging issues that may have a significant impact on the long-term integrity of the park. It is now well recognized that many of the most significan't threats to protected areas worldwide originate far from park boundaries. Whether it is the illegal wildlife trade in the national parks of Asia, or illegal drug cultivation in the national parks of South America, natural resource managers increasingly face threats that are beyond their control (Terborgh 1999).

Morne Trois Pitons National Park is a clear case of distant and powerful forces setting in motion changes that threaten the very existence of a protected area. In this case, tiny Dominica is caught in the middle of an economic dispute between two huge trading blocks, namely the USA and the European Union. This dispute is totally unrelated to environmental protection, yet its unintended side effects may have a profound effect on natural areas throughout the Caribbean.

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This dispute is ostensibly over bananas. In 1993, European nations created a system of quotas for the importation of bananas into the European Union (Sanger 1999). These quotas were intended to benefit the former Caribbean and African colonies of the European powers while restricting the importation of bananas from Central and South America. In practice, the system secures about 20% of the European market for the former colonies while Latin America supplies the remainder (Ferguson 1998). Both the Europeans and the former colonials contend that small-scale banana growers in the Caribbean and Africa cannot compete with the large, vertically integrated producers in the Americas.

The USA became involved in this dispute in an effort to eliminate the quotas, which were seen as a barrier to free trade. Of course, there is no banana export industry in the USA. Yet, it is the USA that precipitated a minor trade war with Europe by bringing several complaints to the World Trade Organization (WTO) in the late 1990s (De Palma 2001a). The USA prevailed at the WTO, and the Europeans were ordered to abandon the quotas. After the European Union refused to lift the quotas, the USA was authorized to retaliate, which it did by imposing 100% tariffs on such diverse and unrelated European luxury goods as Louis Vuitton handbags, Scottish cashmers sweaters, and Parma ham (Sanger 1990)

cashmere sweaters, and Parma ham (Sanger 1999).

The key to understanding why the USA intervened "is steeped in American politics" (Sanger 1999). More specifically, the manner in which the USA finances its presidential elections is the crucial element. While the USA has no direct stake in bananas, Carl Lindner does. Lindner, owner of the Cincinnati Reds baseball team, is also chairman and chief executive of Chiquita Brands International, a transnational corporation that owns and operates vast banana plantations in Central and South America. Between 1993 and 1996, Lindner donated more than \$1,000,000 to the Democratic Party while also contributing significantly to the Republicans (Ferguson 1998). In the year preceding the presidential election of 2000, Lindner "contributed \$550,000 to the Republican Party and at least \$275,000 to the Democrates. \$550,000 to the Republican Party and at least \$275,000 to the Democrats, according to public financing records (De Palma 2001a).

In the wake of the WTO decision, the Europeans had proposed several compromises that were rejected by Chiquita and the USA. According to the *New York Times*, 'Chiquita pushed' Washington to respond aggressively and backed its demands with

substantial contributions to both political parties from its chief executive, Carl H. Lindner" (De Palma 2001b). Finally, in April of 2001, the impasse was broken when the Europeans agreed to import more bananas from Latin America. The new accord uses a complex formula that should help Chiquita regain the 40% share of the banana market it enjoyed prior to 1993 (Cooper 2001). Ironically, Chiquita already has the largest share of the European banana market (Lavery 2001). In 1998, Chiquita supplied 25% of European bananas while the entire Windward Islands Group accounted

for only 6% (Ferguson 1998).

Although banana exports from the eastern Caribbean represent only a minor fraction of Europe's supply, the banana industry is of primary importance to the economic stability of the Windward Islands. For example, in Dominica bananas account for more than half of all export earnings and 36% of the national labor force (Godfrey 1998). The negotiated increase in Chiquita's share of the European market will certainly come at the expense of small producers in the eastern Caribbean. According to Paul Reillo of the Rare Species Conservatory Foundation (a conservation group working closely with the government in Dominica), the anticipated loss of banana subsidies may catalyze a significant decline in agricultural revenues for the entire eastern Caribbean (Reillo 2001). Thus, decisions made far from the Caribbean are creating an increasingly dire economic landscape in the region. Consequently, protected areas are increasingly exposed to encroachment from subsistence farmers, tourism entrepreneurs, and extractive industries.

In Dominica, the past few years have witnessed a number of proposals for environmentally damaging development projects financed by foreign investors. Most notable among these was a proposal for a large copper mining operation in the heart of the island's interior forest reserves. This project, initiated by an Australian mining company, would have covered 10% of Dominica's land surface area. Conservationists, led by the Dominica Conservation Association (DCA), responded with a local and international campaign to halt the initiative. As a result of this successful campaign, Atherton Martin, head of the DCA, was awarded the prestigious Goldman Environmental Prize in 1998.

A more immediate threat to Morne Trois Pitons National Park is the recently initiated construction of an aerial tramway on the forested slopes just west of the park boundary. This project, financed in part by external investors, was originally designed to transport visitors into the core area of the park. However, early on it became clear that the environmental impacts of the project, both physical and visual, were unacceptable. A series of informal discussions between World Heritage representatives and the Dominican government led to a relocation of the tramway outside the park boundary. In this case, the park's status as a world heritage site played a major role in keeping the aerial tram out of the park. Nonetheless, this project may still have a major impact on the forested habitats immediately adjacent to the park boundary. Although construction is currently suspended due to a lack of funding, the issue remains unresolved.

Another simmering issue is the proposal to construct a new international airport on the northern end of the island. There are presently two airports in Dominica, neion the northern end of the Island. There are presently two airports in Dominica, net-ther of which can accommodate direct flights from the USA or Europe. The goal of the proposed airport is to significantly increase the number of visitors to the Island. Some see this as a key element in enabling tourism to replace bananas as the country's leading foreign exchange earner. Others fear that a major increase in tourism would overwhelm the island's protected areas and undermine the perception of Dominica as "the Nature Island." Although the airport is currently under review, many still see this as a pivotal issue. Attorney Henry Shillingford of the DCA has stated that "if this airport is built, all of our work here will be for nothing" (Shillingford 1999).

The vulnerability of Dominica's national parks and protected areas is directly related to the vulnerability of its economy. Since the arrival of the Europeans more than 500 years ago, Dominica and its neighbors have struggled to control their own eco-

nomic destinies (Honychurch 1995). The present course of economic globalization has only served to exacerbate this situation. As the St. Lucia Minister of Commerce, Industry & Consumer Affairs has stated: "Globally, we're just a lonely pawn on a gigantic chessboard surrounded by kings, queens and rooks who are waiting their moment to pounce" (Royle 2001). Although the ongoing struggles to curb campaign finance abuses and rethink the globalization project may seem peripheral to the management of national parks, they are integral to the fight to save the world's remaining wild places.

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