

National Parks from the Ground Up: Experience from Dominica, West Indies

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ABSTRACT. *This paper describes the development of a new national park in Dominica, a country that previously had no protected areas at all. In establishing the Morne Trois Pitons National Park, 14 coordinated steps are identified: developing local initiative; developing local public awareness; defining an area of priority interest (the Morne Trois Pitons area); obtaining basic equipment; defining the park boundaries; drafting protected area legislation; preparing interim management guidelines; undertaking a field demonstration project; establishing linkages with tourism and education; preparing the education and interpretative programmes; developing the management capacity; continuing the development of park facilities; establishing a research programme; and ensuring follow-up support. The paper draws conclusions from the Dominica experience and suggests how they might be applied elsewhere.*

1. INTRODUCTION

In 1974 and again in 1975, the Canadian International Development Agency (CIDA) provided grants totalling US \$200,000 to assist the Government of Dominica in establishing a national park on the island. The funds were channelled through the Canadian Nature Federation (CNF), whose involvement in the project concluded in 1980.

Looking back, Dominica provides an interesting case study and illustrates some valuable lessons in building a park system from inception to self-sufficiency. It is the purpose of this paper to present the experience gained in the practical implementation of a total park programme. Inasmuch as the project has been judged a success within the region and has acted as a stimulus and model for other islands, the lessons learned should be of wider interest. As Boza noted at the Second World

Parks Conference (Elliott, 1974), "There is a notable lack of information on the ways in which developing countries actually set about solving the problems involved in the administration and development of their national parks."

In 1974, Dominica had no parks, no enabling legislation, no management capability, and little public awareness or political support for parks or conservation in general. By 1981, as a result of a multi-faceted 'bootstrap' effort by CNF and others working with Dominica's Forestry and Parks Division (DFPS) there is today an operational national park known as Morne Trois Pitons. It is not a paper park. The infrastructure in place includes a National Park and Protected Areas Act, a headquarters office and visitor centre, marked boundaries, access trails, picnic shelters, numerous environmental education publications, and a trained cadre of staff. The park itself is accepted as integral to the island's development process and now largely operates without outside assistance. Morne Trois Pitons has been placed on the *UN List of National Parks and Equivalent Reserves* (IUCN, 1980a) and has been suggested as a possible World Heritage Site (IUCN, 1981a).

It must be added that these accomplishments came while Dominica faced a period of disruptive events including civil unrest, political turmoil, and natural disasters in the form of Hurricanes David and Allen. Despite these difficulties the parks programme has endured and a post-project audit has concluded that, although there is still work to be completed, the park is essentially operational and effectively managed.

The following discussion outlines the steps in the six-year period of park development and summarizes the factors which contributed to the achievement of project objectives.

2. STEPS IN THE DEVELOPMENT OF THE NATIONAL PARK

The procedure in establishing, developing, and administering an operational national park requires action on a number of different fronts. The following steps can be identified as the key ones in Dominica.

2.1. Support local initiative

Recognition of the unique natural values of the interior of Dominica first came from natural history experts from outside the country. The Director of the island's Forestry Division became sympathetic to these values, and his concern for the environmental damage of a timber harvesting operation reinforced them. This concern led to attendance at the International Seminar on National Parks and Equivalent Reserves, which in turn led to the conception of the idea of a national park in Dominica. Recognizing the assistance that would be required and the international interest in the concept, the Director pursued and invited outside agencies to contribute.

The first lesson is that initiative from the local level, even if it is from only one individual, is a prerequisite for action. One man and a small amount of seed money was enough to launch what was to become Morne Trois Pitons National Park.

2.2. Develop local public awareness

Awareness of national parks and conservation in Dominica in the early 1970s was almost non-existent. To counteract this, a team from the Conservation Foundation prepared a public relations document entitled "A Chance for A Choice". This booklet, a high quality production, presented the potential benefits of a national park on the Island. Distributed widely, the document was very helpful in eliciting interest and receptivity for further work.

A second lesson is that public relations in the early phases of a project conducted by a team of respected outside experts can effectively reinforce efforts being made at the local level.

2.3. Define an area of priority interest

In Dominica, as in most other countries, there will be many candidate sites for selection as national parks. When beginning a park system, all efforts should focus on one area. This strategy allowed a solid programme to be developed in Morne Trois Pitons which subsequently led to consideration for the addition of other areas to the system. The temptation to use the "shotgun approach" rather than the "rifle approach" was thus avoided.

Our third lesson followed from experience gained

earlier in Costa Rica: acknowledge limitations and proceed with one key area as a springboard for future additions. (In fact, in 1981, the Dominican Cabinet announced approval in principle to create a second national park at the north end of the Island).

2.4. Obtain basic office and field equipment

To proceed beyond the preliminary paperwork, it was necessary to obtain logistical support to carry out further work. At this point, the first CIDA grant allowed for purchase of a vehicle and appointment of a technical advisor. The Forestry Division provided a visible and accessible office base and the detailed planning work began.

2.5. Define park boundaries

Many national parks throughout the world have been established on lands unsuitable for any other purpose. In the case of Dominica, boundaries of the park were drawn to exclude private lands and lands judged to harbour significant agricultural or forestry potential. Water catchments and lands with high erosion potential were all included in the proposed boundary study, which identified a park area amounting to 8 percent of the land area of the island.

It should also be mentioned that the donation of a significant amount of private land to the park through the Nature Conservancy also affected boundary selection.

The lesson is that when selecting an area for national park establishment, it is important to minimize social and economic disruption. The chances of survival of the proposed Morne Trois Pitons National park were enhanced by boundary definitions using land ownership and agricultural potential criteria. A subsequent rationalization of the boundaries on ecological criteria by Shanks and Pitney (1979) confirmed the area selected and provided suggestions for minor adjustments.

2.6. Draft protected area legislation

Once the concept of a national park was publicized and a proposed area defined, the basis for the legal establishment was prepared. Dominica's Parks Act, prepared with help from the Canadian Ministry of Justice, is a broad one, allowing for the creation of national parks, historic sites, and recreational areas. Two alternative acts were presented to the Attorney General, who then presented one to the House of Assembly. The Act was passed unanimously within four months. Action on the parks regulations, however, has taken much longer and only recently have they been presented for gazettelement.

The passage of the Parks and Protected Areas Act was the breakthrough that was needed to galvanize

further action. Once Dominica had demonstrated its commitment in the area of parks, other agencies came on board and the work began in earnest.

2.7. Prepare interim management guidelines

In Dominica, it was not possible to conduct a full-scale management planning exercise in the early stages of the project. A preliminary plan, however, was prepared outlining the basic objectives and general management guidelines (Thorsell, 1975). This document guided the park in its formative stage but gradually needed updating as conditions changed and as new information became available. A formal management plan for Morne Trois Pitons is now in its final stages of completion.

The lesson here is not to delay action until a sophisticated comprehensive plan can be prepared. A preliminary guideline approach, however, can be useful in identifying the key problem areas. Also, it is preferable for the local staff to prepare this plan for themselves as a staff development exercise.

2.8. Undertake a field demonstration project

Apart from reports, discussion, legislation, and general administrative tasks, a practical on-the-ground recreational facility was provided to physically demonstrate one of the park's attractions. The project selected was a nature trail and picnic shelter development in an easily accessible and attractive area of the park. As a demonstration project, this was done carefully, utilizing local labour. A trail brochure was prepared and an official opening ceremony held, with the Minister and other key officials attending at the site.

The trail has subsequently become a popular facility; virtually every tourist to the Island visits the site and is exposed to the rainforest environment. To our surprise, an equally large visitation by local Dominicans also resulted. Ironically, the gauge of the success of the facility is reflected in the recreation site management input it now requires. The lesson is that a practical, visible, low cost, accessible facility, properly done, generates both local and foreign use, providing immediate public understanding and support for the nature-oriented experiences the park is planned to offer.

2.9. Establish linkages with tourism and education

Once a sample facility was provided and information brochures on the park prepared, these two prime target groups were drawn into the programme. The symbiotic benefits between parks and tourism became immediately apparent and the park has become a strong theme in the promotional literature on the Island's attractions.

Meetings with primary and secondary school teachers indicated that resource materials relevant to the is-

land environment would be enthusiastically received. A special teacher's workshop bringing in environmental education experts from the region was sponsored by DFPS and CNF, further developing the parks/education linkage.

The Dominican experience illustrates that to strengthen local support the involvement of related park user agencies should be cultivated. Integrating the park programme with the Tourism Board and the Education Department created particularly strong linkages that were developed for mutual benefit.

2.10. Prepare education/interpretation programme

The more word of the national park spread, the greater the demand for information became. An interpretive policy guideline paper was prepared (Thorsell, 1978) and a major effort was then directed to this sector. Brochures, magazine articles, trail guides, films, displays, posters, and radio programmes were all used to inform Dominicans and their visitors of the values of the park and the broader island environment. Two 16mm films narrated by the DFPS Director proved to have particularly high impact when shown by park staff at most of the island's schools and villages.

The realization here is that schoolteachers in developing countries are often in great need of resource material about their own environment. Morne Trois Pitons' interpretive programme acted as an effective environmental education catalyst to foster a greater conservation awareness beyond the confines of the park itself. Concomitantly, sales of park publications to tourists have become an ongoing source of revenue.

2.11. Develop management capacity

Building on the original headquarters staff of one, there are now seven professionally competent members of staff who work either full- or part-time on parks responsibilities. At the field level, all Forest Guards and Rangers have been given supplementary training in parks management. Interestingly, there has yet been no evidence of outward mobility of trainees.

A variety of training methods were used, provided in cooperation with WWF-US, Parks Canada, and the ECNAMP programme (Putney, Jackson, and Reynard, this volume). Management capacity in Dominica was thus strengthened by a mix of the following:

- On the job work experience with visiting professionals;
- attendance at International Seminar on National Parks and Equivalent Reserves for four senior staff;
- participation in two regional park planning workshops;
- attendance at regional annual meetings of the Caribbean Conservation Association;

- field attachments with staff at Virgin Island National Park for two senior staff;
- sponsorship of three workshops held locally on the topic of environmental education and park ranger training;
- sponsorship for correspondence courses; and
- provision of reference and study materials for the park library.

No actual counterpart designations were made; rather a cooperative team approach to transfer of knowledge (both directions) was the method that seemed to work best.

The workshops for field level staff were particularly useful as they addressed such practical topics as first aid, search and rescue, chainsaw maintenance, and law enforcement. Training for this level cannot be overlooked as the field staff is responsible for operation of the park on a day-to-day basis.

Our experience in Dominica suggests that training at the local level, using workshops, sponsoring attendance at conferences, study tours, and attachments at other parks combined with knowledge transfer at the working level can effectively supplement long-term education at foreign universities. Further, any training in continental North America must reflect locally appropriate technology considerations, it must recognize the insularity factor, and understand the effects of cross-cultural tourism. Establishing a regional park training school, possibly in conjunction with the University of the West Indies, would be an important step in developing training opportunities at the local level.

2.12. Continue park facility development

While all the above steps were being undertaken, the tasks of managing, protecting and developing Morne Trois Pitons were in progress. Boundary marking, trail construction, and picnic site development were the major facilities provided. Labour from villages near the park was used wherever possible. Some experimenting in materials and design was necessary but three criteria guided all developments: durability in the rainforest environment; local availability of materials; and likelihood of low post-operative maintenance costs.

Our concern was that capital costs for facilities be kept relatively low and that only those structures undeniably essential to the use and operation of the park be provided. The post-project continuation of maintenance by DFPS is a reflection of the rationale of this approach.

2.13. Establish a research programme

Morne Trois Pitons National Park, with its unique rainforest, indigenous fauna, and active volcanic activity, has long attracted international scientific attention. At

the same time that research activities were to be encouraged in the park, it was recognized that researchers themselves can cause resource impacts and conflict with other users.

For this reason, the Island Resources Foundation developed a research plan with guidelines for controlling and encouraging proper use by researchers in the park. In addition, research needs were defined, and special facilities and funding sources outlined.

The basic rationale here was that since one of the objectives of the park is to encourage research, it should be planned and managed. Although a research programme has been slow in getting underway, a framework is in place. Perhaps an association with an established university or tropical research institution could be developed to exploit this sector of the park programme.

2.14. Follow-up support

During the early years of the project, an outside professional worked with DFPS on a continuing basis to assist in launching the park. This presence was gradually phased out, the CNF programme concluded and full responsibility for the management of Morne Trois Pitons is now in the hands of DFPS. Post-project follow-up reviews to monitor progress are, however, suggested and should be considered in total project funding (La Bastille, 1975).

Similar to La Bastille's (1973) experience in Central America, occasional return visits by foreign advisors to review progress can add dimension to the effort and act to provide psychological support. This follow-up was not provided for in Dominica but should be a consideration in future projects.

3. CONCLUDING COMMENTS

Beyond the experience gained in achieving each of the previous tasks, there are several general issues relating to the project as a whole that deserve comment.

3.1. Justification of a national park

An important consideration in Dominica was the framework in which the idea of parks was rationalized and presented. In many developing countries the words 'park' and 'environmental protection' strike a negative note to some skeptics in the formative period. It is important, therefore, to treat the park(s) as one element in the total integrated resource management fabric of the country. Parks must be seen to contribute to the total economic development process by providing a flow of multiple benefits including protection of water catchments, prevention of erosion, maintenance of natural systems, en-

vironmental education, research, tourism, recreation, and the maintenance of future options.

Within this broader scheme of wildland management, parks can play their most effective role as environmental catalysts. Thus viewed, parks are an indispensable aid in the advancement of resource management and are inescapably associated with a healthy, attractive and, most important, productive environment. As has been noted by Western and Henry (1979), this national economic development motive for parks in developing countries can be the most effective justification for their conservation.

3.2. Developing local relevance and involvement

To assure long-term support, parks must demonstrate that they can be both self-supporting and made relevant to local people. Job creation at the rural level providing visible material benefits is one important element. The involvement of as many segments of the population as possible in the park programme is another.

To develop this involvement is a major challenge for park systems everywhere. But in countries like Dominica, where the conservation movement is in its infancy, aid support may have to extend over a number of years if this is to materialize. From our experience in Dominica, a period of six years was a reasonable time dimension.

3.3. Project administration

As discussed above, the assistance given to Dominica to establish a national parks organization was characterized by:

- The need to work from the ground up—all the fundamental steps were required;
- the strength of local support for the overall objective;
- the practicality of the project and emphasis on accomplishing results on the ground;
- the relatively low level of funding available;
- the mix of input from a variety of individuals and agencies; and
- the on-going and coordinating role of the non-governmental group selected to execute the project.

This last point of administration by an NGO is particularly important as it allowed the extensive flexibility necessary to achieve results without the smothering effects of bureaucracy.

Finally, the cooperative personal relationships between local government officials and visiting experts worked on a peer level and worked well. Too often, projects suffer from personal difficulties between the various individuals involved. Differences and disagreements will, of course, occur but achieving the objective of establishing and effectively managing a national park of international calibre is of such importance that it can override minor differences.

Acknowledgements

The Dominica project was a social product to which many individuals and agencies contributed. First must be recognized Chris Maximea, Director of Forestry and Parks for his vision and continuing commitment to conservation in Dominica. Single-handedly he guided and provided the basis of the park. Second, the park staff at the local level, including Superintendent Colmore Christian, have been most instructive and constructive to all who worked with them.

We all are indebted to CIDA's Non-Governmental Division for sticking with us and allowing CNF to complete the project. CNF's local representative, Penny Honychurch, devoted almost four years of her considerable talents. Other staff provided through CNF were Ted Mosquin, Charlie Harvey, George and Kay Wood, Ruth and Bruce Gordon, and Peggy Heppes.

Parks Canada's cooperation was vital and assured through Harold Eidsvik. Harry Cooper and Roger Hamilton of that agency also did their share. The National Museum's Louis Lemieux and John Whiting made their unique contributions.

Regionally, the long-term input of Dr. Edward S. Towle and the Island Resources Foundation has been and still is assisting in the ecodevelopment of Dominica. Similarly, the Caribbean Conservation Association and Jill Sheppard have always provided support. The follow-up work of Allen Putney and ECNAMP was helpful in the areas of training and expanding the parks programme.

Through the years, the WWF has provided the Dominica Forestry and Parks Division with much needed vehicles and WWF-US has provided scholarships for training. The initial ground work by the Conservation Foundation and by Michael Wright of The Nature Conservancy with the Archbold Estate provided the spark-plug that was needed. Various Peace Corps volunteers also worked ably with their Dominican counterparts.

