

The TCI Experience: Pros and Cons of Developing Eco-tourism Related Activities

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ABSTRACT

Trail systems and programs have been developed in the Turks and Caicos Islands (TCI) to augment and entice eco-tourism related activities. The Little Water Cay Rock Iguana Trail Program was the first such endeavor, developed in 1996 to aid in the protection of the endangered TCI rock iguana, *Cyclura carinata*. Two underwater snorkel trails (Smith's Reef and Bight Reef) were developed in 1997 in an effort to help protect nearshore reefs and in 1998, the Middle Caicos Eco-tourism Project was initiated with the development of the historical Crossing Place Trail. An experiential review of the mechanisms for the development, design, funding and implementation of these programs are discussed, as well as the pros and cons experienced while undertaking each of these endeavors.

KEY WORDS: Turks and Caicos Islands, eco-tourism projects

INTRODUCTION

The standard set by the Ecotourism Society describes eco-tourism as "responsible travel that conserves natural environments and sustains the well-being of the local people" (Kalosh 1993). The parameters that define eco-tourism are directly linked to the reasons for initiating environmentally related activities. Overall, the basic eco-tourism concepts are either one or a combination of the following aspects:

- i) A management tool to help protect and preserve the environment;
- ii) Promotion of the ecological facets of a tourist destination;
- iii) Increasing visitor and local environmental awareness;
- iv) Increasing the economic gain of the tourism industry through sustainable use of the natural environment
- v) Spreading the tourism dollar to areas other than the main commercial districts utilizing the natural environment as the attraction.

Ultimately, every project must ensure the continued sustainable use of the environment, otherwise, there will be no further eco-tourism activity. It is here that most programs incorporating nature fall short.

The next step is to define what makes a particular eco-tourism project a success. In simplified terms, a successful project is one that manages to keep the environment in tact and keeps the tourists coming year after year. But accomplishing those goals are not so simple or straight forward. As there are many components to developing

programs of this nature, it is important to evaluate the effectiveness of each individual item in perpetuating the overall goals.

The Turks and Caicos have developed several nature trail projects that are currently marketed as part of their eco-tourism trade. Of these, this paper will examine three of the projects using a case study approach. The evaluations will include the details of developing the TCI trail systems and highlighting the pros and pitfalls experienced along the way. In this manner, it is hoped that others may garner pertinent information from these experiences that will help them to develop their own successful eco-tourism programs.

RESULTS

The three nature trail programs described in the following text are all projects initiated through the Turks and Caicos National Trust (TCNT). The Department of Environmental and Coastal Resources (DECR) has also lent support for these projects within the governmental framework, with funding contributions coming from both external and local resources. The author of this paper acted as the TCNT Project Coordinator for the following projects and was involved in all aspects of the projects from proposal preparation, design and implementation, and initial project management and maintenance.

The following is a brief background and summary of the individual programs, with the pros and pitfalls noted for each. Included in each case study are the following aspects of the development process: funding sources, reasons for design specifics, types of interpretive elements utilized, marketing techniques, maintenance needs, forms of income generation, training programs and/or environmental education aspects.

The Little Water Cay Rock Iguana Nature Trail Program

Background — The Little Water Cay Rock Iguana Nature Trail Program was the first eco-tourism project initiated through the Turks and Caicos National Trust. Little Water Cay (LWC) is a small island adjacent to the east side of Providenciales and is inhabited by a healthy population of the endangered rock iguana, *Cyclura carinata*. For many years, residents and visitors have visited the nearby cay for picnics and the experience of seeing the rock iguanas. As tourism began to grow on Providenciales, visits to LWC became more frequent and the associated impacts increased. Most disconcerting was the destruction of the burrows and nesting areas of the rock iguanas as visitors tread over the dunes and burrowing areas and began to explore the interiors of the cay. A second problem was the inappropriate feeding of the animals, causing possible illness and the disruption of their role within the food chain. Harassment of the docile creatures also became more frequent, especially from residents bringing their animals to the cay.

In 1995, a solution was proposed by the Turks and Caicos National Trust (TCNT) and the Department of Environmental and Coastal Resources (DECR).

Proposals were written to seek funds for the development of a multi-faceted nature trail program. Outside funding was secured through the RARE Center for Tropical Conservation and matching funds from the MacArthur Foundation. Once funding was secured, two boardwalk nature trails were developed on the island in the areas most accessed by humans. The boardwalks would keep visitors from crushing burrows and nesting sites, while localizing impact to the given areas. Interpretive elements would help to educate the visitors, complete with "iguana etiquette", on why and how they could help protect the endangered iguanas. This was followed by training sessions for the water sports operators in their role as self-policing wardens of the cay.

Brochures about the cay were produced to enhance the educational component as well as act as a marketing aid. Magazine articles and press releases were also written (Pardee Woodring 1996). Posters were made for marketing and placed in the airports, at all tour desks, and at water sports operators outlets. An income generation mechanism was initiated that would raise funds for the maintenance and upkeep of the cay facilities. An iguana button was produced, which acted as the ticket for accounting purposes and also as a souvenir in exchange for the tourists' \$3 fee. Any excess income not used to operate and maintain the cay was transferred into a conservation fund controlled by the water sports operators and the National Trust to initiate other projects of this nature.

Pros and Pitfalls — A large bonus to the LWC Nature Trail Program was the initiation of the RARE funded Environmental Education Project that focused specifically on the endangered rock iguana. Through this program, residents and locals of all ages throughout the islands were made aware of the country's own special endemic endangered species. This program helped to set the stage for island wide acceptance and pride in the newly developed Little Water Cay Nature Trail Program.

Albeit, the biggest hurdle to overcome with the development of the LCW Nature Trail Program was the user conflicts and acceptance by the people that made money running tours to the cay. Many of the water sports operators felt their freedom to use the island for tours was being taken away from them, and they were opposed to their visitors having to pay a fee. Many meetings and training sessions were held prior to the opening, and eventually the operators agreed to cooperate with the project. Operators were promised that funds collected above and beyond program maintenance fees would be held in a separate account for use on other conservation projects of their choosing. A special committee was formed through the local Watersports Association that would vote on the appropriation of those funds.

Once opened, the new trail system did prove beneficial to the operators despite their initial opposition. Tours increased to the cay, and the tourists were quite pleased with the trail system. As of March, 1999, the trails were grossing over \$50,000 dollars per year, with approximately 17,000 tourists visiting the cay (Pardee Woodring 1999). Excess funds have been used to hire an iguana specialist for

additional monitoring LWC, to put in mooring buoys on dive and snorkel sites, to lend support to the Underwater Snorkel Trails and Middle Caicos Project, and to finance numerous other small conservation related projects.

The author of this paper relinquished the management role in 1999 and therefore cannot report fully on the progress of the program since that time. A number of changes have occurred over the past two years, including posting a warden on the cay for periodic policing and checking for payment of user fees. Prior to this, the cay was self policed by the operators who went there. In 1999, there was a change in the structure of the LWC committee that decided on fund allocations, limiting the power of the operators in controlling those funds and their involvement in the project. Local sentiment suggests that with this reduction in involvement, the operators have lost some of their interest and have reduced their efforts to comply.

Feeding iguanas has also been a problem from the outset, and initially specifically formulated food was purchased for the operators that felt their guests still needed to feed the iguanas. Eventually many operators gave up on the prepared feed and discontinued feeding practices completely. Unfortunately, several operators continue to feed less appropriate items, but the incidents are far less frequent.

Tidal surge and winter storms are also a problem for the trails, but the boardwalks were designed to be removable and built in small 4ft manageable sections. If the shoreline begins to wash away, the sections can be removed in those areas. When sand accretes through tidal surge, the boardwalk is easily jacked up again with the use of a few strong boards. Otherwise, maintenance to the trail system is minimal.

Aside from the small problems and growing pains that every project suffers, the Little Water Cay Nature Trail Program has made a huge mark for eco-tourism in the Turks and Caicos Islands. In 1998, the program received a Finalist position in the Islands Magazine Eco-tourism Awards. This accomplishment alone has put the TCI on the map in terms of those searching for eco-tourism destinations.

The Smith and Bight Reef Underwater Snorkel Trails

Background — The second eco-tourism project was in fact inspired by the same water sports operators who helped develop LWC, due to their concern of the apparent demise of two near-shore snorkeling reefs. Smith's Reef and Bight Reef are both located along the north coast of Providenciales and are accessible from the shore. The increase in tourism was escalating the level of impacts to the reefs at a rapid rate. Unlike the offshore reefs where water sports operators have the chance of educating and policing visitors on the rules of reef etiquette, beachgoers to these reefs were on their own. It was decided that snorkel trails would be placed around both reefs. The purposes of the trails were two-fold: to lead snorkelers along a path of sufficient water depth where they could not easily damage the corals or themselves (which would also tend to localize the area of impact), and to educate the snorkelers through interpretive information given on the trail markers and beach

signs.

A unique design was decided for the underwater trail markers. The base of the trail marker is a LoPro size ReefBall™ that will eventually become part of the living reef. The marker portion is a handmade tile with original artwork and information embedded into the glazed surface. These individual artworks were then sold to increase local community awareness in the project with the names of the donor or donor agency embedded into the tile for deployment on the underwater sites. Meetings were held with all operators that frequented the reefs to advise them of the new system and ask for their assistance in helping to police the areas.

As it was deemed impossible to set up an income generating mechanism directly from day to day users of the trails, alternative methods were offered. Colorful laminated trail cards with educational information included were produced for sale through the tour desks and water sports operators. A complimentary courtesy card was also developed for the hotels, to be placed in the individual rooms. The card consisted of an underwater scene on front with drawings pictographically representing the "NOs" of reef etiquette for international interpretation. No marketing was deemed necessary to attract visitor's to the trails, but magazine articles were published to advise snorkelers of the reef trails and their role in helping to preserve the environment (Pardee Woodring 1997).

Pros and Pitfalls — The Underwater Snorkel Trail Project has overall, been very well received by all that enter the waters off Providenciales. The community interest and assistance with initial funding needs and subsequent maintenance has been positive for the trails. International interest has been shown through several news releases in other countries.

Maintenance of the trails has been from voluntary sources since their completion in 1997, with bimonthly cleaning of the tiles and checks on general conditions. To date, these voluntary efforts have been for the most part sufficient in keeping the trail markers maintained.

Thus far, no storms have managed to wreak havoc with the underwater mounts or markers. Their weight, design, and additional screw anchor and cabling has kept them in place. Some scouring around the bases has occurred, but they are easily repositioned with the aid of divers. Only two tiles have been broken to date. The first was attached to a buoy that was obviously used as a mooring by mistake. Since that time, less resistant markers, such as plastic bottles are used for marking outer boundaries, and they are attached to separate screw anchors. The second tile broken was located in shallow waters and likely used to stand upon or bumped by a passing boat.

Coral growth on the trail mounts has been slow, but at least three species of corals are now apparent with a fair coating of primary algal species and other encrusting organisms. This is to be expected in the highly oligotrophic waters in this area.

Unfortunately, the funding mechanisms devised to assist with maintenance have not been fully utilized nor have the recipient funds been returned to assist in this

maintenance. Fortunately, there have been little need to maintain the project as is, and those needs have been covered by volunteer services and donations.

The biggest pitfall of the project is that no continuous monitoring system has been put in place to monitor the health of the corals on the reefs, nor the effect of the trails as an aid in reducing the impacts. Observations suggest that people tend to follow the trail markers and that some are obviously absorbing the interpretive information on the markers and beach signs.

Additional impact control has been added to Bight Reef in the form of roping off the interior shallow reef sections. An artificial reef program has been initiated as well that should further dilute impact by providing another nearshore reef site. Proposals have now been submitted for monitoring the reefs and obtaining user impact information.

The Middle Caicos Eco-tourism Project

Background—The Middle Caicos Eco-tourism Project began with the resurrection of the Crossing Place Trail, a historical trail that leads along the coast of Middle Caicos to a “crossing place” between the islands of Middle and North Caicos. Aside from reinstating one historical aspect of the islands culture, the trail provides easier, yet limited, access to some of the impressive natural surroundings. By instituting the official trail site, coastal access for this area is guaranteed as development begins to escalate. Economic gain to the local island economy through guided tours, meals, taxis, local crafts, and other services are further benefits to the project.

A portion of the trail is suitable for hiking only, while another segment can be accessed with bicycles. There are plenty of snorkel sites along the way and magnificent views from many stops. Two caves are included on or near the trail with ruins from the Loyalist era scattered about. Flora and fauna abound on this barely developed island.

Interpretive signs include large scale artistically drawn maps at the beginning of each trail section as well as maps and interpretive information for the cave sites. Handmade “cameo” tile trail markers mark the way, with directional signs at key points. Brochures have been produced with information on Middle Caicos and contact numbers. Magazine articles were written to aid in marketing (Pardee Woodring 1998). A marketing booklet filled with color photos and text describing the highlights of the island and trail was produced and given to all tour operators and in some cases, villa rental agencies. Keychains with the MC Cameo logo are sold at local craft outlets and to those visiting the island to help with trail maintenance fees.

All aspects of design, construction, and implementing stages of the project included interviews, participation and assistance from many of the elders of the community. The official opening of the Crossing Place Trail took place in December 1998, with cultural shows, crafts, and foods sold by the local community, and other proceeds going to the augment the trail program.

Pros and Pitfalls — In terms of local support, acceptance, and pride in the project, the Middle Caicos Eco-tourism Program is a prime example of a how a community can work together to make the project unique. Since the opening of the Crossing Place Trail, there has been a resurgence in local interest for Middle Caicos and their local handicrafts.

Outside eco-tourism has increased at an island style pace. The biggest pitfall in the process is access to Middle Caicos and the cost of doing so. The water sports operators do run excursions to Middle Caicos but the roundtrip ride is sometimes a grueling 2.5 hours in rough weather, and the boats are limited in time by the receding tides. Plane services, although the best option for extending the day, are not guaranteed to run daily, and special charters have to be arranged. Either way, the cost per person per day is minimally at a rate of \$130. Many tourists ensconced in all inclusive resorts are not willing to spend that amount for a tour, regardless of its eco-tourism appeal.

Another problem with the trail portion of the program is the limited funds available for maintenance. The five-mile hiking portion of the trail has to be brush-cut seasonally for upkeep. A private donor guaranteed initial funds for the first few years of operation as the program took hold, but few funds are left now for continued maintenance. The ticketing mechanism has not been fully utilized, and the limited tours that have paid are not enough to maintain the trails and interpretive elements. Again, voluntary services have been required to keep the trail in operation.

DISCUSSION

Overall lessons learned while developing the three nature trail projects are compiled below. The key points have been categorized by the various aspects involved in project development.

Funding Sources

For large budgeted projects, it is often necessary to seek regional or international funding, particularly in small island nations. Securing outside funding can not only help to market the program internationally, but also establishes a good "credit rating" with other funding agencies and the potential for future assistance. Utilizing local sources for funding helps to build community involvement and awareness and is well worth the effort it takes to do so as it often results in continued moral and financial support.

Design and Construction

The infrastructure design and construction of a particular nature trail project depends upon several factors beyond the physical and biological characteristics of the site and conservation needs. One must consider the number of visitors expected, their levels of physical ability, safety and health precautions, waste disposal, accessibility to transport, security, food and water, time allocations, and trail

guidance needs to name just a few. Seasonal climatic conditions, tides if located near water, and pests such as mosquitos or more lethal organisms should all be addressed when designing the project.

Lo-tech construction, use of locally found durable materials, and low visibility structures that blend with the environment are preferable for all the right reasons, i.e. typically lower costs and less maintenance. Any cultural features or representations of native culture should be utilized to highlight more unique qualities. Employment opportunities and interviews with as many local counterparts as possible will help to create local vested interest, acceptability and pride in the project.

Interpretive Elements

Interpretive elements are often the defining features that make the individual project stand out from all other trail programs. It is here that the opportunity lies to relate to visitors what is unique not only about the particular environment, but the efforts of the Turks and Caicos government and citizens to protect it. Typically, the role of interpretive elements is to relate environmental information, but is often coupled with protective measures needed to help conserve the environment. To be successful, the interpretive information must be presented in a way that catches not only the eye, but the mind and memory of the visitor.

Income Generation

Income generation is important for ongoing maintenance and operations. If a user fee is used, the ticketing mechanisms should be simplified as much as possible in terms of how to collect and disperse the tickets and funds. Instituting a ticket form that also acts as a souvenir gives visitors an added bonus to their fee, one that serves to remind them of their special eco-tour. This mechanism can also help to promote the program as other potential tourists inquire about the souvenir. Be prepared to work with the tour operators and desks to assist them in getting the fee mechanism in place and functioning to their benefit as well as the programs.

Marketing

The eco-tourism marketing program needs to extend from local, to national and international levels. The most difficult problem in local marketing is that tourists are new every week, and the marketing devises chosen must be continuously supplied and updated. Assistance on the international level is usually available through the government's Tourism Board. Posters, magazine articles, press releases, and advertisements in marketing booklets or road maps are good tools in spreading information. Apply for international recognition of your projects through the many eco-tourism awards offered.

Training and Environmental Education

Training and environmental education programs need to extend not only to the tour guides and trail guides, but to taxi drivers, water sports operators, tour desks, travel agents, hotel management, and any other persons directly or indirectly related

to the project. Instituting environmental awareness programs in schools and other community arenas will help to further the pride and preservation of the project.

CONCLUSION

In all three case studies, the biggest problem has been one of continuity. Almost all projects start off with a bang and then slowly dwindle into obscurity. As that happens, enthusiasm tapers off, upkeep of the environment becomes less of a priority, program maintenance suffers, and local pride and support abate. Of all the lessons learned from the three TCI nature trail projects, the following key factors have been deemed the most important in developing successful eco-tourism programs.

Continuous Protection and Preservation of the Environment

Without the environment, there is no opportunity for eco-tourism activities. Protecting and preserving the environment that is chosen for the eco-tourism activity involves careful consideration when designing the project, and monitoring during construction and operation phases to ensure that the surrounding environment sustains minimal impacts. Interpretive elements are also important as educational components that inform visitors of how to assist in preserving the environment. Through training and environmental awareness programs, residents will also learn an appreciation and awe for their local environment, furthering the preservation efforts.

Continuous Local Acceptance, Involvement and Support

The increased attraction of tourist through eco-tourism programs can offer opportunity to many people throughout the community, whether it be taxi drivers, boat operators, tour desks, local craftsmen, hotel and restaurants, or rental villas to name just a few. Although outside marketing is important in initially getting tourists to a destination, it is the local support and acceptance of the project that is key to the program's continuing success. If a sense of pride for the project can be manifested throughout the community, this sentiment will be reflected in numerous ways to the tourists. The local community will be the force that makes the eco-tourism activity a truly special experience. In metaphorical terms, the environment you wish to preserve and protect may be the heart of the matter, yet the soul comes from the people who embrace it.

How does a project succeed in garnering this local support? By involving as many people in the community as possible in all the different phases of project development and ongoing operations. Some examples used in the TCI projects include holding community meetings about the project, getting funding or service donations, employment opportunities, utilization of local artisans and craftsmen, training and education programs for all ages, and establishing working groups or committees involved in the disbursement of funds or other activities. Their involvement will constitute an investment of sorts, one in which they will have

vested interest in seeing the program become and remain successful.

Continuous Maintenance

Maintenance typically refers to just the physical maintenance of whatever type of trail is constructed. Although important, the physical structures are only a small portion of the overall program that needs to be maintained. Other facets include interpretive and marketing elements, training and education programs, administration / accounting, and public forums for continued community involvement. Continual maintenance of all these facets will result in the continued promotion of the program.

Beyond the physical facilities, a few examples for continued maintenance include interpretive elements that must be updated for changes and in the case of brochures and handouts redistributed on a regular basis. Marketing elements require the same, and time must be spent maintaining good relations with the travel agents and writers, tour operators and tourism desks, and any other persons related to the enterprise of the project. Training and local education programs need to run continually to ensure the ongoing enthusiasm of local counterparts. Keeping up with administration and accounting if working a fee paying trail can be key to determining the highs and lows of the project and to prepare financially for upcoming needs. This information needs to be reported to the community and local user groups to keep them in contact and a part of your project.

How does a project succeed in providing ongoing maintenance? It is accomplished primarily through some form of income generation which supplies the needed funds to a) hire staff to coordinate and keep up with ongoing needs and b) supply the finances for the material aspects. Income generation does not necessarily have to be in the form of a user fee, but does require some consideration in terms of creating a fairly constant cash flow of funds for maintenance. Even if the project is fairly simple and easily maintained in the beginning, long term wear and tear will eventually require funds for replacement of physical or material implements. Voluntary services should only be considered a bonus to any project, and volunteers do require a certain amount of coordination and appreciation for their roles.

In summary, continuity is the key to an ongoing successful eco-tourism operation. Developing the program is only the first step. Continued protection and preservation of the environment, continued local support, and ongoing program maintenance are the real challenges of any successful eco-tourism operation. Keep those facets in tact and the tourists will come back.

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