

# USING TOURISM TO CONSERVE THE MIST FORESTS AND MYSTERIOUS CULTURAL HERITAGE OF THE BLUE AND JOHN CROW MOUNTAINS NATIONAL PARK, JAMAICA

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# **ABSTRACT**

The Blue and John Crow Mountains National Park protects internationally significant biodiversity components and rich cultural heritage. Inside the park, two recreation areas are managed, and outside, sustainable community tourism is being developed. Tourism contributes to Aichi Targets by: (1) raising public awareness of the values of biodiversity, (2) engaging local communities in biodiversity awareness-raising and skills training, and (3) facilitating ecologically sustainable, income-generating activities for poverty reduction. Tourism and community engagement activities are part of the effort to reduce threats to forests through unsustainable livelihoods such as slash and burn, shifting agriculture. Community tourism activities have been established in a few communities while others are at various stages of planning. Several community members are now employed as National Park Rangers or otherwise assist in park management. Benefits to biodiversity conservation have been realised through local capacity building for sustainable tourism.

# **BACKGROUND INFORMATION**

The Blue and John Crow Mountains National Park (BJCNMP) protects the largest remaining block of contiguous rainforest in Jamaica (JCDT, 2005). Established in 1993, the 486 km<sup>2</sup> National Park is of international significance for globally threatened endemic species, with its main mountain ranges cited as two of the 'wholly irreplaceable' key biodiversity areas within the Caribbean Biodiversity Hotspot (CEPF, 2010). Alongside the important natural heritage of the area, BJCNMP is also home to the Windward Maroons. Maroons are indigenous communities of Amerindians and Africans who escaped slavery in the Americas during the 16th to 19th centuries by fighting off attempts at control by colonial powers (Agorsah, 1994). In Jamaica, the Windward Maroons (hereafter referred to as Maroons) used the natural resources of the Blue and John Crow Mountains to wage guerrilla warfare against the British colonial powers, and

were eventually granted their sovereignty as a free nation within the island (John et al., 2010). The mountains provided a natural fortress for the Maroons, and as the last resting place of their ancestors, the mountains remain a living monument to the memory of the fallen freedom fighters (John et al., 2010). Today, the Maroons account for less than 1 per cent of Jamaica's population, but their culture is shrouded in mystery and attracts hundreds of visitors to Maroon territories each year.

Annually, about 12,000 Jamaicans visit BJCNMP and the community-based tourism attractions associated with it (JCDT, 2011). In 2011, Jamaica as a whole attracted three million visitors who spent US\$2 million or about 5.4 per cent of the Gross Domestic Product (PIOJ, 2011), but less than 15 per cent of these visitors stayed at resort areas near the National Park (JTB, 2010). Tourism in Jamaica is nature-based, but the focus since its inception in the 1950s has been on north coast beach resorts and attractions.

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Concerns in the 1980s and 1990s about damage to coral reefs and mangroves led to attempts to improve the environmental sustainability of tourism, including a move to diversify tourism opportunities – a challenge in common with many countries around the world (Commonwealth Secretariat, 2002). Options have expanded to include a variety of other natural and cultural features of the island but the Blue and John Crow Mountains are still mostly undiscovered by both foreigners and Jamaicans.

This paper explores the opportunities that tourism is beginning to provide to poor local communities around the BJCNMP in improved management of the biodiversity of the area. In 2002, three of the four parishes around the park had a poverty rate of between 27–32 per cent in comparison to the national average of 19.7 per cent of people who live below the national poverty line (PIOJ, 2007). Specifically, the park management's approach to building local capacity for sustainable tourism and the response of local communities is described, along with the challenges faced. The process of building local community capacity has taken much longer than anticipated, and the vision of making the park and its environs a new tourist destination in Jamaica is still to be realised. Park management activities have however been successful in

raising awareness about the value of biodiversity for tourism, and in the use of these resources to help reduce local poverty.

#### **CULTURAL HISTORY OF BJCNMP**

The first inhabitants of Jamaica were the Taino, an Amerindian group living mainly on the coast. In 1509, the Spanish began to settle Jamaica particularly on the north coast. To avoid enslavement, many of the Taino fled to the interior hills of the island; these communities were later strengthened by the integration of Africans who escaped the Spanish slavers from 1513 onwards. It was during this time that the name 'Maroons' from the Spanish 'Cimarron,' or, 'runaways living in the mountain-tops' was introduced to identify this group.

In 1655, the British captured Jamaica from the Spanish, and with the rapid growth of the sugar industry, large numbers of African slaves were imported, but many of them escaped to join the Maroons. The Maroons eventually migrated to the north-east of the island, establishing their capital at 'Great Negro Town,' later to become Nanny Town, which lies deep in the interior forests of the Blue Mountains (Figure 1). From Nanny Town, the Maroons

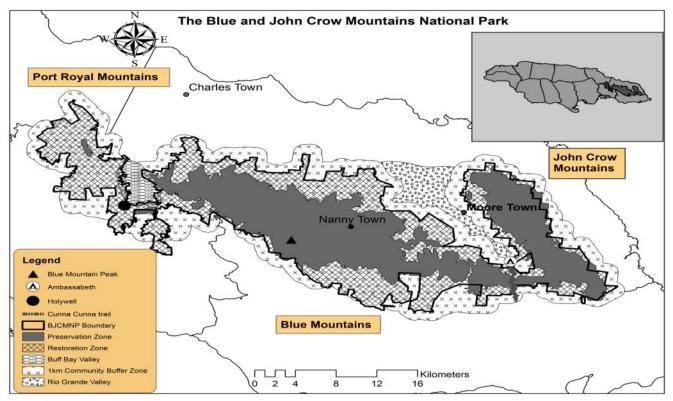


Figure 1. Map showing the Blue and John Crow Mountains National Park

controlled most of the Blue and John Crow Mountains, and all of what today comprises the northern parishes of St. Mary and Portland (Agorsah, 1994).

Much of the mystery that surrounds Maroon culture originates from their clever use of the natural resources found in the BJCNMP. Tools required by the Maroons to wage their highly effective guerrilla warfare against the British were provided by the forest biodiversity and the rugged mountain landscape (Agorsah, 1994; Bilby, 2005). The Windward Maroons were the first of two Jamaican Maroon bands, and the first Maroon free-nation having gained their sovereignty in 1740 on the signing of a Peace Treaty with the English after almost 20 years of continuous warfare (Campbell, 1988).

On attaining freedom, the Maroons moved out of the interior mountains and into the Rio Grande and Buff Bay Valleys, now part of the Park's Community Buffer Zone, which extends 1 km around the BJCNMP boundary. There are two Maroon communities within this Zone, which continue to maintain their rich cultural heritage - the Moore Town and the Charles Town Maroons. Several inhabitants of some of the villages in the upper Rio Grande Valley are considered descendants of the Maroons (Figure 1). The heritage of the Moore Town Maroons, in particular their music, was declared by UNESCO in 2003 as a Masterpiece of the Oral and Intangible Heritage of Humanity (UNESCO, 2004). Visiting certain areas within the Blue and John Crow Mountains can only be done with the consent of the Maroon Colonels, prayers to the ancestors and the presence of a Maroon guide (W. Sterling, personal communication, 24 March, 2010).

Cultural heritage on the southern slopes of the Blue Mountains was influenced by the British, and differs from that of Maroon culture on the northern slopes. In 1728, coffee seedlings were introduced to the island, and the Blue and Port Royal Mountains were extensively chosen for coffee cultivation (Laborie, 1798). The cool, misty conditions of the mountains allowed coffee berries taking longer to ripen, thus developing a superior flavour to other Jamaican grown coffee. The coffee industry boomed in Jamaica from 1790-1834, with a slave labour force, and in 1814, Jamaica accounted for 30 per cent of world coffee exports (Patterson, 1967). The coffee boom led to the pristine forest becoming extensively occupied and cultivated. By the late 1830s, the industry collapsed due to a combination of the emancipation of slaves in 1838, massive soil erosion, a great storm, which destroyed the works and houses on many large plantations and the removal of preferential trade agreements for Jamaica. Coffee cultivation has seen resurgence in the Blue Mountains, and old plantation houses and artefacts are tourist attractions in the area.

The inaccessibility of the interior mountains meant that much of the forest was impenetrable, which suggests that extensive areas of forest were never cut despite the coffee boom (Chai & Tanner, 2010; Shreve, 1914). An official report (Hooper, 1885) on Jamaica's forests highlighted the need for watershed management on the steep slopes of the Blue Mountains. The report spurred the government to retrieve lands that were patented (that is, ownership rights were given) (Delle, 1998). In 1889, much of the Blue Mountains were protected under the Mountain and River Reserves Law (1889). Additional land was protected under this and other legislation, until in 1950 all the parcels were consolidated as the Blue Mountain Forest Reserve under the Forest Act of 1937 and the later establishment of the Forestry Department in 1942. The BJCNMP was designated in 1993, under the Natural Resources Conservation Authority (NRCA) Act of 1991 for the protection of biodiversity, ecosystem conservation and recreational and educational opportunities (JCDT, 2005).

# MANAGEMENT OF THE BJCNMP

Today, the National Park is managed collaboratively by the Jamaica Conservation and Development Trust (JCDT - a non-government organisation, hereafter referred to as the Trust) and the two government agencies responsible for relevant legislation: the National Environment and Planning Agency (NEPA) through Delegation Instruments signed in 1996 and 2002, and the Forestry Department through a Co-management Agreement in 2000. Management assistance is also provided by the Jamaica National Heritage Trust.

The vision of the BJCNMP is: "[to be] a native rainforest and home to thriving populations of endemic species, and majestic mountain memorial to the Maroon Freedom Fighters managed through active programmes that conserve natural habitats and intangible heritage by: restoring degraded areas, reducing and mitigating against threats, facilitating the provision of essential ecosystem services, and promoting the revitalization of Maroon traditions, whilst providing quality incomegenerating, recreational and educational experiences for Jamaicans and foreigners, alike" (JCDT, 2011).

The mission is: to collaboratively manage the national park for its natural, cultural and recreational values, by striking the right balance between biodiversity conservation and socio-economic development, for the ultimate well-being of the people of Jamaica (JCDT, 2011). Governance of the park is the responsibility of the co-management partners: the Trust, NEPA and the Forestry Department. These organisations meet regularly to review detailed park management reports from the Trust. As the operational manager the Trust seeks to involve local community members in the preparation of the Management Plan and detailed planning for local projects, which are jointly implemented (JCDT 2011).

Management is guided by a 5-year Management Plan (2011 - 2016) approved by the Natural Resources Conservation Authority, which describes programmes for natural heritage conservation, cultural heritage preservation, enforcement and compliance, education and public involvement, recreation and tourism, monitoring and evaluation, governance and administration. Park activities include: reforestation with native, non-lumber trees, control of invasive plant species, school visits, sustainable community development, enforcement patrols, bird monitoring and operation of recreational areas. The core of the National Park is the Preservation Zone and it covers over 70 per cent of the Blue and John Crow Mountain Ranges (Figure 1). Around the Preservation Zone is the Restoration Zone where forest rehabilitation such as invasive species control and reforestation with native species occurs.

Management takes into consideration threats (particularly deforestation and forest degradation) and their root causes, primarily environmentally unsustainable economic activities conducted by community members with low educational attainment and limited income. Slash and burn, shifting agriculture is one such activity, where areas of forest are cleared using fire just outside the park boundary or sometimes deep within the forest to avoid detection by the park rangers (R. Poyser, personal communication, 10 August, 2012). Burning is a low cost clearing method and releases potash providing a quick fertilising stimulus for crops. The topsoil, which is low in nutrients and on steep slopes, is quickly eroded, so farmers moves to another location in two to three years. Small scale agriculture or working on large coffee farms are the main sources of income for people living in the rural communities in BJCNMP Community Buffer Zone. The park's Management Plan identifies the root causes behind

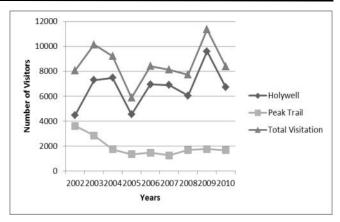


Figure 2. Visitation at the National Park Recreation Areas, Jamaica

inappropriate agricultural practices as inadequate knowledge and capacity to implement more environmentally sustainable practices or other income generating activities.

# NATIONAL PARK RECREATION AND TOURISM PROGRAMME

Since the establishment of the park, efforts have been made to facilitate sustainable development as an alternative to slash and burn farming. The Recreation and Tourism Programme aims to provide and facilitate recreational opportunities for local and international visitors (using ecotourism principles) to generate income and support for the National Park and its surrounding communities (JCDT, 2011). The two main recreational areas within the park are Holywell and the Blue Mountain Peak Trail including Portland Gap (Figure 2). These are under active management and are self-financing, except for capital expenditure.

Holywell is an hour's drive from the capital city of Kingston. The site has large picnic areas, three cabins (accommodating up to 10 people), camp-sites (for up to about 50 campers), a visitors' centre, interpretive signs, one interpretive trail and four other hiking trails. Used mainly by residents of Jamaica on weekends and during holidays, there are about 10,000 visitors per annum (JCDT, 2011). The Blue Mountain Peak Trail is approximately 9.3 km long and takes hikers to the highest point on the island (2,256 m). Portland Gap is the only recreational area along the Peak Trail and is a small site with rustic dormitory-style accommodation for up to 90 people. Ticketed visitors amount to about 2,000 per annum; figures are believed to be higher but are difficult to account for, due to the remoteness of the site and inadequate park personnel.







From left to right: Oatley Mountain Trail BJCMNP © S. Otuokon; Oatley Trail at Holywell © JCDT; Moore Town Maroons © JCDT

Both sites provide opportunities, particularly to residents of Jamaica, to enjoy nature, which is the first step in raising awareness about the value of biodiversity. Visitation records over the past nine years show a slow increase in the number of visitors at Holywell, following declines linked to major storms between 2004 and 2005 (Figure 2), suggesting an increasing appreciation for nature-based recreation. Visitation peaked in 2009 with a special programme for school groups that visit Holywell for educational and interpretive programmes where they participate in a variety of activities. The Kids Discovery Zone at Holywell is a play area designed for three to ten year olds, its focus is learning through fun activities such as games and stimulation of the senses. For example, at the Coney Mound inside the Kids Discovery Zone, children dig in the sand like the endemic Jamaican Hutia (Geocapromys brownii), commonly known as the Coney, burrowing underground, and an interpretive sign depicts and describes this animal and its conservation. In addition to raising the awareness of visitors, training local community youth as tour guides for these programmes provides locals with the opportunity to use biodiversity sustainably to generate an income.

To prevent additional developmental from trails, buildings etc, new development inside the BJCNMP boundary is discouraged. Hence, a major focus for local development and poverty reduction strategies has been support for community tourism based on the region's rich natural and cultural heritage. Between designation of the National Park in 1993 and the present time, various approaches to facilitate community-based tourism have been tried with successes, failures and many lessons learned along the way.

The initial community-based tourism approach was to work with community members through the park's three Local Advisory Committees formed in the early 1990s (JCDT, 2005). Two local tour guide companies were established during this period and supported with funding, training and technical assistance (Smith, 1995). However, when support from the National Park management ceased, these community ventures ground to a halt. One challenge faced was the limited willingness on the part of domestic visitors, to pay for tour guides, particularly on the Blue Mountain Peak Trail. Another challenge was that rural community members have low levels of education, no capital for business establishment and limited business, organisational and project management experience. In addition, community members lost interest in the initiative when the available funding changed from grants to low interest loans.

The most successful experience with community-based tourism has been with the Bowden Pen Farmers' Association (hereafter referred to as the Association). They were established in 2000 by a group of farmers in the Upper Rio Grande Valley who had been involved with one of the park's Local Advisory Committees. Notably, park management did not provide assistance to establish a local tour company in this community. This group was motivated by what they learned from park management activities and researchers using the Ranger Station in the community (Bedasse, 2004). Two full-time park rangers were also hired from this community. A key person in the development of community-based tourism in the Upper Rio Grande Valley was the Association's Adviser who is from the local community, has tertiary level education,

management level work experience and was one of the three Community Outreach Officers employed by the National Park in the 1990s. She helped organise the Association and came to an agreement with the group to establish an ecotourism resort – Ambassabeth (Figure 1)— on land she owned (Bedasse, 2004). Association members share in the profits made from operating the resort and tours.

With technical assistance from the park rangers and funding from several sources, Association members restored the heritage trail through the Cunha Cunha Pass. The Trust and the Association enjoy a mutually beneficial relationship. The Trust assists the Association with proposal writing, sustainable agriculture training, tourism/ hospitality training and introduction to agencies. The Association helps design and actively participates in park projects. For example, they have implemented reforestation projects on lands just outside the National Park, planting Water Mahoe (Hernandia catalpifolia) the only food plant eaten by caterpillars of the Giant Swallowtail Butterfly (Papilio homerus), an endangered species and the largest butterfly in the Americas. These biodiversity conservation activities are helping the National Park achieve its goals, whilst contributing to the visual appeal of the area and the likelihood of seeing the Giant Swallowtail Butterfly, which will enhance the tourism experience.

Another successful community based tourism experience has been the Youth Poverty Alleviation through Tourism and Heritage (PATH) project, funded by the United Nations Educational, Scientific and Cultural Organisation and the Environmental Foundation of Jamaica between 2003 and 2009. The focus was on building awareness about biodiversity conservation and capacity for sustainable tourism amongst youth living around Holywell and the Charles Town Maroons in the Buff Bay Valley. Youth learned how to generate income through sustainable community tourism and ecotourism. They recognise that these forms of tourism depend on showing visitors the biodiversity of the area, which provides an impetus for conservation. This programme yielded four national park rangers, two staff members (one administrative and one part-time assistant education officer) and four tour guides who are on call for educational packages or trail tours.

Based on these experiences, the Trust recognised the need for a 'programmatic' as opposed to an ad-hoc approach to establishing community-based tourism (JCDT, 2011). Through the Holywell and Rio Grande Valley Commercial Development Project, funded by the Inter-American Development Bank and implemented by the Trust between 2006 and 2009, a manual for the Blue Mountains Sustainable Tourism Programme was prepared. Participatory planning activities targeted communities from around the park's recreational areas and the Rio Grande Valley, along with relevant government agencies and private sector.

The vision of the Blue Mountains Sustainable Tourism Programme is for the park to be: "a world-class sustainable tourism destination that supports local communities and enhances conservation of the National Park and its environs" (JCDT, 2012). The hub of the planned destination is the BJCNMP, and along with the park's Community Buffer Zone, these will comprise Jamaica's newest destination. The extending from this hub will be the community-based and private sector owned attractions, festivals and accommodation in the clusters of communities around the hub. The National Park and the support it derives from packages sold, will help ensure the environmental sustainability of the destination, and make it a true ecotourism product. Visitors will be able to spend several days within the destination, travelling from one local community to another for different experiences in diverse locales.

The Programme will be aimed at three main target markets: (1) international, independent travellers, (2) residents of eastern Jamaica and (3) business travellers to the city of Kingston (Heritage Design/USDA Forest Service, 2008). The rationale for the Programme's focus on international tourists is that international tourism continues to grow (UNWTO, 2011), and tourism focusing on natural and/or cultural heritage is the fastest growing segment of international tourism (about 10 per cent of international tourists; UNEP, 2005).

The Blue Mountains Sustainable Tourism Programme has four components:

- Governance through establishment of cluster groups (community-based and private sector ventures) and an Advisory Committee, with the Trust as the secretariat.
- ii) Operations of the Blue Mountains Sustainable Tourism Coordination and Marketing Office within the secretariat, providing packaging of tours, marketing and booking of the destination and specific tours locally and internationally.



Charles Town Maron Museum © JCDT

- iii) Product development (detailed planning through consultancies, infrastructural improvements, development, training and maintenance of standards) within BJCNMP and in targeted communities around these sites, the Upper Rio Grande Valley and the Maroon communities. Infrastructural improvements are being made to existing structures and there are plans for new construction, such as a cultural centre at Moore Town and new trails at various locations. In addition, there needs to be packaging and organisation of activities to provide experiences related to cuisine, music and other cultural heritage as well as biodiversity.
- iv) Environmental management to ensure sustainability.

Funding to fully establish the Programme is the main challenge. A start-up budget of about US\$65,000 over a three-year period for personnel, marketing and training has been estimated in addition to US\$35,000 for repairs and new construction at six sites (JCDT, 2009a). The Trust has sought funds from several sources without success.

Due to funding constraints and inadequate marketing, there are relatively few foreign visitors to the park under this initiative. A current focus on training and capacity building ensures that community groups are being prepared for increased tourism. The BJCMNP has been nominated for *World Heritage* status (JCDT, 2009), and the Programme is addressing issues that plague development of new business opportunities in rural communities, inadequate marketing and limited capacity (Hayle, 2002; Cooper, 2004)—which aim to increase visitation. Thus far, key achievements of the Blue Mountains Sustainable Tourism Programme include:

- 125 community members received training in tourism, hospitality and National Park awareness with 50 certified TEAM JAMAICA (national basic level tourism certification) and 23 nationally certified Tour Guides between 2006 and 2009 (JCDT, 2010).
- In 2011, with funding from the Forest Conservation Fund, 21 community members from seven communities received business plan training and three communities produced business plans.
- Major grant funding from the Forest Conservation Fund, of US\$261,000 to support improvements at Ambassabeth and Cunha Cunha Pass Trail and marketing over a four-year period was approved for Bowden Pen Farmers Association in 2011.
- Funds from the Jamaica Social Investment Fund were approved in 2012 for the Charles Town Maroons in 2012 to improve the Museum and Asafu Yard.

The Blue Mountains Sustainable Tourism Programme is far from being fully established; however, some selling points for the Programme based on the biodiversity and cultural heritage of the area have been developed. At Holywell, visitors can relax and be rejuvenated by the misty atmosphere, while enjoying a cup of coffee, walk the nature trails or learn about the history of old coffee plantations. The trek to the Blue Mountain Peak, is challenging but rewarding, and can be combined with stays in local guesthouses. Visitors can access Ambassabeth in the Rio Grande Valley by hiking the Cunha Cunha Pass Trail (one of Jamaica's oldest trails) whilst keeping an eye out for the Giant Swallowtail Butterfly (Figure 1). From here, they can visit nearby Moore Town to hear the music of the Windward Maroons or visit Nanny Falls where the Maroons disappeared from advancing British troops. In Charles Town, visitors can tour the Maroon Museum, dance to authentic Maroon drumming and hike the Sambo Hill Trail to the lookout where Nanny and her captains planned their assaults on the British.

# **ACHIEVING AICHI BIODIVERSITY TARGETS**

Facilitating the development of sustainable community tourism in the Community Buffer Zone of BJCNMP has contributed to achieving the Aichi Biodiversity Targets (UNEP, 2010), in particular Targets 1, 2 and 5.

Aichi Target, 1 of raising awareness of the value of biodiversity, is being achieved as visitors to the parks recreational areas learn from the interpretive signage and exhibits, listen to the local tour guide or play at the Kids

Discovery Zone. Aichi Target 1 is also about making people aware of the steps they can take to conserve biodiversity and use resources sustainably. This is shown through the way the Maroons used physical components of the environment to win a war, against what might have been considered, a superior army. Through the training provided under the National Park's Recreation and Tourism Programme, local community members are learning how they can make a sustainable living by using some of the same natural features that the Maroons used centuries ago. Further, as this training is associated with business planning, funding and marketing assistance, local community members are better able to put what they have learned into practice. Awareness raising and training alone are insufficient to result in a change in attitudes and practices towards biodiversity. Local capacity must be built over the long term, through mentoring and facilitating project experience in addition to the provision of an enabling environment (Worah, 2002; Cooper, 2004). Further, where community groups self-mobilise, the outcome is more likely to be sustained than when groups are formed for project purposes (Pimbert & Pretty, 1997; Worah, 2002).

Amongst the communities around BJCNMP, community with the greatest success in achieving Aichi Target 2 - the integration of biodiversity values into local poverty reduction strategies - based on sustainable tourism is the Bowden Pen Farmers' Association. This community has had the longest interaction with park management and it has not establishes short-term community tourism ventures. Rather, community members decided to form an organisation and establish a sustainable tourism programme on their own, having first learned through park outreach about the value of the biodiversity in their community. The community members realised that visitors would be willing to pay for experiences of both natural and cultural heritage and then approached the Trust for assistance. In hindsight, park management should have focused on raising awareness about the value of biodiversity and capacity building for conservation and sustainable use first rather than first moving to establish income-generating ventures. Other communities did not have sufficient understanding of biodiversity conservation, nor the capacity to maintain their sustainable community tourism programmes without significant on-going assistance from park management.

The Association also shows how sustainable tourism can contribute to achieving Aichi Target 5. They are planting a variety of native trees, and in particular the feeding tree for the Giant Swallowtail Butterfly caterpillars. They want to increase the likelihood that their visitors will see this endangered species, and having understood the threats to the species, are taking steps to conserve it by restoring and protecting its forest habitat and food plant. The involvement of local community members enhances the work of the Trust in rehabilitating native forest in the park's Restoration Zone. Further, the Association's tourism activities discourage practices such as slash and burn, shifting agriculture and providing alternative income generation for community members.

#### **LESSONS LEARNED**

- 1. The park's Community Buffer Zone is outside the legal boundary of the park. There are no people living inside the park and management has no jurisdiction over the activities of people outside the boundary, except for general environmental legislation. If biodiversity conservation outside the park's boundaries is weak and environmentally unsustainable practices continue to play a major role in livelihood activities, then there will be a negative impact on the park's ecosystems. Therefore, it is important for park management to find ways to raise awareness amongst local community members and increase their support for the conservation of biodiversity.
- 2. Management could have focused only on managing the recreational areas within the park; however, working with local communities outside the park helps build goodwill towards the park and its management. The park employs local community members; uses local service providers and trains community members so they can provide new services, e.g., tour guiding. Research in communities around Holywell (the park's main recreation area) showed that community members saw training and education as well as income generating and recreation opportunities as benefits they derived from the site and its management (Otuokon, 2010).
- 3. Sustainable tourism can provide a means for local community members to generate income (through employment or small business opportunities) in more environmentally friendly ways than current agricultural livelihoods. It can also help promote environmentally sustainable agricultural practices through training and raising local awareness about visitor expectations, for example, landscapes unscathed by fire and sustainable agricultural produce.
- 4. Community members first exposed to environmental education, including visiting ecology researchers, were

- found to have a greater awareness of the value of biodiversity and natural ecosystems, whilst others tended to see the forest as a barrier to development.
- 5. The benefits from sustainable tourism must be clearly linked to conserving biodiversity – the most successful community groups in the programme have both conservation and tourism projects.
- 6. Community members with little exposure to the tourism industry need capacity building to help them establish their own businesses and participate successfully in the industry. Skills training, technical assistance and project implementation experience help build local capacity.

#### CONCLUSION

Critical to the successful use of tourism to achieve Aichi Biodiversity Targets are: (1) the building of local capacity for both biodiversity conservation and sustainable tourism, (2) ensuring that tourism involves and benefits the stakeholders impacting biodiversity and (3) ensuring close linkages between the tourism programme and other park management programmes. If the BJCNMP had a Recreation and Tourism Programme focused only on the park's recreation areas, it would not likely have had the impact it has had on influencing livelihood practices of local community members.

Whilst park management has been promoting and facilitating sustainable community tourism particularly through training, it has encouraged the participation of trainees in other conservation activities such as planting of native tree species and invasive species removal. The Bowden Pen Farmers' Association has recognised the value of biodiversity to their tourism product and therefore have embarked not only on tourism projects, but also more strictly conservation focused projects. As stakeholders clearly see the need to conserve the biodiversity one uses to generate income, they will act as some already have, to reduce the rate of loss of natural habitats outside the protected area.

Based on the experiences and lessons learned, Jamaica Conservation and Development Trust will continue to use sustainable tourism and ecotourism as tools for biodiversity conservation within and around the BJCNMP.

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### **ABOUT THE AUTHORS**

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Shauna-Lee Chai's research interests are in terrestrial conservation issues such as setting priorities for conservation action, ecosystem rehabilitation, invasive species management, assessing conservation effectiveness and secondary forests that re-grow after industrial abandonment. She holds a PhD in Plant Sciences from the University of Cambridge where she was a Gates Scholar. Prior to Cambridge, Shauna-Lee was employed as Conservation Science Officer for the Blue & John Crow Mountains National Park in Jamaica. There she co-authored a management plan for the park, and gained experience working with a wide cross-section of the public on the management of complex conservation issues.

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#### **RESUMEN**

El Parque Nacional Blue y John Crow Mountains protege componentes de biodiversidad de importancia internacional y de gran riqueza cultural. Dentro del parque se gestionan dos áreas de recreación y en su exterior se está desarrollando el turismo comunitario sostenible. El turismo contribuye a las Metas de Aichi: (1) aumentando la conciencia pública sobre los valores de la biodiversidad; (2) involucrando a las comunidades locales en las actividades de sensibilización en materia de biodiversidad y formación profesional; y (3) facilitando actividades generadoras de ingresos y ecológicamente sostenibles tendientes a reducir la pobreza. El turismo y las actividades comunitarias son parte de los esfuerzos para reducir las amenazas que para los bosques suponen las prácticas no sostenibles como el cultivo migratorio de tipo corte y quema. En algunas comunidades se han establecido actividades turísticas de carácter comunitario, mientras que otras se encuentran en diversas etapas de planificación. Varios miembros de la comunidad se desempeñan ahora como guarda parques o colaboran en la gestión del parque. Los beneficios para la conservación de la biodiversidad se han realizado a través de la creación de capacidad local para el turismo sostenible.

# **RÉSUMÉ**

Le Parc national Blue and John Crow Mountains protège une diversité biologique et un patrimoine culturel d'importance internationale. À l'intérieur du parc, deux zones récréatives sont gérées. À l'extérieur, un tourisme communautaire durable est mis en avant. Le tourisme contribue aux Objectifs d'Aichi en : (a) améliorant la prise de conscience du public sur la valeur de la diversité biologique ; (2) impliquant les communautés locales dans des activités de prise de conscience et de formation professionnelle sur la biodiversité ; et (3) facilitant les activités écologiquement durables et génératrices de revenus afin de réduire la pauvreté. Le tourisme et l'implication des communautés s'inscrivent dans l'effort général pour réduire les menaces qui pèsent sur les forêts au travers de moyens de subsistance non durables comme la culture sur brûlis et l'agriculture itinérante. Des activités de tourisme communautaire ont été mises en place dans quelques communautés, et d'autres sont actuellement en cours de planification. Plusieurs membres des communautés sont aujourd'hui employés comme gardes forestiers au sein du Parc national ou contribuent à la gestion du parc. Les avantages pour la conservation de la diversité biologique se font sentir grâce au renforcement des capacités locales pour un tourisme durable.