

The Takitumu Conservation Area: a community-owned ecotourism enterprise in the Cook Islands

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Summary

The Takitumu Conservation Area was created in 1996 on the island of Rarotonga in the Cook Islands. Its main purpose is to conserve biodiversity for the benefit of present and future generations. Only local people own the land and its resources. Ecotourism will be the area's main economic activity. A guided nature walk has been organized with landowner agreement and support.

Résumé

La réserve de Takitumu a été créée en 1996 sur l'île de Rarotonga, dans les îles Cook. Son but principal est de préserver la diversité biologique au profit des générations actuelles et futures. La terre et ses ressources appartiennent exclusivement à la population locale. L'écotourisme sera la principale activité économique de la zone. Des randonnées guidées avec découverte de la nature ont été organisées avec l'accord et le soutien des propriétaires terriens.

Resumen

El Área de Conservación de Takitumu fue creada en 1996 en la isla de Rarotonga, en las Islas Cook. Su principal objetivo es conservar la biodiversidad en beneficio de las generaciones actuales y futuras. Las tierras y los recursos pertenecen exclusivamente a los pobladores locales. El ecoturismo constituirá la principal actividad económica de la zona. Se ha organizado una caminata guiada por la naturaleza, que cuenta con el acuerdo y el apoyo de los propietarios del lugar.

For so long we landowners have been left out in major developments concerning our lands. It is the normal procedure for Government to tell us that they would like to develop our land. Because we are told it is in our best interest, we agree. They then go ahead and develop the land without our input. This project is a major step forward in listening and involving us.

Rarotonga landowner

The Cook Islands in the South Pacific are made up of 15 islands spread over an ocean area of 1,830,000 square kilometres (between 9° and 23°S latitude and 156° and 167°W longitude). Total land mass is only 237 square kilometers. Tourism is the main source of foreign exchange.

The Takitumu Conservation Area (TCA) is on Rarotonga, the largest island. Forested, with an area of 155 hectares (380 acres), it is located in the southern part of Rarotonga (Figure 1). The TCA's overall aim is to conserve biodiversity for the benefit of present and future generations of Cook Islanders and others.

In 1987, the Cook Islands Conservation Service initiated a bird recovery plan to help save Rarotonga's unique and endangered Kakerori bird (*Pomarea dimidiata*). Only 38 birds remained; this figure had fallen to 29 two years later. Studies showed that ship rats (*Rattus rattus*) were largely responsible for the Kakerori's decline. In August 2000, through the

Kakerori Recovery Programme (KRP), the Kakerori population had grown to over 200.

Throughout 1995, the Environment Service (the government agency responsible for environment) discussed with the traditional leaders and landowners of the Kakerori's core breeding area the idea of creating a Conservation Area (CA) on their land. At first the landowners were suspicious. They believed that if they agreed to designate their land as a Conservation Area, this would become its legal status and their continued ownership would be threatened.

During consultations, it was emphasized that designation as a Conservation Area would not involve legal proceedings but only a verbal agreement. The owners would still control their land. In time this assurance was accepted by the owners. The three valleys that make up the TCA were declared a Conservation Area by the three major landowning tribes (Kainuku, Karika and Manavaora) in early 1996.

Planning and management

Establishment of the TCA was facilitated by the Environment Service, under the auspices of the South Pacific Biodiversity Conservation Programme (SPBCP), and executed by the South Pacific Regional Environment Programme (SPREP). The landowners' declaration has not been made part of legislation or formally recorded, as there remains some element of belief that access to their land would be restricted if the land were formally declared to be a Conservation Area.

The SPBCP was deemed an appropriate source of support for the establishment and implementation of the project, as it recognizes the land tenure situation in the Pacific countries and the fact that the resources found in this area are used by local people for sustenance. SPBCP funding, initially made available to the TCA for three years, was extended for another two years. This funding ceased at the end of June 2001.

The TCA project has not been without its problems. The first year was a difficult one. The concept of empowering landowning clans to conserve the environment had been all but lost when western-style government came into existence. In addition, the bureaucracy associated with provision of aid money was unfamiliar to those outside government.

TCA planning and management is carried out by the Conservation Area Coordinating Committee (CACC), a core committee consisting of six representatives from the landowning tribes. The CACC meets on a regular basis to discuss issues relating to the project. It takes all major decisions with respect to the TCA.

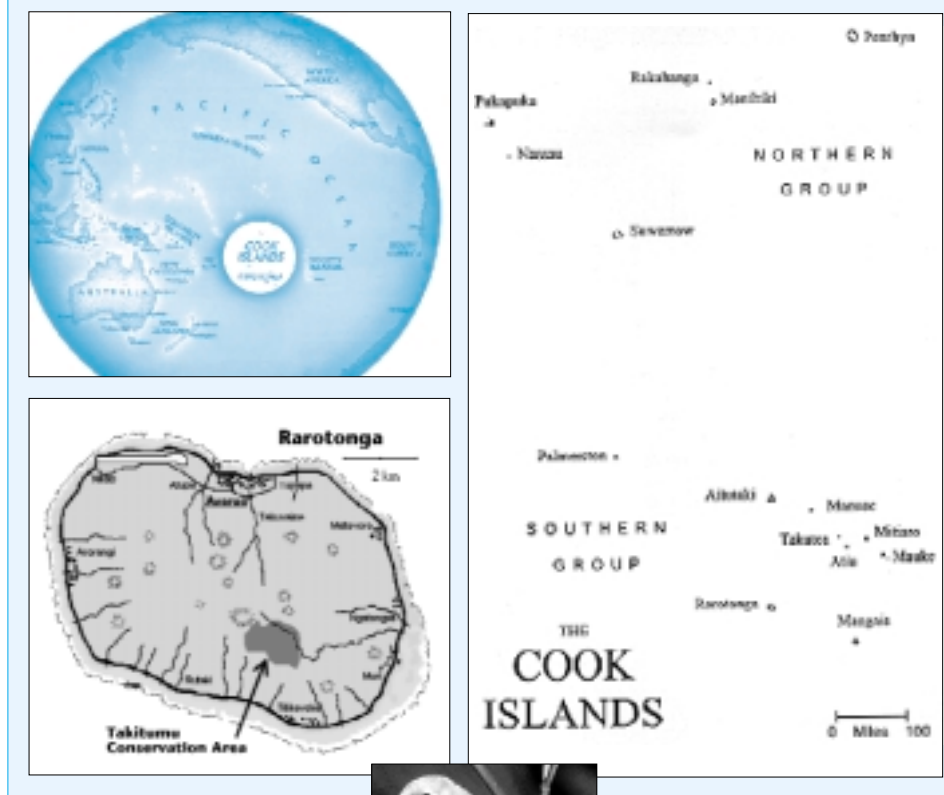
The Environment Service was involved in the project design and acted as a facilitator, providing technical advice during the project's initial phases. It has since stepped back and left management of the TCA to the landowners.

An agreement reached between the government of the Cook Islands and the landowners has allowed the CACC to execute and manage funds from the SPBCP. This was an unusual move, as SPREP is an intergovernmental organization responsible to its member country governments.

Under CACC management, the scope of the TCA Project was broadened to include:

- ◆ the existing Kakerori Recovery Programme;
- ◆ wider environmental concerns such as biodiversity;

Figure 1
The Cook Islands, the island of Rarotonga and the Takitumu Conservation Area



- ◆ sustainable development; and
- ◆ community involvement and environmental awareness.

On a day-to-day basis, the project is run and managed by the Conservation Area Support Officer (CASO), whose salary has been fully paid by the SPBCP. Other project staff members include a Conservation Officer/tour guide, who has been partially supported by the SPBCP, and a Technical Adviser funded since 1999 by the SPREP's Avifauna Programme. Monitoring by the SPBCP has involved quarterly progress and financial reports.

Geological and biological features

Rarotonga is a volcanic island about 2.5 million years old. Much of the TCA consists of steep, dissected, forested country with ridges formed by volcanic dykes. About a third of Rarotonga's drinking water comes from the TCA. Management of this area therefore helps protect the island's most important watershed area.

Three types of vegetation are present: upland forest, disturbed forest/scrub, and fernland. About 70% of all inland Rarotonga's plants are found in this area, including a number of endemic species. Bird life in the TCA is diverse. All four native breeding land birds are found in the TCA, including the island's other endemic species, the Rarotonga starling.

Community use

The three landowning groups comprise a large number of individuals. Although there are many TCA landowners, no one actually lives there. Most inhabitants of Rarotonga live on the coastal plain.



The endangered Kakerori

Existing community use of the TCA is limited to recreational activities such as walking and collecting coconuts and coconut fronds, mountain bananas and chestnuts. Harvesting of freshwater prawns

and eels, and recreational hunting of the Pacific fruit bat and Pacific pigeon, were common in the past. These practices are now discouraged in the TCA. Groups such as Outward Bound (which runs a challenging course for adults and young people at least 14 years of age), and school and church youth groups, sometimes visit the area for training and educational purposes.

Sustainable income-generating activities

To assist with efforts to be self-reliant following the end of SPBCP funding in June 2001, income has been generated since 1997 through two activities: nature walks, and sales via a "one-stop environmental shop". TVA nature walks are the primary source of income. The TCA office doubles as the environmental shop, where t-shirts, posters, calendars, books, videos and other items are sold.

Guided nature walks were an obvious choice for income generation, as there is already a well established tourism industry in the Cook Islands. The number of visitors to the Cook Islands has remained at around 60,000 during the last three years.

History of the ecotourism project

In early 1997, work to accommodate guided walks began in the most accessible of the three TCA valleys, Turoa. This consisted of track devel-

opment, installation of interpretative signs, safety ropes and an entrance gate, and upgrading of the main road giving access to the area. Planning for an interpretation shelter was initiated in 1996, with construction beginning the following year.

In August 1997, the SPBCP and NZODA (New Zealand Overseas Development Assistance) funded a two-week regional community-based ecotourism workshop in Kosrae, Federated States of Micronesia. Two representatives of the TCA project attended. The knowledge gained at this workshop helped in the development of ecotourism in the TCA.

Following the Kosrae workshop, the TCA project held a three-day locally based community workshop in September 1997 to assist ecotourism development. This workshop also served to create ecotourism awareness, and to involve the community in developing ecotourism in the TCA.

Guidelines were prepared in 1998 for the landowners, as managers of the TCA, in consultation with the CACC and key stakeholders. The purpose of the management guidelines is to ensure sustainable management of the TCA now and in the future.

Nature walks

In 1998, 298 tourists visited the TCA. The following year saw a 74% increase, to 518 (Figure 2). There were 539 visitors in 2000. Tourist visits generated NZD 540 in 1997 and NZD 19,167 in 2000.

The Takitumu nature walks were established to help provide money to sustain the Kakerori Recovery Programme, as well as to provide the landowners with a small income to encourage them to retain the Conservation Area and with its special values.

These nature walks are fully guided four-hour tours. They started off small (half-day tours one day per week in 1997) and grew as tourist interest increased. More staff were added to strengthen the CACC's capacity to run such an operation. The walks were extended to two days per week in 1998. They have gained such popularity among tourists that in early 2000 they were further increased in number. They now take place Tuesday through Friday from 9.30 am to 1.30 pm.

Table 1 presents a breakdown of the costs associated with the nature walks.

The nature walks are popular for several reasons. These include:

- ◆ the conservation value attached to the TCA project;
- ◆ the chance to see the endangered Kakerori and other birds;
- ◆ a knowledgeable tour guide with good people skills, who is very popular with tourists;
- ◆ tracks of varying levels of difficulty, which provides a degree of flexibility (especially for older, less able tourists);
- ◆ increased awareness by tourists, as a result of marketing and word of mouth; and
- ◆ an increase in the number of tourists, due to the addition of another international airline operating from October to April (during the northern hemisphere's winter months).

Marketing

The TCA nature walks currently appeal to a niche market of nature and bird enthusiasts and are marketed as such. They are promoted in a number of ways, including brochures, signs on the main road, and *Jason's What's On* and *Jason's Passport Map* (free publications for tourists which advertise tourism operations in the Cook Islands). Advertisements for the TCA have appeared on three different Internet sites.

Other means of making the nature walks better known include the TCA newsletters, and articles and advertisements in travel publications. Commissions of 15% for one to nine persons, and 20% for groups of ten or more, are paid to agencies that sell TCA tours. Word of mouth has also helped promote the nature walks.

Based on a visitor survey conducted between January and September 1999, the four most common methods used to attract nature walk participants were brochures, word of mouth, *Jason's What's On* and *Jason's Passport Map*. The largest visitor age group was between 40 and 60 years old.

Two other inland tours operate on Rarotonga. One operator offers bush treks and the other uses four-wheel drive vehicles to take visitors on rugged inland "safaris". Both attract tourists in all age groups. The former offers adventurous and more gentle walks on different days; the safari is marketed more as an adventure tour in a 4WD jeep. Neither company offers TCA tours.

TCA management believes the TCA has the potential to increase the number of its visitors to 3120 per year. This would represent an annual turnover of NZD 140,400.

Distribution of profits

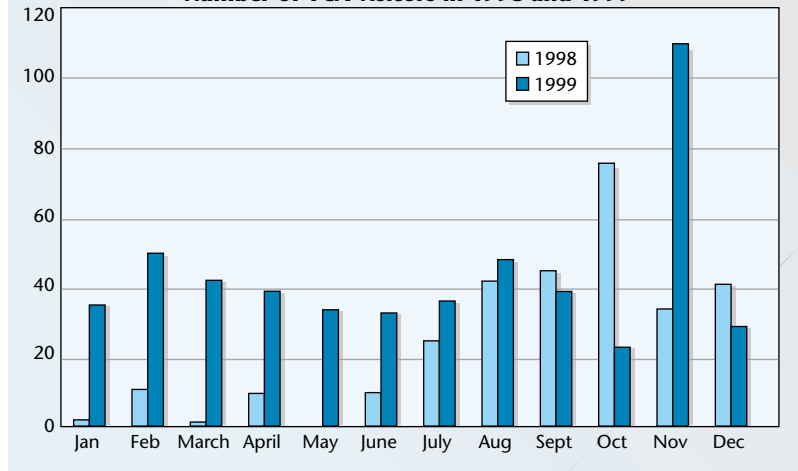
Management has established a system to ensure that any profit generated is distributed fairly and in such way that all the project's major aspects are provided for in the future.

The distribution figures were derived in full consultation with the CACC and formalized in the management guidelines. However, they are flexible and are reviewed from time to time to assess their appropriateness to the current situation. Profits due the landowning groups are distributed by the project on a yearly basis. With the consent of the family, payment is made to its representative to the CACC. Each family group has its own arrangement with respect to how this money is spent. The project takes no position on how landowning groups utilize their share of the profits. If requested, however, it is willing to advise family groups on investing their profits.

The Kakerori Recovery Programme (KRP)

The seven-month Kakerori Recovery Programme consists of two major activities:

Figure 2
Number of TCA visitors in 1998 and 1999



- ♦ controlling rats with poison from September to December, which helps the Kakerori breed successfully; and

- ♦ monitoring population trends, which involves undertaking an annual census and noting breeding successes.

There are plans to transfer ten young birds to the island of Atiu, which is free of ship rats. This should ensure the bird's continued survival. The TCA landowning communities and the people of Atiu have given their full support to the transfer.

Table 1
Breakdown of costs of nature walks
(New Zealand dollars)

Gross income, per person	35.00
Costs	
Taxi service	6.00
Lunch	3.00
Purified water	.50
Tour guide	4.00
Advertising	2.00
Agents commission 15%	5.25
Total Cost	20.75
Taxable income	14.25
Tax @ 20%	2.85
Net income per visitor	11.40

Table 2
Profit distribution

Land rental: Profits generated from nature walks and sales distributed equally between the three landowning groups	35%
Kakerori Recovery Programme: Provides support for control of predators (mainly rats) and monitoring of population trends; donations by tourists and members of the public also assist this programme	20%
CA development: Provides infrastructure and information for TCA users	20%
Administration: Assists implementation of day-to-day activities of the Manager and staff; includes oversight of the project by the Committee	15%
Stock: Purchase of goods for one-stop environmental shop	10%

Discussion

Although the TCA ecotourism venture is generating increasing revenues for the project and its landowners, it is obvious that current income generating activities cannot sustain the project at its existing level after 2001.

In the future, current activities will need to be downsized. SPBCP support of about NZD 72,000 per year exceeds the amount presently generated by the nature walks and product sales of NZD 11,500 (less 35% for land rental). The two principal components (i.e. the KRP and the ecotourism

venture) will need to be maintained to continue pursuing the overall objective of the project. The Kakerori is still considered endangered. According to *BirdLife International* criteria, once the population reaches 500 it is removed from the "endangered" category. It is highly unlikely that the nature walks will completely fund the KRP at their present level (about NZD 35,000 per year).

When needed, landowners provide some voluntary labour. The reality of living in a largely cash-based society has meant that formal work and other commitments by landowners prevent use of voluntary labour on a more regular basis. The TCA has utilized international volunteers to assist with some of the arduous work within the area. International volunteers have a strong appreciation of the environment and are keen to assist with worthy projects. This relieves the need for large community input into the TCA's more laborious tasks. The experience is not all one-sided, as volunteering provides an opportunity for a comparatively low-cost holiday. For younger volunteers, it also offers an opportunity to gain valuable experience in their chosen fields and improve their CVs.

The perceived negative impacts of establishing the TCA are that hunting (fruit bats, pigeons, freshwater prawns and eels) and timber harvesting, as carried out in the past, have been restricted due to the landowners' wish to ban these activities in the area. The TCA represents about 1% of Rarotonga's total forested inland area; these activities are permitted on other parts of Rarotonga. Other impacts include soil erosion from small-scale track development and, as the number of TCA visitors increases, greater potential for accidental introduction of exotic plant species into the area.

TCA management is exploring options for enhancing and expanding its tourism product. A Tour Guiding workshop was organized in 1999, with an emphasis on bird watching. The majority of participants came from the outer islands. At this workshop it was agreed to establish a combined outer island bird-watching tour. The project has since initiated bird tours to four outer islands. These tours involve spending a day and night on the islands to observe unique birds.

Although the TCA has good tracks with varying levels of difficulty, specific days for adventure

or more gentle walks have not been designated. If a tour contains a mixed group of young and old visitors, it is up to the guide to determine the best course of action. Since older people are the most common age group to visit the TCA, most nature walks are gentle. Based on experience and feedback from visitors, there is demand for more strenuous walks.

Other components and commitments of the TCA project to be fulfilled under the SPBCP have meant that income-generating activities could not be concentrated on exclusively. Thus, ecotourism has gained momentum slowly against a major competitor which began operations after the TCA. The money derived from nature walks is spread thinly in the TCA project. Compared with other inland tour operators which are owner-operated, there are lower financial rewards for individuals than would be the case in an owner-operated business.

The lack of committed tour guides is a matter of concern. The project has hired several guides in the past, but most lose interest after staying only a short period. It is unclear why the guides leave. We can only surmise that issues such as remuneration, boredom, and the amateur status which the job has been given may be factors. In view of the increasing number of visitors to this area, tours may be negatively affected by relying on only one guide. Additional SPBCP funding has made it possible for other TCA staff members to act as back-up guides when the main guide was not available.

Excessive fragmentation of land ownership, resulting from changes in the land distribution system since colonization, means it is not uncommon for there to be large numbers of owners of blocks of land on Rarotonga. This is the TCA's case. Land issues (especially those relating to economic details) can be rather sensitive for landowners to deal with among themselves.

The number of landowners in the TCA and the split of profits between the three land-owning tribes make it difficult for landowners to receive significant financial benefits. Nevertheless, there are potential long-term benefits. For example, if the tribes invested their share of the profits in a trust fund, the money could be used for scholarships for landowners' families or for community projects.

Lessons learned

The TCA project has relied heavily on CACC members to keep their extended families informed. Educational and awareness activities have also provided information to landowners and to the general public concerning the project as a whole. However, they have not been entirely effective at informing landowners about the economic particulars of the ecotourism venture.

It has been found that direct regular consultation with the wider landowning groups is a better way to relay the economic details generated by the ecotourism venture. This was demonstrated when the project held a meeting for one of the landowning tribes at the end of 1999. Lack of knowledge and misunderstandings existed on the part of many of those at the meeting concerning the funds generated by the ecotourism venture. Misconceptions were clarified at the meeting.



CACC member and visitors with sign made locally for the TCA

Under current accounting procedures, there is an equal distribution of 35% of the profits to the three land-owning tribes. It is important that among the landowners there is total openness about how the money is being distributed. Ongoing consultation with the wider community is essential for the support of the project, not only in monetary terms but also in terms of continuing to achieve the TCA's aims in the long term.

Empowering landowning communities has given them the will and determination to make this project succeed. The project has drawn attention to the importance of conserving biodiversity throughout Rarotonga and inspired other communities to develop similar projects.

It may be premature at this stage to present the lessons learned. Most lessons will be learned after funding from the SPBCP ceases and when the ecotourism business has operated independently over a period of time.

Conclusions

To continue to work towards the aims of the TCA beyond 2001, the project will need to consider operating as an environmental NGO and actively seek funds to achieve goals that otherwise might not be realized.

It may prove difficult for a group of landowners to operate an ecotourism business effectively and efficiently. In the future, management might consider privatizing the nature walks, with royalties paid to the TCA and to landowners (e.g. five dollars per tourist).

The TCA project has boosted the capacity skills of the TCA staff, not only the skills needed to run an ecotourism operation but also, for example, scientific, management, administration and interpersonal skills. Staff members attended training courses locally and regionally during the period of SPBCP funding.

Through the TCA project, the knowledge gained from operating an ecotourism venture has been shared with other local people.

Apart from the ecotourism venture's financial

rewards for landowners, benefits include:

- ◆ three landowning groups working together to achieve a common goal;
- ◆ increased appreciation of conservation values;
- ◆ training of local people in the scientific aspects of the KRP;
- ◆ passing on of local knowledge of resources found in the area, and their traditional uses, to other locals; and
- ◆ employment for local people.

It can be argued that the TCA is probably the only true "ecotourism" venture in the Cook Islands, in the sense that it gives something back to the communities and is conserving part of our unique natural heritage. The project is implemented and owned by local people.

Education about the TCA and its biodiversity is a major part of the experience gained by tourists from the nature walks. However, it must not be forgotten that local people also need to be educated. Long-term and focused educational and awareness activities are essential to increase the level of appreciation of – and support for – the TCA and its objectives.

As part of its transition to the imminent discontinuation of SPBCP funding, resources for the project's educational component have been minimized. The project is now seeking alternative funding to support some educational and awareness activities. This raises the issue of who will seek funds for this component once SPBCP ceases supporting personnel.

As the ecotourism business thrives and grows, landowners (as custodians of the project) should not lose sight of the TCA's original objectives, i.e. to conserve biodiversity for the benefit of present and future generations of Cook Islanders and others.

With encouragement and continued emphasis on the importance of biodiversity conservation, an increasing number of landowners have begun to appreciate the project's aims and give further support to the TCA. The fact that the project belongs to the landowners has been a big factor in achieving landowner commitment. However, the