

Formerly called CASOLINK

A newsletter for Conservation Areas in the Pacific

Issue no. 6  
ISSN 1562-4935

## CONTENTS

1. Ha'apai Conservation Area Project: Video and environmental awareness-raising in Ha'apai, Tonga. **Will Birge**
3. Conservation area summaries 2nd quarter April-June 2000.
4. From the Manager's Desk. **Joe Reti**
5. Success indicators for the SPBCP. **Trevor Ward**
6. Funafuti CA Update (Tuvalu). **Sharon Marks**
7. Sea horses discovered and promotional videos for Utwa-Walung CA, Kosrae (FSM). **Madison Nena**
8. Income-generating activities under way in Huvalu Forest CA, (Niue). **Logo Seumanu**
8. Workshop to help protect mangroves for Jaluit Atoll CA (Marshall Islands). **John Bungitak**
9. Bees for conservation? Uafato is going honey! (Samoa). **François Martel**
10. The Palau Conservation Society: Raising awareness on the Mesekiu and other environmental matters
11. Leatherback turtles visit Samoa. **Petelo Ioane**
12. Wan Smolbag Theatre Turtle Monitor Programme, (Vanuatu). **Peter Walker**
13. High hopes for Aitutaki Ra'ui, (Cook Islands). **Moana Matepi**
14. Environment News
15. News Brief

## Ha'apai Conservation Area Project: Video and environmental awareness-raising in Ha'apai, Tonga

**Will Birge** *Peace Corps Volunteer*

The results of a community evaluation coordinated by the Ha'apai Conservation Area Project (HCAP) in November 1999 indicated that there was a need for further environmental awareness-raising. Owing to a generous grant from the US Small Projects Assistance Program, the Ha'apai Conservation Area Project is now using video equipment to supplement its environmental education and awareness-raising efforts. The use of video equipment to enhance awareness-raising was identified as a need as far back as 1996. Prior to the arrival of the equipment in May 2000, these efforts were limited to posters, display boards and information sheets that were carted to schools, community meetings and public events. The new equipment, consisting simply of a 21-inch TV/VCR in one unit, a video camera and a small Yamaha generator for power, pro-

vides the HCAP staff with a more up-to-date medium to capture the attention of Ha'apai communities and get the word out on pressing environmental issues.

### Video equipment uses

The conservation area office has a small library of educational videos, which have been collecting dust from lack of use, so our initial intention for the new video equipment was to show educational video programmes to schools and community groups. We also intend to use the equipment to record and document, for future reference, conservation area projects currently under way. With only two years left in the funding of the HCAP, outer island communities were targeted for these awareness-raising activities. With the equipment finally

*Conservation Area Officer instructing students at St. Joseph's College, Tonga*



SPREP

South Pacific Regional Environment Programme

Owing to a generous grant from the US Small Projects Assistance Program, the Ha'apai Conservation Area Project is now using video equipment to supplement its environmental education and awareness-raising efforts.

*Ha'apai Conservation Area Project's environmental awareness booth, with information panels, at the 1997 Ha'apai Agricultural Festival*



in hand, its possible uses have expanded. We are now using it to document current environmental conditions in each Ha'apai island, supplemented with interviews of community leaders. In this way it is hoped the footage will spur both thought and action within other Ha'apai communities. The conservation area staff are also hoping to begin developing a series of short educational and instructional videos, which would be available from the HCAP office.

#### **Equipment transportation**

Since the Ha'apai Conservation Area covers an area of 10,000 sq km and consists of over 62 islands, 16 of which are inhabited, transportation of the equipment posed a logistics problem - how to protect it from both jarring and the elements. After much thought, a commercially manufactured case was ruled out as being too costly, as well as taking time to order, so the office decided to *build* a protective carrying case. The design we settled upon was simple and, we hoped, effective. Each case would be a box within a box. A wooden frame, with siding, would be built to fit around the original cardboard boxes that the equipment came in. The outer wooden box would be sealed with caulking to create a water-tight seal. The results are two rather bulky wooden cases that, after visits to nine outer islands, performed beautifully.

#### **Videos in action**

One week after the arrival of the equipment and two days after the completion of the carrying cases, the equipment, as well as conservation area staff, were put to the test on a five-day awareness-raising blitz of eight Ha'apai outer island communities, and a ninth community the following week. The trip was to focus on raising awareness of coral reef maintenance and to announce the prizes for an upcoming clean-community competition, which in-

cludes penning pigs and rubbish clean-up. For conservation area staff, the trip offered an insight into the variability of neighbouring island communities, from successful ones to those with ongoing environmental problems. However, beyond highlighting community differences, the most lasting impression of the trip was the power of video to capture people's attention. Whether we were meeting with the elders of a community, the youth, or in a classroom, the use of video to supplement our programme was a great attraction.

Attendance at each community meeting was impressive. Community members were very receptive and quite interested to see what was being done in the other Ha'apai communities that the staff had visited. One island community in particular stood out as an excellent example of what can be accomplished with good community leadership and cooperation and was a favourite example of the conservation area staff. This community was the island of Mango. Though a small community, the members had worked diligently to pen pigs, discard rubbish appropriately, plant and maintain useful household shrubs, and even placed all toilets in a more eco-friendly location along the rear of the community. The result is a neat, tidy, and near picture-perfect South Pacific Island community. The use of video in this manner highlights a very important tool in any community-driven environmental work—the power of community pride and, yes, a little inter-community competition.

Classroom visits also highlight the benefits of adding video to the environmental-awareness programmes. The attention of students, of all ages, is glued to the TV screen when a video is shown. Question and Answer sessions held after the video demonstrate that the students are indeed absorbing important information from the video. For the

classroom, as well as the communities, the video of choice is "Fale 'oe Ika" ("House of Fish") a Tongan language video about reef destruction, the effects, and what can be done to stop it. The video, developed by the Ministry of Lands, Survey and Natural Resources in Tonga with assistance from SPREP, is an excellent resource for any local school or community.

Aside from simply being passive viewers, several classes have taken the initiative and written and recited poetry with environmental themes, performed dances and sung songs for the conservation area staff. While their "reward" may simply be being recorded on camera, certainly the reward for the conservation area staff is witnessing teachers and kids taking not only the time and effort to learn important environmental messages but also doing it together in an enjoyable way.

### Follow-up

The Ha'apai Conservation Area Project is currently organising a follow-up outer island trip, focusing more time on a fewer number of "hub" communities. The reason for this is simple: while the experience with video equipment thus far has been quite positive it would be a mistake to expect that a single session, using video or any other medium, is going to bring about broad and lasting changes in a community. Video is simply a valuable supplement to an already clear and focused programme on a particular topic, such as coral reef protection, pig penning or waste management and should not be the entire programme. Furthermore, the desired message needs to be repeated frequently, and to retain a place in the consciousness of any community.

## Conservation Area summaries 2<sup>nd</sup> quarter April–June 2000

### Utwa-Walung CA (Kosrae, Federated States of Micronesia)

The Kosrae State Government approved US\$10,000 for infrastructure development for the CA.

The SPBCP has approved funds to undertake an assessment on potential sustainable aquaculture activities in the CA. A consultant has been identified and hired to do the study. The findings and recommendations of the study will assist in the project's income-generating activities.

The State Legislature has appointed the CASO to the Board of Directors of Kosrae's Visitor's Bureau.

The first search expedition for sea horses in the CA was held on 17 June 2000 (see article on page 7).

An article on the CA appeared in the quarterly newsletter of a local organisation, the Development Review Commission.

### Takitumu CA (Cook Islands)

The TCA celebrated World Earth Day in April by offering reduced rates on their nature walks to locals. Also, the project set up a display at the Punanga Nui mar-

ketplace in downtown Avarua to commemorate World Environment Day in June. Other environmental groups also participated in the celebrations.

On 23 June, the CASO gave a presentation at the AGM of the Koutu Nui (traditional chiefs) and took them on a tour of the TCA. The tour was of special interest to the outer island delegates as they have a desire to set up similar projects on their islands.

The CACC, in line with the draft 2001 strategy plan, has decided to reduce the number of meetings. Only two CACC meetings were held this quarter.

The project took part in SPREP's action plan meeting on Rarotonga in April.

The CASO met with UNDP representative Tom Twining-Ward concerning biodiversity assistance to the Cook Islands. This assistance will enable biodiversity projects to be established.

Road and trackwork has been a major activity this quarter. The Global Volunteers have rendered great assistance in the development of a new track. The Outward Bound participants assisted by clearing a major slip on the road in April and the CACC held a

working bee to clear the drains and the recreation area.

The project shared in sponsorship for a Kakerori page in Birdlife International's book *Birds to Watch*. Co-sponsors of the page included the Cook Islands Environment Service, New Zealand Department of Conservation and SPREP.

The project has commenced developing the Cook Islands Birdwatchers Tour and the first tour is planned for 6–15 October and the second for 10–19 November. An advertisement has been placed in the *NZ Forest and Bird Magazine* to promote these tours. Travel agent Island Hopper will coordinate the travel arrangements of the tour and the project will organise the tour. If this activity can be sustained on a regular monthly basis it will generate good income for the TCA. A bird book will be produced by the project to assist with the tour.

A complimentary tour of the CA was conducted for the owners of the Rarotongan Resort who then included the TCA in their guest information package and on their web site. In addition, TCA staff members are giving short presentations at the Resort's guest orientation sessions.

An ad for the TCA tours has been placed in Rarotonga's new tourist magazine *Raro Magic*. During this quarter the TCA, from income generated from the tours, has spent NZ\$2376.40 on marketing in *Canada 3000 magazine* and the *Cook Islands Sun* and reprinting 5000 brochures.

The project has received funds from the Cook Islands Environment Service to help the project in its awareness activities.

### Vatthe CA (Vanuatu)

The first of several informative interpretation signs for locals and visitors were made for the CA.

Documentation of traditional stories and history of the area has been carried out by Rolenas Tavue. This information will be relayed to the tour guides to assist them with interpretation during guided tours.

Vatthe Lodge staff have started English classes to help them communicate better with English-speaking visitors.

An environment and conservation workshop was held for landowners from Santo to Vatthe from 2 to 4 May.

*continued on page 4*



The construction of the conference room at Vatthe Lodge has been completed by the Sara Village Youth.

During the second quarter, Vatthe Lodge showed some strong signs of assuming financial responsibilities. This included funding the following: purchase

of a new lawn mower, renovation of toilet/showers, replacement of insect screens for the bungalows and restaurant, and building a guests' changing room at Metantas River. Costs were approximately \$250,000 vatu. This is a good portion of the Lodge's income and also a good indication that the Lodge is capable of sustainability.

## From the Manager's Desk

**Joe Reti** *SPBCP Programme Manager*



In the last issue, I mentioned the efforts under way in preparing the CAPs for the end of SPBCP support. Draft transition strategies for Saanapu/Sataoa, Utwa-Walung, Rock Islands, Jaluit Atoll and Takitumu CAPs have been completed and now await formal endorsement by the CACCs and lead agencies concerned. A SPREP/SPBCP strategy has also been prepared, and will soon be discussed with the SPREP Management. Strategies for at least five other CAPs are expected to be completed during the next month or so, but we are on target to have all strategies completed before the beginning of the fourth quarter.

I know the preparation of the strategies has been a very involved process for many of you. That is why I have nothing but confidence, that these strategies will address the key issues for each of your projects and will guide the SPBCP in ensuring that its resources are put to the most productive use. I wish to thank all of you for your untiring efforts in making sure that the development of your transition strategies has been undertaken in a participatory and transparent manner.

The Steering Committee of the Pacific Islands Conservation Trust Fund, met for the second time in May, to finalise the concept paper for submission to UNDP, and to discuss the next steps in the development of this innovative initiative. Mr Wep Kanawi from The Nature Conservancy, Papua New Guinea, was appointed the Fund Coordinator. He will be assisted by a volunteer to be based at SPREP. We are now awaiting comments from UNDP on the concept paper and will keep you informed of future developments as they occur.

I am sorry that we were unable to run the Resource Management Training Course at USP as planned in June due to the political situation in Fiji. This was a difficult decision for the three parties concerned (SPREP, USP and ICPL) but I am sure you will agree it was probably the best decision at the time, given the uncertainty surrounding travel and safety of participants in Suva. We are now planning to start the course in early 2001 but will keep you informed should there be a need for further changes.

In July, SPREP will relocate its operations to the new SPREP Centre at Vailima. During these early times there may be some problems especially with communication facilities. Therefore, if you encounter problems with the e-mail and telephone systems you'll know why. Facsimile should only take a day or two to return to normal, so try this medium if the others fail.

I want to thank those of you who have volunteered feature articles on your projects for the newsletter. This is a great way to advertise your projects and I hope you have seen some of the benefits in return. If not, do not despair, I'm sure it will not be too long before you see the results.

For those of you who have yet to take advantage of this opportunity, this is not a very good reflection on you, or your projects. I can only assume that you have nothing to report or do not see this as a priority for your CA. Whatever the reason, sharing information between CAPs is an essential priority for the SPBCP and it is disheartening therefore that we are not freely exchanging information with each other through this newsletter and other means. Please do make a contribution by letting others know how you are getting on with your projects.

I understand that a number of CAPs have taken on Peace Corps volunteers to help implement their projects. This is great news, as I am sure the volunteers can play a key role in managing the projects in your countries. The volunteers are now part of the SPBCP and CA family and I would appreciate it therefore if you could provide us some more information on the volunteers in your project so that we have a complete record of staff within each CA. This would greatly assist us in the distribution of information and in keeping track of people with work experience in the Pacific for future use.

Finally, please note that the Technical Management and Advisory Group and Multipartite meetings this year will be held in Wellington, New Zealand, during the week 13–16 November. Some of you will be involved in these meetings so please pencil in

*continued on page 5*

these dates in your 2000 work plan. Invitations to the Multipartite will be issued by UNDP to the SPREP Focal Points in your country so keep an eye out for this and let me know by end October if

your Focal Point has not received an invitation.

Best wishes  
Joe Reti

## Success Indicators for the SPBCP

**Trevor Ward** *Institute for Regional Development, University of Western Australia, Perth, WA*



**Over the past two years, consultants have identified a set of indicators that can be used to assess the success of the SPBCP. Potential indicators for the Programme have been developed after visits and consultations with local communities in three of the SPBCP's Conservation Areas (Samoa, Vanuatu and Fiji), and after discussions with SPBCP and SPREP staff.**

The consultants' work has found that the success of the SPBCP can be best measured by adopting a modern performance-based model that assesses the extent to which the structure, processes and practices of the SPBCP achieve desired conservation outcomes expressed in biodiversity terms.

The SPBCP aims to achieve the conservation of biodiversity by developing and promoting the sustainable use of the natural resources contained within each Conservation Area (CA) in the Programme. The sustainable use of natural resources is based on control and management of the CA by a local community, often one living inside the CA, and the development of improved levels of stewardship by the community of their natural resources. The SPBCP provides support to facilitate local communities to identify and implement management practices that are sustainable, and to develop direct linkages and dependencies between the biodiversity of the CA and their social and economic welfare.

The consultants' work has found that the success of the SPBCP can be best measured by adopting a modern performance-based model that assesses the extent to which the structure, processes and practices of the SPBCP achieve desired conservation outcomes expressed in biodiversity terms. The indicator development framework used in this project used CA values, management objectives, and threats/issues as the basis for identifying indicators. This framework will enable the final Success Indicators to be focused but flexible, and will enable the same indicators to be used in a two-tier system for both natural resources management at the local CA level and performance evaluation at the Programme level for the SPBCP.

The Success Indicators proposed for the CA level of the SPBCP are focused on key elements of biodiversity, sustainable uses and the well-being of dependant human communities. A number of these indicators are common to all (or most) CAs, and 26 indicators are defined as Core Indicators for the CA level of the SPBCP. Success Indicators for the Programme level of the SPBCP are the 26 Core Indicators and 5 Programme Indicators that assess activities conducted only at the Programme level. In each of the three Conservation Areas used in this pilot study, we identified Success Indicators

covering biodiversity, natural resources and socio-economic conditions of the local villagers (Uafato, 25 indicators; Vatthe, 27 indicators; Koroyanitu, 28 indicators). Implementation strategies have been suggested for each high priority indicator, including the matching of data needs to local capacity for routine monitoring.

For these CAs, the Indicators can be implemented using a combination of local effort, the CASO and the lead agency, and with support and logistics for some indicators from national and regional agencies. The consultants consider that data for most of the indicators can be best captured during an annual household survey in each village, and that this is the major tool for capturing data on the success indicators. This will be an intensive 2–3 week survey of local perceptions of resources and conditions, and, with the appropriate comparisons to independent data captured in the other indicators, should provide an achievable and powerful basis for assessing the condition of the CA resources and biodiversity. In its routine operation, this annual survey should be able to be conducted by the CASO with the support of several trained local villagers. This annual household survey could also provide a focus for community participation in resource management, and could be a key part of the implementation of a natural resources management plan.

The remaining indicators not covered by the household survey will need more detailed and specialised resourcing for their implementation. For some biodiversity and resource indicators, the input of a specialist is required for the initial design of a standard monitoring protocol, for routine implementation and interpretation by local villagers (after training) without further external support. However, some of the biodiversity, vegetation, water quality and marine indicators, because of their technical nature and the equipment requirements, can only be implemented with external assistance (such as aerial photography). The need for external support





is constrained to only the most critical and high priority indicators, and the consultants recommend that these be implemented in close consultation with national level government agencies, where much of the required expertise is located. The one exception is routine (five years) colour aerial photography, which is recommended for donor and international support by all Pacific Island nations.

The consultants' reports provide simple procedures for summarising, analysing and visualising the indicator data, with templates and worked examples

to demonstrate some of the possible ways of summarising the indicator data for visual presentation.

The consultancy team that worked on identifying indicators for the SPBCP consisted of: Trevor Ward (Australia), Fanaura Kingstone (Cook Islands), Suliana Siwatibau (Vanuatu), Geoff Dews (Australia), Art Whistler (Hawaii) and Dion Ale (Samoa). Joe Reti, Sam Sesega, François Martel and Sue Miller from SPREP have guided the work of the team.

The 26 Core Indicators identified by the consultancy teams are:

Core Indicators	
C1. Area of major vegetation types and their dominant species composition	C15. Number of tourists visiting the CA
C2. Bird populations and species composition	C16. Annual income from tourism
C3. Population size of "flagship" species	C17. Extent of weed invasion into forests, grassland and managed lands
C4. Quality of water in rivers for drinking	C18. Extent of animal pest invasion into forests, grassland, managed lands and rivers
C5. Harvest of key tree species	C19. Frequency, severity and extent of fire
C6. Catch of fish and shellfish	C20. Number of pour-flush and septic tank toilets
C7. Cash Crop Index	C21. Area of land used for gardens
C8. Subsistence Crop Index	C22. Children's growth statistics
C9. Subsistence Wild-Harvest Food Index	C23. Population size and structure
C10. Cash Wild-Harvest Index	C24. Participation rate in the activities of all groups for village development
C11. Number of village cooperatives or similar business units	C25. Number of households with traditional skills or modern skills
C12. Annual income from kava	C26. Type of house construction and number of electrical appliances
C13. Plan of management for natural resources	
C14. Plan of management for tourism	

## Funafuti CA, Tuvalu Update

**Sharon Marks** *Biodiversity Conservation Officer, Funafuti CA*

The Funafuti Conservation Area (FCA) has recently acquired a new Biodiversity Conservation Officer from Australian Volunteers International. Sharon Marks arrived in Tuvalu mid-June to carry on the good work achieved by volunteer Claudia Ludescher who finished her contract at the end of 1999. A profile on Sharon was included in *CALL* issue no. 5.

At present everyone is busy organising the Tuvalu Environment Day programme for 1 July. This year the theme is "Waste Starts at Home". The Funafuti

Conservation Area is again sponsoring a poster competition with plans to print and distribute copies of the winning entry. Other activities on the day include children going on field trips to the rubbish dump, poem recitations, drama shows, a singing competition, environmental displays and a composting demonstration.

Other recent achievements for the Funafuti CA include the completion of a brand new interpretive centre and storage shed. The Canada Fund,

Funafuti Town Council and SPREP provided funding for the centre. The Honourable Faimalaga Luka, Minister for Natural Resources in Tuvalu, officially opened the locally constructed buildings in May. The shed provides a secure repository for CA diving, survey and boat equipment. Located next to the storage area on the edge of the lagoon, the interpretive centre commands a clear view of the conservation area through large banks of clear glass louvres and windows. The next step in the project will be to design and install appropriate interpretive material.

Stored away in the new shed are 20 sets of face masks and snorkels and 11 pairs of fins recently donated to the FCA by the Australian High Commission in Suva, Fiji. Geoff Adelaide of the High Commission presented this gift to the CA Project Manager Elia Tavita, Conservation Officer Semese Alefaio and Town Council Secretary Simeona Iosia. This equipment will be used by school children on educational trips to the conservation area and for marine surveys.

*The Rev. Iosia Taomia and Mataio Tekinene of the Environment Department about to hand out a basketball and calculator as a prize for a winning poster by Petelema Eti, Class 4m of Nauti Primary School. (photo: FCA)*



## Sea horses discovered and promotional videos for Utwa-Walung CA, Kosrae

**Madison Nena CASO, Utwa-Walung CA**

### Sea horses

During my discussions with the local CA communities during May, a number of people said that they had seen sea horses in the CA. Why is this piece of news interesting? Well, sea horses have never been reported in these waters. According to the reports, the sea horses were sighted in the brackish part of the CA.

As a result of this exciting news, the Utwa-Walung Marine Park management decided to organise a sea horse search within the park involving the public. The first search was held on 17 June 2000 during a four-hour period. To publicise this event, the project made radio announcements and distributed a flyer. The local people who initially had seen the sea horses were the team leaders for the search. One sea horse was spotted on the coral reef at about 2–3 metres (6–10 feet) deep. All in all, about 20 people took part.

Another sea horse search is scheduled for the first part of July 2000. As the information on sea horses that we have indicates they are more likely to be seen at night, the second search will be held in the evening.

When we have definite locations of where sea horses are within the marine park, we hope to declare the area(s) as strictly protected. These wonderful creatures will give added value and tourism appeal to the CA. Thus, we are currently looking at ecotourism activities that will include the sea horses. Before this, a feasibility study will be done to ensure that our activities do not negatively affect these creatures.

### Promotional videos

Aquaquest Video from Guam was contracted to make two promotional videos for the Federated





States of Micronesia. The videos will be used in international promotional shows and will also be distributed to travel agents, especially in the United States and other potential markets for Micronesia.

The Kosrae Tourism Bureau coordinated the filming activities in Kosrae, and the Utwa-Walung Con-

servation Area was included in the filming as a major attraction for Kosrae.

During the film crew's visit to Utwa-Walung, ecotourism and cultural demonstrations by the community were filmed. The video will be available at the end of this year.

## Income-generating activities under way in Huvalu Forest CA, Niue

Logo Seumanu CASO, Huvalu Forest CA

### Huvalu Conservation Tour

The Huvalu Forest Nature Tour kicked off in the second quarter with four visitors being the first to experience our walks. The CASO guided the visitors on the Liku side of the CA and explained the goals and activities of the project. The visitors' reaction was a very positive one.

### T-shirts and caps

The project has purchased some polo-neck shirts and they have been embroidered with the Huvalu logo. These are for sale locally for NZ\$20 each. The money generated will enable us to purchase more polo T-shirts. We have received our order of 50 caps from overseas and these also have the Huvalu logo embroidered on them. The caps will be mainly sold locally. They retail at NZ\$20 each. If you wish to purchase a T-shirt and/or cap, e-mail Logo Seumanu at huvalu.ca@mail.gov.nu

### Coconut-oil enterprise

A trial Direct Micro Expelling (DME) coconut-oil processing plant started at the beginning of this year. This cottage industry is currently making scented coconut oil and bottling it in a variety of glass containers. We have now decided to use the 200-ml atomiser bottles to contain the oil and a Peace Corps



Huvalu Forest Conservation Area logo

Volunteer who works for the Niue Development Bank has designed an attractive label. There has been a steady demand for the scented oil, especially from locals departing the country. Another product from DME that we intend to produce is pure oil for cooking. Once the three storage drums arrive we will start producing cooking oil to sell.

## Workshop to help protect mangroves for Jaluit Atoll CA, Marshall Islands

John Bungitak CASO, Jaluit Atoll CA



**The *alaps* (senior heads) of the family clans from the Ionene Community on Jaluit Atoll are concerned that their mangrove trees are being logged without proper management. Outsiders pay the Ionene youths a pack of cigarettes or a bottle of vodka in exchange for a carload of mangrove logs. As a result of this deforestation, the number of wildlife (crabs and sea birds) has been noticeably decreasing. This situation has prompted the elders to take action.**

The Ionene *alaps* asked the Republic of Marshall Islands Environment Protection Agency (RMI EPA) for help in managing and protecting their mangrove ecosystem. In response, the RMI EPA asked the Jaluit CASO, John Bungitak, to conduct a two-day training workshop, the aim of which was to help increase the community's understanding and appreciation of its mangroves. This workshop was held on 9–12 June 2000.

Twenty-eight senior *alaps* and 31 young adults attended the workshop. Because of the great num-

ber of participants, the group was divided into two teams. The first day was for the *alaps*, and the second for the young adults.

The second day of the workshop for the youths resulted in some interesting and lively discussion. The participants gained a better understanding of the importance of the mangrove ecosystem in their community. A positive outcome was that the youths expressed the desire to become tour guides for the mangrove area rather than destroying the trees for a pack of cigarettes or a bottle of vodka.



After the workshop, the *alaps* all agreed that their mangrove area should be established as a conservation area and that such a move should be supported by a council ordinance at their next meeting. It was also agreed that access roads should be built and maintained for visitors' use.

The workshop was successfully completed, and the *alaps* and their people would like to express their appreciation to RMI EPA, SPREP and the Government of Great Britain for their support of the workshop.

## Bees for conservation? Uafato is going honey!

François Martel *SPBCP Socio-Economics Officer*

The Uafato CA is located in a remote part of north-eastern Upolu, 30 kilometres from Apia, Samoa. The terrestrial part of the CA covers approximately 14 sq km and includes most of the village lands and stretches from the coast up very steep and highly dissected coastal mountains.

The indigenous timber species *ifilele* (*Intsia bijuga*) is a key feature of this biodiversity, and its sustainable management constitutes the central objective of the project. The main strategy for conserving *ifilele* is to reduce community dependence on it for income by developing a range of other sustainable income-generating activities. Among them, the community considered honey production as having a high priority for development.

But to go from NO honey bees in the valleys, to setting up a bee-keeping venture in one of the most remote parts of Samoa, is quite an undertaking! As Uafato villagers now know, it's one thing to watch beehives on TV and quite another to put your hands into a hive full of bees.

A feasibility study for the development of bee-keeping in the Uafato Conservation Area was completed in August 1999. The study included considerations related to motivation and skill levels of communities and individuals, past experiences in village bee-

keeping in Samoa, issues related to share of benefits, funding requirements and market demand, as well as the establishment of suitable management structures needed to support a bee-keeping venture in Uafato village.

The technical report clearly explains how there is a "positive nectar flow" for this conservation area. Commercial viability is clarified by the market report noting the existence of a local honey market and a potential export market. Financially, there is also the opportunity to earn some form of income which could be as supplementary or main source. The impact of such a project on the environment is seen as positive, where the bees are beneficial to the conservation of natural resources.

Well, that was enough for Uafato villagers to decide to go ahead with the venture. They have proposed to set up the Uafato Village Community Honey Project, coordinated by the *Komiti o tina* (Women's Committee) in association with the Uafato Conservation Area Coordinating Committee (CACC). It is proposed that there be three practical management units for this "honey" project:

- Project Coordinator—being *Komiti o tina* (in association with CACC),
- Project Units/Owners—being the family units identified as participants of the project,

Beehives to be purchased (approximately 30 hives) will be funded by a Pacific Initiative for the Environment (PIE)—NZODA project and put in trust with the CACC. The hives will then be rented to 19 individual families of the village of Uafato.



Choosing a new site trail hive.  
(photo: Greg Sherley)

Contract Managing Agent—being a business dealing in honey, contracted (for an initial period of up to two years) to plan implementation, manage the hives, harvest and market the honey from Uafato, but more importantly to progressively pass on bee-keeping skills to keen new village bee-keepers.

Beehives to be purchased (approximately 30 hives) will be funded by a Pacific Initiative for the Environment (PIE)—NZODA project and put in trust with the CACC. The hives will then be rented to 19 individual families of the village of Uafato. A small enterprise structure remains to be established but the bee-keeping project will follow the basic principles of a Cooperative Farming Venture for the local production of honey.



*Weighing trail hive in Uafato. (photo : Greg Sherley)*

### The Palau Conservation Society: Raising awareness on the Mesekiu and other environmental matters



**The following item on dugongs was produced by the Palau Conservation Society (PCS) and appears as a brochure in the PCS education kit. The attractive blue kit, with Palau's national bird, biib (Fruit Dove) on the cover, contains much easy-to-read information on Palau's environment.**

The PCS is the lead agency for the Rock Islands Conservation Area. The SPBCP is providing financial support to the Rock Islands mainly for awareness and educational purposes. Rock Islands is a world-renowned dive area, which harbours an abundance of marine organisms that feed Palau's residents. It also provides habitat for several endangered species. The PCS was established in 1994 to encourage and facilitate community participation in decisions that affect Palau's environment. The Society works to protect Palau's environment through public awareness, research and the promotion of sustainable development policies.

In Palauan legend, a young single woman runs away from her mother in shame for having broken a traditional taboo. During her escape into the sea she is magically transformed into the *mesekiu*, a dugong.

The Palauan population of *mesekiu* is special because it is the only one in all of Micronesia.

In Micronesia, the endangered dugong, *Dugong dugon*, is found only in Palau, making it the most isolated dugong population in the world. The nearest neighboring populations are 850 km to the west in the Philippines and 800 km to the south in Indonesia.

Dugongs were once part of the rich cultural heritage of Palau, as evident from their prominence in legends, jewelry and artwork. Dugongs were traditionally hunted for their meat, but only by a hunter designated by the chief. Only the high chiefs could wear the neck vertebrae of a dugong as a bracelet.







Today less than 200 dugong are believed to be in Palau and the number is decreasing. Despite a national law protecting dugong, poaching and loss of habitat have continued to threaten this marine mammal. This animal may disappear from Palau's waters unless something is done to prevent its extinction.

#### Biology and distribution

The dugong is one of only four extant species in the mammalian Order Sirenia (seacows). Adult dugong can reach lengths up to 11 feet [3.3 m] and weigh up to 1500 pounds [680 kg]. Dugong can live up to 70 years. It is the only herbivorous mammal species that is strictly marine. It eats a wide variety of tropical and subtropical seagrasses. In Palau much of the grazing on these seagrasses takes place in lagoon waters more than 20 feet [6 m] deep, making this type of area key habitat for dugong. Females are called cows and have their first calf at between nine and 17 years of age. The gestation period is 13 months. Calves are born singly, with three to seven years between each calf. The calf

suckles for 18 months. The dugong's slow reproduction rate is an important issue in terms of promoting recovery of depleted populations.

#### Threats

Poaching is a serious threat to the dugong in Palau. As of 1991 there were several dugong hunters in Koror. One source reported that in one year alone 11 dugong were killed near Babeldaob and two near Kayangel.

Using boats with outboards, the hunters spear dugong at night. Hunting is done for meat, but sport rather than economic necessity appears to be the main motivation. Recently, the practice of carving dugong bones into jewelry and curios for sale to tourists has added to the demand for dugong and exacerbated the problem of decreasing their take.

Other threats include the deposition of sediments from eroded areas, which cover and kill seagrasses, polluted run-off water, and dredging. Boats and gillnets are also responsible for incidentally killing dugong.

### Leatherback turtles visit Samoa

**Petelo loane** *GIS/Database Assistant Officer, SPREP*

Just recently leatherback turtles have turned up in Samoa, where they have never been seen before. The Regional Marine Turtle Conservation Programme Database at SPREP in Apia has reported three leatherbacks caught in long-line fishing around Samoan coasts. All three turtles were reported to have been strangled by long-lines, suggesting that the introduction of long-line fishing to Samoan waters has revolutionised the fishing industry in the country not only for fishermen but for the fish themselves.

The three leatherbacks were caught in the north, south and east of Samoa, at different times and by different fishermen. The first two were caught off the island of Upolu, and the third turned up off the coast of the island of Savai'i. The first leatherback was caught in 1996 in open water at Piula; the second was caught by Siumu fishermen in 1999 in open water there; and the third was caught by Apia-based fishermen in open water near Salaelua in February 2000.

*A Leatherback turtle caught by a long line fishing boat. Petelo loane and Esera Rusia (foreground) recording the measurements. (photo: SPREP)*





When asked, Samoan turtle fishermen said they had never before caught leatherback turtles in any fishing trips. They said they caught only shell turtles—either green or hawksbill. One was so surprised at his unusual catch that he almost threw the turtle back, thinking it was a ghost.

When asked, Samoan turtle fishermen said they had never before caught leatherback turtles in any fishing trips. They said they caught only shell turtles—either green or hawksbill. One was so surprised at his unusual catch that he almost threw the turtle back, thinking it was a ghost. Samoans have a long history of fishing for turtles, which traditionally were reserved only for the chiefs. This restriction acted as a traditional conservation method.

The Samoan turtle fishermen use traditional Samoan net made of sinnet (*afa*), a Samoan string made from coconut fibre. These nets are transported by longboats (*fautasi*) or *tulula* (a half-size *fautasi*). The other method of traditional turtle fishing is called “*tumatuma laumei*”. The fisherman lays leaves of elephant taro on the sea surface. The turtles are attracted by the shade of the leaves and that is when the fishermen spear them. Both of these practices are performed in the open sea.

The leatherback turtle is the largest sea turtle living today. It may grow to be 2.4 m (8 ft) long and weigh about 900 kg (2000 lb). Its overall colour is black with white patches on the belly. The leatherback is the only turtle that has no hard top shell. Its huge front flippers take it thousands of kilometres in the ocean, where its favourite food is a jellyfish that most sea animals avoid, the Portuguese man-of-war. The leatherback turtle has no teeth and it uses its strong, sharp beak to catch food.

In determining the reasons for the recent appearance of leatherbacks in Samoan waters, three areas were closely looked at—feeding grounds, mating and nesting. It is believed that feeding was the

main reason for these turtles coming into Samoan waters because there are no reports of leatherbacks nesting in Samoa. Mating is ruled out as the turtles were medium size and not ready for mating.

The great improvements in fishing technology and the introduction of long-line fishing seem to pose real dangers for the leatherback turtles. If they are caught by long-lines they are killed instantly as they get strangled by the line. If we do nothing to save this marine animal, it will soon become extinct.



To commemorate the year of the turtle, Samoa produced stamps of turtles.

## Wan Smolbag Theatre Turtle Monitor Programme, Vanuatu

Peter Walker *Wan Smolbag Theatre*



“Hello, may I talk to the turtle monitor please?”  
“Yes, wait a minute I’ll just go and get him.”

It was only when we had rung around seven islands that we realised what this simple sounding exchange implied. We had been ringing various islands to find out if the turtle advertising boards we had sent had reached their destinations, some of which were fairly remote. Usually we were ringing in to a community phone. Everyone who answered knew straightaway what and who we meant by “turtle monitor”, so over the three years of SPREP support the phrase has taken root and in many communities when a turtle is found, the turtle monitor is called to tag it.

Most of the advertising boards had reached their destination and had been nailed to trees on beaches where turtles are known to come ashore to lay eggs.

The boards, we hope, are all-weather although it is hard to defy a strong cyclone in Vanuatu! Nevertheless, monitors like them and have requested more for other beaches. So far, we have sent out well over 100, each one painted by an artist in Wan Smolbag Theatre. The boards convey a variety of simple messages about turtle protection: not eating turtle eggs, and the kind of turtle where a taboo is in place, and so on.

The turtle boards were the major new IEC initiative in the Smolbag Turtle Monitor Programme this year. SPREP has funded a series of workshops, run by turtle monitors from the founding group of monitors on Efate. In addition, two monitors have visited other island networks, going from village to village to see whether the monitor is active. The biggest barrier we face is the fact that it is very hard to expect some monitors in remote areas to

The biggest barrier we face is the fact that it is very hard to expect some monitors in remote areas to remain interested when it is difficult to give them support or visit them regularly.

remain interested when it is difficult to give them support or visit them regularly. Certainly, having tagging devices gives them a special place in the village and a role to play. Several monitors take great pride in their entirely voluntary role and regularly send reports about turtles they have tagged.

Closer to the capital in the villages of Efate where the campaign started, the problems faced by monitors are different. There is a small financial incentive for the work as they attend a workshop in Vila every year and they are the monitors who run the outer island workshops. However, population pressure and the to-ing and fro-ing from town can sometimes mean that the taboos some villages have put in place are hard to enforce.

Because of their more regular contact with Smolbag, the turtle monitors are not afraid to voice their concerns to Fisheries and other agencies. The recent afternoon session with officers from Fisheries and the Environment Unit showed how committed the monitors are to the project.

They asked for more support to be given to locally enforced taboos. There is potential confusion when Fisheries law does not say it is illegal to kill large

turtles but the village has imposed a complete taboo through their chief. The monitors asked for more support for these taboos.

Furthermore, they questioned why influential business people are able to prevent Fisheries from visiting hotels where turtles are kept in captivity. "Are they above the law?" they asked. The sad answer seemed to be "yes". The agencies explained to monitors that they also lacked funds to carry out raids on shell factories at night, which is when they suspect work is done on undersized shells.

Fisheries and the Environment Unit expressed their gratitude to the turtle monitors for the work they do. Given the financial pressures on departments, much of the responsibility for awareness, they said, falls on groups like Wan Smolbag and the turtle monitors.

This year, the monitors say they want us to ensure that the Minister for Fisheries is at their workshop. Such is their belief in their work, they plan to keep up the lobbying of agencies for more support and changes in the laws regarding turtles. And this time they want Wan Smolbag to make sure the monitors' message reaches the top!



*The endangered Hawksbill turtle (photo: J. E. Maragos)*

#### NEWS FROM THE REGION

#### NEWS FROM THE REGION

#### NEWS FROM THE REGION

### High hopes for Aitutaki Ra'ui

#### Moana Matepi

In true Aitutakian style, a friendly warning—"If you like the size and shape of your leg, don't poach the ra'ui!"—was issued by one of the island's community leaders to anyone tempted to break the newly installed ra'ui there.

Aitutaki's authorities have now in place since June 15 a ra'ui system within the island's once pa'uarich lagoons—and Island Council mayor Tai Herman says it's something that's needed badly. For many years, fishery surveys carried out by the

The ra'ui ceremony held on Maina Islet on 15 June 2000.

(photo: Cook Islands News, 21 June 2000)



Ministry of Marine Resources have recommended that the Island Council establish a lagoon resource management plan.

The degree of over-harvesting and damage to the reefs says Herman is evident. "I think every Cook Islander knows the lagoon in Aitutaki doesn't have the *pa'ua* (Giant clam) as it used to have. People can still remember catching *kiokio* (bone fish) or *Ava* (milk fish) by the hundreds many years ago. This does not happen any more," he says.

Source: Cook Islands News, 21 June 2000

## NEWS ENVIRONMENT NEWS ENVIRONMENT NEWS ENVIRONMENT NEWS

### A healthier Aitutaki future

Moana Matepi

The *ra'ui*—a traditional concept for conserving marine life—used to be practised regularly up to the 1960s in some islands of the Cook Islands. Then it fell into disuse and the result was over-fishing and abuse of the lagoon until a few years ago. Traditional leaders in Rarotonga re-introduced the *ra'ui*, to huge successes in selected areas around the main island. In the outer islands, Aitutaki community support has been tremendous and, says Aitutaki Mayor Tai Herman, a good indicator of a healthier future for one of the most famous lagoons in the Cook Islands. He knows it won't be an easy task. "It's going to be difficult policing, especially Motukituu, and Maina (islets) because they are miles away from the main island." However, the Island Council, the aronga mana (traditional leaders) and supporters of this cause hope that the people at large will respect the *ra'ui*. The staff of the Marine Resources, lagoon tour operators and "basically any

Aitutakian" will carry out policing. Everyone is being urged to watch out for poachers in the *ra'ui* areas and to report incidents of breaking the *ra'ui* to the office of the Island Council.

#### Excess

An excess of \$8000 towards the purchase of floats, pipes and anchors needed for the project was provided by New Zealand Official Development Aid (NZODA) to get the *ra'ui* under way. Many thanks says Herman are in order for those who helped and are in support of the project; among them, the New Zealand High Commission, traditional leaders, staff of Marine Resources, teachers and students, the tourism industry and the people of Aitutaki.

Source: Cook Islands News, 21 June 2000



### Village in deal to save wildlife

Paul Nengai

A historic conservation agreement has been signed to preserve land and protect wildlife in Wanang village in the Usino-Bundi district of Madang province.

The 11 clan leaders within the Wanang Conservation Area signed the deed which prevents the harvesting of logs and exploitation of their environment. Wanang Conservation Deed (WCD) covers 18,570 hectares of land and virgin forest.

The Wanangs, comprising 144 villagers, have decided to reject any logging companies and other development projects. They want the area preserved for wildlife and its unique plant species. The deed

binds an agreement made by the 11 clan leaders of Alkapke, Kaipsakang, Iga, Babugu, Katam, Kai, Mudd, Kimevung, Wanasakang, Igurnana and Gariskang. It also contains 13 resolutions which the villagers have agreed in principle to guide the management of their forest and land. The clan leaders agreed to recognise the deed as a legal document, which binds the parties to their promises and can be enforced in a court of law.

Bismarck Ramu Group (BRG) NGO project coordinator John Chitoo, who spearheaded the signing, said this deed was the first of its kind in the country. BRG, with its environmental lawyer Cathy Whimp, drafted the deed for the Wanang people.



Mr Chittoa said: "My group came in to assist after the Wanang village leaders requested help. Through many meetings and consultation this document was put together. We recorded their ideas and thoughts and forwarded them to Ms Whimp to put them in a legal frame which then became the Wanang Conservation Deed."

He said landowners around the country had problems with environmental damage because of improper deals with companies in the first place.

**Source:** Port Moresby, *The National*/PINA Nius Online, 12 June 2000

## NEWS BRIEF NEWS BRIEF NEWS BRIEF NEWS BRIEF

### Introducing Ilebrang U. Olkeriil, CASO, Palau

In CALL issue no. 5, an article appeared on Ilebrang. At the time of going to print, we didn't have a photograph of her. Our thanks to François Martel who

recently visited the Rock Islands and managed to get a picture with Ilebrang in it.



*L-R Geory Merep, Ilebrang U. Olkeriil and Francois Martel take a boat ride through scenic Rock Islands. (photo: Andrew Smith)*

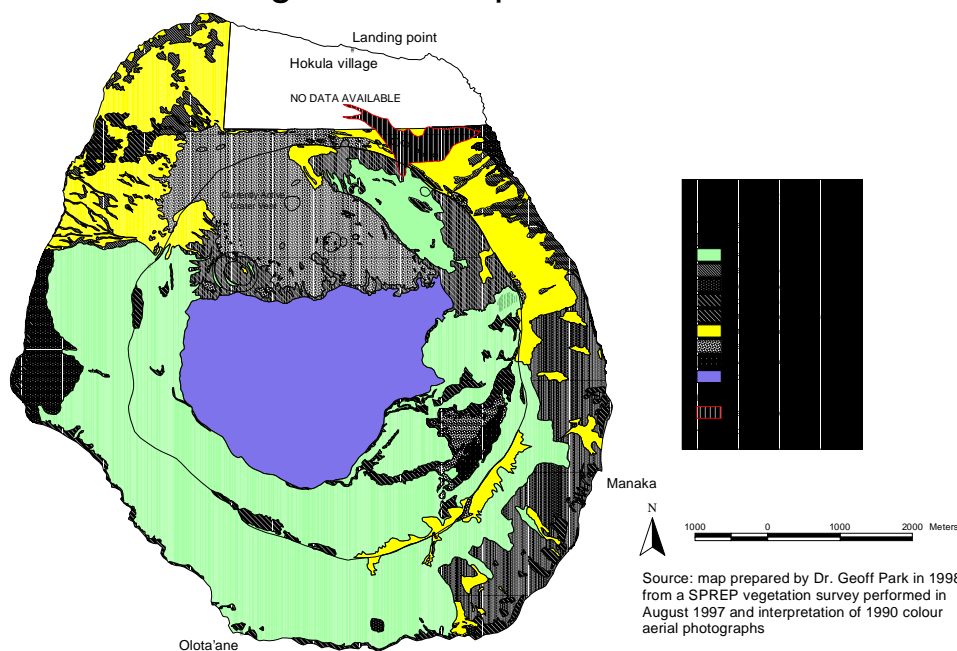
**The South Pacific Biodiversity Conservation Programme (SPBCP) provides technical and financial assistance to 14 Pacific Island countries to establish and manage a series of community-based conservation areas that demonstrate biodiversity conservation through the sustainable use of natural resources by local people. The South Pacific Regional Environment Programme (SPREP) executes the SPBCP with financial assistance from the Global Environment Facility (GEF) through UNDP.**

### Vegetation Map for Tofua Island, Tonga

The Tofua Island vegetation map was drafted by Geoff Park and put on GIS by James Atherton as part of a survey on the Terrestrial Ecology and Botany of Tofua and Kao Islands in Ha'apai, Kingdom of Tonga. The islands of Kao and Tofua contain some of the best remaining undisturbed native

vegetation in Tonga, which is of great importance to the native wildlife of the islands. Tofua's and Kao's forests are of such biodiversity value, in terms of their quality and international significance, that some strict protection, in balance with sustainable use of some of the forests, is recommended.

## Tofua Vegetation Map



### Construction underway for Palau's coral reef center

The Rock Islands CASO and SPBCP Socio-economic officer were provided with a grand tour of the Palau International Coral Reef Center, currently under construction on the Koror waterfront. The new Center is a US\$6.0 million dollar joint-endeavor between the Governments of Japan, USA and Palau. The new Palau International Coral Reef Center will soon be completed and is expected to be fully func-

tional in January 2001. The Center will provide a forum for coral reef studies, research and education. It is designed to assist in improving the management, use and conservation of Palau's marine environment and may play a key role in supporting Rock Islands Conservation Area in scientific investigations and monitoring in the future.



One of the islands making up the Rock Islands group. (photo: J. E. Maragos)

#### Common acronyms

SPBCP:	South Pacific Biodiversity Conservation Programme
CASO:	Conservation Area Support Officer
CAP:	Conservation Area Project
CA:	Conservation Area
CACC:	Conservation Area Coordinating Committee
SPREP:	South Pacific Regional Environment Programme

Prepared for publishing by SPREP's Publication Unit

CALL is the newsletter of SPREP's South Pacific Biodiversity Conservation Programme, based in Apia, Samoa.

*Technical editor*  
Anna Tiraa

*Editor*  
Suzie Grano

*Graphics*  
Cathy Appleton and Adele Keil

*Layout*  
Pito Malifa

*Printer*  
Stredder Print Ltd

SPREP  
PO Box 240, Apia, Samoa  
Phone (685) 21929  
Fax (685) 20231  
Email [sprep@sprep.org.ws](mailto:sprep@sprep.org.ws)