

WANTOK ENVIRONMENT CENTRE (WTEC)

P.O.Box. 145 LUGANVILLE, SANTO WEBSITE: www.positiveearth.org



'Operasen Savem Krab Kokonas' Back In Action

The Australian Government, through its Regional Natural Heritage Programme (RNHP), has provided funding of AUS\$20,000 to fund the next phase of 'Operasen Savem Krab Kokonas' in Sanma Province.

The Sanma Coconut Crab Taskforce will be conducting awareness, scientific studies and stakeholder consultations from December 2006 until May 2007. These activities are aimed at conserving the rapidly declining stocks of the world's largest crustacean, *Birgus latro*.

The *Fisheries (Ban on Coconut Crabs) Regulation* was introduced in 2004 after lobbying by the Taskforce. This law makes it illegal to take any Coconut Crabs in Sanma Province. So far, three men have been prosecuted for taking crabs during the ban season and ordered to pay 20,000 vatu each. The Ban is due to be lifted on the **1st April 2007**.

The Taskforce involves representatives from the Department of Fisheries, Department of Forestry, Santo Landholders Conservation Initiative Project, Sanma Province and Wan Tok Environment Centre.

Taskforce members will be carrying out the following activities over the next few months:

1. Stock Assessment and Community Consultation

The Taskforce will be conducting Coconut Crab population surveys throughout December. The team will re-visit sites that were sampled by Dr Rick Fletcher in 2003, including Matantas, Port Olry, Hog Harbour and Khole. The team will compare current populations of Coconut Crabs with the 2003 results to observe whether the populations have increased during the ban season.

The Taskforce will also visit new sites, including Tanevusvus, Navota, Araki, Avunatari, Ambaghura and Shark Bay.

The Taskforce will prepare a scientific report showing the results of the population surveys.

2. Presentation of Results

Taskforce members will present the results of the stock assessments to provincial leaders, Government Departments, communities, business owners and tourism representatives. The Taskforce will also ask these stakeholders for their views on whether to continue the current ban season beyond April 2007.

If communities are in favour of the ban, the Taskforce will lobby for an extension.

3. Community Monitors Workshop

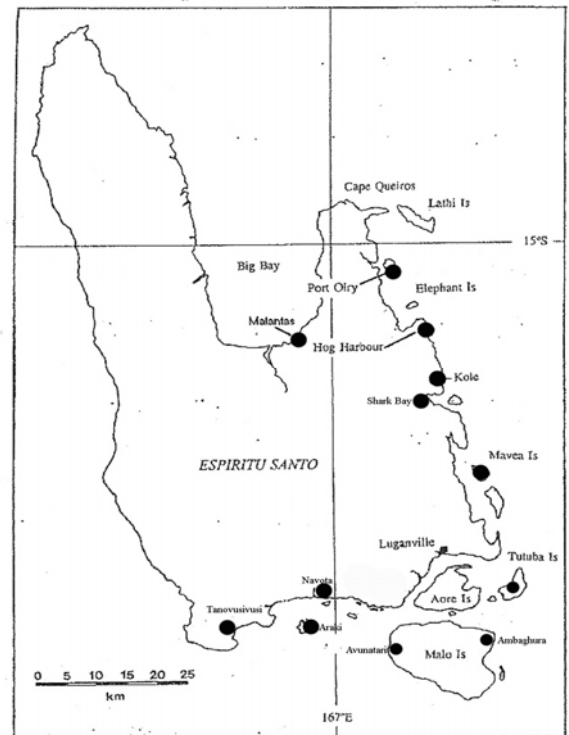
A workshop to train community-based Coconut Crab monitors will be held in February 2007. The workshop will help communities to continue to monitor and manage Coconut Crab populations in their areas, and report illegal taking to the authorities.

4. General Awareness

The Taskforce will carry out general awareness activities throughout Sanma Province to help communities to understand the rules regarding taking Coconut Crabs and how to manage this important resource.

RNHP is a four year, \$AU10 million initiative, established to protect outstanding biodiversity in South East Asia and the Pacific. The programme is administered by the Australian Government's Department of the Environment and Heritage. For more information about RNHP, visit their website at: <http://www.deh.gov.au/heritage/programs/index.html#rnhp>

Sipos yu wantem save moa long saed long Krab Kokonas, ridim notis we Jennifer Pickering I bin preparem we I stap long page namba 2 long niusleta ia



2006 Stock Assessment Sites, Sanma Province

KRAB KOKONAS

Nem long Bislama: Krab kokonas
 Nem long English: Coconut Crab, Robber Crab, Palm Thief or *Birgus latro*
 Nem long Franis: Crabe du Coco

Bodi blong krab kokonas i olsem wanem?

Krab kokonas emi mo bigwan bitim ol narafala krab long wol. Long everi kokonut krab long wol, kala blong wanwan long olgeta I no semak. Sam krab kokonas i blu, samfala I red mo samfala i brown. I gat 5 lek we I stap long saed saed blong krab ia, mo oli semak long tugeta side. Long foret I gat tu bigfala tut (scientific toktok blong hem, emi *chela*). Ol krab kokonat oli usum tut ia blong openem ol kokonas. Afta I gat 3 semak lek tu i stap bihaen. Hemi usim trifala lek ia blong wokabaot long stampa blong kokonat tri. Afta i gat tu (2) moa smolsmol semak lek we i stap bihaen olgeta. Hemi usim tufala lek ia blong helpim em blong pulum win. Ol krab kokonas i gat wan samting olsem sora blong fis wei i wok olsem wan basket blong pulum win. I stap andanit long jes blong em (scientific toktok blong emi *brachiolegan*). Wok blong tufala lek ia I blong putum wota I go insaed long sora blong hem, ting ting bihaen long hem I from se blong krab ia I save pulum win nomo taem we sora ia wetwet.

Ol big bigfala krab kokonas oli gat wan had sel. Sel ia emi blong protektem krab mo mekem sur se hotstan i no mekem bodi blong hem i lusum tumas wota. Sel blong em i no save gro. Taem we krab i stap gro hemi mas go long wan hol long graon mo lego olfala sel blong em mo bae I wokem wan niufala sel bagaken. Niu sel ia i sopsop. From i isi blong fulap animal I save kakae em taem i no gat had sel, Hemi mas wet long hol kasem taem sel blong em i kam strong kasem taem sel blong em i kam strong bagaken.



Emia wan adult krab kokonas

Krab kokonas kakae wanem?

Krab Kokonas i kakae fulap diferan kaen frut (olsem bredfrut, kokonas, pandanas, nagai, navele, natopoa, banana) mo roten lif mo mit wei i roten. Oli mas dring freswota mo soltwota tu blong mekem sur se oli gat inaf sol insaed long bodi blong olgeta.

Krab kokonas i stap wei long wol?

Yu save finem krab kokonas long ol tropikal aelan long Indian mo Pacific Ocean. Bifo I bin gat krab kokonas long Borneo, Indonesia mo Papua New Guinea be naoia trifala kantri i nomo gat kokonat krab from oli bin kakae evriwan.

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TRU IA?!
Krab Kokonas i save leftemap samting wei wet blong em I kasem 29 kg! Emi wan strongfala krab! Mo tu i save klaemap ol longfala kokonas tri wei haet blong em i go kasem gat 6m!

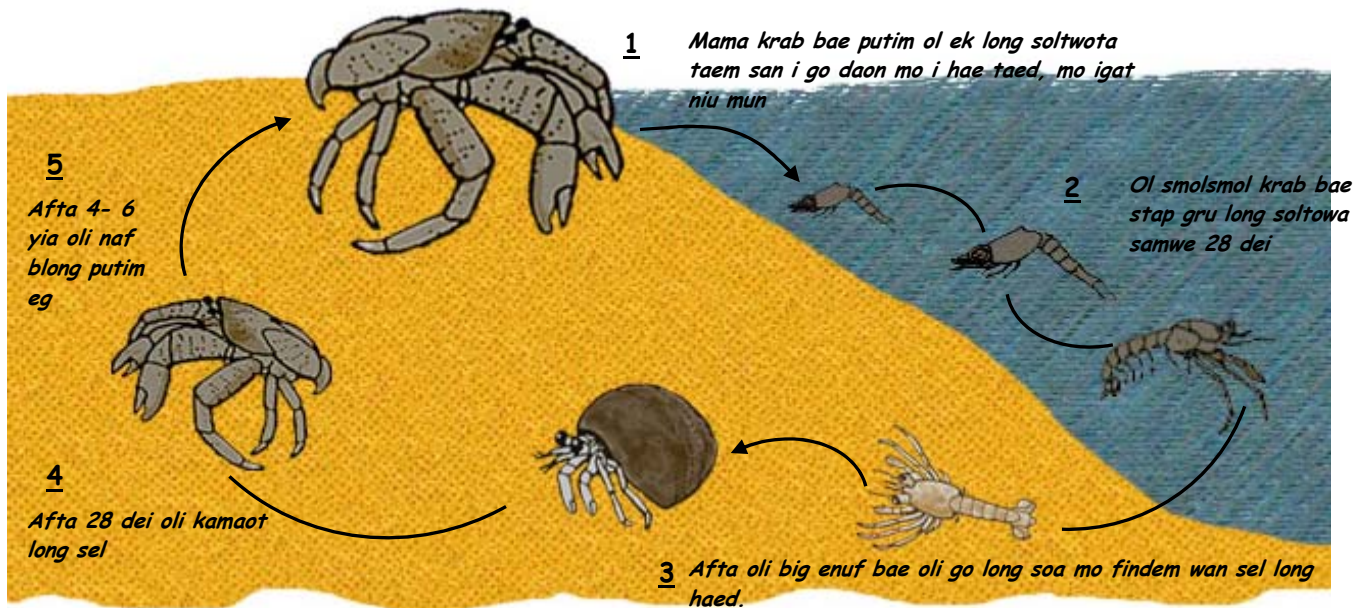


Ol staff mo voluntias blong WTEC oli wishem yufala wan Meri Krismas mo wan gudfala Niu Yia 2007.

Olsem wanem nao ol krab kokonas oli mekem pikinini?

1. Ol man mo woman krab ikam tugeta long hot taem, stat long manis Oktoba kasem manis Maj. Afta we man krab i go wetem wan woman krab, woman krab bae i karem ol ek blong hem andanit long tel blong em blong sam ples long 3 wik. Taem we solwota I kam so, mama krab bae I wokabaot I go long solwota mo putum ek long solwota.

2. .Taem we mama krab I putum ol ek blong hem long solwota, solwaota I helpem ol ek blong oli brok blong ol smol smol krab I save kamout. Ol smol smol krab ia I semak long wan smol blak anis. Oli stap long solwota blong 28 dei mo long taem ia, oli jenis fulap taem.



5. Taem we oli kam bigwan mo, bae ol krab Kokonas ia oli muv i go antap moa long bus. Be from oli nidim solwota blong laef bae oli no go longwe tumas (no bitim 6km long soa). Samwe 6 yia i pas bifo oli naf blong putum ek bakegen.

4. Afta long 28 dei ia oli kamaot long sel mo oli haed olbaot insaed long ol hol long graon mo long ston, folem fasin blong bigfala krab kokonas

3. Afta long 28 dei, oli kam long so olsem wan smol nakato. Oli mas faenem wan sel blong haed long em. Oli haed long sel ia blong 28 dei (kasem taem saes blong olgeta i 5 millimita). Afta 28 dei oli no save go long solwota bakegen from nao ia oli no save pulum

NEW VOLUNTEERS AT WANTOK ENVIRONMENT CENTRE

Sarah Flavall, a VSA volunteer from New Zealand, joined Wantok Environment Centre in September 2006.

Her background is in coastal science and planning, having completed and MSc in Coastal Geomorphology and an Honours degree in Resource and Environmental Planning. Sarah has worked for 6 years in New Zealand for local government and an engineering consultancy firm in various coastal planning and scientific roles.

In her spare time, Sarah enjoys mountain biking, swimming and helping out

with pikinini soccer. Sarah will be in Santo for 2 years.

Maria Jennifer Haygood-Guste joined WTEC in November 2006 as Office Supervisor. Jennifer is a Researcher-Trainer by profession and worked with the Farmers' Institute for Southern Tagalog before she came to Vanuatu in April 2006 with her partner, a REDI Facilitator for Sanma Province. Jennifer has a Bachelor of Arts in Development Studies and has worked with Indigenous Peoples' Organizations and NGOs, as well as the Ibon

Foundation – a development institution in the Philippines.

Marie Kalsei left Wantok Environment Centre in November 2006.

Marie has been part of the WTEC team for three years and has participated in many awareness activities in communities.

WTEC would like to thank Marie for her contribution and wish her all the best for the future.



Sipos wan man I tekem Krab Kokonas, bae mi mekem wanem?

Sipos yu lukim wan man I tekem krab kokonas, yu sud mekem wan ripot long Taskforce. Ripot blong yu I sud talemaot evri samting ia:

- Nem blong yu mo eni nara man we I bin lukim (wetem ples o namba we polis I save contactem yu sipos oli wantem askem eni kwestens long yufala)
- Nem blong man we yu bin lukim takem ol krabs. Emi blong wanem ples?
- Daet mo taem we yu bin lukim man I tekem ol krabs
- Ples we yu bin lukim em (emi gud sipos yu save mekem wan smol map blong talem stret ples)
- Evri samting we yu bin lukim – Hamas krabs I bin tekem? Wanem saes? Emi bin mekem wanem wetem ol krabs (olsem emi bin kakae olgeta o salem olgeta)?
- Komuniti blong yu I bin kasem informasen long saed long Ban Sison blong Krab Kokonas?
- Yu bin ripotem wanem yu bin lukim long jif, yet? Jif I bin mekem eni samting blong punishem man we I bin tekem krabs, yet?

Example of report to Taskforce:

To Sanma Taskforce,

Long wednesdei 21st June, mi stap long sanbij klosap long plantation long 3 o'clock.

Mi bin lukim long eye blong mi Mr John i stap digimup undersize krab, mo filimap long wan big-fala bag. Me tink se insaet I gat 20 krab kokonas.

Afta, mi bin go long haos blong John. Mi bin toktok wetem woman blong em. Em I bin talem mi se tufala bin kaekae krab kokonas long naet ia. Mi bin pickemup wan shell blong krab – saes blong em i 7 sentimitas, nomo.

Olgeta everiwan i liv long vilij ia, i bin aware long ban blong krab kokonas we i stap.

Hemi stap askem TaskForce blong lukluk long matter ia kwiktaem mo mekem wan ripot long polis. Hemi wan serious matter mo mi hop se bae Mr John emi pas long kot.

Mi redi blong stanap long kot olsem wan witness. Sipos yu nidim long askem mi eni kwestens, yu save singaot long mi long 31011 o livim wan mesij long skul blong vilij ia.

Tenkyu tumas,

Jif Peter



Talem NO Long Plastic Bags

Live and Learn Environmental Education has launched a campaign to discourage the use of plastic bags and promote re-usable shopping bags—“Usum Bakeken Bags”. The cotton bags are a cheap, environmentally friendly alternative to plastic bags in markets.

Approximately 2000 plastic bags are given out in Vanuatu every day. These plastic bags end up in our environment, either in the sea or inland. They create litter and do not break down easily. Many sea animals suffocate after getting caught in plastic bags that are washed into the sea.

You can buy Usum Bakeken Bags from Live and Learn in Port Vila, or Wantok Environment Centre in Luganville. Prices are 200 VT- 400 VT.

Santo 2006: French Scientific Expedition Explores Santo

From September to November 2006, a team of over 120 scientists converged on Sanma Province as part of the Santo 2006 Expedition. Led by Professor Philip Bouchet, of the National Museum of Natural History, the Expedition aimed to survey and document the biodiversity of Santo's marine, karst (cave), river and forest environments. The Expedition also examined the impact of introduced species.

Santo 2006 used a range of sampling techniques, including scuba divers dredging and vacuuming the seabed and aerial surveys of the forest canopy using hot air balloons.

Sarah Flavall, a WTEC volunteer, provided assistance to the Santo 2006 team based at the Expedition headquarters at the Vanuatu Maritime College. She helped to develop, translate and distribute information to the media about the expedition and their interesting discoveries. She also helped to organise a community open day and education sessions held in Luganville.

Mountain Tabuemasana: Santo 2006

Report by Tarer Karae (Dept of Forestry)

This brief report gives a general out look of the trip to Mt Tabuemasana by Santo 2006 scientists. There were twelve of us who left on MV Uvfroseni on Sunday 29/10/06 at 12 midnight - nine expatriates and three ni-Van (Mr Sam Channel, a forest Botanist, Graeme K, a USP student in Port Vila, and me). The group is a combination of entomologists, bat specialists, palm specialists, an orchid specialist and four forest botanists, which is my main interest.

Back Ground

The highest mountain in Vanuatu, located 11 kilometres from Kerepua village, West Santo, measures 1875m above sea level.

The other fork is said to be a little bit higher but we could not make it because the route that goes from the fork we climbed to this other one has some landslides that wiped away the path. It took us two days to travel from Kerepua village to the base of the mountain and half a day to the top of the mountain. The starting point is quite difficult along the river and the first ragged mountains, especially with the west coast climate. As you go in further, the path maintains similar terrain but it gets cooler as you climb the track.

Forest Type

It starts with bamboo and grassland typical for dry areas like west Santo. As you get higher (above 800m) you get some good patches of forest. The forest has been much disturbed by Kerepua people, mainly for gardening before they left for Kerepua village. Today the forest is growing back based on the patches left on inaccessible or tambu sites but today you can still see the effect of the disturbances more than 40 years ago. The forest composition is not much different from Butmas (600m-700m) except for one or two palm, ferns and orchids species.

You get good forest at the base of the mountain (1100m), as you climb higher above the trees get shorter and grow into forms of shrubs and finally you get palms, Pandanus, white grass, Orchids, ferns and mosses. Most dominant trees that scatter towards the top are shuflera species, Dacridium, Keisois, Tristiropsis, Cycotria and Rabania.

I discovered that most trees are dying towards the top of the mountain. No one could tell me why, but I think it could be because the trees were too old or as a result of cyclones. From my own observation I am afraid the land slides will wipe out the path in the next five years and no one will be able to climb to the top of the mountain again.

There are lots of bird sounds and you can even see them moving on the trees, but we required more research because we did not see species like mountain starling. With eye observation there was a bat species that seemed different to others of its species, it weights 12g while the normal ones weigh only 5 to 6g. We also found a fresh water browns which could be a new species (based on the size and colour of the claws), but we need to wait for the results of the plant DNA analysis. There was not enough time to go back out due to continuous heavy rain and therefore we had to leave for Kerepua earlier than the planned schedule.

Future potentials

There is future potential for eco tourism in this area, but it requires careful management of the site and good arrangements to target the right tourist. If the site is accessible by vehicle, that could make Mount Tabuemasana a *millennium mountain*.



Clockwise from top: Ronan, Seminal, Matthew, Graham, Ulboe, Johan, Greg, Sam, Tarer and Greg

Seacology Rewards Wakon Community Commitment to Environment with Community Hall



Wakon Community Centre

On 27 November 2006, the West Ambrym community of Wakon celebrated the opening of a new community hall. The hall was funded by Seacology, in recognition of the community's commitment to protecting the Wakon Sea-Lake Conservation Area.

The opening ceremony was attended by more than 50 people, including Area Council Secretary, Allan James and Chairman of FAN Council of Chiefs, Mr Benedict.

The Wakon Sea-Lake Conservation Area, which was established through the hard work of Mr Jessie Saksak, is a member of WTEC. The conservation area is significant because it provides breeding grounds for Namalao (*Megapodius layardi*) and other native and migratory bird species. For more information about the Wakon Sea-Lake Conservation Area, visit the WTEC website at www.positiveearth.org.

Seacology is a non-profit organisation based in Canada which aims to provide local communities with benefits for protecting their environment. Other Seacology projects in Vanuatu include:

- Building a kindergarten and play equipment in Marou Community, Emau Island, in exchange for the community establishing a marine and forest reserve (2006).
- Providing infrastructure and equipment for the Nguna-Pele Marine Protected Area (2005).
- Building a community centre in the Vatthe Conservation Area in return for a commitment from the community to protect the area for 20 years (2005).



Jessy Saksak outside Wakon Community Hall

For more information about Seacology, visit their website at www.seacology.org.

MPS Project Update

At the WTEC AGM in April, members were given information about how to prepare a Management Plan to protect resources in their area. Through the Management Plan Support Project (MPS), WTEC aims to provide practical assistance to members preparing management plans in their communities.

On 22-24 November 2006, WTEC staff visited the Malahambae Marine Protected Area in West Malo. This project was started by Josef Malahi in 2005, a member of the Malo Reef Check team, to protect fish stocks and coral reef in the area.

Josef Malahi and WTEC's Conservation Support Officer, Jennifer Pickering, carried out a rapid site assessment of the conservation area to see what kinds of fish are in the area, and how healthy the coral is.



WTEC Staff talking with Josef Malahi about resources in the Marine Protected Area.



Awareness Toktok long Avunatari, Malo

WTEC staff reviewed Josef's draft management plan and made some suggestions to make sure that the plan is effective in protecting the area. WTEC's Field officer, Warakar Ser, surveyed the boundaries so that Josef can map the Malahambae Marine Protected Area.

While they were at Malo, Jen, War and Jess also carried out a preliminary coconut crab survey, and gave a small awareness toktok to the community at Avunatari.

The WTEC team will revisit the area in 2007 to carry out a workshop on managing marine resources, including information on planning, monitoring and enforcement.

Thank you to Josef and his family for looking after us during our stay!

New Rif Jek Team Trained in Santo

Long 27 Novemba kasem 1 Decemba, **Jessica Kahler**, wan Peace Corps voluntia, I bin stap long Santo blong tijim staff blong Aquamarine wetem wan narafala voluntia long saed blong Rif Jek.

Rif Jek team I bin learnem ol gudhan blong Rif Jek mo fasin blong monitorem korel rif. Tu, olgeta I bin mekem wan Rif Jek survey long SS Coolidge. Afta, bae olgeta I jekem SS Coolidge site bakegen long nekis yia blong lukaotem eni jenjis.

WTEC I wantem talem congratulations long niufala Rif Jek team!

Rif Jek emi wanem?

Rif Jek Program I stap helpem putum tugeta gavman, komuniti, skul, mo bisnis blong:

- *tijim* ol man long taon mo rural long saed blong ol samting we I stap spolem rif;
- *bildimap* wan rod blong stori blong ol man we oli stap monitorem rif blong olgeta;
- *usum saiens* blong lukluk ol fasin blong laef long korel rif;
- *putum tugeta* skul, NGO's, gavmen, mo ol man long aelan;
- *pusum tingting* blong komuniti blong manajem gud ol marin rison blong olgeta.



Niufala Rif Jek Team blong Santo

Behaen: Charles, Lester, Graham and Elizabeth;
Forhed: Jessica, Eva, David and Rex

Note: Mifala bin karemaot ol infomasen ia long *Rif Jek Instruction Manual*

Plante ples long wol I stap usum fasin blong Rif Jek blong monitorem helt mo diversiti blong ol korel rif. Mo tu, plante ples long Vanuatu I gat Rif Jek team finis. Nao ia, yumi gat wan Rif Jek team long Santo.

Wan memba blong Santo Rif Jek Team, **Lester Evans**, I bin raetem smol ripot andanit long saed blong experience blong hem wetem Rif Jek.



What is Reef Check? That was one of the many questions I asked when I first heard about Reef Check. Spending just one week with Jessica and the Reef Check Team can change your whole point of view about the beautiful coral reefs that surround our island nation. Taking part in the Reef Check workshop was one the best things I have done since beginning work in the Hospital in 2004.

As a nurse, my job is to assess how a patient is feeling through examination and asking questions. But when it comes to the health of a reef, the only tool I have at my disposal is observation. If a reef is sick, you can't take its blood pressure or order a blood test. You see, the reef can't speak to us and tell us when it's unwell. So before we know it, a sick reef will die right in front of our eyes. I learned in the Reef Check workshop that simple signs, such as coral whitening or algal growth, can tell you a lot about the health of a reef. I also learnt that the only major enemy that the reef has is humans.

Calling this country "the happiest place on earth" would not be complete without the magnificent coral and underwater life that live just off of our shores. In this workshop, I had the chance to see the desolate graveyard of coral that lies below the water's surface and it made me very worried. I was worried that if we don't pay attention to this situation soon, our children won't get the chance to experience the Vanuatu we call home.

As a proud member of the Reef Check team, I'd like to encourage you, the reader, to take the time to go underwater and see for yourself how much damage we humans have done to these beautiful reefs. Please join hands with us and stop this needless destruction. Help keep Vanuatu the most beautiful country in the world!

Lester Evans, RN
December 2006