Fiji Ecosystem Based Management (EBM) = Healthy People, Processes and Systems



EBM KUBULAU BULLETIN

Ni sa bula vinaka! Welcome to the eight edition of the WCS EBM Kubulau Bulletin. The bulletin brings together news and results from ongoing activities by the Wildlife Conservation Society within the Kubulau area.



#### VOL. 8. MAY 2009

### **KEY EBM MESSAGES:**

Preservation of functional integrity of Fiji's ecoscapes through community based management.

- Successful EBM relies on cross sectoral planning and management
- Inland and lowland communities need to manage resources together
- EBM protects habitat for all stages of life
- Improving land and fishing practices helps protect natural resources
- Public health and livelihoods depend on environmental health

## KUBULAU EBM PLAN CONSULTATION MEETING

From May 7th to 9th, the EBM team from Suva met in Raviravi to consult the draft Kubulau Ecosystem Based Management (EBM) plan with Kubulau Resource Management Committee (KRMC) and several chiefs from the Bose Vanua. Also present at this meeting were village reps from the Kubulau district.

In February this year there was a workshop organized in Namalata where the workshop participants identified threats, management rules and actions for: terrestrial; freshwater; estuarine and coastal; and marine habitats of Kubulau. The May consultation meeting was held to present the outcomes to KRMC and Bose Vanua.

Also presented at this meeting was proposed structure for the KRMC sub-committees. This governance structure proposes KRMC together with village reps to set up 5 committees to help increase community involvement in resource management activities and to provide a focus for key management activities. The proposed sub-committee are: resource management; science; community development and finance; education; and communication.



The participants of the consultation meeting in Raviravi.

KRMC members will discuss the formation of the sub-committees in a village meeting in each village, and invite community members to express an interest in joining a sub-committee. The sub-committees will be chaired by KRMC reps and members will be selected and appointed by the chair of that subcommittee.

Some of the main issue raised at this consultation meeting was: the lack of awareness on burning; deforestation; water catchment conservation; piggeries and live stock waste; compliance; and enforcement.

As part of strengthening the monitoring of the Kubulau qoliqoli, the EBM partnership is looking to apply to Global Green Funds (GGF) to help equip the monitoring boat with essential gears such as flares, binoculars, radio, etc.

Following the Kubulau consultation meeting, the revised draft was then presented to the external stakeholders: NGOs and government departments in Suva.

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## STEREO BAITED REMOTE UNDERWATER VIDEO SURVEYS (SBRUVS)

Stereo Baited Remote Underwater Video (sBRUV) surveys in the Kubulau qoliqoli were completed in May 2009 by the WCS Fiji field team lead by Dr. Daniel Egli, Niarchos fellow. This research is part of the monitoring of the effects that Marine Protected Areas (MPAs) have on fish communities. sBRUV surveys provide detailed information on the diversity, abundance and size structure of coral reef fish assemblages, particularly large carnivorous fish such as groupers, emperors and snappers.

The accurate length measurements from sBRUV surveys provide additional

information to the ongoing diver based surveys. This new survey method also allows sampling deeper parts of the coral reef to investigate whether fishing impact might be limited to the shallower parts of the reef fish assemblages.

The results from the surveys will be shared with the communities and help better understand the function of MPAs in the Kubulau qoliqoli. Dr. Egli will also provide the communities of Kubulau with a DVD of video footage from the surveys, making the underwater world more accessible to everyone.



SBRUVS team doing monitoring in Kubulau.

## STAKEHOLDER CONSULTATION IN SUVA

THE GOAL OF ECOSYSTEM-BASED MANAGEMENT IS TO MAINTAIN AN ECOSYSTEM IN A <u>HEALTHY</u>, <u>PRODUCTIVE</u> AND <u>RESILIENT</u> CONDITION SO THAT IT CAN PROVIDE THE <u>SERVICES</u> HUMANS WANT AND NEED.



Representatives from Non Governmental Organizations (NGOs) discussing the Kubulau Ecosystem Based Management (EBM) plan in Suva. Following the KRMC and Bose Vanua consultation in Raviravi, Kubulau, the Kubulau Ecosystem Based Management (EBM) plan was presented to the external stakeholder: Non Governmental Organizations (NGOs) and government departments).

This two day presentation, 11th and 12th of May, was made by Pepe Clarke, Consultant with Wildlife Conservation Society (WCS)-Fiji.

Highlighted at this presentation were the draft management rules and actions for communities and stakeholders, format of the plan, and the role of different organizations, and governance structure, etc.

Reporting of infringements and the proper reporting process was also highlighted at the presentation.

"Physical evidence lacks in most reporting of infringement that's why judiciary does not make favorable decisions" commented Mr Aisake Batibasaga, senior fisheries research officer.

These breaches together with the requirement then should be reported to police and fisheries department. Apart from these, the status of tilapia was also discussed. Mr Aisake Batibasaga added "Viti Levu is infested right down to estuaries and this fish eats larvae and juveniles of important food items such as prawns and other invertebrates".

According to the recent freshwater surveys by Wetlands International-Oceania (WI-O), tilapia is not found in Kubulau and there should be efforts to prevent introduction of this species.

Tilapia introduction should be prevented because Kubulau is one of the last remaining places in Fiji where it is absent from. However, the lake in Raviravi has tilapia in it and care should be maintained that tilapia do not enter the Seutabu river.

Community actions for tilapia and many other treats for the Kubulau terrestrial, freshwater, estuarine and coastal, and marine habitats are listed in the Kubulau EBM plan. Once finalized, copies will be distributed to all the communities.

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## MANGROVE LEAF LITTER COLLECTION

For over 1 year, community volunteers from Raviravi have been collecting leaf litter in traps set in the mangroves near the village. The information from the leaf litter may give some indication of mangrove response to climate variations. For example, warmer temperatures are likely to cause increase growth and litter production. In addition, there may be changes in the seasonal timing of flowering and fruiting. Observing these patterns will help us learn about how well-equipped Kubulau ecosystems are to cope with changing climate.



WCS staff Waisea Naisilisili and Wayne Moy helping Raviravi community members install mangrove leaf litter traps in January 2008.



Raviravi resident (FIND OUT NAME) takes a break during the work.

## **KUBULAU BIOLOGICAL SURVEY 2009**

In April 2009, the Wildlife Conservation Society (WCS) field team surveyed 33 forereef sites covering the entire Kubulau qoliqoli.

The team was joined by Aaron Jenkins from Wetlands International-Oceania, Heidi Williams from CORAL, Yashika Nand from the Fiji Fisheries Department and two community divers from Kubulau, Unaisi Mara and Paula Veileqe. In addition, former WCS staff member Alex Patrick returned from the Philippines to participate.

Biodiversity surveys by Aaron Jenkins documented 342 fish species, with a predicted total of 635 on Kubulau reefs. Almost 5% of the species recorded were endemic to the Fiji-Tonga region, and divers made frequent sightings of the highly endangered Humphead wrasse.

WCS will be analysing the data in the upcoming months to determine how well the MPA and community tabu areas have been working to improve fish abundance and biomass.

The data collected will be used in combination with new habitat maps being

created from satellite imagery covering the Kubulau qoliqoli in order to provide recommendations for new sites to add to the existing MPA network. WCS is working with a team of students at James Cook University in Townsville, Australia, to identify potential new MPA sites that are both rich in fisheries resources and biodiversity, but at the same time minimize costs to fishers when those areas are declared no-take. These results will be presented back to the community later to discuss options for adaptive management.



School of batfish in Namena MPA.



The WCS marine team taking a rest during a surface interval.



Beautiful juvenile lionfish spotted in Nasue MPA.

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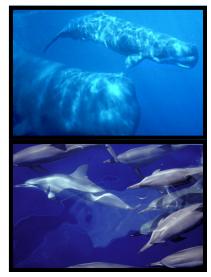
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> CHECK US OUT!

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Cetaceans, whales (above, © WWF Canon) and dolphins (below, © WWF Canon/Cat Holloway), make Kubulau a popular choice for tourist.

# Ongoing and Upcoming Events

- **Jun 09**-Presentation of the final draft of the Kubulau EBM management plan to KRMC and Bose Vanua for consideration for endorsement. •
- Jun 09-Kubulau socioeconomic monitoring.

# **Jun 09**-Ongoing 2009 Kubulau biological survey data management.

- May-Jun 09-Kubulau baited underwater video survey.
- **May 09** International marine conservation conference in New York.

## **STAFF FAREWELL**

In March, Martin Callow left Fiji to return to homeland England. Although Martin is not in Fiji but he will continue to support WCS-Fiji and the communities of Kubulau and Macuata to continue EBM work in Fiji. Dr. Stacy Jupiter is now the new WCS-Fiji Program Director while Thomas Tui is the Assistant Director.



# CETACEANS IN KUBULAU

On 2nd April 2009, several NGOs, dive operators, and governmental departments met at Fisheries department to develop the whale sanctuary management plan for Fiji Islands. The workshop highlighted several important sites for cetacean (whales and dolphins) sightings in Fiji waters, including Kubulau qoliqoli. Cetacean sightings are important to document as this gives us useful information such as: important areas for cetacean conservation; development of national species list; and identification of dive sites for tourism and research.

"Cetacean sighting sheet was developed by Dr. Cara Miller and this has been distributed to Greenforce and Nai'a cruises to help record the different types of cetaceans found in Kubulau qoliqoli" said Sunil Prasad, EBM project coordinator. "Dive operators, such as Nai'a cruise, help with recording cetacean sightings in Fiji as they are always out diving with these species" said Penina Solomona of Worldwide Fund for Nature (WWF). Together with Nai'a, Greenforce will help fill the sightings sheets of cetaceans in Kubulau qoliqoli. These forms will help Fisheries department to make a list of different types of cetaceans found in Kubulau which will then help identify good tourist dive sites. At the moment Namena is a popular dive sight for cetaceans as they are encountered almost during every dive.

## ANY QUESTIONS...?

Please send your questions and letters to the EBM Bulletin Editorial Team, using the contact details above. The deadline for submissions to the next newsletter is Monday  $5^{th}$  May 2009. Please contact the Editor for further details.

## TAQOMAKI NI NODA VEIKABULA



The Wildlife Conservation Society (WCS) is a U.S. based international NGO, with conservation programs all around the world, including Fiji. Over the past century, the WCS has worked to establish more than 130 parks and protected areas on land and at sea as well as working on threatened species. WCS works to save wildlife and wild places by understanding and resolving the critical problems that threaten key species and large, wild ecosystems around the world.

Our "Ecosystem-based Management" work is funded by the David and Lucile Packard Foundation and the Gordon and Betty Moore Foundation, which started in 2004. It is led by WCS, with the partners of the World Wide Fund for Nature - Fiji, Wetlands International, and the University of the South Pacific. A second EBM site is at Macuata, to the north. This newsletter focuses on the work led by WCS at Kubulau.

