



Newsletter KARAI BILONG SOLWARA

SEPT – NOV 2017

RESEARCH AND CONSERVATION CENTRE

PO BOX 697 KIMBE, WEST NEW BRITAIN PROVINCE

PAPUA NEW GUINEA Ph: (675) 73705699

Email: office@mahonianadari.org

Web site: www.mahonianadari.org

Facebook: www.facebook.com/MahoniaNaDari

USAIDPACAM GRANT

Mahonia Na Dari has been awarded a new project grant which thanks to the generosity of the American People will ensure continued education programs to mid-2019. The Pacific-American Climate Fund (PACAM), is a grant-making

facility funded by the U. S. Agency for

PROJECT: YOUTH AS AGENTS OF CHANGE: MARINE ENVIRONMENTAL AWARENESS IN KIMBE BAY

International Development (USAID) and administered by Partners for Global Research and Development, LLC (PGRD) that assists twelve Pacific Island countries to reduce long-term vulnerabilities associated with climate change. PACAM awards grants to civil society organizations in support of climate change adaptation

measures and related “co-benefits”, such as livelihoods enhancement, improved health, food security, disaster risk reduction, or sustainable natural resources management.

In addition to building climate resiliency, the Pacific

American Climate Fund, through the awarded grants,

strengthens the managerial and financial capacity of civil society organizations. The countries in which PACAM operates are: Federated States of Micronesia, Fiji, Kiribati, Nauru, Palau, Papua New Guinea, Republic of Marshall Islands, Samoa, Solomon Islands, Tonga, Tuvalu, and Vanuatu.

INSIDE:

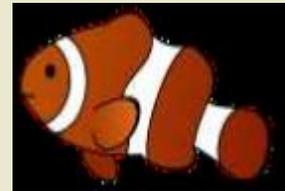
1. USAID GRANT

2. PROJECT

3. BUSY EO & SCHOOL CAMPS

4. FAREWELLS

5. RESEARCH & NEW STAFF



MAHONIA NA DARI FACEBOOK PAGE IS NOW ACTIVE AGAIN

CHECK US OUT!

www.facebook.com/MahoniaNaDari

ALSO CHECK OUT BLOG BY DR R. TORRENCE:

[HTTPS://AUSTRALIANMUSEUM.NET.AU/BLOGPOST/AMRI-NEWS/REPLICAS-SHARE-THE-SPARKLE-OF-ARCHAEOLOGICAL-DISCOVERIES](https://australianmuseum.net.au/blogpost/amri-news/replicas-share-the-sparkle-of-archaeological-discoveries)

USAIDPACAM PROJECT ACTIVITIES

1. Climate change & marine literacy outreach to primary schools & communities in three districts surrounding Kimbe Bay (Talasea, Hoskins, and Biialla)

2. Conduct marine biodiversity educational sessions for high school students, primary school teachers, and teacher trainees

3. Convene a workshop to develop curricula incorporating climate change & marine biodiversity in PNG primary schools



4. Development and produce a PNG Marine Environment Education Program Primary Teaching Guide and professionally-designed support posters to distribute to coastal PNG schools

2. 100 high school students and 25 primary school teachers and trainees complete the full intensive marine environment education program (MEEP)

3. A working group established for the development of a Marine Environment Education Program Teaching Guide for primary school teachers

4. A Marine Environment Education Program Teaching Guide for primary schools developed, tested and distributed to coastal PNG schools

EXPECTED OUTCOMES

1. Increased climate and marine biodiversity awareness of 10,000 community members and primary school students



Photos- Left: Malalia Primary School

Middle Top: Kavutu Elementary

Right: Siki Elementary School

All showing the USAIDPACAM project banner acknowledging the generosity of the American People which enabled MND to bring Outreach MEEP to 15 Hoskins L.L.G. schools in October.

Photo:- Somei Jonda explaining a project process at the USAIDPACAM grant workshop



EDUCATION & MND UPDATE

Retiring MND Board Chairperson, Cecilie Benjamin presented MND's project details to a packed audience including the US Ambassador Catherine Ebert-Gray at the USAIDPACAM joint grants projects launch at the Grand Papua Hotel in Port Moresby 03rd October. At the October 14th Board meeting Walindi Resort General Manager was elected new Chairperson.

In mid-October, Somei and the four marine educators spent 2 weeks in the Hoskins L.L.G., conducting **Outreach MEEP** to 2212 primary and elementary students in 15 different schools (see photos page 2) Somei was back in Moresby in late November to attend a UNDP workshop for sustaining Protected Areas such as Kimbe Bay.

SCHOOL CAMPS 2017 Kimbe International School and Bialla International held school camps at Mahonia Na Dari. Grade 5, 6 & 7 students experienced marine environment presentations and hands-on field trips including finding and planting mangrove seedlings for the NBPOL sponsored Numundo coastline rehabilitation project. Feedback shows that the highlight of the school camps was a day at beautiful Restoff Island learning to snorkel the coral reef. Our thanks to the generous support of Walindi Resort and their wonderful dive boat crews. *"I would like to say thank you so much Mr Miller and Mr Jonda for the nice lessons that you gave us. It was so much fun here in Mahonia. I wish I could stay here to learn more about the marine ecosystems. Thank you so much!!!"* – Abenicca Ngahan-Bai Grade 5



Kimbe International Grade 7's



Bialla International Grade 6's



Bialla International Grade 6's



Bialla International Mangrove seedling hunt



VISITING RESEARCHERS

JCU Mahonia waved goodbye on 26 November to newly married researchers from James Cook University, **Gemma and Ben Creswell** who have been diving and studying biodiversity on Kimbe Bay sea-mounts. They will return early 2018.

BOSTON Mahonia's expert boat driver **Nelson Sikatua** (top right) spent 3 months this year with three Boston University researchers. Photo (left) back row shows **Dr Theresa Rueger** (left) and **Tina Barbasch** (middle) saying farewell to Nelson and his family. Tina plans to be back at MND in mid-2018. The team leader was Professor Peter Buston.



VOLUNTEER LEAVES

A sad farewell as accounting wizard, **Bruce McPherson** of New Zealand based Volunteer Services Abroad left after 3 months mentoring support for MND Finance Manager, Charles Filaukep. Bruce often worked 7 days a week to achieve the assignment objectives. His efforts are much appreciated. Bruce has helped MND many times in the past.

Photo: MND Staff say goodbye to volunteer Bruce McPherson:-

L-R Standing - Lydia Bulu, Peter Waka, Bruce McPherson, Charlie Ani, Nelson Sikatua, Noel Patalarea, Charles Filaukep, Eki Teka, Oko Ceve. L-R Sitting - Peter Miller, Tose Henz & Emben Sani.

JCU RESEARCHER REPORT During October & November, new resident researcher Gemma Cresswell has been based at Mahonia Na Dari conducting her first season of fieldwork. Gemma started her PhD in May this year at James Cook University, Australia, and is studying the ecology of reef fish on the Seamounts of Kimbe Bay. Together with her colleague, Ben Cresswell, Gemma has been working to develop new methods for surveying seamounts and the fish communities that inhabit them. Seamounts are underwater mountains that rise from the ocean floor, often from great depth. If they rise close enough to the sea surface, where there is enough light, coral reefs can form on the top of these structures. Unlike other types of coral reef that form along coastlines, seamounts are usually isolated or found in small chains in the middle of oceans or bays. This isolation, together with the deeper nature of these reefs is thought to give rise to a unique collection of environmental conditions, which, in turn, drive the formation of highly distinct ecosystems and biological communities. In Kimbe Bay, there is a diverse range of marine habitats ranging from inshore fringing reefs to mangroves and seagrass beds. There are also several distinct seamount reefs in the deeper parts of the bay. Gemma's research is aimed at describing the fish communities that live on these seamounts and trying to find out what differences exist between those found on seamounts and those found closer to shore.

Unlike near shore reefs, which generally start at shallow depths between 2-5m, the seamounts in Kimbe Bay have their reef tops at around 20m. This means that in order to survey them, technology that can exceed the limits of SCUBA diving is required.

Gemma and Ben have therefore been pilot testing a new design of remote underwater video camera. Consisting of two pairs of stereo video camera, arranged back-to-back, the unit is dropped onto a seamount and films continuously for 5 minutes before being retrieved. Later analysis of the video footage then allows fish caught on camera to be identified, counted and can also measure their length. Researchers have long been using Underwater Visual Census methods to survey coral reef fish populations, the cameras, however, will be able to be deployed to much greater depths than that of a SCUBA diver.

During this trip Gemma and Ben conducted over 150 transects and deployments of the camera unit and will be analyzing the footage over the coming months. Scientists still know very little about the ecology of deep reefs

Researcher Gemma conducting a diver-operated video transect.



Researcher Ben Creswell & MND's Nelson



and seamount communities and this is the first quantitative study of the fish living on seamounts in Kimbe Bay. It is hoped that the data collected for this thesis will contribute to both greater knowledge of coral reef habitats in Kimbe Bay and also the global body of scientific knowledge on seamount ecology.

NEW MND Education Officer - Geoffrey Bai has a strong background in teaching with the International Education Agency in PNG and has an impressive sporting achievements record. Geoffrey started with MND 16th October, 2017.

