

SEPT 2020- SEPT 2022

# Marine Mammal Conservation Status in Papua New Guinea: Development of a Marine Mammal Sighting and Stranding Database for Conservation Planning

≡ MENU

PNG DOLPHIN  
PROJECT



# PNG MARINE MAMMAL SIGHTINGS

+ ADD YOUR SIGHTING

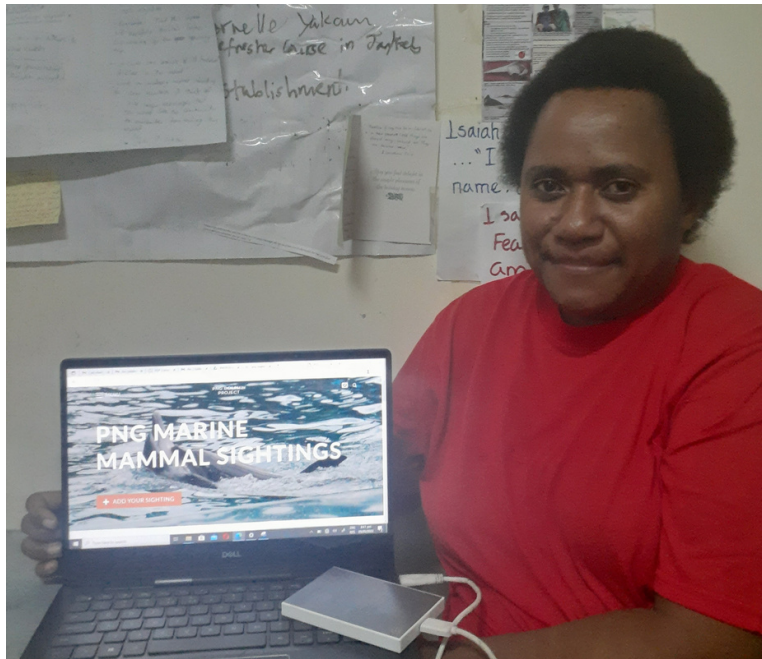
HOME - PNG SIGHTINGS & STRANDINGS (PNGDOLPHINPROJECT.ORG)

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## REPORT BY

WILMA MAVEA  
PIDU PROJECT OFFICER

# Final Report, SMM Grants in Aid of Research 2020- Wilma Mavea



**AWARDEE:** WILMA MAVEA  
PIDU PROJECT, PIKU BIODIVERSITY  
NETWORK AND SNUBFIN DOLPHIN  
CONSERVATION PROJECT

**REGION:** OCEANIA PACIFIC REGION

**AMOUNT AWARDED:** UDSD\$792.91 (PGK2  
679.32)

**PERIOD:** SEPTEMBER 2020-SEPTEMBER  
2021, EXTENDED TO SEPTEMBER 2022 DUE  
TO POST COVID IMPACTS & RESTRICTION  
OF MOVEMENTS.

## Project Summary

Very little is known about the status of marine mammals in Papua New Guinea (PNG) waters. My Honours project at the University of PNG includes compiling all marine mammal records. With the SMM Grant's support, I purchased a computer and worked remotely at home to upload all known sighting, stranding, and bycatch records to the PSS site.

PSS is a sighting and stranding database adapted from the very successful Great Barrier Reef Marine Park Authority Eye on the Reef program. The PSS has provided safe long-term storage for all known marine mammal records for PNG waters. My manuscript is now in preparation for submission to an international peer-reviewed journal. All my research information is available to the PNG Conservation and Environment Protection Authority (CEPA) for Conservation and Planning purposes.

## Project Description

Very little is known about marine mammals in Papua New Guinea (PNG) waters. The limited data is a result of a few short-term projects that have been undertaken. The extremely high fieldwork and personnel costs and largely remote, inaccessible regions throughout PNG have prohibited long-term monitoring projects from continuing.

There have been two previous marine mammal species assessments for PNG waters. Reeves (1999) enlisted 16 species for PNG waters. The second assessment by Miller (2007, pp.52) recorded 22 marine mammal species; 16 were confirmed, and a further six species were unconfirmed but probable. My Honours project successfully compiled all known PNG marine mammal records from 1973 to 2020 and new recent records from 2021-2022. The compilation resulted in 358 cetacean sightings, 117 stranding records and updated species lists to 19 confirmed marine mammals and six probable species after my Honours work. The newly established species include Snubfin *Orcaella heinsohni* and Humpback *Sousa sahulensis* dolphins previously recorded as Irrawaddy and Indo pacific dolphins, two sub-species under Tursiops are now confirmed as *aduncus* and *truncates*. New records include Common mink whale *Balaenoptera acutorostrata*, Ginkko toothed beaked whale *Mesoplodon ginkgodens* and the Omura's whale *Balaenoptera omurai*. The Omura whale will now bring the confirmed record up to 20 species in 2022. Pygmy sperm whale *Kogia breviceps* previously recorded in Kimbe bay has a new confirmed record of occurrence in Kikori Delta.

## Project Goals and Objectives

This project aimed to:

- Provide a comprehensive review of marine status in PNG waters.

The objectives were to:

- Have an operational national database website.
- All data collated will be available for Marine Mammal Conservation Planning for Papua New Guinea.

## Project Milestone outcomes

The project goal activity vs outcomes are

- The first step was to create a safe, effective, and permanent baseline database website. **This phase has been completed.**
- Create an efficient but inexpensive way to generate data through the citizen science program. **This phase has been completed.**
- Work in collaborations and partnerships with the PNG government and other research organisations in the country, sustaining the PNG Marine Mammal research work. **This phase has been completed.**

# Project Timeline

*This section includes the Schedule activities/timeline. Please note that the manuscript published in a peer review will be made available.*

<b>TASK</b>	<b>START DATE</b>	<b>END DATE</b>
<b>PHASE 01</b> REVIEW AND COMPILATION OF DATA	AUGUST 2020	OCTOBER 2020
<b>PHASE 02</b> COMPLETION OF DATA UPLOADS TO PSS SITE	NOVEMBER 2020	JANUARY 2021
<b>PHASE 03</b> MANUSCRIPT PUBLICATION	JANUARY 2022	PENDING PUBLICATION
<b>PHASE 04</b> SHARING OF DATA INFORMATION WITH CEPA	MAY 2022	SEPTEMBER 2022
<b>PHASE 05</b> COMMUNITY OUTREACH AND EDUCATION FOR CITIZEN SCIENCE	MAY 2022	SEPTEMBER 2022
<b>PHASE 06</b> GRANT REPORT	AUGUST 2022	SEPTEMBER 2022

# Budget Breakdown-Acquittal report

ITEMS/MATERIALS	ESTIMATED BUDGET
<b>ITEM 01</b> RESEARCH LAPTOP (EXTERNAL HARD DRIVE)	\$ 513.00 (K1, 778.00)
<b>ITEM 02</b> MICROSOFT OFFICE COMPUTER PROGRAM	\$ 80.72 (K307.00)
<b>ITEM 03</b> ENDNOTE PROGRAM- FOR EASY ACCESS & STORAGE OF REPORTS/RERENCEING	\$ 454.00 (K454.00)
<b>ITEM 04</b> KASPERSKY TOTAL SECURITY FOR LAPTOP	\$ 59.98 (K141.00)
<b>GRAND TOTAL</b>	\$USD 792.29 (K2679.91)

# Project Sustainability Plan



## Why is this project important?

To conserve and protect marine mammals in PNG, it is crucial to know:

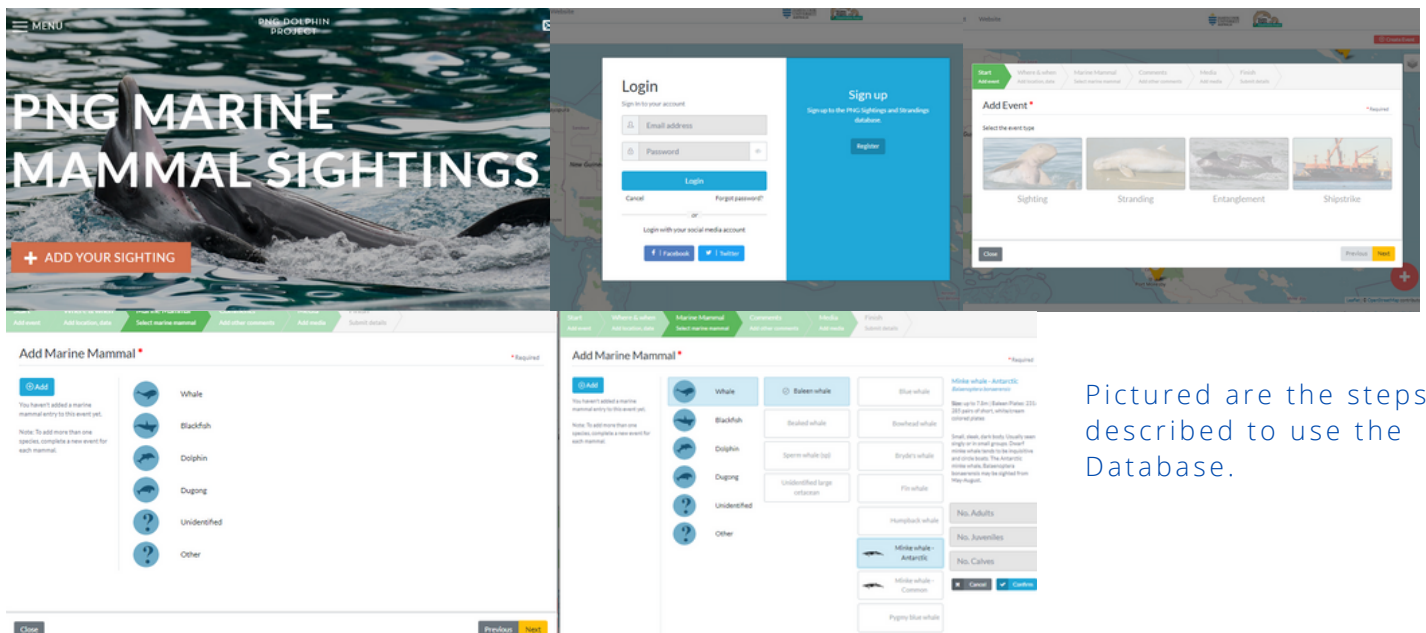
- what species and where they occur in PNG,
- threats faced by the marine mammals,
- deaths and causes,
- and critical areas where they occur may need further dedicated studies and protection (through Marine Protected Areas by the government authority- CEPA).

Dedicated research is costly and time-consuming. Therefore citizen science and public sighting records are significant sources of information, mainly when a photograph/movie clip accompanies a sighting, stranding or bycatch report.

The first important step after data compilation is the publication of this manuscript in a peer review paper that provides a summary of 'what species and where they occur in PNG'. The next step is to produce a public identification leaflet for general education and awareness nationally with the help of government authority CEPA, who would have access to the database and any other information for PNG Marine Mammal National Conservation and Planning.

Pictured above is Wilma Mavea, Dr Beasley with the conservation environmental and protection authority after presentation of her honours research work in 2017.

# More Information about the PNG Marine Mammal Database



Pictured are the steps described to use the Database.

The Pidu project created the website and launched it online in 2019 via the <https://pngdolphinproject.org/> website. The PNG stranding and sighting website (database) were adapted from the Great Barrier Reef Marine Park Authority Eye on the Reef program. Similarly, the PNG Dolphin sighting and stranding encourage Papua New Guinea citizens to keep an eye on the waters as they travel PNG waters and could report any sightings ( or other events). So far, opportunistic common dolphin sightings (spinner, bottlenose) have been reported with associated photographs and videos.

The database is user-friendly. For a public citizen to participate, one must have a google account or social media account (Facebook or Twitter) for confirmation purposes. They would then navigate to PNG MARINE MAMMAL SIGHTINGS to register/login to record an event. Clicking the plus sign will lead to options; the options available include reporting events of the sighting, stranding, entanglement (bycatch) and ship strike. The following options are easy-to-follow steps on where and when the sighting took place, marine mammal selection with the help of pictures and descriptive guides on their common behaviours. The next step allows contributors to make comments to describe the behaviours (incident) of cetaceans reported, and the final step is to upload associated pictures and videos.

The website is still undergoing maintenance and upgrades. One of the challenges involved in uploading different video formats, especially if it's a long video. However, the website proves to be very efficient, beneficial and timeless for PNG Marine Mammal Conservation and Planning in the long run, compared to the traditional method of saving such large files in computers, hard drives that often get lost or need formatting.