

Final Evaluation Report

Your Details	
Full Name	Jo Marie Acebes
Project Title	Conservation of the Babuyan Marine Corridor: the only breeding ground of humpback whales in the Philippines.
Application ID	26484-C
Date of this Report	20 July 2022

1. Indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.

Objective	Not achieved	Partially achieved	Fully achieved	Comments
<p>To increase the understanding on the population structure, movement patterns and site fidelity of humpback whales within the Babuyan Marine Corridor, between other breeding grounds and feeding grounds in the western North Pacific.</p>				<p>Based on the accumulated data collected from this and previous projects, we now know that humpback whales migrating to the Babuyan Marine Corridor to breed have a relatively high site fidelity to the area. Results indicate that this is a small population of whales utilising the breeding area and have a high rate of return to the area every season. Although there are humpback whales that also move between the Philippines and Okinawa and Ogasawara, Japan, the within-region return index is higher than the interchange index with Japan breeding grounds. Most whales that breed here migrate to the Russian Far East to feed in the summer.</p>
<p>To enhance the capacity of local stakeholders in managing the marine protected area (MPA) in Camiguin through a training-workshop.</p>				<p>23 local stakeholders from Calayan and Camiguin Islands participated in the MPA training workshop. Revisions of the existing municipal ordinance declaring a marine sanctuary were discussed and are pending approval of the local government executive in Calayan Island (seat of the municipality). Two mooring buoys were installed inside the marine sanctuary around Pamoctan Island. These buoys, if used properly, will prevent damage to the coral reefs in the southern part of the Island.</p>
<p>To increase local awareness on the importance of the conservation of the entire Babuyan Marine Corridor ecosystem through an integrated educational outreach</p>				<p>Educational outreach activities were conducted in the elementary and high schools of Camiguin Island. Educational outreach activities were also conducted in high schools and colleges in three municipalities on the mainland. Social media posts regarding the biodiversity of the Babuyan Marine</p>

program.				Corridor, especially about the whales and dolphins, were maintained throughout the project. Infographics were produced and posted on our social media platforms.
To assess the extent of extraction of marine resources in Camiguin Island through the validation of the fisheries data by conducting interviews and catch-landing monitoring.				The interviews and catch landing monitoring were not completed because of problems encountered with the local community organiser hired. Data gathered are from monitoring of the local fisheries office on Camiguin Island.

2. Describe the three most important outcomes of your project.

a). This completion project allowed us to expand the area and extend the survey effort in the Babuyan Marine Corridor. Together with the data collected from previous Rufford Foundation funded projects, we were able to increase the understanding on this small, distinct population of humpback whales migrating in the Philippines. Based on our results, it appears the population of humpback whales migrating in the Babuyan Marine Corridor is small and has a high rate of return to the area every season. We have also determined that many of the whales migrating in the Philippines also visit Ogasawara and Okinawa, Japan breeding grounds. From the Babuyan Marine Corridor at the end of winter, most of the humpback whales go to the Russian Far East to feed in the summer.

b). This project provided the opportunity to gather the local municipal representatives, village officials, fisherfolk association members and local law enforcers and talk about the results of the project and marine protected area management. Engagement of local community is important in sustaining the research and conservation work in the area.

c). There was an increase in social media exposure, local community education outreach, and dissemination of information to the national (the Philippines) public and international scientific community. We now have over 13,000 followers on Facebook, over 2,700 on Instagram and over 200 on Twitter. We were able to continue the educational outreach in the northern mainland coasts and reached elementary schools and high schools, including two colleges and a vocational school in three different municipalities.

The MPA training was a success. We consider this as a significant achievement because this is the first time an activity like this was conducted for the local stakeholders. It was attended by 23 participants, with representatives from the local government office of Calayan, barangay officials, PCG, and fisherfolk organisation.

Equally significant is the simultaneous conduct of the survey monitoring in the three main islands, Camiguin, Fuga and Calayan, during the 2019 season. This greatly

increased the survey effort and allowed us to demonstrate that the humpback whales continue to utilise a wider area in the waters surrounding the islands within the corridor during the season.

3. Explain any unforeseen difficulties that arose during the project and how these were tackled.

In 2019, weather and sea conditions caused delays in the travel of the survey team to their respective research sites. In Fuga, unfavourable sea conditions limited the survey effort of the team and were only able to do boat surveys for 2 days. In Camiguin, the survey team was only able to go out at sea for 14 out of the 20 days originally planned. In Calayan, the team was only able to survey for 5 days out of the original 10 days planned.

Unspent funds were used for the 2020 monitoring survey. The 2020 survey was cut short due to the pandemic, as travel restrictions and nationwide lockdowns were imposed, and the research team had to leave the island and return to Manila.

Several participants invited to attend the MPA training workshop were not able to attend. Although there were many participants, they were mostly from one island and from one village. It was hoped that there were more participants from the Local Government Unit of Calayan, particularly officials because they would be influential in the revision and approval of the municipal ordinance.

Educational outreach activities on the mainland coastal communities were delayed due to a typhoon. Activities were conducted in January 2020 instead.

We were not able to complete the interviews and catch landing monitoring due mainly to the problems encountered with the community organiser hired. He was not able to accomplish the task assigned to him and his contract was discontinued. We instead requested assistance from the local fisheries office and were able to gather some of the fishery data they collected.

Personal challenges among team members also caused delays in the conduct of work in 2019. Death in the family in April 2019 and illness in October 2019 hampered work.

Due to the pandemic and consequent lockdowns and quarantines, the data analysis was significantly delayed. Team members were forced to remain at home or locked down in Bohol (BALYENA.ORG's home base). The team members locked down in Bohol made use of their time there to analyse the data on-hand and complete the manuscript which was published in the first quarter of 2021.

4. Describe the involvement of local communities and how they have benefited from the project.

The local community in Camiguin Island was involved in every major activity of this project. We had meetings with the village captain regarding the existing municipal ordinance declaring the marine sanctuary and consulted with her for the planning

of the MPA training. During the MPA training attended by village officials, fisherfolk association members and local law enforcers, we consulted with them on the effectivity of the existing marine sanctuary, their insights on the proposed expansion and other related issues on coastal resources extraction. We worked with the local fisherfolk organisation in the village in planning the mooring buoy installation. Their team constructed the buoys and helped in the installation.

5. Are there any plans to continue this work?

Yes, we have continued the monitoring survey for humpback whales for the 2021 and 2022 season, although shortened because of COVID-19 restrictions and budget limitations. We plan to continue the survey in the following seasons (2023-2024).

We plan to continue the work started on the municipal ordinance and aim to revise it to expand the area designated as a protected area. We aim to include in the revision the delineation of the MPA into the different zones.

6. How do you plan to share the results of your work with others?

I presented the results of this project during the Estuarine and Ocean Science Centre's Fall seminar series at the San Francisco State University Romberg Tiburon campus. This seminar was attended by students, professors, researchers and guests of the SFSU Estuarine and Ocean Science Centre. The humpback whale research results were presented as a poster presentation at the 23rd Biennial Conference on the Biology of Marine Mammals (World Marine Mammal Conference) in Barcelona, Spain. Throughout the duration of the project, we posted activities and interesting findings on an almost daily basis on our BALYENA.ORG Facebook page and Instagram account.

7. Looking ahead, what do you feel are the important next steps?

It is important that the monitoring surveys are continued to be able to collect more photo identifications and to increase the effort by conducting the survey earlier in the season and to monitor Fuga and Calayan Islands. To have a better idea on the date of arrivals and departures of the whales, signalling the beginning and end of the breeding season respectively, it is important to deploy underwater sound traps/recorders to conduct passive acoustic monitoring. This will enable us to monitor when the whales arrive in the area and when they leave through sound without the need of the researchers being on-site. This data is important for the management of the area as a future Marine Protected and Humpback Whale Conservation Area.

It is crucial that the revision of the municipal ordinance is followed through. This is the next step to proceed with reassessing the existing sanctuary, delineating it into multiple-use zones, and develop a management plan for the community.

8. Did you use The Rufford Foundation logo in any materials produced in relation to this project? Did the Foundation receive any publicity during the course of your work?

Yes, we mentioned The Rufford Foundation as the funding source of our project during our educational outreach. We included the logo of The Rufford Foundation in the posters we presented at the 23rd Biennial Conference on the Biology of Marine Mammals in Barcelona, Spain in December 2019.

9. Provide a full list of all the members of your team and their role in the project.

Elson Aca led survey team 2 in Camiguin and was the lead photographer for team 2. He also led the educational outreach activities in the northern coasts.

Shotaro Nakagun was the lead photographer for team 1 in Camiguin.

Takeya Sakamoto was the data recorder and research assistant for the survey team in Fuga Island.

Timothy Gardner was the research assistant and data recorder in survey team 1 in Camiguin. He was the research assistant and data recorder for survey team 2 in Camiguin.

Mark de la Paz was the survey leader for the Calayan Island team.

Julia Motoomull was the research assistant and data recorder for the Calayan survey team.

Angelico Tiongson was the photographer for survey team 3 in Camiguin.

Volunteers: **Laetitia Smoll, Glib Lirazan, Jennifer Daray, Tatiana Pridorozhnaia, Lidia Kronova, Ivy Pangilinan, Brendon Hirney, Timo Pangilinan, Kate Teng, Patricia Yap, Audrey Atienza, Roleen Sevilla, Vincent Amelineau, Krisna Ocong, Arisa Satjaraxa, Carmela Santos, Daniel Torres, Marie Saballegue, Keziel Alquitran, Noemie Jubilier**

10. Any other comments?

Delay in the completion and submission of this report was mainly due to personal difficulties and challenges experienced by the grantee/team leader and some of the members, including a hired community organiser. We sincerely apologise for the delay, and we are grateful for your patience and consideration.