

## The Rufford Small Grants Foundation

### Final Report

Congratulations on the completion of your project that was supported by The Rufford Small Grants Foundation.

We ask all grant recipients to complete a Final Report Form that helps us to gauge the success of our grant giving. The Final Report must be sent in **word format** and not PDF format or any other format. We understand that projects often do not follow the predicted course but knowledge of your experiences is valuable to us and others who may be undertaking similar work. Please be as honest as you can in answering the questions – remember that negative experiences are just as valuable as positive ones if they help others to learn from them.

Please complete the form in English and be as clear and concise as you can. Please note that the information may be edited for clarity. We will ask for further information if required. If you have any other materials produced by the project, particularly a few relevant photographs, please send these to us separately.

Please submit your final report to [jane@rufford.org](mailto:jane@rufford.org).

Thank you for your help.

**Josh Cole, Grants Director**

Grant Recipient Details	
<b>Your name</b>	Ricardo F. Tapilatu
<b>Project title</b>	Monitoring and Conservation of the Sea Turtle Nesting Population at Yembekaki beach on Waigeo Island, West Papua - INDONESIA
<b>RSG reference</b>	10853-1
<b>Reporting period</b>	First year
<b>Amount of grant</b>	£6,000
<b>Your email address</b>	<a href="mailto:rftapilatu@gmail.com">rftapilatu@gmail.com</a>
<b>Date of this report</b>	October 2013

**1. Please 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
Discussion with Raja Ampat Kabupaten (Regency) government officials			V	Discussed policies at Kabupaten level regarding natural resources management and conservation with officials from relevant Kabupaten government divisions
Discussion with YPP and Yembekaki community figures and villagers			V	Discussed sea turtle conservation programme in Raja Ampat with YPP. Village figures and fishermen were interviewed to compile local knowledge of turtles.
Surveys on nesting at Yembekaki and Wareba beach			V	Wareba Beach was surveyed on foot in mid-December 2012 and mid-June 2013. These survey schedules were considered the appropriate time of year to record nesting activity. Evidence of nesting was found, and tracks of turtles were seen, further corroborating that Wareba Beach supports significant olive ridley turtles nesting, a medium level of leatherback nesting and a low level of green and hawksbill nesting.
Establishment of conservation cadre and turtle monitoring teams			V	Young groups of Yembekaki showed great enthusiasm towards becoming the village conservation cadre and joining the turtle monitoring team. A monitoring team was formed in March 2013 and an additional team was formed in June 2013. Each team conducts beach surveys daily. Teams rotate every other month.
Training on data collection		V		Basic training to identify sea turtle species with a standardised methodology was provided.
Nest counts and monitoring			V	These teams are stationed at a post on the central section of Wareba beach. Monitoring teams are now conducting daily nesting surveys and monitoring nest fates. The monitoring team enter the information into a datasheet
Assessment of existing and potential threats			V	Primary threats were identified: predation (by dogs and monitor lizards?), egg poaching, flooding of nests by the high tide, and potentially lethal

				sand temperatures. Other potential threat: nickel mining by Anugrah Surya Pratama (ASP) company operated since 2007 at a distance of approximately 10km inland from the nesting beach.
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**2. Please explain any unforeseen difficulties that arose during the project and how these were tackled (if relevant).**

A turtle monitoring team with support from Conservation International (CI) Indonesia was formed in March 2013 to work with the turtle conservation project in Yembekaki. The project only hires a limited number of people (seven) from the village. The limited number may potentially create problems within the community (i.e. jealousy). To tackle this potential problem, an additional team was formed in July 2013. Two teams (each consisting of four people) will work on a shift basis once every other month, while an administrative team (consisting of three people) will work regularly on a monthly basis.

**3. Briefly describe the three most important outcomes of your project.**

**I. Monitoring team and local patrol**

A sea turtle monitoring programme was established. The formation of the monitoring team ensures that Wareba beach is being monitored for nesting on a daily basis. In addition to nest counts and monitoring nests fates, the team also conducts daily patrols to prevent potential poaching and predation events on nests. The presence of the conservation teams is significantly enhancing hatchling production and the overall reproductive success of the critically endangered leatherback, as well as other sea turtles.

**II. Environmental education**

We carried out education and outreach through extension and focus group discussions with villagers, community figures and government officials. We identified that Wareba beach and a few other beaches in the north Waigeo may represent alternative nesting beaches for leatherbacks that primarily nest at Bird's Head during the boreal summer nesting season. This corroborates with previous satellite tracking studies that indicate that leatherbacks nesting on Bird's Head often travel near Waigeo Island during their inter-nesting periods, and could potentially use Waigeo Island for some of their nests (Bird's Head leatherbacks lay an average 5.5 nests per season, Tapilatu *et al.* 2013). We also found that the beach is important for smaller turtle species such as olive ridleys and green turtles, which are both considered Endangered by the IUCN. The decreasing nesting trends and sightings of turtles by villagers is probably due to intensive harvesting of eggs and adult turtles in the past. Carrying out extension activities and discussions resulted in increased awareness and community commitment to initiate conservation actions to save the sea turtles nesting on the beach. Other important results are the identification of primary threats on the nesting beach and potential threat to the water quality posed by the nickel mining operation. There has been an initiative from local villagers to request an independent assessor to conduct a study on environmental impact assessment of the mining operation. Another important result was the introduction of the BHL programme at north Bird's Head region under the State University of Papua (UNIPA, the only state academic institution in the region) to school children who now become aware of the higher educational opportunities available to them at UNIPA

### **III. Training and support**

We trained local patrol teams in standardised data collection methods for documenting sea turtle nesting, nest monitoring and hatching success. We assigned different roles to each patroller in each team to develop expertise and thus minimise error in data recordings. We developed a simple database in spreadsheets so data from the field can be entered in electronic format once the teams are back in the village. Another important result is that CI-Indonesia Raja Ampat Program has committed to assist the monitoring and patrol team by providing a wooden long-boat equipped with an outboard engine (25HP), which enables the transport of supplies and personnel from Yembekaki village to Wareba beach.

### **4. Briefly describe the involvement of local communities and how they have benefitted from the project (if relevant).**

The Yembekaki community and village elders have played an important role in the current project, because one of the goals is to engage local community members at the village level so that they become an active stakeholder in sea turtle conservation. This includes educating the communities on the conservation and cultural importance of sea turtles. The engagement and education is improving their understanding and appreciation of sea turtle biology and conservation. Further, hiring people from Yembekaki village to work in the sea turtle project provides local jobs and income for unemployed community members. At this initial phase, responses from local communities are twofold:

We stayed at local villagers' houses which stimulated motivation and interest of the artisanal fishers during our stay at their houses.

We shared lectures, videos and articles related to the sea turtle biology and conservation (main subjects: life cycles, habitats and threats on the beach and at sea, emphasising conservation actions and how the community can participate and contribute to the success of the recovery programme).

The community involvement, and the community-based conservation are a critical component of the sea turtle nesting beach programme. It is the heart and soul of successful sea turtle conservation programmes around the world. The success of sea turtle conservation programme in Raja Ampat is dependent upon enabling community benefits and development, and thus helping the community as a whole. It is expected that this programme will continually strengthen and become a long-term initiative which acts as a driving force for conservation in Raja Ampat.

### **5. Are there any plans to continue this work?**

Yes, we envision our recent accomplishments as the initial stage of establishing a long-term community-based sea turtle conservation program in Raja Ampat. We plan to continue the work in two ways. First, we will utilise the conservation teams that we have formed to verify the conservation and biological importance of the northern coast of Waigeo to the recovery of the western Pacific leatherback. The results will indicate to what extent nesting at north Waigeo contributes to the critically endangered population of leatherbacks nesting at Bird's Head. Second, we will continue to strengthen the sea turtle conservation programme at Waigeo by networking with other partners such as YPP, CI-Indonesia, and the Raja Ampat regency government to ensure that Waigeo is included as a critical component in the development of an ecologically connected network of locally managed marine protected areas (LMMPAs) in the Raja Ampat region. Thus, the

success of this programme is contingent upon the continuing and enhancing this project on several fronts. Therefore, a second Rufford Small Grant Fund (RSGF) will be applied for 2014.

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

The scientific results regarding sea turtles nesting at Wareba beach of Yembekaki will be compiled as a report to the Raja Ampat regency and Papua Barat provincial government as well as to the conservation NGOs (YPP, CI, TNC and WWF) as a foundation for developing a science-based sea turtle conservation strategy for Bird's Head seascape. Additionally, the initial results of this project will be presented in the 35th International Symposium on Sea Turtle Biology and Conservation (to be held in Turkey in 2015). We will also write articles to several newspapers in the region such as Radar Sorong and the Manokwari Post. In addition, we plan to give several talks on local radios in Manokwari and Sorong, in the Papua Barat Province. When published, we will send copies to Rufford Small Grants.

#### 7. Timescale: Over what period was the RSG used? How does this compare to the anticipated or actual length of the project?

The RSG was used for 12 months from November 2012 to October 2013. The timescale was similar to the proposed time schedule.

#### 8. Budget: Please provide a breakdown of budgeted versus actual expenditure and the reasons for any differences. All figures should be in £ sterling, indicating the local exchange rate used.

1 GBP = Rp. 14.300

Item	Budgeted Amount	Actual Amount	Difference	Comments
Communications	100	145	- 45	
Printing materials	50	50		
Team training	300	350	- 50	
Medical supplies	100	100		
Field Equipments and supplies	600	600		
Field logistics	900	750	+ 150	
Field guides	100	100		
Boat	1000	1000		
Fuel	1750	1975	- 225	Due to increased fuel price (~ 30%) all over Indonesia in July 2013
Accommodations	700	650	+ 50	
Food	600	550	+ 50	
Local Transportations	500	450	+ 50	
Presentations	300	200	+ 100	
Education and Outreach Activities	500	450	+ 50	
Post-project expenses	500	200	+300	
<b>Total</b>	<b>8000</b>	<b>7570</b>		
<b>Left-Over</b>			<b>430</b>	

Considering we envision the sea turtle conservation project at Yembekaki as long-term programme, we would like to use left-over funds (GBP 430) to continue supporting the conservation teams that are conducting the beach surveys. This will be taken into account when we submit a proposal for the 2<sup>nd</sup> RSGF to support the ongoing programme at Yembekaki.

#### **9. Looking ahead, what do you feel are the important next steps?**

- To continue work with data collection and analysis in order to present the findings as official reports to the government and to presentation to scientific community.
- To update information on sea turtle conservation in the Management Plan of the Connected Locally Managed Marine Protected Areas in Raja Ampat and the Bird's Head region.
- To solidify the regional sea turtle conservation strategies on the beach and improve the environmental education among different conservation groups (BHL-UNIPA and YPP) in conjunction with CI Indonesia-Raja Ampat Program and the local government.
- To apply for a second RSGF to ensure the production of extensive database for verifying the significance of sea turtle nesting at Waigeo to the recovery of the critically endangered population of leatherback nesting at Bird's Head. Further, the 2<sup>nd</sup> RSGF will facilitate capacity building by continuing to train monitoring teams for developing skills in nest relocation, nest protection, hatching success evaluation, and predator control. In addition, by working with teachers at village school we will further develop an education and outreach programme by incorporating lessons on sea turtle biology and conservation into local school curricula.

#### **10. Did you use the RSGF logo in any materials produced in relation to this project? Did the RSGF receive any publicity during the course of your work?**

The RSGF logo has been used in all our presentations during meetings and discussions with communities, as well as with government officials. It is anticipated that a poster will be presented with RSGF's logo in the 35<sup>th</sup> International Sea Turtle Symposium in 2015 in Turkey. In addition to its logo, RSGF will be stated in the acknowledgement section of all written papers and reports resulting from this project.

#### **11. Any other comments?**

The RSGF was instrumental in initiating a new sea turtle conservation program on Waigeo of Bird's Head, Indonesia. That program has the potential to significantly contribute to the recovery of the western Pacific leatherback. We are very thankful for the support Rufford Small Grants Foundation has granted us.



Figure 1. Sea turtle nesting beach at Wareba beach of Yembekaki at North of Waigeo Island, Bird's Head Papua – Indonesia.



Figure 2. Focus discussion with villagers at Yembekaki village in June 2013



Figure 3. Sea turtle monitoring and conservation team with village chief of Yembekaki and PI