CEPF FINAL PROJECT COMPLETION REPORT

Organization Legal Name:	The University of Queensland
Project Title:	Status and Conservation of the Solomon Islands' Most Threatened Endemic Terrestrial Vertebrates
Date of Report:	April 2016
Report Author and Contact Information	Diana Fisher d.fisher@uq.edu.au

CEPF Region: East Melanesian Islands

Strategic Direction: Strategic Direction 1. Empower local communities to protect and manage globally significant biodiversity at priority Key Biodiversity Areas under-served by current conservation efforts

Grant Amount: USD$ 78549.00

Project Dates: 2014/6/1 to 2015/12/30

Implementation Partners for this Project (please explain the level of involvement for each partner):

The University of Queensland School of Biological Sciences and School of Civil Engineering Centre for Water Futures supported staff who were involved in organising and conducting field research and surveys, analysis, communication and consultation with communities, running training workshops in conservation for students, and administering additional sources of funding for this project (the Australia Pacific Science Foundation).

The University of the South Pacific supervised research projects of indigenous students involved in this project, including Corzzierrah Posala's masters project.

The Solomon Islands Ministry of Environment, Climate Change, Disaster Management and Meteorology (of the Solomon Islands central government, based in the capital Honiara) was the main government partner. We have consulted with the Ministry throughout this work, and provided them with our results and reporting documents. We have also provided The Ministry of Education and Human Resources Development with a new high school text book on terrestrial ecology and biodiversity.

The Solomon Islands Community Conservation Partnership (SICCP) is supported by the American Museum of Natural History and the University of Queensland to implement community-driven protected areas. Regular consultation with SICCP staff and board members was carried out during this

project. The results of amphibian and mammal surveys were supplied to the SICCP for incorporation in community management plans. Since completing his masters project and gaining relevant field skills as part this project, our local student Corzzierrah Posala is now working in this role in the SICCP.

Conservation Impacts

Please explain/describe how your project has contributed to the implementation of the CEPF ecosystem profile.

Please summarize the overall results/impact of your project.

Planned Long-term Impacts - 3+ years (as stated in the approved proposal):

- Priority species of terrestrial vertebrates on Gatokae, Vangunu, Kolombangara, Makira, and Gizo avoid extinction.

- Primary forest is protected under community conservation agreements in Key Biodiversity Areas on Gatokae, Vangunu, Kolombangara, Makira and Gizo

- Ecosystem Services and ecological roles of terrestrial vertebrates continue in Key Biodiversity Areas.

Actual Progress Toward Long-term Impacts at Completion:

We have documented priority species in primary forests in KBAs on Vangunu, Gatokae, Kolombangara and Makira as planned. Management plans including this information are necessary for formal recognition of protected areas in community conservation agreements at these sites by the Solomon Islands central Government. Local organisations including the SICCP, and KIBCA and Zaira communities (under the SICCP umbrella) have their own management plans. They are defending these areas of primary forest. Data collected during Corzzierrah Posala's masters project on diet, foraging and ethnobiology showed that priority species of terrestrial vertebrates on Gatokae, Vangunu, Kolombangara, and Makira in these areas are continuing to play important ecological roles including pollination and seed dispersal. Currently, these species are avoiding extinction. The community protected areas are continuing to progress towards central government recognition.

Planned Short-term Impacts - 1 to 3 years (as stated in the approved proposal):

- Project participants, the Solomon Islands Government, the SICCP, and local landowners are aware of populations of priority species of mammals and frogs in Key Biodiversity Areas on the islands of Gatokae, Vangunu, Kolombangara, Makira, and Gizo. Landowners have management plans to protect these species and areas.

- Solomon Islands high school students are aware of terrestrial biodiversity in the Solomons and issues in its conservation.

- Landowners, interested members of the public, managers and researchers have up-to-date tools to identify Solomon Islands mammals and frogs.

Actual Progress Toward Short-term Impacts at Completion:

We have given local conservation groups new information on the location of threatened mammals, frogs, and other poorly-documented species in the KBAs, to include in their management plans; we rediscovered the endangered New Georgia monkey-faced bat (*Pteralopex taki*) on Kolombangara Island (where it was previously thought extinct). We extended the range of New Georgia monkey-faced bat on New Georgia and Vangunu (at Zaira - in an area in the KBA protected from logging). We extended the range of Spiny Rat (*Rattus praetor*) and large-footed Myotis bat (*Myotis moluccarum*) to Makira Island. We also confirmed that *Pteralopex taki* is not present on the island of Gatokae.

Confirmation of the New Georgia monkey-faced bat in the Zaira Community Resource Management Area (ZCRMA) on Vangunu is helping to safeguard this area from logging. It has attracted attention from the IUCN (they are willing to provide support against a recent timber rights dispute over part of ZCRMA and it has also attracted additional funding opportunities (Tyrone Lavery is presently drafting a funding application with SICCP to Rainforest Trust to support Zaira).

Our ecology and biodiversity management textbook for high schools is in print and has been given full support by the Permanent Secretary of the Solomon Islands Department of Education. This book has also (unexpectedly) received many online orders and requests from elsewhere. The book has been uploaded to UQ espace as an open access document that can be downloaded for free (http://espace.library.uq.edu.au/view/UQ:387049). People outside the Solomon Islands who want a copy will be able to donate funds to print extra copies for Solomon Islands schools.
This book is freely available to landowners, interested members of the public, managers and researchers, and contains up-to-date guides to identify Solomon wildlife.

With support from the Australasian Bat Society, we have also collected call recordings for 14 of the 18 known echolocating bats in the country. We have prepared reference calls for each of these species and will be making these freely available over the web as well as publishing them in a scientific journal.

Please provide the following information where relevant:

Hectares Protected: na
Species Conserved: New Georgia monkey-faced bat *Pteralopex taki*
Corridors Created: na

Describe the success or challenges of the project toward achieving its short-term and long-term impact objectives.

The process of formal government recognition of community protected areas in the Solomon Islands takes time. Legal challenges from logging companies continue to threaten community protected areas in our project region. We have not been able to include Gizo in our sites, as originally planned. We have consulted with WWF (based in Gizo) several times, but were unable to find anywhere to survey bats and frogs on Gizo. This small island is listed as a priority area because of the presence of an endemic bird, surveys for which were beyond the scope of this current project.

We have mentored a masters student indigenous to the KBA region, enrolled through the University of the South Pacific. He has successfully submitted his masters thesis, attended an international workshop for training and networking of conservation students in the Asia-Pacific region at UQ, and was accepted and sponsored to present his research at the Society for Conservation Biology Oceania conferences at Suva, Fiji (2014) and Brisbane, Australia (2016). He is now highly skilled in field methods, and is employed in implementing community conservation in these KBAs by the SICCP. He has also been employed in further conservation fieldwork in the Solomon Islands in increasingly responsible roles, and has tutored new students in field skills at the Solomon Islands National University (a young institution that has begun with little capacity for research).

Were there any unexpected impacts (positive or negative)?

Project Components

Project Components*: Please report on results by project component. Reporting should reference specific products/deliverables from the approved project design and other relevant information.*

Component 1 Planned: Conservation status and location of populations of priority species of mammals and frogs in Key Biodiversity Areas on the islands of Gatokae, Vangunu, Kolombangara, Makira, and Gizo are known, and there is improved knowledge of how to manage these sites to protect them.

Component 1 Actual at Completion:

We have completed mammal and frog surveys of the Key Biodiversity Areas on the islands of Gatokae, Vangunu, Kolombangara and Makira. We have recorded new locations for several CEPF priority mammals and frogs including:
- Solomon Islands tree frog *Litoria lutea* - confirmed in the Gatokae section of the Marovo-Kavachi KBA
- New Georgia monkey-faced bat *Pteralopex taki* – rediscovered in the Kolombangara Upland Forest KBA and confirmed in the Vangunu section of the Marovo-Kavachi KBA

- Makira flying-fox *Pteropus cognatus* – confirmed at high elevation (~700m asl) in the East Makira KBA

We also recorded additional IUCN Red List threatened species:
- Makira leaf-nosed bat *Hipposideros demissus* (VU) - confirmed at several locations in the East Makira KBA
- Dwarf flying-fox *Pteropus woodfordi* (VU) – confirmed at several locations in the Marovo-Kavachi and Kolombangara KBAs

We have analysed these survey data and reported them to the MECDM. We have also supplied reports on survey results to local communities during village discussions, including pictures and maps. KIBCA, the community conversation group on Kolombangara Island, requested a report on the biodiversity values of the island so that they can use this themselves to support an application under the SI Protected Area Act. We have done this through the submission of survey results to SICCP for incorporation in their management plans. We also provided data to the Zaira community in their management plan (Vangunu), to the Biche community (Gatokae), and the Makira Community Natural Conservation Trust (Makira).
An article on priority species and conservation in *Melanesian Geo* was been peer reviewed and accepted. We have also presented our results at two conferences in 2015 (the Australian mammal society national conference in Hobart, and the 2nd IUCN Pacific Islands Conservation Forum in Suva), and a workshop on conservation in the Solomon Islands Archipelago at the Australian Museum in 2016.

Component 2 Planned: A textbook on terrestrial biodiversity of the Solomon Islands and its conservation is available.

Component 2 Actual at Completion: We have completed and published this new ecology and biodiversity management textbook for high schools (see above). We have ordered an initial print run of 1,000 copies to be distributed for free within Solomon Islands. The book has also been uploaded to UQ espace as an open access document that can be downloaded for free (http://espace.library.uq.edu.au/view/UQ:387049).

Component 3 Planned: A mammal identification guide and a frog identification guide are available.

Component 3 Actual at Completion:

A mammal and frog identification guide has been included within the Solomon Island ecology book. Our identification guides include recent information from our CEPF funded surveys, so are thorough and up-to-date.

Component 4. There is compliance with CEPF social safeguard policies at each site.

Component 4 Actual at Completion:

We have monitored the CEPF Social Safeguard Policy and on indigenous peoples and conducting village discussions at all of the sites. There have been no grievances relating to this project.

Were any components unrealized? If so, how has this affected the overall impact of the project?

The article about this project has not yet been published in the local magazine Melanesian Geo. This grass roots publication has no direct source of funding and relies upon volunteer editors and graphic designers. The timing of issues is therefore intermittent. We have written a draft but not yet submitted a scientific paper on the effects of logging on mammals of Western Province. The results of this study have been complex; we needed to include historical and satellite data on logging history at different scales for interpretation.
These components have had little effect on the overall impact of the project.

Please describe and submit (electronically if possible) any tools, products, or methodologies that resulted from this project or contributed to the results.

We attach the completed secondary school text book with species identification guides.

Lessons Learned

Describe any lessons learned during the design and implementation of the project, as well as any related to organizational development and capacity building. Consider lessons that would inform projects designed or implemented by your organization or others, as well as lessons that might be considered by the global conservation community.

It is difficult to predict how long processes to establish and formally recognise community protected areas may take. Deliverables need to be tailored to communities individually, with flexibility. The stages of development of community-protected areas differ throughout the region. For example, Kolombangara Island Biodiversity Conservation Association is continuing to carry out community consultation and awareness as a precursor toward the development of a protected area management plan that is satisfactory to landowners. They asked for a biodiversity report rather than a management plan. We have limited ability to help communities to prevent the encroachment of logging into community protected areas. This remains a threat, and there are frequent challenges. Communities are often faced with legal battles to deal with this threat. More funding for expert legal advice and support may be helpful.

Project Design Process: (aspects of the project design that contributed to its success/shortcomings)

We planned to include local student training and education in this project from the start, with our University of the South Pacific partner. We included a student who was indigenous to the major KBA region in all aspects of the project. This has been very successful, and has also contributed to our ability to disseminate information to communities, as the student had a strong grounding in both the research and scientific identification of species and ecology side, and the community and cultural sides of the project. In future, it will be beneficial to also include capacity building and collaboration with the Solomon Islands National University. This is a new institution with initially limited capacity for research.

Project Implementation: (aspects of the project execution that contributed to its success/shortcomings)

We under-estimated the extent of interest in the ecology text book in the wider community and people outside the Solomon Islands. This has a potential to increase education opportunities further. It would have been useful to organise a larger print run and mechanisms to fund this (e.g. through crowd-funding websites) earlier.

Other lessons learned relevant to conservation community:

Additional Funding

Provide details of any additional funding that supported this project and any funding secured for the project, organization, or the region, as a result of the CEPF investment in this project.

Donor	Type of Funding*	Amount	Notes
MacArthur Foundation	A	USD$15,000	Boat transportation costs- fuel and maintenance, and printing of text book
Lubee Bat Conservancy	A	USD$7,400	Field consumables and equipment
Australia Pacific Science Foundation	A	USD$23,000	Salary for Dr Tyrone Lavery
The University of Queensland (School of Biological Sciences)	A	USD$7000	Salary for Dr Tyrone Lavery
The University of Queensland (School of Biological Sciences)	D	USD$17206	20% UQ salary contributions to Dr Diana Fisher
Queensland Department of Agriculture, Fisheries and Forestry	D	USD$10,000	GPS data loggers
The University of Queensland (Centre for Water Futures)/ MacArthur Foundation grant to S. Albert	D	USD$60,000	Use of the UQ boat, outboard motor and skipper stationed in the Solomon Islands, and 10% UQ salary contributions to Dr S. Albert and 80% to Dr P. Pikacha
Australian Museum Research Institute Expedition Fellowship	B	$USD7150	Salary for Dr Tyrone Lavery for work on further community conservation projects in the Solomon Islands
Fondation Segre	B	$USD12,986	Support for Tyrone Lavery, indigenous students, and other local participants for work on further community conservation projects in the Solomon Islands
Bat Conservation International	A, B	$USD3570	Further equipment support for bat call identification keys
The University of The South Pacific	D	USD$1725	10% UQ salary contributions to Dr Gilianne Brodie

****Additional funding should be reported using the following categories:***

A *Project co-financing (Other donors or your organization contribute to the direct costs of this project)*

B *Grantee and Partner leveraging (Other donors contribute to your organization or a partner organization as a direct result of successes with this CEPF funded project.)*

C *Regional/Portfolio leveraging (Other donors make large investments in a region because of CEPF investment or successes related to this project.)*

D *In-Kind contributions can include staff and volunteer time, supplies, and other materials your organization provides to the project.*

Sustainability/Replicability

Summarize the success or challenge in achieving planned sustainability or replicability of project components or results.

This project largely aimed to support existing conservation areas linked with SICCP in the Solomon Islands. These have been funded (by the MacArthur Foundation and other organisations) for more than ten years. Applications of results from this project will continue to be used to better manage and plan SICCP community conservation areas and their important species for many years.

We have been able to improve awareness of biodiversity and local ability to manage it through capacity building, especially by training a masters student, and also by working with local rangers and government trainees Our student is now involved in mentoring new trainees and new students. Employment through this project has helped past UQ and USP students to return and invest their relevant knowledge and skills in the Solomon Islands.

We hope that the Solomon Islands terrestrial ecology and forest management text book for the national secondary school curriculum will have wide ranging and long lasting benefits for conservation and sustainable management of Solomon Islands biodiversity, because it will raise awareness in young people.

The guidebook and identification keys will continue to enable people to recognise species in the future, assisting them with conservation and promoting appreciation of Solomons wildlife.

New records of the endangered New-Georgia Monkey-faced Bat (*Pteralopex taki*) have attracted more funding (see above). This is contributing to support of local guides, rangers and more indigenous students. For example, we have begun further camera-trapping to locate new and rare species that use the canopies and hollows of strangler figs (roost sites of *P. taki*), and Dillenia trees. Local students are merging traditional ecological knowledge with original research on threatened mammals on New Georgia, Vangunu and Makira.

Summarize any unplanned sustainability or replicability achieved.

Safeguard Policy Assessment

Provide a summary of the implementation of any required action toward the environmental and social safeguard policies within the project.

We used community forums (Makira) and discussions with village leaders (Kolombangara, Gatokae and Vangunu) to monitor local opinion, and positive and negative outcomes of the project. A third party contact person at the SICCP office was available to hear grievances. No anticipated or unanticipated environmental or social safeguard issues arose during this period.

We have consulted extensively with all of the partner communities during surveys and taxonomic work in the planning phase of this project in 2012 and 2013, and during the work in 2014 and 2015. All of our discussions have been in Solomons pidgin, in addition to the local language / dialect. We have indigenous collaborators and contacts that speak English, pidgin, and local languages (including SICCP staff members and our local student). In meetings to ask permission to survey and photograph bats and frogs, and use the information in school educational materials, participants were free to express their views, and were therefore not dominated by project proponents or certain sections of community. In the Solomon Islands, there is a process of hierarchical discussions led by customary landowners and the local community that must be adhered to before anyone who is not an owner can work in forests (or to visit them for any purpose), even in cases of a simple observational visit to a site. Talks begin with the council of village chiefs and often also church leaders, who then take the proposal to a meeting of the whole community where permission and terms (payments etc) are freely discussed. Relatives of community members who live outside the area but consider that they may also have a claim to the land on which the work is planned also have rights to comment. These discussions can therefore take some time. Communities in this project have given consent at all stages, including clear terms of access.

Additional Comments/Recommendations

Information Sharing and CEPF Policy

CEPF is committed to transparent operations and to helping civil society groups share experiences, lessons learned, and results. Final project completion reports are made available on our Web site, www.cepf.net, and publicized in our newsletter and other communications.

Please include your full contact details below:

Name: Diana Fisher and Tyrone Lavery
Organization name: The University of Queensland
Mailing address: School of Biological Sciences, The University of Queensland St Lucia 4072
Tel: +61 33469004 (61 0487496260 mobile)
Fax:
E-mail: d.fisher@uq.edu.au; t.lavery@uq.edu.au

*****If your grant has an end date other than JUNE 30, please complete the tables on the following pages*****

Performance Tracking Report Addendum

CEPF Global Targets

(Enter Grant Term)

Provide a numerical amount and brief description of the results achieved by your grant.
Please respond to only those questions that are relevant to your project.

Project Results	Is this question relevant?	If yes, provide your numerical response for results achieved during the annual period.	Provide your numerical response for project from inception of CEPF support to date.	Describe the principal results achieved from July 1, 2007 to June 30, 2008. (Attach annexes if necessary)
1. Did your project strengthen management of a protected area guided by a sustainable management plan? Please indicate number of hectares improved.	yes	34,217 Ha	34,217 Ha	The provision of biodiversity data from Kolombangara Uplands KBA, Vangunu and Gatokae sections of Marovo-Kavachi KBA and East Makira KBA has contributed towards sustainable management plans.
2. How many hectares of new and/or expanded protected areas did your project help establish through a legal declaration or community agreement?	yes	0	0	No protected areas or legal conservation agreements were established during the project.
3. Did your project strengthen biodiversity conservation and/or natural resources management inside a key biodiversity area identified in the CEPF ecosystem profile? If so, please indicate how many hectares.	yes	34,217 Ha	34,217 Ha	Records of IUCN threatened species in the Kolombangara Uplands KBA, Vangunu and Gatokae sections of Marovo-Kavachi KBA has strengthened and further justified biodiversity conservation in these areas.
4. Did your project effectively introduce or strengthen biodiversity conservation in management practices outside protected areas? If so, please indicate how many hectares.	yes	34,217 Ha	34,217 Ha	Records of IUCN threatened species in the Kolombangara Uplands KBA, Vangunu and Gatokae sections of Marovo-Kavachi KBA has strengthened and further justified biodiversity conservation in these areas. These areas are yet to be formal recognized as Protected Areas under Solomon Islands legislation.
5. If your project promotes the sustainable use of natural resources, how many local communities accrued tangible socioeconomic benefits? Please complete Table 1below.	no			

If you answered yes to question 5, please complete the following table