CEPF SMALL GRANT FINAL PROJECT COMPLETION REPORT

Organization Legal Name:	University of the South Pacific
Project Title:	Documentation of Fiji's Introduced and Endemic Land Snail Fauna
Date of Report:	December 2012
Report Author and Contact Information	Dr Gilianne Brodie, Phone 679 3232876; Email brodie_g@usp.ac.fj

CEPF Region: Micronesia/Polynesia

Strategic Direction:

CEPF Strategic Direction 1: Prevent, control, and eradicate invasive species in key biodiversity areas

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CEPF Strategic Direction 2 Strengthen the conservation status and management of key biodiversity areas

Grant Amount: \$19,327

Project Dates: 12/09 - 12/12

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

- Landcare Research New Zealand involvement in almost all aspects of study except direct field work
- South Pacific Regional Herbarium facilitation of field survey work in Viti Levu highlands
- NatureFiji/MareqetiViti- direct support for field work and community liaison on Gau Island
- LäjeRotuma Initiative logistical assistance with field work and community liaison in Rotuma
- Koronivia Research Station advice and feedback on introduced species fact sheet content and layout
- Biosecurity Authority Fiji feedback on introduced species factsheets
- IUCN-Oceania collaboration and knowledge exchange via IUCN Red listing training and assessments
- National Trust of Fiji assistance with backup storage of Fiji land snail distribution database

Conservation Impacts

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

This project collated basic information to assist with the identification of introduced, invasive and endemic species in key biodiversity areas. It also helped to identify which areas had critically endangered species and also which areas did not have invasive or introduced species and therefore where strengthened biosecurity measures are required. This information was fed back to land owning communities as well as the national Fiji Invasives Species Taskforce (FIST) committee and provided to the Department of Environment for inclusion in their National Biodiversity Strategy Action Plans.

The project fieldwork was undertaken in several of Fiji's key biodiversity areas including less disturbed "forested" areas of Gau, Rotuma, Viti Levu and Kadavu, plus the limestone ridges of Cicia Island in the Lau archipelago.

The project substantially increased awareness of endemic and introduced fauna and encouraged strong inclusion of local leaders, plus hands on participation and training of community members, in what we see as the initial stages of future implementation of threatened species conservation. Recommendations were provided to stakeholders which will hopefully lead to the development of collaborative recovery plans in the future.

Many aspects of the project have also been directly integrated into the undergraduate and postgraduate teaching programs of the University of the South Pacific and mentoring & training (local human resource capacity building) was a core element of all field work conducted.

Please summarize the overall results/impact of your project against the expected results detailed in the approved proposal.

Expected Results as per original LOI – Introduced species

- A summary report of the status of Fiji's lands snail provided to the Fiji government departments of Environment, Agriculture and Forestry.
- A checklist of Fiji's introduced land snails produced and published.
- Lucid Key Development software obtained and established.
- The estimated risk of each of the introduced species; to biodiversity loss, human health and agricultural production has been accessed and results published.
- Posters and awareness materials designed and provided to numerous stakeholders.
- Factsheets, targeted at quarantine and agricultural officers, to allow rapid identification, have been produced and made publically available. Two additional factsheets on potentially serious land snail invasive species not yet in Fiji also included.
- Conversion of factsheets into field guide book via USP Press in progress, completion expected in 2013.

Expected Results as per original LOI – Endemic species

Land Snail surveys undertaken in numerous locations but most significant are:

- Rotuma Island detailed report produced (dead shells of *Partula leefi* only found, no *Succinea rotumana* located may be extinct) and scientific paper in revision to journal Tropical Conservation Biology.
- Cicia Island brief report produced (more detailed in progress to be completed by early 2013) – several populations of living Fiji endemic partulids found. DNA samples and shell photographs will be sent to partulid specialist in USA for regional comparative analysis.

- Checklist of Fiji's endemic *Placostylus* species established after field trips to Navakavadra Range, Nakorotubu and material provided by NFMV from Gau. Fourteen species possible therefore separate *Placostylus* project established as a Master's student project with a molecular component. Scholarship was obtained – thesis completion expected in mid 2013.
- No Fijipoma liberate found to date.

Please provide the following information where relevant:

Hectares Protected: Not applicable

Species Conserved:

Assessments for two high priority Fijian endemic partulid snails, *P. leefi* (endemic to Rotuma) and *P. lirata* (endemic to Lau), that were <u>not included</u> in recent 2012 IUCN land snail assessments because of a lack of data, can now be undertaken as a result of this project.

IUCN red-listing assessments were undertaken for 14 species of placostylids for the 1st time – 2 determined as critically endangered, 6 endangered and 2 assessed as vunerable.

Project has created a strong foundation for future conservation of numerous other Fiji endemic species e.g. *Trochomorpha* – 17 endemic species now Red-List assessed.

Globally significant land snail reference collections now established locally in Fiji at the University of the South Pacific.

Corridors Created: Not applicable

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

This project has been very success and the outcomes and outputs have created a locally-based foundation that was previously lacking for land snail conservation and research in Fiji. There is still much work to do collating widely scattered information and identifying gaps, but we have now set clear priorities for where introduced and invasive species management is required and also priorities for future threatened species conservation work on Fiji's endemic land snail fauna. Importantly, in close collaboration with our local and overseas counterparts the project has also began to build local human resource capacity and create the public and community awareness necessary to have conservation work continue in the longer term.

Were there any unexpected impacts (positive or negative)?

Positive – Unexpected linkages to IUCN-Oceania Red-list project and opportunity to encourage completion of Fiji Land snail catalogue of Barker & Bouchet.

Negative - Finding the invasive flatworm *Platydemus manokwari* (voracious snail predator) on the only island in the world (Rotuma) reported to have the unique Polynesian tree snail *Partula leefi*.

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. Don't underestimate the time involved with factsheet production; collating existing data, assessing data quality, securing copyright and the checking of final outputs by many stakeholders is very time consuming and requires an experienced decision maker not a new graduate.

Involving local postgraduate students with family and cultural connections to your field trip location is appreciated by communities and improves informal communications, awareness raising and increases the chance of the program continuing.

Don't assume that any indigenous students in your project can speak their local language confidently in public.

Translation to local languages requires considerable thought, particularly in respect to target audience as content for factsheets made for quarantine officers needs to be different to content made for relatively isolated village communities.

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

One of the strengths of this project's design was its strong and continuous inclusion of local human resource capacity building and long term-training in both invasive species and threatened species conservation.

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

Involving multi-stakeholders is a strength however they also substantially increase the time involved with all aspects of the study particularly up to date reporting and communications.

Other lessons learned relevant to conservation community:

Working in remote small island communities is logistically very difficult and requires finding implementation partners with a high level of organization skill, strong community credibility and existing linkages into all the individual communities involved – it also takes considerable time to build the respect and trust needed to implement projects successfully.

ADDITIONAL FUNDING

Provide details of any additional donors who supported this project and any funding secured for the project as a result of the CEPF grant or success of the project.

Donor	Type of Funding*	Amount	Notes
USP	A	\$21,683 FJD	
CEPF	В	\$17,754 USD	Specific focus on endemic genus established as a high priority in the current project

*Additional funding should be reported using the following categories:

- **A** Project co-financing (Other donors contribute to the direct costs of this CEPF 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 project.)

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

Sustainability/Replicability

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

Local training and capacity building considerably improved the chances of continued work and replication of successes in other locations.

Summarize any unplanned sustainability or replicability achieved.

IUCN Red-listing assessment and training.

Safeguard Policy Assessment

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

Quarantine related recommendations now included in the Fiji's National Invasive Species Taskforce committee work plan for 2013.

Selected land snails species, now added to Fiji's protected species decree and associated policies via direct Department of Environment.

Project results will be reflected in future National Biodiversity Strategy Action plans for Fiji Islands.

Additional Comments/Recommendations

We have only just scratched the surface there is lots more to be done

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: Dr Gilianne Brodie Organization name: University of the South Pacific Mailing address: Biology, SBCS, FSTE, University of the South Pacific, Private Bag, Suva, Fiji Islands Tel: 679 3232876 Fax: 679 3231512 E-mail: brodie_g@usp.ac.fj

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	C	EPF Global	Targets	
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Provide a numerical Please respo	amount and nd to only tl	brief descript	ion of the re s that are re	sults achieved by your grant. levant 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. (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.	No			Please also include name of the protected area(s). If more than one, please include the number of hectares strengthened for each one.
2. How many hectares of new and/or expanded protected areas did your project help establish through a legal declaration or community agreement?	No			Please also include name of the protected area. If more than one, please include the number of hectares strengthened for each one.
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			Gau Island
4. Did your project effectively introduce or strengthen biodiversity conservation in management practices outside protected areas? If so, please indicate how many hectares.	Yes			Rotuma Island, Cicia Island (Lau Group), Nakauvadra range, Nakorotubu
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.

Please complete this table if your pro under Community Character	Table 1. Socioeconomic Benefits to Target Communities Please complete this table if your project provided concrete socioeconomic benefits to local communities. List the name of each community in column one. In the subsequent columns under Community Characteristics and Nature of Socioeconomic Benefit, place an X in all relevant boxes. In the bottom row, provide the totals of the Xs for each column.																				
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Name of Community	Small landowners	Subsistence economy	Indigenous/ ethnic peoples	Pastoralists/nomadic people	Recent migrants	Urban communities	Communities falling below th poverty rate	Other	Adoption of sustainable natural resources management practices	Ecotourism revenues	Park management activities	Payment for environmental services	Increased food security du to the adoption of sustaina fishing, hunting, or agricultural practices	More secure access to wat resources	Improved tenure in land or o natural resource due to titlin reduction of colonization, etc	Reduced risk of natural disasters (fires, landslides, flooding, etc)	More secure sources of energy	Increased access to public services, such as educatio health, or credit	Improved use of traditional knowledge for environmen management	More participatory decision making due to strengthene civil society and governanc	Other
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If you marked "Other", please provide detail on the nature of the Community Characteristic and Socioeconomic Benefit:																	