CEPF FINAL PROJECT COMPLETION REPORT

Organization Legal Name:	Bristol, Clifton and West of England Zoological Society Ltd (referred to as 'Bristol Zoological Society')
Project Title:	A Model Release for Captive Bred Polynesian Tree Snails
Date of Report:	6th March 2013
Report Author and Contact Information	Neil Maddison (nmaddison@bristolzoo.org.uk) & Trevor Coote (partula2003@yahoo.co.uk)

CEPF Region: Polynesia-Micronesia

Strategic Direction: 2. Improve management of key biodiversity areas

Grant Amount: $72,268

Project Dates: May 1, 2011-Nov 30, 2012

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

Global Partula Species Management Programme (GPSMP): an international consortium of zoos: discussions were held between consortium members, and the project developed in the course of those discussions.

Government: the French Polynesian government provided permission for the project to be implemented on the site that they managed as a National Park (part of the Tefaati Valley). In addition, they have helped with highlighting the project to visitors to their offices, and have committed to over-seeing a display of tree snails in their offices in order to increase awareness to visitors

Conservation Impacts

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

The CEPF ecosystem profile highlights the key factors that have guided the implementation of this project:

"Land snail diversity is particularly high with over 750 species in Hawaii alone and perhaps 4,000 species in the insular tropical Pacific."

The focus of the project has been to identify methods of how to improve land snail biodiversity conservation in the hotspot

"The major threats to Pacific biodiversity are human induced and include invasive species, habitat alteration and loss …"

The project has included a focus on removal of invasive species, habitat restoration and on-going management

"This ecosystem profile includes a commitment and emphasis on using conservation Outcomes ... scientific underpinning for determining CEPF's geographic and thematic focus for investment. Conservation outcomes can be defined at three scales – species, site, and landscape …"

The project has worked at species and site scale

"67 species belonging to priority classes one and two were selected for CEPF investment … A total of 60 sites were identified for CEPF support."

The site clearance and Reserve construction were carried out in the Tefaaiti Valley (Tahiti, site number 124 in the Priorities for site-level investment, CEPF Ecosystem profile), Both *Partula hyaline* and *Partula clara* are present in the location (ranked as '1' in the Priorities for site-specic investment, CEPF Ecosystem Profile). In addition, two other species of partulids *(Partula nodosa* and *Partula affinis*) that were known to have occurred in the location will be re-introduced when conditions are considered viable for their survival.

Please summarize the overall results/impact of your project.

A small enclosure secured against *Euglandina rosea*, the principal threat to the endemic Partula tree snails to be reestablished in their home range, has been constructed and modified so that it is ready for the repatriation of three species from the international breeding programme, one of which exists solely in captive conditions and the other two which are critically endangered. The *Euglandina* have been removed from inside the reserve and the immediate area. A 5 ha area of invasive tree species has been completely cleared and a nursery of endemic shrubs established. These actions will inform other snail conservation programmes and have made a Natural Park a higher priority for maintenance and educational purposes by the local government authorities. One of the principal objectives of the project is to establish the feasibility of utilizing managed Reserves as part of an overall strategy to conserve critically endangered Polynesian tree snails, and this work is in progress, with on-going support from the GPSMP, including the use of local monitors who were trained as part of the CEPF-funded project.

The CEPF-funded project also offers the opportunity to increase awareness of the threats to endemic Polynesian biodiversity from invasive species. A module has been produced for production for use in environmental education (currently awaiting school inspectors sign off for use in academic curriculum commencing Sept 2013), and a way of displaying a captive-held populations of *Partula* species has been identified.

Project Approach (500 words)

The aim is to use the experience of building a predator-proof reserve to inform the conservation strategy for partulids and to include this as part of a wider habitat restoration initiative, as well as the basis for an outreach strategy to engage local people and local schoolchildren in biodiversity conservation. The intention was to design a project that employed local people to construct, monitor and maintain the reserve and to clear and maintain the surrounding habitat (which was achieved), and to recruit and build the capacity of local support for ongoing monitoring (which was achieved).

The project also offered the opportunity to ensure ongoing support from the French Polynesia government, by stimulating interest and illustrating that there is international support (and attention) on the threats to Polynesian biodiversity; this objective has also been achieved in part, with a statement of intention to sign a three-year agreement between the French Polynesia

government and Bristol Zoological Society, whereby the government would provide funds for activities undertaken by the GPSMP within Polynesia.

Link to CEPF Investment Strategy

The ecosystem profile states that

"The three primary strategic directions are:

- *prevent (*ion*), control and eradicate(*ion*)e invasive species in key biodiversity areas;*
- *strengthen the conservation status and management of 60 key biodiversity areas;*
- *Build awareness and participation of local leaders and community members in the implementation of protection and recovery plans for threatened species."*

The project related to all three strategic directions in the ecosystem profile, as all three directions are (still) key factors that need to be addressed in order to conserve endemic land snails in French Polynesia. The key biodiversity area where the project was implemented was at risk from the following:

- A lack of protection from invasive species i.e. habitat change from introduced flora; biodiversity loss from predation by introduced species on endemic species. The site was cleared of invasives and a protected area was constructed to protect endemic land snails
- The project took place on Tahiti on land owned by the French Polynesian government; this key location is listed in the Ecosystem Profile as a priority area
- Lack of stakeholder buy-in to ecosystem protection. A public awareness campaign was included in the project activities, including the production of a module for use in school environmental education, and agreement to construct a display highlighting the loss of tree sails, in a public area. In addition, local capacity (and interest) has been built by the recruitment of a local 'champion'

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

The provision of a well-managed, protected area of native habitat and sample of local biodiversity which includes: a secure refuge for endemic tree snails extirpated from the area but maintained in an international breeding programme; a maintained and protected area of native flora and forest vegetation accessible to local people, school parties and other visitors for educational purposes; and a model for similar schemes in other selected locations.

Actual Progress Towards Long-term Impacts at Completion:

Actions taken during project period means that all of the long-term impacts will be realized given additional resources for continuing maintenance.

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

The removal of an invasive carnivorous species that threaten endemic species of tree snail in the protected reserve; the removal of a number of pioneer pest plant species to allow recolonisation of native species; the provision of an area readily accessible for educational purposes; the opportunity for capacity building of a local wildlife conservation NGO through project implementation and technical support from partners, including stimulating interest in local tree-snail breeding programmes for local action; a higher (actual) level of protection for a location within a National Park.

Actual Progress Toward Short-term Impacts at Completion:

Success in removing the two most invasive plant species from a discrete area. The involvement of a small, local NGO in future maintenance of the secure reserve. The location is already a

National Park but the local government has now become more involved by planting a nursery of endemic shrubs on land cleared of invasive tree species. The area is accessible for educational purposes and literature is being prepared. However, the special requirements of the snails in a breeding programme (continuous air conditioning) are beyond the resources of local individuals and we have look at other options. Through discussions with the Department of the Environment, it appears that we have the opportunity to set up a display in in a government office, in a public area, which would assist with awareness-raising to an important audience i.e. maintaining a high profile of the importance of the snails to Polynesian culture.

Please provide the following information where relevant:

Hectares Protected: 5 ha
Species Conserved: 3 (directly; 17 indirectly through knowledge transfer)
Corridors Created: -

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

There was success in the two principal field objectives of clearing invasive tree species and re-establishing endemic shrubs, and in constructing a secure reserve against the carnivorous snail, though the endemic tree snails have yet to be repatriated.
Engaged local NGO in ongoing management of the Reserve; built capacity of local individuals.
Designed and agreed environmental education module for use in primary and secondary schools

Were there any unexpected impacts (positive or negative)?

The withdrawal of promised local government funding was unexpected, and required re-assignment of CEPF funding (which was agreed).

Internal disagreements within the NGO who had taken part in project design meant that they could no longer commit to on-going monitoring, and an alternative solution had to be found (which was the case)

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:
Identify mitigation measures to control at least five malignant invasive species (*Euglandina rosea, Miconia calvescens, Platydemus manokwari, Lissachatina fulica, Veronicella cubensis*) in key location Te Faaiti Valley National Park

Component 1 Actual at Completion:
A secure barrier has been erected against *Euglandina rosea* and there will be research into its control.
Removal of invasive plant species has been completed, although it is acknowledged that on-going maintenance is required to keep the area clear of invasives (part of the management programme)

Component 2 Planned:

Restoration of, and sustainable action for, a habitat in a discrete area; an assemblage of native species maintained as a managed sample of local biodiversity, and according a higher (actual) level of protection for a specified location within a National Park.

Component 2 Actual at Completion:
Both restoration of habitat and a renewed assemblage of native species (except endemic tree snails which await repatriation) have been successful. The location will now receive a higher level of maintenance.

Component 3 Planned:
Raise awareness and support for conservation of threatened species and ecosystems in French Polynesia, including interest and ongoing support for local conservation breeding and re-introduction

Component 3 Actual at Completion:
Awareness and support will be raised on the implementation of educational materials (locally agreed). Local breeding may need to be restricted to air-conditioned government office due the need to maintain temperatures below 32 degrees C (I non-air-conditioned areas the temperature is likely to rise above this, killing the snails). Diren (local government office) have agreed to place a display in a publically-visible area.

Were any components unrealized? If so, how has this affected the overall impact of the project?
The repatriation of the snails and the implementation of educational materials have been delayed. Both are vital to maximize the impact of the project and will realized this year.

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

See attached report.

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.
Local conditions can affect the timing of project implementation; inclement weather, unpredictable local government finances and politics, high local costs. All of these can and did hinder implementation at times but to an extent are specific to French Polynesia.

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

Location of an excellent site for the reserve, a small, flat plateau; employing of a contractor who lives in the main valley and collaboration with the small local NGO which is responsible for general maintenance of the valley where the reserve is situated, the employment of non-employed local people for weeding and *Euglandina* clearance.

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

Failure of original NGO collaboration, withdrawal of promised funding from the local government, protracted administrative process for authorization of the movement of the snails.

Other lessons learned relevant to conservation community:

To set in motion any required administrative processes well in advance; make greater allowances for difficult weather conditions; give schools plenty of notice for the collaboration and production of educational materials, including an understanding of the administrative system for introducing new material into the curriculum.

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
Bristol, Clifton and West of England Zoological Society Ltd (Category A)	Flight Project support (field visit)	£2,000 £3,000	Return to the UK for Project Manager; support for management, outreach and government engagement from BZS personnel
Partula Global Species Management Programme (Category A)	Project support	£14,000	GPSMP is a consortium if international zoos who support conservation-breeding and the presence of a field biologist in Polynesia

****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.)*

Sustainability/Replicability

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

The main objective of the project was to learn from the process of constructing a tree snail Reserve for re-introduction of extirpated species. The construction has been completed, identifying many factors that need to be taken into consideration if a similar process is utilized elsewhere. These factors include site selection, clearance of invasives (plant and animal), physical construction (materials, timescales, environmental), local capacity for monitoring, on-going protection strategy (e.g. land tenure, law enforcement, local ownership), and engagement

of other stakeholders e.g. the French Polynesian government, which underwent changes in personnel at the political level, which resulted in having to implement a contingency plan (supported by CEPF).

Summarize any unplanned sustainability or replicability achieved.

It was originally envisaged that a local NGO would undertake ongoing monitoring, but early on in the project the NGO went through a number of internal changes that resulted in the project team having to find alternatives. We have been fortunate in finding a suitable replacement, although we note that this is an individual rather than an organizational alliance, and there is, of course, a risk that commitments may change. Nevertheless, we are confident that in the short and medium term that we have resources in order to maintain the monitoring, supported by the ongoing presence of the GPSMP-funded field biologist (and CEPF-funded Project Manager), who has overall responsibility for assessing the effectiveness of the intervention.

Safeguard Policy Assessment

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

Additional Comments/Recommendations

Please see the attached project report

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:

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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 May 1, 2011 to November 30, 2012 (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	5 ha		See attached report
2. How many hectares of new and/or expanded protected areas did your project help establish through a legal declaration or community agreement?	No			
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			In Te Faaiti Natural Park on Tahiti the removal of the principal invasive pest species of trees has enabled the local government to plant a cleared area with endemic species of shrub. The removal of the carnivorous invasive molluscs and the construction of a predator-proof reserve will see the repatriation of endemic tree snail species.
4. Did your project effectively introduce or strengthen biodiversity conservation in management practices outside protected areas? If so, please indicate how many hectares.	No			
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

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.

Name of Community	Community Characteristics								Nature of Socioeconomic Benefit												
									Increased Income due to:												
	Small landowners	Subsistence economy	Indigenous/ ethnic peoples	Pastoralists/nomadic peoples	Recent migrants	Urban communities	Communities falling below the poverty rate	Other	Adoption of sustainable natural resources management practices	Ecotourism revenues	Park management activities	Payment for environmental services	Increased food security due to the adoption of sustainable fishing, hunting, or agricultural practices	More secure access to water resources	Improved tenure in land or other natural resource due to titling, 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 education, health, or credit	Improved use of traditional knowledge for environmental management	More participatory decision-making due to strengthened civil society and governance.	Other
Total																					

If you marked "Other", please provide detail on the nature of the Community Characteristic and Socioeconomic Benefit: