## **CEPF FINAL PROJECT COMPLETION REPORT**

### I. BASIC DATA

Organization Legal Name: Pacific Expeditions Ltd.

**Project Title (as stated in the grant agreement):** Phoenix Islands Conservation Survey and Restoration Assessment, Kiribati

**Implementation Partners for this Project:** Eco Oceania Ltd, NZ Department of Conservation, Government of Kiribati, PII, Auckland University

Project Dates (as stated in the grant agreement): March 1, 2006 - June 30, 2006

Date of Report (month/year): August 2006

### **II. OPENING REMARKS**

#### Provide any opening remarks that may assist in the review of this report.

The technical report is currently being peer reviewed via PII Auckland (as at 3 August 2006).

### **III. NARRATIVE QUESTIONS**

1. Briefly describe the methods used in achieving the objectives of this project.

- Bird surveys - pelagic transect counts, circum-navigation of islands, evening observations of birds returning to atolls, terrestrial transect surveys, colony counts and spotlight surveys.

- Marine mammal and turtle surveys – pelagic transects and island perimeter surveys.

- Invasive mammal surveys - rat trapping, cat-luring, field sign, spotlight transects, genetic tests of rats.

- Mammalian impacts - evaluating impact on seabirds (seabird species composition per island compared with 1960s, breeding success) and observations of vegetation damage.

- Invasive ant surveys – standard protein and sugar lures set out in landing and camping areas on all islands visited.

- Invasive plant surveys – plant lists established for all islands and key locations noted.

- Feasibility studies for pest eradication - evaluating crab densities and efficacy of standard poisoning approaches (non-toxic bait trials), non-target risks (species present and their diet).

- Operational planning for pest removal - literature review and consultation with technical experts.

2. Describe what was achieved in terms of:

a) capacity development;

The two Kiribati representatives learnt many new techniques for surveying and monitoring biota, particularly avifauna and invasive species. Survey methods were adapted for the situation and new methods developed, e.g. evening bird survey (from boat) which correlated well with island transect data. Subsequent networking with technical experts of pest eradication.

b) developing partnerships;

Important partnerships were established amongst Pacific Expeditions, DOC, CI, Government of Kiribati and other agencies and institutions including the New England Aquarium. All of these partnerships will strengthen during the next stages of Phoenix Islands restoration – management planning and pest eradication.

c) raising awareness of invasive species and generating community support for their management;

A brief visit to Kanton (the only inhabited island in the Group) raised local community awareness of conservation values and pest issues. It is expected that this project and especially the next stages (planning and carrying out pest removal and establishing better biosecurity) will generate significantly increased awareness. It is planned to publish findings particularly on impacts of invasive mammalian pests, including recent impacts of Asian black rats.

d) involving the local community and other stakeholders:

Visit to local community as above, plus participation of Government of Kiribati staff and completion of some marine reef work in collaboration with NEAq.

e) providing benefits to the local community and other stakeholders.

These will come about with pest eradication and raise the profile of the Government of Kiribati conservation initiatives and potentially allow initiatives for future resource use, including potentially ecotourism.

3. How has the project been promoted? (Please enclose/attach press clippings, brochures, publications, videos, websites, photos, etc). Please describe the products developed during the project and how and to whom these were disseminated.

Nothing via the media at this stage, but video footage and excellent photos will be available for websites, etc in due course. Publications are being planned, e.g. highlighting the recent invasive species impacts at McKean Island.

## **IV. ACHIEVEMENT OF PROJECT PURPOSE**

*Project Purpose:* To assist the Government of Kiribati in managing invasive alien species on key islands in the Phoenix Group.

#### Planned vs. Actual Performance

Indicator	Actual at Completion
Purpose-level:	
Provide operational plan(s) on the management of invasive alien species on priority islands in the Phoenix Group to the Government of Kiribati.	Draft plans completed – the recommended priority islands for removing pests are Rawaki, McKean and Birnie, and operational plans are drafted for each of these.

4. Describe the success of the project in terms of achieving its intended impact objective and performance indicators at the local and/or the national/regional level.

Completely successful in that it succeeded in landing on the three top priority islands for survey (Rawaki, McKean and Enderbury) and in collecting data at all 8 of the atolls. This enabled priorities for pest eradication to be determined for the Group as a whole, the feasibility of pest eradication to be evaluated, and priority operational plans drafted for 3 islands (Rawaki, McKean and Birnie).

5. Were there any unexpected impacts (positive or negative)?

a) Additional information was collected on pelagic birds, turtles, marine mammals and health of reef communities.

b) A small number of shearwater burrows were damaged near the landing on Rawaki, but expedition members were subsequently briefed on how to avoid this problem, i.e. stepping at the base of the burrow entrance or walking around seabird colonies. Future expeditions will need to be made aware of these risks and mitigation measures.

6. Describe the key positive and negative lessons learned from this project that would be useful to share with other organizations interested in implementing a similar project.

a) importance of experienced island team from a logistics perspective because of the many potential hazards of island work, particularly landings.

b) having the support crew focused on logistics which enabled scientific team to focus on their technical work.

c) importance of using experienced scientific personnel to ensure rapid collection of accurate data and being able to adapt to new situations, e.g. developing alternate fauna survey methods when islands could not be safely landed on (this included boat circumnavigations of islands and evening surveys from boat when birds were returning to islands).

d) avoiding colonies of burrowing seabirds except when being counted, when surveyors stepped at the base of burrow entrances. In higher density situations snowshoes/mudflat shoes would be desirable.

### **V. PROJECT OUTPUTS**

**Project Outputs**: Enter the project outputs from the Logical Framework for the project

### Planned vs. Actual Performance

Indicator	Actual at Completion
<b>Output 1:</b> Determine the status and distribution of invasive alien species and other terrestrial biota on selected islands in the Phoenix Group. The biota to be surveyed include: - mammals - species list, habitat, breeding stage, impacts where relevant - seabirds - species lists, colony size estimates, breeding stage, map of colony extents - plants (species list, any invasive alien species mapped) - reptiles (species list) - invertebrates (focus on crabs and potential invasive alien species, e.g. ants)	Output 1 indicators completed for the 3 top priority islands to visit (Rawaki, McKean and Enderbury) and for lower priority islands of Birnie, Orona and Nikumaroro, while Kanton was partially surveyed and Manra was surveyed only from the boat.
<b>1.1.</b> At least 6 islands in the Phoenix Group surveyed for invasive alien species and other terrestrial biota by May 2006.	Completed – 6 islands, including the 3 top priority islands, were surveyed, and 2 others partially surveyed. Some significant changes in pest status has occurred since the 1960s, including the loss of some mammalian pests and the arrival of another – the Asian black rat. No significant threats were found during ant and plant surveys.
<b>Output</b> 2. Assess the feasibility of invasive alien species managment and prepare feasibility report for invasive alien species managment on surveyed islands in the Phoenix Group detailing recommended target atolls and invasive species.	Draft completed 10 July 2006
<b>2.1.</b> Feasibility of managing invasive alien species determined on surveyed islands.	Draft completed 10 July 2006. The feasibility study recommends that the removal of rabbits (Rawaki), Pacific rats (Birnie) and Asian black rats (McKean) is feasible and that they are priority actions for these small islands. Pest eradications are also important for the larger islands, but these should be staged. Specific, improved biosecurity measures are recommended to prevent rodent (re)invasion.
<ul> <li>2.2.</li> <li>Feasibility report detailing the results of the Phoenix Islands surveys on invasive alien species and other terrestrial biota prepared by early June 2006.</li> <li>2.3.</li> </ul>	Draft completed 10 July 2006. The report documents significant changes in seabird populations since the 1960s, much of which reflects the recent arrival of an impacting Asian black rat species on McKean Island. Rawaki is a critically important island because it supports the only remaining breeding populations of several procellariiform species in the Phoenix Islands, including the Phoenix petrel and white-throated storm petrel, but rabbits are impacting these and other species and the ecosystem there. The removal of pests from key islands is achievable and will enable firstly the security of these seabird species to be achieved and secondly their recovery in the Phoenix Islands group as a whole. Report provided for peer review 10 July 2006,

Feasibility report peer reviewed by key stakeholders.	comments pending as at 3 August 2006.
<b>Output 3.</b> Prepare operational plan(s) for restoration of priority islands in the Phoenix Group detailing recommended methodology, budget, timing, non-target issues, and monitoring and maintenance of pest-free status.	Draft operational plans completed for Rawaki, McKean and Birnie Islands 10 July 2006.
<b>3.1.</b> Detailed operational plan(s) for managing invasive alien species completed for priority atolls in the Phoenix Group by June 2006.	A three-island pest eradication approach is recommended for mid 2007: Rawaki – rabbits – provisional recommendations of poisoning, dogging, spotlighting, shooting. McKean – Asian black rats – anticoagulant via hand spread and in bait stations. Birnie – Pacific rat – anticoagulant by hand spread - also used as a learning programme for the much larger Enderbury Island.
<b>3.2.</b> Operational plans peer reviewed and signed off by key stakeholders July 2006.	Provided for peer review 10 July 2006, comments pending as at 3 August 2006.

7. Describe the success of the project in terms of delivering the intended outputs.

Completely successful:

Output 1 (surveys) - The project determined that while some pest species have died out in the Group, others have arrived in recent times, including Asian black rats on McKean Island and which have eliminated many species of sensitive seabirds on that island.

Output 2 (feasibility) – The project determined that pest eradication is currently feasible, particularly from the three small islands – Rawaki, McKean and Birnie. Rawaki will play a crucial role in the recovery of seabirds in the Group as a whole following pest eradications, because it will provide dispersing birds of up to 18 species to the other islands when those islands are restored. Non-target issues are significant (crabs, curlews and other waders), but manageable by adaptive approach and careful timing.

Output 3 (operational plans) – These are provided for Rawaki (Rabbits), McKean and Birnie. The Birnie operation can be used partly as a learning project to assist with planning for the much larger Enderbury Island which also has Pacific rats. It is likely that peer review and further research will involve some changes to eradication methods.

8. Were any outputs unrealized? If so, why and how did you address these?

Manra Island was a priority 2 island for survey, but was not landed on due to dangerous sea conditions. Data on Manra birds was collected by observing returning birds at night and comparing these findings with a 2000 survey report which also documented mammals (Kepler et al 2000).

9. How did the lack of achievement of these outputs affect the overall impact of the project?

Did not affect the overall findings and recommendations.

### VI. LESSONS LEARNED FROM THE PROJECT

## Describe any lessons learned during the various phases of the project. Consider lessons both for future projects, as well as for CEPF's future performance.

Planning time for the expedition was very tight due to financial year constraints – a greater lead in time is needed for this sort of work to ensure adequate preparation of all participants.

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

Rapid survey methods (refer technical report) are essential for the success of these sorts of projects.

#### Project Execution: (aspects of the project execution that contributed to its success/failure)

Island surveys require experienced technical staff and support staff which was the case here – technical staff were able to adapt survey methods to local conditions and support staff dealt with the many logistic and safety issues.

### **VII. 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
PII Auckland	Α.	\$3642.56	Contingency for increased
			costs of Kiribati participation

### \*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** Complementary funding (Other donors contribute to partner organizations that are working on a project linked with this CEPF funded project)
- *C* 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.)
- **D** Regional/Portfolio leveraging (Other donors make large investments in a region because of CEPF investment or successes related to this project.)

## Provide details of whether this project will continue in the future and if so, how any additional funding already secured or fundraising plans will help ensure its sustainability.

The next stage (management planning) is likely to be funded via an RNHP bid (S Taei pers. comm.).

The following stage (pest eradication) will take place subject to approvals and funding in 2007.

### VIII. ADDITIONAL COMMENTS AND RECOMMENDATIONS

Please provide any additional information you think may assist CEPF in understanding any other aspects of your completed project.

Describe any follow-up activities you wish to implement and how you intend to do so (eg other invasive species management actions you wish to pursue, or how you plan to scale up the project to a broader area).

Refer VII above.

This project is supported by the Australian government's Regional Natural Heritage Program through the Critical Ecosystem Partnership Fund.

The Critical Ecosystem Partnership Fund is a joint initiative of Conservation International, the Global Environment Facility, the Government of Japan, the MacArthur Foundation and the World Bank. A fundamental goal is to ensure civil society is engaged in biodiversity conservation.

### IX. INFORMATION SHARING

CEPF aims to increase sharing of experiences, lessons learned and results among our grant recipients and the wider conservation and donor communities. One way we do this is by making the text of final project completion reports available on our Web site, <u>www.cepf.net</u>, and by marketing these reports in our newsletter and other communications. Please indicate whether you would agree to publicly sharing your final project report with others in this way. Yes

If yes, please also complete the following:

### For more information about this project, please contact:

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