

## Darwin Initiative Main Project Annual Report

**Important note:** To be completed with reference to the Reporting Guidance Notes for Project Leaders:

*it is expected that this report will be about 10 pages in length, excluding annexes*

**Submission Deadline: 30 April**

### Darwin Project Information

Project Reference	19-028
Project Title	Addressing the threat of Invasive Species in Pitcairn Overseas Territory
Host Country/ies	Pitcairn Islands
Contract Holder Institution	Royal Society for the Protection of Birds (RSPB)
Partner institutions	Pitcairn Natural Resources Division (NRD)
Darwin Grant Value	£287,060
Funder (DFID/Defra)	Defra
Start/end dates of project	15 April 2012 to 30 March 2016
Reporting period (e.g., Apr 2015 – Mar 2016) and number (e.g., Annual Report 1, 2, 3)	Annual Report 3 April 2014 to March 2015
Project Leader name	John Kelly
Project website/blog/Twitter	Not applicable
Report author(s) and date	John Kelly 29 April 2014 Ruth Sharman 29 April 2014

### 1. Project Rationale

The Pitcairn Islands UK Overseas Territory, comprising of Pitcairn, Henderson, Ducie and Oeno Islands, located in the South Pacific Ocean, boasts unique biodiversity of global significance. Henderson Island, a UNESCO World Heritage Site, supports the entire breeding populations of four globally threatened land birds, and is the only known nesting location of the Endangered Henderson petrel. Oeno Island holds breeding populations of the globally Endangered Phoenix petrel and important numbers of Murphy's petrels. All four islands in the Pitcairn group are Important Bird Areas (IBAs). One of the principal threats to the Pitcairn Islands, and other islands in the Pacific region, is the impact posed by Invasive Alien Species (IAS). Rats and other mammalian predators are well known for their impact on islands, and other less obvious species such as plants and invertebrates can also cause major changes to island ecosystems. The presence of rats and other invasive pests on Pitcairn Island (the only inhabited island of the group) may have a significant socio-economic impact in terms of lost crop production and ongoing control costs, as well as negatively affecting quality of life. The risk of new IAS arriving from French Polynesia to the Pitcairn Islands group is significant, whilst the outer islands of Henderson, Oeno and Ducie are threatened by the spread of IAS already established on Pitcairn Island, including rats. Within the wider Pacific region the same threats from IAS exist forming a major part of conservation efforts in the area. These threats are often most severe in countries with limited resources and capacity, including the Cook Islands and Kiribati.

In 2011 the RSPB in partnership with the Pitcairn Natural Resources Division (NRD) and other partners undertook a rat eradication operation on Henderson Island, the largest tropical island attempted to date. Unfortunately subsequent visits to the island have established that this eradication failed. This Darwin Project aims to undertake work to assess the reasons behind the 2011 eradication failure, to monitor the status of biodiversity on Henderson Island following the failed eradication, and improve biosecurity measures and the capacity for eradications in Pitcairn and the wider Pacific region by working with Pitcairn NRD and partners in the Cook Islands and Kiribati

## 2. Project Partnerships

The geographic scope of the project requires effective working with other organisations based in the Pacific region. The project has built on an ongoing collaboration between the RSPB, the Pitcairn Natural Resource Department (NRD) and with the Pitcairn community.

We entered into partnership with Eco Oceania Pty Ltd, BirdLife Pacific and the Pacific Invasives Initiative to deliver required work in both Cook Islands and Kiribati during the financial year 2014/15.

We entered into partnership with Biodiversity Restoration Specialists (NZ) Ltd to deliver biosecurity training, develop the rodent and cat eradication feasibility study and undertake field work in relation to the economic impact assessment of invasive species on Pitcairn Island during August – September 2014.

Outside formal partnerships, opportunities are also being sought to find synergies with the Darwin Plus project and other environmental projects that are currently being implemented on Pitcairn. We have identified the opportunity to share ship time with the *Developing a sustainable marine and fisheries management plan for the Pitcairn islands* Darwin Plus project.

## 3. Project Progress

### 3.1 Progress in carrying out project activities<sup>1</sup>

**Activity 2. Capacity is built in the Pitcairn Islands to maintain the pest free status of Henderson, Oneo and Ducie Islands.**

**Activity 3. The feasibility of eradication of pests on Pitcairn Island is assessed and continued support for Henderson Island assessed.**

A local Pitcairn Islander, Sue O’Keefe, worked as an assistant in the Pitcairn Natural Resources Division (NRD) in order to support the development and passage of biosecurity legislation (all previous biosecurity legislation having been removed over 6 years ago, leaving Pitcairn’s vulnerable natural environment exposed). She also provided specific support on various IAS policies in Pitcairn.

An 18 day field visit by Grant Harper to Pitcairn Island took place during August. The purpose of which was 1) conduct training of relevant staff in biosecurity and biological monitoring; 2) assess biosecurity systems on Pitcairn Island; 3) conduct a survey of inhabitants on views on invasive species and a socio-economic impact of invasive species; and 4) assess feasibility of rat and cat eradication on Pitcairn Island.

- The training programme was well received. Feedback from Michele Christian at the Natural Resources Division received *via* the FCO was positive: *‘The training provided to the NR Division staff was valuable and I’m pleased to say Grant was very impressed with the amount of knowledge the staff have on bio security matters, obviously there are a couple of things that need to be tightened up which we are currently addressing. The feedback from Grant was very useful and thank you to RSPB. I support future efforts by RSPB in providing training to Pitcairn’*

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<sup>1</sup> Please see previous annual reports for progress on activities not discussed here.

- Monitoring transects were established for birds, lizards and rats. Depending on costs and availability, these transects will be run seasonally by islanders Carol and Jay Warren.
- The assessment of biosecurity practices resulted in the identification of a number of weaknesses with recommendations to improve biosecurity currently been drafted.
- The feasibility of a possible rat and cat eradication was assessed. The project appears to be feasible, with the township requiring the most attention due to several risks for an eradication, such as alternative food from chickens and fruiting trees.
- The preliminary results from the survey conducted indicates that there is strong support for a rat eradication and slightly less support for a cat eradication, mainly due to issues with possible secondary poisoning of pet cats and the likely explosion in rat numbers should the eradication fail.

The executive summaries of reports submitted by Grant Harper are included in Appendix 4.

**Activity 1.d By end of project, organise a six month expedition to Henderson Island to address feasibility issues which have arisen during the course of the project.**

Preparations for the additional expedition to Henderson Island are well underway. At the time of writing, the project manager is engaged in recruitment of all staff; booking of flights and accommodation; procurement of all materials required; arrangements with a purchaser in New Zealand; facilitating customs clearance in New Zealand for all supplies coming from Australia, USA, and UK; and engaged with the Pitcairn Island NRD to arrange permissions for the scientific work as well as recruitment of two camp assistants from the local community. The research plan has been included in Appendix 4.

**Activity 4. Eradication benefits shared and capacity built to deliver post eradication monitoring and island restoration studies at two additional partner organisations in the Pacific.**

Ray Pierce and Bill Nagle (Pacific Invasives Initiatives) visited Kiritimati (Christmas Island) during 30 April – 7 May. They facilitated a biosecurity capacity building workshop and scoping of a biosecurity action plan for Kiritimati and Kanton in the Phoenix Islands. The completed action plan will provide guidance to Kiribati as a whole and identify key actions at key sites within the country and activities which should occur in conjunction with trading partners. Practical work at Kiritimati included surveillance of pest-free motu, surveillance and management advice for an existing incursion (yellow crazy ant), workshops to review principles of biosecurity and identify IAS and their likely sources, pathways and arrival points and actions needed to prevent their invasion of Kiribati. This included a site visit to the Kiribati Port Authority complex to evaluate risks and needs for improving local biosecurity. Related work included a community awareness day presented by local government staff to importers. It was noted that significant improvements in resourcing, awareness and attitudes are needed by Kiribati to effectively manage IAS issues.

Ray Pierce, Souad Boudjelas (Pacific Invasive Initiative) and Steve Cranwell (BirdLife Pacific) conducted a field visit to the Cook Islands during 20 – 30 May to assist with conservation planning for two outer islands. The work was in two parts – firstly undertaking a workshop to scope a biosecurity action plan for Suvarrow and secondly to survey Takutea motu as a first step in assisting the Takutea Trust to restore Takutea. The biosecurity workshop involved three days of planning with staff of agencies (Quarantine, Environment, Port, Warehouses) and Te Ipukarea Trust. This planning initially involved a revision of basic biosecurity principles before developing risk assessments for Suvarrow based on the participants' collective knowledge of potential IAS and their sources, pathways and risks of reaching Suvarrow. The final session identified actions needed by agencies to mitigate the chances of IAS incursions at Suvarrow and was followed up with meetings with Port Authority and government agencies. A draft action plan is currently being prepared for input by attendees.

Planning for possible Takutea restoration involved initial meetings with Trustees at Atiu followed by a 3-night survey of Takutea. This involved general surveys of vegetation and birds and targeted surveys of rats and crabs. A further meeting with the Trust was held to consider options for management which ranged from “doing nothing” to rat eradication and strengthening biosecurity.

See Appendix 4 for the Executive Summary of all reports submitted.

### 3.2 Progress towards project outputs

Output	Status	Appendix / comment
<i>1.a Two expeditions to Henderson Island are organised during 2012 to follow up rat sighting and assess impact on bird populations.</i>	Complete. Additional six month expedition planned for 2015.	n/a
<i>1.b By end 2013, organise follow up expedition to Henderson and Oeno islands completed to establish and further monitor impacts of rat eradication operations (failure and success) and undertake research to understand and further eradication operations.</i>	Complete. Additional expedition added to this project. Logistical preparations have been ongoing during 2014/15 with the expedition carried out during 2015/16	Relevant report submitted in 2014. Peer review paper currently in preparation.
<i>1.c By end of project (EOP) long-term methods established for monitoring the biodiversity changes on Henderson and Oeno are in place.</i>	Original objectives completed however, additional work will be carried out during 2015 and reported on next year.	n/a
<i>2.a By end 2014, biosecurity measures on Pitcairn island have been assessed, and areas for improvement identified.</i>	Completed as per original objectives.	Technical report completed by Grant Harper. See Appendix 4 for Executive Summary.
<i>2.b By end 2014, 2 Pitcairn government staff receive training in biosecurity activities.</i>	Complete	n/a
<i>2.c By EOP, 2 Pitcairn staff receive training in ecological survey and monitoring, biosecurity measures, and planning for eradication/control of IAS</i>	Complete. Positive feed back received from Pitcairn Island Government.	n/a
<i>2.d By EOP, biosecurity and ecological monitoring protocols developed, agreed and implemented by Pitcairn government.</i>	Complete however, implementation by Pitcairn government has been delayed due to lack of financial resources. RSPB is investigating options.	n/a

<i>3.a By 2013, community meeting held to discuss potential Pitcairn Island wide pest eradication.</i>	Completed	Submitted in 2013 with additional work carried out in 2014.
<i>3.b By end of 2014, a socioeconomic study completed to assess livelihood benefits of pest eradication on Pitcairn.</i>	Completed	Technical report completed by Grant Harper. See Appendix 4 for Executive Summary.
<i>3.c By end of 2014, a feasibility study carried out to assess Pitcairn suitability for pest eradication.</i>	Completed	Technical report completed by Grant Harper. See Appendix 4 for Executive Summary.
<i>3.d By EOP, two major preparatory actions identified in the Pitcairn feasibility study are initiated and funded.</i>	Ongoing	The major preparatory actions are the improved biosecurity legislation and the engagement with the community. If an eradication programme is ever implemented on Pitcairn, effective legislation and community engagement will be crucial.
<i>4.a By EOP, workshops with Pitcairn project staff and with staff from 2 additional Pacific islands to share project benefits and experiences.</i>	Completed – but approach modified from original due to the difficulties identifying a Pitcairner willing to travel for event.	n/a
<i>4.b By EOP monitoring studies established on 2 island countries or territories in the Pacific region.</i>	Completed	Technical report completed by Ray Pierce. See Appendix 4 for Executive Summary.
<i>4.c By end of 2014 feasibility and biosecurity study carried out on 1 additional island country or territory in the Pacific region.</i>	Completed	Technical report completed by Ray Pierce. See Appendix 4 for Executive Summary.

### **3.3 Progress towards the project Outcome**

We have made excellent progress to achieve the project outcomes over the previous year. All of the original project components have been broadly achieved. The outstanding aspects of this project is the additional expedition to Henderson Island and some editorial changes to the submitted reports received.

### **3.4 Monitoring of assumptions**

While the main assumptions and indicators remain valid for this project, we reported in our previous annual report that we had some concern that the goat cull on Pitcairn Island may have an adverse effect on any plans to remove rats and cats. This appears not to materialise with the community appearing to remain supportive of a rodent eradication but more cautious about cat eradication due to the previous failed attempt in 97/98.

### **3.5 Impact: achievement of positive impact on biodiversity and poverty alleviation**

The project's goal is to "Capacity and knowledge in place to maintain, monitor, understand and deliver biodiversity benefits from island restoration in the Pacific countries and territories."

Key progress on the project goal was made during 2014/15 with Grant Harpers visit to the island and planning for the 2015 expedition.

Over the last year, the project has brought part time employment to one member of the Pitcairn Community and the project will continue to support other members of the community during the coming year.

The assessment on the socio-economic costs of IAS on Pitcairn Island was carried out. The assessment and approach was informed by the recent report on the economy of Pitcairn Island. This report identified that the economy is largely driven by UK budgetary aid. The main impact of invasive species to the economy is therefore impact on indigenous food production, housing and lifestyle of the Pitcairners. Removal of invasive species could improve the sustainability prospects of the community with increased crop yields, removal of contamination, protection of soils, prevent damage to housing and wiring.

#### **4. Project support to the Conventions (CBD, CMS and/or CITES)**

The endangered Henderson petrel is listed on Appendix I of the CMS, to which both Pitcairn and the UK are signatories. Particular articles of relevance are that the parties:

*3(a) should promote, co-operate in and support research relating to migratory species;*  
*3(b) shall endeavour to provide immediate protection for migratory species included in Appendix I.*

Whilst the CBD has not been extended to Pitcairn, this project is of direct relevance to the UKs CBD commitment, in particular Articles:

*8(h) "Prevent the introduction of, control, or eradicate those alien species which threaten ecosystems, habitats or species"*

*12 (a) "Establish and maintain programmes for scientific and technical education and training in measures for the identification, conservation and sustainable use of biological diversity.... provide support for such education and training for the specific needs of developing countries"*

#### **5. Project support to poverty alleviation**

This project was not specifically designed to address poverty alleviation. Relevant comments have been addressed in Section 3.5 above.

#### **6. Project support to Gender equity issues**

Gender equity issues was not a target specifically set at the outset of this project, however, where possible, the project has tried to ensure gender equality in recruitment of all project staff.

#### **7. Monitoring and evaluation**

Monitoring and evaluation has been undertaken through regular meetings and discussions on the project within the RSPB and communication with staff of the Pitcairn NRD. Communication with Pitcairn NRD has been challenging this year due to the Michelle Christian spending time off Pitcairn due to bereavement. This has created a backlog of work leading to delayed decision making for many aspects of the project.

#### **8. Lessons learnt**

Four members (two from each team) of the Henderson Island research will undergo Advanced Wilderness Medical Training during April 2015. This training is crucial for working in such remote areas with no easy access to doctors or evacuation. Similar projects should undergo this type of training with budgets allocated accordingly.

The logistical preparations for this six month expedition have encountered some issues with internationally sourced items delayed in customs with associated charges. These delays are difficult to predict. The time difference has also created delays responding to requests with irregular out of hours working required to address comments in a timely manner.

Sourcing of many supplies out of New Zealand has resulted in unexpected delays due to suppliers inability to accept payments online *via* credit cards. Payments for many supplies are only possible through bank transfers. This process is time consuming. An organisation such as the RSPB has strict payment schedule where payments can only be made once a week. Payments then take at least ten days to arrive in the NZ account with a charge deducted at both ends of the transactions. Suppliers often request payment of this charge after the fact.

## **9. Actions taken in response to previous reviews (if applicable)**

### ***Stronger evidence of the poverty alleviation/ socioeconomic benefits of pest eradication***

While there is evidence that pest eradication will benefit for the Pitcairn Island community, it is not conclusive that IAS are the key driver of poverty on Pitcairn. IAS are not the main issue facing the Pitcairn community, when viewed in context of the continued depopulation and isolation of the island.

### ***Improve Darwin publicity***

The Darwin logo has been used and acknowledged in all public meetings held and receives prominence on the front cover of all draft reports.

Over the next year, we anticipate three Henderson Island Newsletters. This newsletter will include acknowledgement of the Darwin Initiative.

The Darwin Initiative will be acknowledged in all peer review publications arising from the project.

## **10. Other comments on progress not covered elsewhere**

The major risk to the project now is in relation to the expedition to Henderson Island. The risks are manifold and can only be addressed by good preparation and contingency planning. The project manager is currently engaged heavily in arranging the logistics for this expedition. As part of this, individual risk assessments will be required as well as an evacuation plan. Medical training provided to two members of the team for each phase and appropriate insurance put in place.

## **11. Sustainability and legacy**

The in country profile of the project was greatly enhanced by the visit of Grant Harper to Pitcairn Island and the work carried out in Cooks and Kiribati.

There is evidence of increased capacity been built through the receipt of a request for funding to support biosecurity and biodiversity monitoring on Pitcairn. The RSPB is not in a position to support these costs but is investigating options.

The RSPB will continue to engage with Pitcairn Island NRD and also work to eradicate rats from Henderson Island.

## **12. Darwin Identity**

### ***Improve Darwin publicity***

The Darwin logo has been used and acknowledged in all public meetings held and receives prominence on the front cover of all draft reports.

Over the next year, we anticipate three Henderson Island Newsletters. This newsletter will include acknowledgement of the Darwin Initiative.

The Darwin Initiative will be acknowledged in all peer review publications arising from the project.

### 13. Project Expenditure

Please expand and complete Table 1.

**Table 1 Project expenditure during the reporting period (1 April 2014 – 31 March 2015)**

Project spend (indicative) since last annual report	2014/15 Grant (£)	2014/15 Total Darwin Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)				
Consultancy costs				
Overhead Costs				
Travel and subsistence				
Operating Costs				
Capital items (see below)				
Others (see below)				
<b>TOTAL</b>	<b>59,880</b>	<b>59,880</b>		

Highlight any agreed changes to the budget and **fully** explain any variation in expenditure where this is +/- 10% of the budget. Have these changes been discussed with and approved by Darwin?

### 14. **OPTIONAL: Outstanding achievements of your project during the reporting period (300-400 words maximum). This section may be used for publicity purposes**



## Annex 1: Report of progress and achievements against Logical Framework for Financial Year 2014-2015

Project summary	Measurable Indicators	Progress and Achievements April 2014 - March 2015	Actions required/planned for next period
<p><b>Goal/Impact</b></p> <p>Capacity and knowledge in place to maintain, monitor, understand and deliver biodiversity benefits from island restoration in the Pacific countries and territories.</p>		<p>There is heightened awareness on Pitcairn on impact of IAS and continued support for their eradication, including tackling issues of biosecurity.</p>	
<p><b>Purpose/Outcome</b></p> <p>The biodiversity and socioeconomic benefits of pest eradication in the Pitcairn Islands are understood, maintained, advanced, and shared.</p>	<ul style="list-style-type: none"> <li>- Pitcairn government and islanders implementing work-plans towards the eradications of pests and maintain pest free status of islands in the group</li> <li>- Pitcairn government and islanders established good supportive relationship with other organisations working to eradicate pests from Pacific islands.</li> </ul>	<p>Pitcairn government and islanders have continued to support RSPB's work on Henderson and have been consulted on their continued support for eradication plans for Henderson and feasibility assessment for Pitcairn – with a positive response from the community.</p>	<p>Key actions for 2014/15 include undertaking work on the Cook Islands, Kiribati and Pitcairn. Additionally, a significant requirement will be the preparation for the 2015 expedition to Henderson Island.</p>
<p><b>Output 1.</b></p> <p>The biodiversity benefits and ecological impact of pest eradication on Henderson, Oeno and Ducie Islands are understood and evaluated, and lessons learned for future eradication attempts are investigated.</p>	<p>1.a Two expeditions to Henderson Island are organised during 2012 to follow up rat sighting and assess impact on bird populations.</p> <p>1.b By end 2013, organise follow up expedition to Henderson and Oeno islands completed to establish and further monitor impacts of rat eradication operations (failure and success) and undertake research to understand and further eradication operations.</p> <p>1.c By end of project (EOP) long-term methods established for monitoring the biodiversity changes on Henderson and Oeno are in place.</p> <p>1.d By end of project, organise a six</p>	<p>1a – 1c Reported on in 2014</p> <p>Active preparations for 1d during 2014 – 15. This has required a significant amount of time to raise funding and ensure all supplies are in place for the expedition.</p>	

	month expedition to Henderson Island to address feasibility issues which have arisen during the course of the project.	
<b>Activities</b>		
1.1 Arrange ship charter and equipment for 2012 expeditions, contract expedition team and coordinate with Pitcairn to hire fieldworkers		Completed during 2012 and expedition reports completed.
1.2 Arrange ship charter and equipment for 2013 trip, contract expedition team and coordinate with Pitcairn to hire fieldworkers, plan fieldwork, logistics and results of expedition published		Completed during 2013 and expedition reports in draft. Preparation of final reports will be considered during the planning of the 2015 expedition.
1.3 Monitoring methods for Henderson and other islands established and monitoring manual produced		Monitoring methods established for Oeno Atoll.
<b>Output 2.</b> Capacity is built in the Pitcairn Islands to maintain the pest free status of Henderson, Oneo and Ducie Islands.	<p>2.a By end 2013, biosecurity measures on Pitcairn island have been assessed, and areas for improvement identified.</p> <p>2.b By end 2014, 2 Pitcairn government staff receive training in biosecurity activities.</p> <p>2.c By Year 2, 2 Pitcairn staff receive training in ecological survey and monitoring, biosecurity measures, and planning for eradication/control of IAS</p> <p>2.d By EOP, biosecurity and ecological monitoring protocols developed, agreed and implemented by Pitcairn government.</p>	All work complete. Draft technical reports submitted to project manager. Editorial review required to ensure that content is appropriate for the local audience.
<b>Activities</b>		
2.1 Project Manager and/or contractor assess biosecurity on Pitcairn, report produced by end of Year 2 detailing recommendations for improved biosecurity		All work complete. Draft technical reports submitted to project manager. Editorial review required to ensure that content is appropriate for the local audience.
2.2 Identify 2 staff members on Pitcairn and identify gaps in knowledge, develop and undertake training plan and produce biosecurity manual for staff		Completed
2.3 Project staff on Pitcairn identified and trained during 2013 expedition and involved in production of monitoring manual		Project staff included three members of the Pitcairn community that were involved in the 2013 expedition.
2.4 Arrange training for Pitcairn staff to improve biosecurity/eradication knowledge and implementation		Completed

2.5 At least 2 key areas for biosecurity improved on Pitcairn either through training of staff skills and expertise and/or purchase/construction of equipment and materials to improve biosecurity (e.g. rodent bait stations, invertebrate traps, “clean” packing area)		Project has contributed to the improvement of biosecurity legislation on Pitcairn. Project has contributed to upskilling of two Pitcairners on the implementation of good practice biosecurity measures. Project has contributed to the improvement of biosecurity facilities on Pitcairn.
<b>Output 3.</b> The feasibility of eradication of pests on Pitcairn Island is assessed and continued support for Henderson Island assessed.	3.a By 2013, community meeting held to discuss potential Pitcairn Island wide pest eradication. 3.b By 2013, a socioeconomic study completed to assess livelihood benefits of pest eradication on Pitcairn. 3.c By 2013, a feasibility study carried out to assess Pitcairn suitability for pest eradication. 3.d By EOP, two major preparatory actions identified in the Pitcairn feasibility study are initiated and funded.	Completed  All work complete. Draft technical reports submitted to project manager.  All work complete. Draft technical reports submitted to project manager. Editorial review required to ensure that content is appropriate for the local audience.  The project has contributed to understanding local population concerns around the eradication of rodents and cats from Pitcairn Island.  The project has contributed to the improvement of biosecurity legislation on Pitcairn.
<b>Activities</b>		
3.1 Arrange suitable date for 2012-2013 community meeting		Reported on in 2014
3.2 Contract an experienced socio-economist to design questionnaire and study to assess livelihood costs and benefits of pests on Pitcairn		Completed.
3.3 Project Manager and/or experienced consultant undertake >10 day visit to the island to gather required information and write and publish a feasibility study		Dr Grant Harper (Biodiversity Restoration Specialists (NZ)) spent 18 days on Pitcairn.
3.4 Undertake training for Pitcairn staff (e.g. methods and knowledge of best goat/cat control options) and/or purchase required equipment/materials (e.g. purchase rat proof waste bins and chicken feeders to reduce food available to feral rat population) as identified in feasibility study		Biosecurity training has been provided, however, it is too early to carry out these activities due to no organisation having firm plans to eradicate cats and rats from Pitcairn Island. Any activity or progress would be premature when an eradication may not occur for some time.
<b>Output 4.</b> Eradication benefits shared and capacity built to deliver post eradication monitoring and island restoration studies at two additional partner organisations in the Pacific.	4.a By EOP, workshops with Pitcairn project staff and with staff from 2 additional Pacific islands to share project benefits and experiences. 4.b By 2014 monitoring studies established on 2 island countries or	Completed.  Completed. Reports submitted to project manager.

	<p>territories in the Pacific region.</p> <p>4.c By 2014 feasibility and biosecurity study carried out on 1 additional island country or territory in the pacific region.</p>	Completed. Reports submitted to project manager.
4.1 Organise workshops (either directly or through sub-contracting) with Pitcairn staff and the two Pacific partners in order to undertake on the ground training in establishing monitoring methods, developing feasibility studies, assessing biosecurity, and produce a monitoring manual, feasibility study and biosecurity manual for the case-study		Completed
4.2 Work with and support two Pacific partners in developing monitoring methods and manuals for 2 islands within Pacific region		Completed
4.3 Work with and support one Pacific partner to produce an eradication feasibility study and biosecurity manual and published these document before EOP		Completed

## Annex 2 Project's full current logframe

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<p>Goal:</p> <p>Effective contribution in support of the implementation of the objectives of the Convention on Biological Diversity (CBD), the Convention on Trade in Endangered Species (CITES), and the Convention on the Conservation of Migratory Species (CMS), as well as related targets set by countries rich in biodiversity but constrained in resources.</p>			
<p>Sub-Goal:</p> <p>Capacity and knowledge in place to maintain, monitor, understand and deliver biodiversity benefits from island restoration in the Pacific countries and territories.</p>	<ul style="list-style-type: none"> <li>- Monitoring methods established and capacity in place to follow populations of endemic and globally threatened species on Pitcairn Islands.</li> <li>- Impact of failed rat eradication on Henderson Island's biodiversity is understood and research in to causes of failure and plans for subsequent attempt investigated.</li> <li>- Recovery of species on Oeno Island post-rat eradication is better understood</li> <li>- One Island restoration plan including feasibility study, biosecurity assessment and emergency response plan, and two monitoring plans in place for additional island ecosystems in the Pacific region.</li> </ul>	<ul style="list-style-type: none"> <li>- CMS reports</li> <li>- IUCN Red List data</li> <li>- Island restoration plans</li> <li>- Monitoring and survey reports</li> <li>- Biosecurity protocols</li> </ul>	
<p>Purpose</p> <p>The biodiversity and socioeconomic benefits of pest eradication in the Pitcairn Islands are understood, maintained, advanced, and shared.</p>	<ul style="list-style-type: none"> <li>- Pitcairn government and islanders implementing work-plans towards the eradications of pests and maintain pest free status of islands in the group</li> <li>- Pitcairn government and islanders established good supportive relationship with other organisations working to eradicate pests from pacific islands.</li> </ul>	<ul style="list-style-type: none"> <li>- Biodiversity monitoring reports.</li> <li>- Final project report</li> <li>- Pitcairn Island eradication feasibility study</li> <li>- Pitcairn Island biosecurity protocols</li> <li>- Pitcairn government staff work-plans</li> <li>- Email and fax communications</li> </ul>	<p>Biodiversity, socioeconomic and quality of life benefits of pest eradication are sufficient to ensure community support for pest eradication on Pitcairn island.</p> <p>Trained staff remain working in Pitcairn or pass on capacity to others.</p>
<p>Outputs</p> <p>1. The biodiversity benefits and ecological impact of pest eradication on Henderson, Oeno and Ducie Islands are understood and evaluated, and lessons learned for</p>	<p>1.a Two expeditions to Henderson Island are organised during 2012 to follow up rat sighting and assess impact on bird populations.</p> <p>1.b By end 2013, organise follow up</p>	<ul style="list-style-type: none"> <li>- Biodiversity monitoring reports</li> <li>- Project progress and expedition reports.</li> <li>- Scientific publications.</li> </ul>	<p>Pitcairn Island community remains supportive of project on Henderson Island and shipping and transport options are available for visiting.</p>

<p>future eradication attempts are investigated.</p>	<p>expedition to Henderson and Oeno islands completed to establish and further monitor impacts of rat eradication operations (failure and success) and undertake research to understand and further eradication operations.</p> <p>1.c By end of project (EOP) long-term methods established for monitoring the biodiversity changes on Henderson and Oeno are in place.</p> <p>1.d By end of project, organise a six month expedition to Henderson Island to address feasibility issues which have arisen during the course of the project.</p>		
<p>2. Capacity is built in the Pitcairn Islands to maintain the pest free status of Henderson, Oneo and Ducie Islands.</p>	<p>2.a By end 2014, biosecurity measures on Pitcairn island have been assessed, and areas for improvement identified.</p> <p>2.b By end 2014, 2 Pitcairn government staff receive training in biosecurity activities.</p> <p>2.c By EOP, 2 Pitcairn staff receive training in ecological survey and monitoring, biosecurity measures, and planning for eradication/control of IAS</p> <p>2.d By EOP, biosecurity and ecological monitoring protocols developed, agreed and implemented by Pitcairn government.</p>	<ul style="list-style-type: none"> <li>- Consultancy report on Pitcairn biosecurity.</li> <li>- Project reports.</li> <li>- Government endorsed biosecurity plans and protocols.</li> <li>- Training reports posted on project website</li> </ul>	<p>Pitcairn Government pass new biosecurity legislation as part of the Henderson Island Restoration Project before 2014.</p>
<p>3. The feasibility of eradication of pests on Pitcairn Island is assessed and continued support for Henderson Island assessed.</p>	<p>3.a By 2013, community meeting held to discuss potential Pitcairn Island wide pest eradication.</p> <p>3.b By end of 2014, a socioeconomic study completed to assess livelihood benefits of pest eradication on Pitcairn.</p> <p>3.c By end of 2014, a feasibility study carried out to assess Pitcairn suitability</p>	<ul style="list-style-type: none"> <li>- Community meeting minutes</li> <li>- Socioeconomic report</li> <li>- Project progress reports</li> <li>- Feasibility study report</li> <li>- Funding applications for actions – <i>if appropriate.</i></li> </ul>	<p>Pitcairn islanders are supportive of proposals to eradicate introduced pests from Pitcairn Island.</p> <p>Funding of preparatory actions on Pitcairn Island will depend greatly on the results of the feasibility study, the 2015 expedition to Henderson Island and also RSPB's consideration of all available data. Funding applications for</p>

	<p>for pest eradication.</p> <p>3.d By EOP, two major preparatory actions identified in the Pitcairn feasibility study are initiated and funded.</p>		<p>major preparatory work may not be the correct course of action at this time.</p>
<p>4. Eradication benefits shared and capacity built to deliver post eradication monitoring and island restoration studies at two additional partner organisations in the Pacific.</p>	<p>4.a By EOP, hold workshops on Pitcairn Island and hold separate workshops on Cooks and Kiribati to share project benefits and experiences.</p> <p>4.b By EOP monitoring studies established on 2 island countries or territories in the Pacific region.</p> <p>4.c By end of 2014 feasibility and biosecurity study carried out on 1 additional island country or territory in the Pacific region.</p>	<ul style="list-style-type: none"> <li>- Project progress reports.</li> <li>- Workshop attendance records.</li> <li>- Biodiversity monitoring study reports</li> <li>- Feasibility study report</li> <li>- Biosecurity report</li> </ul>	<p>Partnership relations remain strong throughout the duration of the project.</p> <p>Funding to support monitoring studies and feasibility study secured</p>

**Activities** (n.b. Activities 1.1 to 1.3 support Output 1a to 1c, Activities 2.1 to 2.4 support Output 2a to 2d, etc)

- 1.1 Arrange ship charter and equipment for 2012 expeditions, contract expedition team and coordinate with Pitcairn to hire fieldworkers
- 1.2 Arrange ship charter and equipment for 2013 trip, contract expedition team and coordinate with Pitcairn to hire fieldworkers, plan fieldwork, logistics and results of expedition published
- 1.3 Monitoring methods for Henderson and other islands established and monitoring manual produced
- 1.4 Arrange ship charter and equipment for 2015 expeditions, acquire remaining funding requirements, contract expedition team, coordinate with Pitcairn to hire fit and able fieldworkers, prepare final reports.
- 2.1 Project Manager and/or contractor assess biosecurity on Pitcairn, report produced by end of Year 2 detailing recommendations for improved biosecurity
- 2.2 Identify 2 staff members on Pitcairn and identify gaps in knowledge, develop and undertake training plan and produce biosecurity manual for staff
- 2.3 Project staff on Pitcairn identified and trained during 2013 expedition and involved in production of monitoring manual
- 2.4 Arrange training for Pitcairn staff to improve biosecurity/eradication knowledge and implementation
- 2.5 At least 2 key areas for biosecurity improved on Pitcairn either through training of staff skills and expertise and/or purchase/construction of equipment and materials to improve biosecurity (e.g. rodent bait stations, invertebrate traps, "clean" packing area)
- 3.1 Arrange suitable date for 2012-2013 community meeting
- 3.2 Contract an experienced socio-economist to design questionnaire and study to assess livelihood costs and benefits of pests on Pitcairn
- 3.3 Project Manager and/or experienced consultant undertake >10 day visit to the island to gather required information and write and publish a feasibility study
- 3.4 Undertake training for Pitcairn staff (e.g. methods and knowledge of best goat/cat control options) and/or purchase required equipment/materials (e.g. purchase rat proof waste bins and chicken feeders to reduce food available to feral rat population) as identified in feasibility study
- 4.1 Organise workshops (either directly or through sub-contracting) with Pitcairn staff and the two Pacific partners in order to undertake on the ground training in establishing monitoring methods, developing feasibility studies, assessing biosecurity, and produce a monitoring manual, feasibility study and biosecurity manual for the case-study
- 4.2 Work with and support two Pacific partners in developing monitoring methods and manuals for 2 islands within Pacific region
- 4.3 Work with and support one Pacific partner to produce an eradication feasibility study and biosecurity manual and published these documents before EOP



## Annex 3 Standard Measures

Please expand and complete Table 1: new projects should complete the Y1 column and also indicate the number planned during the project lifetime. Continuing project should cut and paste the information from previous years and add in data for the most recent reporting period. Quantify project standard measures over the last year using the coding and format from the Darwin Initiative Standard Measures (see website for details: <http://darwin.defra.gov.uk/resources/>) and give a brief description. Please list and report on relevant Code No's. only. The level of detail required is specified in the Standard Measures Guidance notes under 'definitions and reporting requirements' column. Please devise and add any measures that are not captured in the current list. Please note that these measures may not be a substitute for output level objectively verifiable indicators in the project logframe.

**Table 1 Project Standard Output Measures**

Code No.	Description	Year 1 Total	Year 2 Total	Year 3 Total	Year 4 Total	Total to date	Number planned for reporting period	Total planned during the project
6A	Number of people to receive other forms of education/training	2	3	30	0	5		8
6B	Number of training weeks to be provided	4	1	4	0	5		4
7	Number of training materials to be produced for use by host country	0	0	TBC	0	0		3
8	Number of weeks to be spent by UK project staff on project work in the host country	6	9	0	27	15		8
9	Number of species/habitat management plans (or action plans) to be produced for Governments, public authorities, or other implementing agencies in the host country	0	0	3	0	0		3
10	Number of individual field guides/manuals to be produced to assist work related to species identification, classification and recording	0	1	0	0	1		1
11A	Number of papers to be published in peer reviewed journals	0	0	1 in draft	TBC	0		3
11B	Number of papers to be submitted to peer reviewed journals	0	0	0	TBC	0		2
12A	Number of computer based databases to be <b>established</b> and handed over to host country	0	0	0	1	0		1
14A	Number of conferences/seminars/workshops to be <b>organised</b> to present/disseminate findings	0	0	0	TBC	0		3
14B	Number of conferences/seminars/workshops <b>attended</b> at which findings from Darwin	0	1	0	TBC	1		2

	project work will be presented/ disseminated.							
15A	Number of national press releases in host country(ies)	0	0	0	0	0		n/a
15B	Number of local press releases in host country(ies)	0	0	0	0	0		n/a
15C	Number of national press releases in UK	0	0	0	0	0		3
19A	Number of national radio interviews/features in host county(ies)	0	0	0	0	0		n/a
19C	Number of local radio interviews/features in host country(ies)	0	0	0	0	0		n/a
20	Estimated value (£'s) of physical assets to be handed over to host country(ies)	0	0	0	0	0		TBC
22	Number of permanent field plots to be established during the project and continued after Darwin funding has ceased	0	19	19	TBC	0		3
23	Value of resources raised from other sources (ie in addition to Darwin funding) for project work	0	0			0		

In Table 2, provide full details of all publications and material produced over the last year that can be publicly accessed, e.g. title, name of publisher, contact details, cost. Mark (\*) all publications and other material that you have included with this report.

**Table 2 Publications**

<b>Title</b>	<b>Type</b> (e.g. journals, manual, CDs)	<b>Detail</b> (authors, year)	<b>Gender of Lead Author</b>	<b>Nationality of Lead Author</b>	<b>Publishers</b> (name, city)	<b>Available from</b> (e.g. website link or publisher)

## Checklist for submission

	Check
<b>Is the report less than 10MB?</b> If so, please email to <a href="mailto:Darwin-Projects@ltsi.co.uk">Darwin-Projects@ltsi.co.uk</a> putting the project number in the Subject line.	Yes
<b>Is your report more than 10MB?</b> If so, please discuss with <a href="mailto:Darwin-Projects@ltsi.co.uk">Darwin-Projects@ltsi.co.uk</a> about the best way to deliver the report, putting the project number in the Subject line.	No
<b>Have you included means of verification?</b> You need not submit every project document, but the main outputs and a selection of the others would strengthen the report.	Yes
<b>Do you have hard copies of material you want to submit with the report?</b> If so, please make this clear in the covering email and ensure all material is marked with the project number.	No
Have you involved your partners in preparation of the report and named the main contributors	No due to the busy work load Pitcairn NRD are currently experiencing.
Have you completed the Project Expenditure table fully?	Yes
Do not include claim forms or other communications with this report.	