



# Darwin Initiative 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 2011**

## 1. Darwin Project Information

Project Reference	18-017
Project Title	Developing knowledge to eradicate house mice from UK OT islands
Host Country/ies	Tristan da Cunha, Falklands and South Georgia
UK contract holder institution	Royal Society for the Protection of Birds (RSPB)
Host country partner institutions	Conservation Department Tristan da Cunha (CD-TDC), Falklands Conservation (FC), The Government of South Georgia and the South Sandwich Islands (GSGSSI)
Other partner institutions	University of Cape Town
Darwin Grant Value	£253,636
Start/end dates of project	01/04/2010 to 01/11/2012
Reporting period (eg Apr 2010 – Mar 2011) and number (eg Annual Report 1, 2, 3)	Annual Report 1 (April 2010 to March 2011)
Project Leader name	Dr Richard Cuthbert
Project website	<a href="http://www.rspb.org.uk/overseasterritories">www.rspb.org.uk/overseasterritories</a>
Report authors, main contributors and date	Author: Richard Cuthbert Contributors: Darren Christie, Craig Dockrill Date: 30 April 2011

## 2. Project Background

The islands of Tristan da Cunha, the Falklands and South Georgia are some of the most important sites for biodiversity within the United Kingdom Overseas Territories (UKOTs), supporting globally significant populations of seabirds, endemic plants, invertebrates and land birds. Several species of very high conservation concern are threatened by invasive species and, in particular, predation by introduced house mice. On the Gough Island World Heritage Site (Tristan da Cunha), predation by house mice on chicks of the Tristan albatross and Atlantic petrel is unsustainable for these populations, and is almost certainly causing rapid population declines of the endemic Gough bunting. Consequently, both the Gough bunting and Tristan albatross are classified as Critically Endangered by the IUCN. Mice on Gough Island are also likely to be causing ecosystem-wide impacts through predation of invertebrates and plants, and alteration of nutrient cycles. Research suggests that the impact of mice is likely to be most severe where they are the sole introduced rodent species. As a result, two other islands within the UKOTs are of real concern: mice are the sole species of rodent on Steeple Jason Island (Falklands) and on some areas of South Georgia. This project will build knowledge towards the eradication of mice from Gough Island, and will determine whether mice on Steeple Jason and South Georgia are having similar biodiversity impacts as on Gough as well as contributing towards their eradication from South Georgia.

## 3. Project Partnerships

The project's main partners are the Conservation Department on Tristan da Cunha is (CD-TDC) responsible for all research and conservation activities that are undertaken on Gough

Island and on islands within the Tristan Group, Falklands Conservation (FC) who are the Birdlife partner undertaking research and conservation in this island group, and the Government of South Georgia and the South Sandwich Islands (GSGSSI) which oversee work at South Georgia. Long-term partnerships are also in place between the RSPB and University of Cape Town (UCT) with regards the research and conservation management of Gough Island. Good relations have occurred between the RSPB and all three main project partners, with face to face meetings taking place on Tristan in September and October 2011 as well as regular telephone calls with the Head of the Conservation Department. Due to the distance and remoteness of the Falklands (where both FC and GSGSSI) most meetings have either been by phone calls or Skype video calls. A further working relationship has been established with researchers at the University of Auckland in order to collect samples of mice from New Zealand's Antipodes Island.

## **4. Project Progress**

### **4.1 Progress in carrying out project activities**

### **4.2 Progress towards project outputs**

#### ***Output 1***

*1a. Draft Operational Plan for eradication of mice from Gough Island*

*1b. Key remaining areas of uncertainty identified and steps taken to address these*

#### **Activities 1**

*1.1 Employ two experienced eradication operators to visit and produce draft Operational Plan with project manager for Gough Island*

*1.2 Operational managers identify key remaining steps that need to be addressed prior to an operation*

*1.3 Produce and disseminate operational plan*

*1.4 Produce report identifying key outstanding issues and develop work plans to address these*

Good progress has been made towards Output 1 and Activities 1.1-1.4 of the project. Two eradication experts from New Zealand (Nick Torr and Chris Golding) were contracted by the project and travel arrangements and logistics were put in place for these two experts to visit Gough Island in September-October 2010. These two experts were guided around Gough Island by the Project Manager during this period, and detailed ideas and plans were discussed on island. Following this visit a preliminary operational plan for Gough Island was produced, which as well as setting out prescriptions for the operation also highlighted further areas and steps to be undertaken. This operational plan was circulated to experts at the Island Eradication Advisory Group (IEAG) as well as to the Tristan Biodiversity Advisory Group (T-BAG). The Project Manager is currently planning research and work programmes to work towards the key remaining issues identified by the trip to Gough Island.

#### ***Output 2***

*2a. Research on conservation impacts of mice on Steeple Jason*

*2b. Mouse bait acceptance trials, non-target species trials and mice ecology research undertaken on Steeple Jason*

#### **Activities 2**

- 2.1 *Develop and agree research plans for Steeple Jason with Falklands Conservation and Wildlife Conservation Society*
- 2.2 *Recruit field biologists to work alongside partners, and train partners in methods studies on mice ecology, bait acceptance trials and mice impacts on high risk bird species*
- 2.3 *Organise permits, logistical support and equipment for field research*
- 2.4 *Carry out one summer and one winter field season of research on Steeple Jason*
- 2.5 *Produce and disseminate research reports from fieldwork*
- 2.6 *Incorporate research findings into Feasibility Assessment and produce Draft Operational Plan for mice eradication on Steeple Jason*

Significant progress has been made for Output 2 of the project with activities 2.1 to 2.5 all undertaken or begun during the first year. Plans for a summer season of fieldwork on Steeple Jason were made and agreed between the Project Manager and Falklands Conservation, and were approved by the Wildlife Conservation Society (WCS) whom own the island. Transport, logistics, field equipment and permits for the work were arranged in 2010 and in January 2011 4 weeks of fieldwork were undertaken on Steeple Jason. This fieldwork was led by experienced RSPB scientists Dr Mark Bolton and Andrew Stanbury and the fieldwork was run with two staff from the Falklands. Training and transfer of skills was undertaken during this fieldwork and follow up visits to Steeple Jason (in February and March 2011) were undertaken independently by the Falklands team. The fieldwork has established that mice are having significant biodiversity impacts on the ecology of Steeple Jason island, with both direct evidence of mouse predation (obtained through camera traps) as well as indirect evidence of their impacts (based on the distribution of mice and nesting storm-petrels). This research report has been circulated to project partners and WCS and the results will be published in a scientific journal in due course.

### **Output 3**

#### *3. Mouse bait acceptance trials and mice ecology research undertaken on South Georgia*

The mouse bait trials and research are planned for Year 2 of the project.

### **Output 4**

#### *4. Knowledge, capacity and awareness of conservation threat of mice and invasive species increased in Tristan, Falklands and South Georgia and within UK*

##### **Activities 4**

- 4.1 *Organise training for personnel from Tristan Conservation Department on helicopter safety and bait loading*
- 4.2 *Carry out training*
- 4.3 *Establish remote networks for bi-monthly updates between the project partners to collaborate on project planning*
- 4.4 *Produce educational materials and mouse game for use by UKOT children and visitors, disseminate materials to OTs*

Educational materials in the form of a "South Atlantic mouse game" were produced during the first year of the project and were led by the RSPB's International Educational Officer (Barrie Cooper) and Overseas Territories Officer (Clare Stringer). The resulting game (see Annex 4) highlights the biodiversity impacts of mice and rats at Gough Island and in the Falklands, as well as highlighting other conservation issues affecting these island groups (e.g. seabird mortality from longline fisheries and the impact of introduced non-native plants). These games will be distributed to schools on Tristan da Cunha and in the Falklands. Training of personnel at

the Tristan Conservation Department has not so far been undertaken, as this element of the project was not required during the first year of the work. Establishment of remote networks and bi-monthly updates has not been formally established between project partners, and updates and contacts are being undertaken informally through email, phone calls and Skype video calls.

### Output 5

*5. Steps taken to ensure the sustainability of research and action directed at eradicating invasive species on UKOTs beyond end of project*

The key elements of Output 5 will not be undertaken until Years 2 and 3 of the project.

### 4.3 Standard Measures

**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				2	2	10
6B	Number of training weeks to be provided	5				5	4	12
7	Number of training materials to be produced for use by host country	0				0	0	1
8	Number of weeks to be spent by UK project staff on project work in the host country	14				14	8	20
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	1				1	1	3
11A	Number of papers to be published in peer reviewed journals	0				0	0	2
11B	Number of papers to be submitted to peer reviewed journals	0				0	0	3
14A	Number of conferences/seminars/workshops to be <b>organised</b> to present/disseminate findings	0				0	0	1
14B	Number of conferences/seminars/workshops <b>attended</b> at which findings from Darwin project work	0				0	0	2

	will be presented/ disseminated.							
15A	Number of national press releases in host country(ies)	0				0	1	3
15C	Number of national press releases in UK	0				0	0	2
17A	Number of dissemination networks to be <b>established</b>	0					0	1
19A	Number of national radio interviews/features in host county(ies)	0				0	0	3
19B	Number of national radio interviews/features in UK	0				0	0	2
20	Estimated value (£'s) of physical assets to be handed over to host country(ies)	£0				£0	£1400	£6200
23	Value of resources raised from other sources for project work	£36, 181				£36, 181	£36,181	£77,181

**Table 2 Publications**

Type (eg journals, manual, CDs)	Detail (title, author, year)	Publishers (name, city)	Available from (eg contact address, website)	Cost £
Operational Plan	<i>Preliminary operational plan for eradicating house mice from Gough Island.</i> Nick Torr, Chris Golding and Richard Cuthbert (2011)	RSPB Sandy, UK	Authors and at <a href="http://www.rspb.org.uk/overs_eastterritories">www.rspb.org.uk/overs_eastterritories</a>	£0
Research report	<i>Assessing the impact of House mice (Mus musculus) on the native fauna of Steeple Jason, Falkland Islands.</i> Mark Bolton and Andrew Stanbury (2011)	RSPB Sandy, UK	Authors and Project Manager	£0
Education materials	<i>South Atlantic mouse game.</i> Anon (2011)	RSPB Sandy, UK	Project Manager	£0

#### 4.4 Progress towards the project purpose and outcomes

We consider that the first year of the project has made significant progress towards the main purpose of the project which is “to investigate the impact of mice on Steeple Jason in the Falkland Islands, produce draft operational plans for the eradication of mice from Steeple Jason and Gough Island, refine operational planning for mouse eradication on South Georgia, and create the capacity to undertake mouse eradication operations on all three islands”. Increased capacity has been raised at the Falklands, the impact of mice has been investigated at Steeple

Jason island and a draft operational plan has been produced and reviewed for Gough Island. The key assumptions of the project purpose all remain relevant and in place to continue with the project's work in Year 2 and 3.

#### **4.5 Progress towards impact on biodiversity, sustainable use or equitable sharing of biodiversity benefits**

The project has made some important progress towards securing biodiversity benefits for Gough Island, Steeple Jason and South Georgia, which will be met following the eradication of mice from these islands. While the eradication of mice from these islands is still some way off the production of a draft operational plan for Gough and knowledge of the impacts of mice at Steeple Jason are all essential building blocks towards the eventual eradication of mice at these sites.

### **5. Monitoring, evaluation and lessons**

Internal monitoring and evaluation of project progress has been undertaken through regular email exchanges, phone-calls and "Skype" sessions between the project manager and project partners. External evaluation of the project's output has been undertaken through circulating reports and operational plans including, for the latter, review by an expert panel at the New Zealand Department of Conservation Island Eradication Advisory Group (IEAG). More regular and structured updates and evaluation would be useful to the project, however this is made difficult by the dispersed location of the project partners and the often long-periods of fieldwork/operations that are taking place.

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

Not applicable

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

A project change request was made to Darwin in July 2010 following new developments at South Georgia (beginning the eradication of rodents in 2011) and advice from experts on the proposed bait trial on Gough Island (advised not to go ahead with this trial). These developments both occurred between the submission of the Stage 2 application and confirmation of funding, and the changes were approved by Darwin.

A further collaboration was established with University of Auckland researcher James Russell in order to coordinate the collection of mouse, plant and invertebrate samples from New Zealand's Antipodes Island, so that the results of this work can be compared with results obtained from Gough, Steeple Jason and South Georgia. The Antipodes Islands are one of the few islands where mice are the sole introduced species of rodent and potentially biodiversity impacts of mice at the Antipodes may mirror those occurring at Gough Island and Steeple Jason. This research is ongoing.

### **8. Sustainability**

The key elements of sustainability that the project has supplied so far is the transfer of knowledge to fieldworkers in Falklands Conservation through the field research undertaken in January 2011. Two experienced fieldworkers from the RSPB (Dr Mark Bolton and Andrew Stanbury) led this research on Steeple Jason and worked closely with two Falkland Islanders recruited by FC (Marilou Delignieres and Drew Robertson) providing instruction, guidance and experience of nest monitoring, using camera traps and rodent trapping. This experience should be of use for the project partner (FC) and the Falklands in any further research of this nature being undertaken in the area. Other areas of sustainability that the project will supply (such as training in baiting operations and operational planning) will not be undertaken until the second or third years of the project.

## **9. Dissemination**

Dissemination of the project's findings to date has been undertaken with project partners and key stakeholders involved with Gough and Steeple Jason islands. This has occurred for the Gough Island operational plan which has been circulated to all members of the Tristan Biodiversity Advisory Group (T-BAG) as well as to members of the New Zealand Department of Conservation Island Eradication Advisory Group (IEAG). This operational plan will be also be available on the RSPB's website where it will be freely accessible. Further dissemination of the project's finding has occurred with the production of the fieldwork report for Steeple Jason. This report has been circulated to all of the project partners (CD-TDC, GSGSSI and UCT) as well as to the Wildlife Conservation Society (WCS) who are the owners of Steeple Jason and gave permission for this work to go ahead. Key staff at WCS based in the Falklands and Patagonia have expressed great interest in the findings of this research, which has altered their perception on the impact of mice at Steeple Jason. Project partner Falklands Conservation have also presented the results of this work at a Birdlife Global Council meeting further disseminating the results of this project. The educational mouse game will be sent out in the coming year to teachers and schools at Tristan da Cunha, the Falklands and to South Georgia, providing further dissemination of the project and to a target audience (school children) that would otherwise be unaware of the work.

## 10. Project Expenditure

**Table 3 project expenditure during the reporting period (1 April 2010 – 31 March 2011)**

Item	Budget (Revised budget following project change request)	Expenditure	Variance/ Comments
Staff costs specified by individual			<b>-37%</b> Savings on staff costs due to contribution of RSPB staff time for fieldwork on Steeple Jason and much lower than expected costs for FC staff
Overhead costs			<b>-58%</b> Considerable savings on overheads due to these being calculated at 15-25% of staff costs, and staff costs lower than budgeted
Travel and subsistence			<b>-8%</b>
Operating costs			<b>-20%</b> Operating costs lower than budgeted in year 1
Capital items/equipment			<b>-26%</b> Equipment costs lower than budgeted in year 1
Others: Consultancy			Contracts for Gough Operational plan brought forward from year 2 to year 1 of project
Others			-
TOTAL			Overall expenditure matches original budget as under spend in staff costs, capital costs and overheads balanced by contractor costs.



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

I agree for LTS and the Darwin Secretariat to publish the content of this section (please leave this line in to indicate your agreement to use any material you provide here)

The main two achievements of the first year of this Darwin project are the drafting of an Preliminary Operational Plan for the eradication of mice from Gough Island and the discovery of the biodiversity impacts of house mice at Steeple Jason island in the Falklands. Production of an operational plan for Gough helps further the planning that will be required to undertake what will be one of the most challenging eradication operations to date and the benefit of having a draft plan in place is that it can be reviewed by eradication experts and also be modified in light of the lessons learned from other mice and rodent eradication operations. Knowledge of the predatory behaviour of mice at Steeple Jason Island (where they are the sole species of introduced rodent) has important implications for the future management of this island and assessing the feasibility of an eradication has become much more important for the island.

## Annex 1: Report of progress and achievements against Logical Framework for Financial Year 2010-2011

Project summary	Measurable Indicators	Progress and Achievements April 2010 - March 2011	Actions required/planned for next period
<p><b>Goal:</b> <i>To draw on expertise relevant to biodiversity from within the United Kingdom to work with local partners in countries rich in biodiversity but constrained in resources to achieve</i></p> <ul style="list-style-type: none"> <li>⇒ The conservation of biological diversity,</li> <li>⇒ The sustainable use of its components, and</li> <li>⇒ The fair and equitable sharing of the benefits arising out of the utilisation of genetic resources</li> </ul>			
<p><b>Purpose</b></p> <p>To investigate the impact of mice on Steeple Jason in the Falkland Islands, produce draft operational plans for the eradication of mice from Steeple Jason and Gough Island, refine operational planning for mouse eradication on South Georgia, and create the capacity to undertake mouse eradication operations on all three islands.</p>	<p>P(1) Knowledge on the impact of mice on Steeple Jason enhanced, and next steps in conservation action initiated by end of project</p> <p>P(2) Produce or contribute to the operational planning for mouse eradication from all three islands</p> <p>P(3) Staff on all three OTs have participated in operational planning and/or training by end of project</p>	<p>P(1) Knowledge of mice impacts now known for Steeple Jason</p> <p>P(2) Operational plan produced for Gough Island</p> <p>P(3) To be undertaken in years 2/3 of the project</p>	<p>P(1) Publish findings in scientific journal</p> <p>P(2) Work towards operational planning for South Georgia and fieldwork on South Georgia and Steeple Jason</p>
<p><b>Output 1</b></p> <p>1a. Draft Operational Plan for eradication of mice from Gough Island</p> <p>1b. Key remaining areas of uncertainty identified and steps taken to address these</p>	<p>1a. Key stakeholders agree and sign off draft Operational Plan for Gough Island published by Year 2</p> <p>1b. Report produced by Year 1 and work plan developed to address remaining steps in years 2 &amp; 3</p>	<p>1a Draft operational plan written and produced and circulated to key stakeholders for comment</p> <p>1b Remaining areas identified during drafting operational plan and field visit and following recommendations from IEAG (see Appendix 3)</p>	
<p><b>Activities 1</b></p> <p>1.1 Employ two experienced eradication operators to visit and produce draft Operational Plan with project manager for Gough Island</p> <p>1.2 Operational managers identify key remaining steps that need to be addressed prior to an operation</p> <p>1.3 Produce and disseminate operational plan</p> <p>1.4 Produce report identifying key outstanding issues and develop work plans to address these</p>		<p>1.1 Two eradication managers employed on Gough Island Sep-Oct 2010</p> <p>1.2 Key areas identified in plan and in IEAG review (see Appendix 2)</p> <p>1.3 Plan produced (see Appendix 2) and circulated</p> <p>1.4 Work plans currently being discussed with project partners and eradication experts</p>	

<p><b>Output 2</b></p> <p>2a. Research on conservation impacts of mice on Steeple Jason</p> <p>2b. Mouse bait acceptance trials, non-target species trials and mice ecology research undertaken on Steeple Jason</p> <p>2c. Feasibility Assessment and Draft Operational Plan of mice eradication produced for Steeple Jason</p>	<p>2a&amp;b. Published report and/or scientific papers produced in Years 2 &amp; 3</p> <p>2c Feasibility study published by Year 3, key stakeholders agree and sign off draft Operational Plan for Steeple Jason published by Year 3</p>	<p>2a. Research undertaken in January 2011 and report produced</p> <p>2b. To be undertaken in Year 2/3 of project</p> <p>2c. To be undertaken in Year 2/3 of project</p>
<p><b>Activities 2</b></p> <p>2.1 Develop and agree research plans for Steeple Jason with Falklands Conservation and Wildlife Conservation Society</p> <p>2.2 Recruit field biologists to work alongside partners, and train partners in methods studies on mice ecology, bait acceptance trials and mice impacts on high risk bird species</p> <p>2.3 Organise permits, logistical support and equipment for field research</p> <p>2.4 Carry out one summer and one winter field season of research on Steeple Jason</p> <p>2.5 Produce and disseminate research reports from fieldwork</p> <p>2.6 Incorporate research findings into Feasibility Assessment and produce Draft Operational Plan for mice eradication on Steeple Jason</p>		<p>2.1. Work plan developed and agreed</p> <p>2.2. RSPB and FC field biologists recruited</p> <p>2.3 Permits, logistics and equipment arranged</p> <p>2.4. Fieldwork undertaken January 2011</p> <p>2.5 Fieldwork report produced and circulated to project partners (FC and WCS)</p> <p>2.6 To be undertaken in Year 2/3 of project</p>
<p><b>Output 3</b></p> <p>3. Mouse bait acceptance trials and mice ecology research undertaken on South Georgia</p>	<p>3a. Published report and/or scientific papers produced in Years 2 &amp; 3</p> <p>3b Results of trials included in to operational planning for eradication on South Georgia</p>	<p>3a. To be undertaken in Year 2/3 of project</p> <p>3b. To be undertaken in Year 2/3 of project</p>
<p><b>Activities 3</b></p> <p>3.1 Develop and agree research plans with partners in South Georgia Government and with South Georgia Heritage Trust</p> <p>3.2 Recruit field biologists to work alongside partners on mice ecology and bait acceptance trials</p> <p>3.3 Organise permits, logistical support and equipment for field research</p> <p>3.4 Carry out fieldwork on South Georgia</p> <p>3.5 Produce and disseminate research reports from fieldwork</p> <p>3.6 Incorporate research findings into Operational Plan for mice eradication on</p>		<p>To be undertaken in Year 2/3 of project</p>

South Georgia		
<b>Output 4</b> 4. Knowledge, capacity and awareness of conservation threat of mice and invasive species increased in Tristan, Falklands and South Georgia and within UK	4a. Practical training in helicopter safety and bait loading given to 4 personnel from Tristan da Cunha  4b. Remote network and bi-monthly meetings/reports circulated among project partners during operational planning for Gough trial  4c. Educational game and materials produced Year 1  4d. >6 print and/or radio articles produced in OT and UK press Years 2 & 3	4a. To be undertaken in Year 2/3 of project  4b. Regular email contact between partners, but no formal network established  4c. Educational game and materials produced (see Appendix 4)  4c. To be undertaken in Year 2/3 of project
<b>Activities 4</b> 4.1 Organise training for personnel from Tristan Conservation Department on helicopter safety and bait loading 4.2 Carry out training 4.3 Establish remote networks for bi-monthly updates between the project partners to collaborate on project planning 4.4 Produce educational materials and mouse game for use by UKOT children and visitors, disseminate materials to OTs		4.1.. To be undertaken in Year 2/3 of project 4.2. To be undertaken in Year 2/3 of project 4.3. Formal networks need establishing 4.4 Educational mouse game produced
<b>Output 5</b> 5. Steps taken to ensure the sustainability of research and action directed at eradicating invasive species on UKOTs beyond end of project	5a. Funding proposals submitted to support eradication programme after end of project  5b. Conservation strategies promoted to other conservation networks within UKOTs, BirdLife partners and other oceanic islands by end Yr 3	To be undertaken in Year 2/3 of project
<b>Activities 5</b> 5.1 Write and submit funding proposals for supporting full eradication 5.2 Disseminate results of study and trials at workshops/conferences/meetings		To be undertaken in Year 2/3 of project

## Annex 2 Project's full current logframe

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<p>Goal:</p> <p><b>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.</b></p>			
<p><b>Sub-Goal:</b></p> <p>The restoration of Gough Island, Steeple Jason Island and South Georgia's biodiversity and ecosystem function to a favourable conservation status that is not negatively impacted by introduced House Mice</p>	<p>SG(1) Gough Island, Steeple Jason and areas of South Georgia declared free of House Mice</p> <p>SG(2) Step towards improvement in IUCN threat status of endangered and critically endangered bird species through removal of key terrestrial threat process</p>	<p>Reports to funding agencies document successful eradication of House Mice according to standard criteria for determining success.</p> <p>Revised IUCN Red List assessment document</p>	
<p><b>Purpose</b></p> <p>To investigate the impact of mice on Steeple Jason in the Falkland Islands, produce draft operational plans for the eradication of mice from Steeple Jason and Gough Island, refine operational planning for mouse eradication on South Georgia, and create the capacity to undertake mouse eradication operations on all three islands.</p>	<p>P(1) Knowledge on the impact of mice on Steeple Jason enhanced, and next steps in conservation action initiated by end of project</p> <p>P(2) Produce or contribute to the operational planning for mouse eradication from all three islands</p> <p>P(3) Staff on all three OTs have participated in operational planning and/or training by end of project</p>	<p>Scientific reports/papers on impacts of mice produced, Feasibility Assessment produced for Steeple Jason island, Draft Operational Plan for eradication of mice from Gough Island and Steeple Jason produced and favourably reviewed by New Zealand's Island Eradication Advisory Group (IEAG), results of research incorporated in to operational plan for South Georgia</p> <p>Review of Impacts and scientific papers submitted to journals and accepted by peer review,</p>	<p>Major new eradication projects in similar environments do not indicate fundamental obstacles for eradicating house mice</p> <p>No other major new terrestrial conservation threats arise on Gough Island, Steeple Jason or South Georgia</p> <p>Continued local and international support for participation of OT personnel in eradication training programme</p> <p>Staff are available to participate in training</p>

		<p>feasibility studies for mice eradication produced and submitted for review</p> <p>Training reports and activity manuals/handbooks produced</p>	
<p><b>Outputs</b></p> <p>1a. Draft Operational Plan for eradication of mice from Gough Island</p> <p>1b. Key remaining areas of uncertainty identified and steps taken to address these</p>	<p>1a. Key stakeholders agree and sign off draft Operational Plan for Gough Island published by Year 2</p> <p>1b. Report produced by Year 1 and work plan developed to address remaining steps in years 2 &amp; 3</p>	<p>1. Draft Operational Plan for Gough distributed and favourably reviewed by ISSG and eradication experts</p> <p>1b. Report circulated to relevant experts and remaining steps approved</p>	<p>Favourable outcome from bait acceptance trials and captive husbandry trials of non-target species on Gough Island</p> <p>Expert opinion continues to view mouse eradication as technically feasible</p> <p>Availability of experienced operational managers to visit Gough Island</p>
<p>2a. Research on conservation impacts of mice on Steeple Jason</p> <p>2b. Mouse bait acceptance trials, non-target species trials and mice ecology research undertaken on Steeple Jason</p> <p>2c. Feasibility Assessment and Draft Operational Plan of mice eradication produced for Steeple Jason</p>	<p>2a&amp;b. Published report and/or scientific papers produced in Years 2 &amp; 3</p> <p>2c Feasibility study published by Year 3, key stakeholders agree and sign off draft Operational Plan for Steeple Jason published by Year 3</p>	<p>2a&amp;b. Report circulated to relevant experts and peer-reviewed papers published</p> <p>2c. Feasibility Study and Draft Operational Plan favourably reviewed by IEAG and eradication experts</p>	<p>Suitable personnel recruited/involved to undertake research on Steeple Jason</p> <p>Berths and logistical support available for research programme</p> <p>Continued support from island owner (WCS) for research and plans</p> <p>Research on conservation impacts of mice justifies eradication operation</p> <p>Favourable outcome from bait acceptance and non-target trials on Steeple Jason</p>
<p>3. Mouse bait acceptance trials and mice ecology research undertaken on South Georgia</p>	<p>3a. Published report and/or scientific papers produced in Years 2 &amp; 3</p> <p>3b Results of trials included in to operational planning for</p>	<p>3a. Report circulated to relevant experts and peer-reviewed papers published</p> <p>3b. South Georgia operational</p>	<p>Suitable personnel recruited/involved to undertake research on South Georgia</p> <p>Berths and logistical support available for research programme</p>

	eradication on South Georgia	plan	Successful progress on initial stages of South Georgia eradication programme (for rats in 2011 and 2012)
4. Knowledge, capacity and awareness of conservation threat of mice and invasive species increased in Tristan, Falklands and South Georgia and within UK	<p>4a. Practical training in helicopter safety and bait loading given to 4 personnel from Tristan da Cunha</p> <p>4b. Remote network and bi-monthly meetings/reports circulated among project partners during operational planning for Gough trial</p> <p>4c. Educational game and materials produced Year 1</p> <p>4d. &gt;6 print and/or radio articles produced in OT and UK press Years 2 &amp; 3</p>	<p>4a. Training reports and photographs published on project partners and RSPB websites</p> <p>4b. Reports, written exchanges and dates of video-conferencing produced and published on project websites</p> <p>4c. Circulation numbers and educational material published on project website</p> <p>4d. Catalogue of published articles and press</p>	<p>NZ organisations continue to support project and allow participation in eradication operation for training</p> <p>Interest from local and national press in project's progress is maintained</p>
5. Steps taken to ensure the sustainability of research and action directed at eradicating invasive species on UKOTs beyond end of project	<p>5a. Funding proposals submitted to support eradication programme after end of project</p> <p>5b. Conservation strategies promoted to other conservation networks within UKOTs, BirdLife partners and other oceanic islands by end Yr 3</p>	<p>5a copies of funding proposals</p> <p>5b Reports taken to meetings, talks given</p>	

**Activities** (details in work plan) (n.b. Activities 1.1 to 1.6 support Output 1, Activities 2.1 to 2.2 support Output 2, etc)

- 1.5 Employ two experienced eradication operators to visit and produce draft Operational Plan with project manager for Gough Island
- 1.6 Operational managers identify key remaining steps that need to be addressed prior to an operation
- 1.7 Produce and disseminate operational plan
- 1.8 Produce report identifying key outstanding issues and develop work plans to address these
  
- 2.7 Develop and agree research plans for Steeple Jason with Falklands Conservation and Wildlife Conservation Society
- 2.8 Recruit field biologists to work alongside partners, and train partners in methods studies on mice ecology, bait acceptance trials and mice impacts on high risk bird species
- 2.9 Organise permits, logistical support and equipment for field research
- 2.10 Carry out one summer and one winter field season of research on Steeple Jason
- 2.11 Produce and disseminate research reports from fieldwork
- 2.12 Incorporate research findings into Feasibility Assessment and produce Draft Operational Plan for mice eradication on Steeple Jason
  
- 4.5 Develop and agree research plans with partners in South Georgia Government and with South Georgia Heritage Trust
- 4.6 Recruit field biologists to work alongside partners on mice ecology and bait acceptance trials
- 4.7 Organise permits, logistical support and equipment for field research
- 4.8 Carry out fieldwork on South Georgia
- 4.9 Produce and disseminate research reports from fieldwork
- 4.10 Incorporate research findings into Operational Plan for mice eradication on South Georgia
  
- 4.11 Organise training for personnel from Tristan Conservation Department on helicopter safety and bait loading
- 4.12 Carry out training
- 4.13 Establish remote networks for bi-monthly updates between the project partners to collaborate on project planning
- 4.14 Produce educational materials and mouse game for use by UKOT children and visitors, disseminate materials to OTs
  
- 5.3 Write and submit funding proposals for supporting full eradication
- 5.4 Disseminate results of study and trials at workshops/conferences/meetings



## **Annex 3 Supplementary Materials**

### Appendix 1.

*Assessing the impact of House mice (Mus musculus) on the native fauna of Steeple Jason, Falkland Islands. Mark Bolton and Andrew Stanbury (2011)*

### Appendix 2.

*Preliminary operational plan for eradicating house mice from Gough Island. Nick Torr, Chris Golding and Richard Cuthbert (2011)*

### Appendix 3.

*Island Eradication Advisory Group Meeting 15&16 December 2010 (review comments on the Preliminary operational plan for Gough Island)*

### Appendix 4.

*4(a) South Atlantic mouse game*

*4(b) Notes for South Atlantic mouse game*

## Checklist for submission

	Check
<b>Is the report less than 5MB?</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 5MB?</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	Yes
Have you completed the Project Expenditure table fully?	Yes
Do not include claim forms or other communications with this report.	