

Workshop Report: Assessing Management Options for the Introduced Rodents of Tristan da Cunha



13 – 14 October 2005, Robben Island, South Africa

A workshop to reach a consensus among stakeholders about the best strategy for reducing rodent impacts on biodiversity in the Tristan da Cunha Archipelago.



Workshop Report: Assessing Management Options for the Introduced Rodents of Tristan da Cunha

Prepared by Geoff Hilton
Senior Research Biologist
Royal Society for the Protection of Birds
The Lodge, Sandy, Bedfordshire, SG19 2DL, UK

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1. Report on Review of Impacts

John Cooper gave a summary of the findings of the Review of Impacts report (Angel & Cooper 2006¹). This describes the conservation values that these islands have, the extent of the historic and current impact of rodents on the islands, the consequences for biodiversity of reducing rodent impacts, and the consequences of doing nothing. Although both islands are relatively poorly understood from a biodiversity point of view, he noted that there was a particular paucity of literature on the impacts of rodents (rats and mice) on Tristan, and that more information was available for Gough (mice). Consequently, more of the conclusions about Tristan were based on expert inference than empirical data.

The discussion is summarised in Table 1 and Table 2 below.

2.1. CONCLUSIONS AND SYNTHESIS OF RODENT IMPACTS

The group, comprising the majority of vertebrate biologists that have worked on the Territory, took the opportunity to debate the Review of Impacts, to reach a conclusion and synthesis, and to suggest key areas of uncertainty.

Here we summarise main points of discussion:

¹ Angel A & Cooper J (2006). A Review of the Impacts of Introduced Rodents on the Islands of Tristan da Cunha and Gough. RSPB Research Report No. 17. Royal Society for the Protection of Birds, Sandy, United Kingdom. <http://www.rspb.org.uk>

Despite a lack of hard documentary evidence in the form of population estimates, it is the consensus that before the introduction of rodents and cats, there were almost certainly millions of pairs of nesting seabirds on Tristan, of numerous (perhaps 15-20) species. The evidence for this is:

- Extensive parts of the Base where the ground shows evidence of former burrowing, in areas where no seabirds now breed.
- Anecdotal nineteenth century reports of large numbers of seabird burrows in Tussock grass *Spartina arundinacea* on Settlement Plain.
- No conceivable reason why there would not have been comparable seabird densities on Tristan as there are currently on nearby rodent-free Nightingale and Inaccessible.

Further confirmation of the former presence of seabird mega-colonies, and of their effect on terrestrial ecology could be obtained using chemical tests: one could measure the nitrogen content or nitrogen stable isotope ratios of soil from Tristan, to confirm the extent and magnitude of former marine (seabird) input.

It was agreed that any rodent eradication plan on Tristan should include a cost/benefit analysis of the options for active restoration projects, as these might enhance the rate of recovery of seabird populations. This is particularly because some populations are already extirpated, or are at an extremely low level, and intrinsic population growth will be relatively slow. However, it was also

agreed that most species would recolonise naturally (and/or increase in number) given time. This natural recovery would be facilitated by the proximity of large seabird colonies on Nightingale, Inaccessible and Gough Islands.

Recent examples of reintroductions of procellariiform seabirds, through translocating and hand-rearing chicks, are encouraging. There are positive examples from New Zealand (fluttering shearwater *Puffinus gavia*, fairy prion *Pachyptila turtur*, diving-petrels Pelecanoididae), although such activities are labour intensive and costly, and still have a degree of uncertainty.

Reintroduction of landbirds would be more straightforward. However, there are different subspecies of Tristan bunting and Tristan thrush on different islands in the group, and therefore if reintroductions were made to Tristan they may not, strictly speaking, be of the original native type. It was thought unlikely that there would be any resistance to reintroductions in this instance, but it would be important to clarify what caused the decline in the first place and to follow international (IUCN) protocols for reintroductions. Genetic examination of the different sub-specific taxa on the Tristan group would also inform decisions about reintroductions.

Table 1. Synthesis of impacts of rodents on the biodiversity of the main island of Tristan.

Biodiversity element ¹	Historic rodent impact	Effect of reducing rodent impact	Consequences of no action against rodent impacts
Seabird Community	<ul style="list-style-type: none"> Formerly there were millions of pairs of seabirds, in a diverse community Numbers have decreased by <i>ca</i> two orders of magnitude Some vulnerable species probably extirpated Major knock-on effect on terrestrial ecology through massive reduction in nutrient input & soil disturbance 	<ul style="list-style-type: none"> Major long-term increase in small-medium sized seabirds, especially burrowing petrels Potential for active restoration to facilitate and increase the speed of recovery (e.g. use of models as lures to encourage Tristan albatrosses to re-colonise) 	<ul style="list-style-type: none"> Most remaining seabird species extirpated or effectively so, leaving only albatrosses, penguins and birds able to use offshore stacks.
Northern rockhopper penguin <i>Eudyptes moseleyi</i> (VU)	<ul style="list-style-type: none"> Possibly some rat predation on chicks, but population impacts likely to be minor 	<ul style="list-style-type: none"> Probably little impact 	<ul style="list-style-type: none"> Probably little impact
Tristan albatross <i>Diomedea dabbenena</i> (EN) Southern giant-petrel <i>Macronectes giganteus</i> (VU)	<ul style="list-style-type: none"> Both species formerly bred and are now extirpated, but rodents are thought very unlikely to have been a significant factor in the extirpation 	<ul style="list-style-type: none"> May facilitate re-colonisation by Tristan albatross, perhaps with active assistance, see above 	<ul style="list-style-type: none"> None: populations already extirpated

Biodiversity element ¹	Historic rodent impact	Effect of reducing rodent impact	Consequences of no action against rodent impacts
Atlantic yellow-nosed albatross <i>Thalassarche chlororhynchos</i> (EN) Sooty Albatross <i>Phoebastria fusca</i> (EN)	<ul style="list-style-type: none"> Unknown; there may be some chick predation, but not thought to be a major factor affecting population trend 	<ul style="list-style-type: none"> Probably little impact 	<ul style="list-style-type: none"> Probably little impact
Atlantic Petrel <i>Pterodroma incerta</i> (VU)	<ul style="list-style-type: none"> Unknown, but probably a large reduction in population size 	<ul style="list-style-type: none"> Population recovery 	<ul style="list-style-type: none"> Extirpation from Tristan, leaving the only remaining population on Gough, where it is heavily impacted by mice
Tristan Moorhen <i>Gallinula nesiotis</i> (EX)	<ul style="list-style-type: none"> Thought to be globally extinct² Causes of extinction unclear; rodents unlikely to be the primary cause 	<ul style="list-style-type: none"> None: species already extinct 	<ul style="list-style-type: none"> None: species already extinct
Tristan thrush <i>Nesocichla eremita</i> (NT)	<ul style="list-style-type: none"> Not known, but nest predation by rodents is likely to have caused major, and possibly ongoing decline Now scarce on Tristan, and current population trends are unknown 	<ul style="list-style-type: none"> Not known, but likely to be a substantial population recovery 	<ul style="list-style-type: none"> Not known, but species likely to remain scarce, and perhaps (continue to) decline towards extirpation

Biodiversity element ¹	Historic rodent impact	Effect of reducing rodent impact	Consequences of no action against rodent impacts
Tristan Bunting <i>Nesospiza acunhae</i> (VU)	<ul style="list-style-type: none"> Extirpated from Tristan Causes of extirpation not clear: rodents might not have been the only/major problem, since there were also substantial habitat changes 	<ul style="list-style-type: none"> Potential for (active) reintroduction from Nightingale and/or Inaccessible Islands 	<ul style="list-style-type: none"> Reintroduction not feasible
Native invertebrates	<ul style="list-style-type: none"> Effects not described There have probably been large negative effects on some (unknown) sensitive taxa (e.g. possibly the endemic flightless moths) 	<ul style="list-style-type: none"> Probable large increase in populations of some native species but not currently known which taxa would benefit. Unknown effect on invasive invertebrates, and the balance between natives and invasives 	<ul style="list-style-type: none"> Probable continued decline of some sensitive taxa. No recovery of sensitive taxa. Some native species may already be extinct or extirpated, with no possibility of recovery
Native flora	<ul style="list-style-type: none"> Effects not described Possibly large effect on some species/communities, through rodent predation on seeds, seedlings etc, and indirect effects on seabird numbers 	<ul style="list-style-type: none"> Not known Effect could be small; other factors such as grazing are more important Native flora could be negatively or positively affected, depending on how the removal of rodents affects the balance between native and invasive plant species 	<ul style="list-style-type: none"> Not known

Biodiversity element¹	Historic rodent impact	Effect of reducing rodent impact	Consequences of no action against rodent impacts
Native flora	<ul style="list-style-type: none"> Other factors operating since human colonisation are likely to have had a greater impact (especially livestock grazing) 		
Socio-economic	<ul style="list-style-type: none"> Negative effect on production and storage of fruit, vegetables Has greatly restricted the range of crops that can be produced Has caused increased dependence on imported food Domestic pest and environmental health hazard 	<ul style="list-style-type: none"> Potential for an increase in agricultural production & diversity of locally produced crops Potential for decrease in imports of fresh food and hence decrease in potential for introductions of invasive species & reduced costs of living 	<ul style="list-style-type: none"> No recovery in agricultural production. Agriculture continues to decline. No reduction in dependency on imported fresh foods
Nightingale & Inaccessible Islands	<ul style="list-style-type: none"> To date both islands are rodent free, and therefore support biodiversity of enormous global importance, including immense seabird colonies and endemic landbirds If rats were to colonise either islands, a catastrophic loss of biodiversity would occur 	<ul style="list-style-type: none"> Greatly reduced risk of introduction of rodents, since Tristan is by far the most likely source of an invasion 	<ul style="list-style-type: none"> Ongoing potential for introduction of rodents. Risk is increasing with increases in boat traffic associated with tourism and development

1: For individual taxa, the current IUCN Red List status is given. VU = Vulnerable; EN = Endangered; CR = Critically endangered; NT = Near-threatened, EX = Extinct.

2: There is considered to be a small possibility that at the time that Gough moorhens *Gallinula comeri* were introduced to Tristan in 1956, the Tristan moorhen was not extinct. In this case, the current moorhen population on Tristan may comprise a hybrid stock of both taxa.

Table 2. Synthesis of impacts of rodents on the biodiversity of Gough Island.

Biodiversity element¹	Historic rodent impact	Effect of reducing rodent impact	Consequences of no action against rodent impacts
Seabird community	<ul style="list-style-type: none"> • A very large community persists (millions of pairs of twenty species) • Probable ongoing declines of winter-breeding petrels (grey petrel <i>Procellaria cinerea</i> (NT), great-winged petrel <i>Pterodroma macroptera</i>, Atlantic petrel <i>Pterodroma incerta</i> (VU)), magnitude unknown • Probable ongoing declines in populations of smaller summer-breeding petrels (e.g. storm-petrels Hydrobatidae, diving-petrels). Uncertain, but declines possibly large • Possible decline in populations of small surface nesting seabirds (Antarctic terns <i>Sterna vittata</i>, brown noddy <i>Anous stolidus</i>), but this is unlikely • Large summer-breeding seabirds are probably unaffected, but this is uncertain 	<ul style="list-style-type: none"> • Recovery of all affected species 	<ul style="list-style-type: none"> • Continued long-term decline • Probable extirpation/extinction of many species • Extirpation likely to be a long-term process in most cases, due to very large seabird populations, and long life span. However, lack of information about small petrels in particular makes this conclusion uncertain

Biodiversity element ¹	Historic rodent impact	Effect of reducing rodent impact	Consequences of no action against rodent impacts
Seabird community	<ul style="list-style-type: none"> • Probable huge knock-on effect of seabird declines on terrestrial ecology, in particular through reduced input of marine nutrients 		
Northern rockhopper penguin <i>Eudyptes moseleyi</i> (VU)	<ul style="list-style-type: none"> • Possibly some rat predation on chicks, but population impacts likely to be minor 	<ul style="list-style-type: none"> • Probably little impact 	<ul style="list-style-type: none"> • Probably little impact
Tristan albatross <i>Diomedea dabbenena</i> (EN)	<ul style="list-style-type: none"> • Mouse predation is driving an ongoing population decline • Magnitude of overall decrease in numbers not known 	<ul style="list-style-type: none"> • Reduced rate of decline; population recovery if longline mortality also reduced 	<ul style="list-style-type: none"> • Continued decline towards extinction over decades
Atlantic petrel <i>Pterodroma incerta</i> (VU)	<ul style="list-style-type: none"> • Mouse predation is driving an ongoing population decline • Magnitude of overall decrease in numbers not known 	<ul style="list-style-type: none"> • Population recovery 	<ul style="list-style-type: none"> • Extirpation/extinction over decades/centuries
Atlantic yellow-nosed albatross <i>Thalassarche chlororhynchos</i> (EN)	<ul style="list-style-type: none"> • An unknown factor is periodically causing substantial, localised mortality of chicks 	<ul style="list-style-type: none"> • Probably no effect 	<ul style="list-style-type: none"> • Probably no effect

Biodiversity element ¹	Historic rodent impact	Effect of reducing rodent impact	Consequences of no action against rodent impacts
Atlantic yellow-nosed albatross <i>Thalassarche chlororhynchos</i> (EN)	<ul style="list-style-type: none"> • Mouse predation is thought unlikely to be the cause (disease more probable) • Reproductive output of the population is not currently low, suggesting that these chick die-offs have a limited effect on overall population trend 		
Sooty Albatross <i>Phoebastria fusca</i> (EN) Southern Giant-petrel <i>Macronectes giganteus</i> (VU)	<ul style="list-style-type: none"> • Probably negligible impacts, as both species are large summer-breeders 	<ul style="list-style-type: none"> • Probably negligible 	<ul style="list-style-type: none"> • Probably negligible
Gough bunting <i>Rowettia goughensis</i> (VU)	<ul style="list-style-type: none"> • Distribution and abundance probably greatly reduced; the species is now very scarce in the lowlands, and effectively restricted to the less productive highlands • There is no information regarding the ongoing population trend, but there is a strong possibility that there is a continued decline 	<ul style="list-style-type: none"> • Probable increase in distribution and abundance, with spread into lowlands 	<ul style="list-style-type: none"> • Population will remain small & vulnerable • The population may decline to global extinction in several years - decades

Biodiversity element ¹	Historic rodent impact	Effect of reducing rodent impact	Consequences of no action against rodent impacts
Gough bunting <i>Rowettia goughensis</i> (VU)	<ul style="list-style-type: none"> • Mouse impacts are likely to be through both nest predation and competition • It is possible, but unlikely, that scarcity in the lowlands was caused by the presence of Gough moorhens – a lowland species which may be an effective nest predator 		
Gough moorhen <i>Gallinula comeri</i> (VU)	<ul style="list-style-type: none"> • No impact; species remains abundant 	<ul style="list-style-type: none"> • No impact 	<ul style="list-style-type: none"> • No impact
Invertebrates	<ul style="list-style-type: none"> • Large reduction in overall abundance of invertebrates (including possibly abundance of some alien taxa such as earthworms) • Known to feed heavily on endemic moths, which may have suffered major population decreases • Other (unknown) sensitive taxa may have suffered major population declines or extirpation/extinction 	<ul style="list-style-type: none"> • Increase in overall abundance • Probable recovery of rodent-sensitive taxa • Unclear which taxa will benefit • Not known what the effect would be on the balance of native and alien invertebrate taxa 	<ul style="list-style-type: none"> • No overall recovery of invertebrate abundance • Sensitive taxa continue to decline, possibly to extirpation/extinction in some cases

Biodiversity element¹	Historic rodent impact	Effect of reducing rodent impact	Consequences of no action against rodent impacts
Flora	<ul style="list-style-type: none"> • Probably negligible impact on plant community structure • There may be some rodent-sensitive plant taxa, which have decreased in abundance, but no such taxa are known 	<ul style="list-style-type: none"> • Effect unknown but not thought to be very large • Possible recovery of sensitive taxa • Possible change in the balance of native and alien plant taxa 	<ul style="list-style-type: none"> • Effect unknown, but not thought to be large

1: For individual taxa, the current IUCN Red List status is given. VU = Vulnerable; EN = Endangered; CR = Critically endangered; NT = Near-threatened, EX = Extinct.

2. Report on Feasibility Study

Derek Brown presented his findings and views following his visit to Tristan da Cunha, consultation with stakeholders, and visits to quarantine facilities in Cape Town. These findings are described in detail in his Feasibility Study.

2.1. KEY POINTS

Past experience in relation to island size and target species

- Tristan and Gough are large islands, relative to those on which rodent eradications have already been achieved, particularly for ship rats *Rattus rattus* and house mice *Mus musculus*, and for combined rat-mouse operations.
- However, maximum island size for eradication is increasing, and, apart from possible difficulties with combined rat-mouse operations, there is no known *a priori* reason why islands of the size of Tristan and Gough should not be tackled.

Rodent eradication methodology

- Currently, poisoning using anticoagulant toxins, particularly brodifacoum, is the only technique proven to eradicate rats from large islands. On islands of this size, the bait is dispersed aerially from helicopters using bait buckets and differential GPS guidance systems to ensure complete coverage.

- Advanced techniques, such as introduction of pathogens, genetically modified pathogens, or immunosterilants are currently hypothetical only. Research into these methods is believed to be ongoing but is a long way from producing deliverable methods.
- It is essential to understand rodent ecology so that populations are targeted at the right time of year and with the correct amount of bait. Key information required includes the timing of breeding activity and minimum home range size.

2.2. ISSUES TO CONSIDER WHEN PLANNING AN ERADICATION ON TRISTAN

Physical factors

- Large size (9,800 ha), high altitude, cloud cover, high wind speeds, snow, presence of large cliffs and caves.

Human factors

- Presence of a relatively large permanent human population is an unusual and significant factor.

Livestock

- Livestock (poultry, dogs, sheep, cattle, donkeys, pigs) may consume bait, creating potential problems for bait coverage and also posing a threat to

the livestock and possible future human consumption.

Non-target species

- Native landbirds (Tristan thrush *Nesocichla eremita*, Gough moorhen *Gallinula comeri*) are at risk, as well as southern skuas *Catharacta antarctica* (when present on the island in summer). Temporary captive holding would have to be considered during an eradication, as well as consideration of genetic issues surrounding transfer of birds from other islands.

Waste management

- A number of activities and sites on the island (rubbish dump, sewage treatment, fishing waste) provide significant alternative food resources for rodents, particularly commensal rodents in and around the settlement – this would increase the risk of failure of an eradication attempt.

Quarantine arrangements

- There are few islands in the world that are inhabited yet still remain rat-free. Eradication should only take place if it can be ensured that stringent quarantine can be maintained. Tristan has many advantages over most other inhabited islands with regard to effective quarantine.

2.3. ISSUES TO CONSIDER WHEN PLANNING AN ERADICATION ON GOUGH

Physical factors

- Large size (6,500 ha), cloud cover, high wind speeds, snow, heavy rain, presence of large cliffs, caves, offshore stacks, boulder areas, steep ravines.

Mouse ecology

- Mouse ecology in relation to eradication methods is less well-known than for rats, and more information would be needed.

Timing

- Eradication should take place when mice are non-reproductive and when food resources are limiting, coupled with consideration of seasonal weather conditions and seasonal non-target risks.

Human presence

- South African weather station staff and management would have to be supportive.

Non-target Species

- Native landbirds (Gough moorhen, Gough bunting *Rowettia goughensis*) are at risk, as well as southern skuas (when present on the island in summer). Temporary captive holding would have to be considered during an eradication.

2.4. ALTERNATIVES TO ERADICATION – LOCAL RODENT CONTROL

Tristan

- Socio-economic problems could be reduced through a more strategic approach to rat control in the settlement
- Some elements of biodiversity could be conserved, to a limited degree, by targeted local control in hotspots e.g. seabird colonies during breeding season.
- However, these measures would have very limited impact on the biodiversity problem, and would be expensive to execute in the long-term.

Gough

- There are no feasible interim control options. It is not realistic to target key areas as birds are too widespread and dispersed and there is insufficient human capacity to conduct control operations.

2.5. APPROXIMATE COST OF ERADICATIONS

For Tristan, the following is a preliminary estimate:

New Zealand Bait	£200,000
New Zealand pilots	£500,000
Ship support from S.A. <i>Agulhas</i> (£12,000/day)	£500,000

With extra items (shipping of bait, staff costs, mitigation measures etc.) a total cost estimate is £2,000,000.

A similar cost is crudely estimated for Gough.

2.6. FEASIBILITY AND PROBABILITY OF SUCCESS OF ERADICATIONS

Tristan

There is a very high chance that a rat eradication would be successful on Tristan da Cunha if all relevant issues are addressed prior to the attempt. If an eradication were to be unsuccessful, there would be a return to original rat levels in two – three years. An aerial baiting operation aimed at rats would have a strong chance of also eradicating mice, but such an outcome is uncertain, because of the potential interactions between rats and mice, and because of the lack of experience of combined rat and mice operations.

Gough

Derek Brown was concerned that he had not visited Gough so there may be further issues relevant to an eradication, which were not yet identified. Because of this, and the relative lack of experience of mouse eradications elsewhere, there is a high level of uncertainty about the probability of success of an eradication attempt. Derek Brown's current view is that an eradication is *likely* to be possible, but this cannot be confirmed without a more detailed investigation.

3. Determining a Way Forward - Conclusions and Next Steps

3.1. KEY POINTS OF DISCUSSION

- Tristan da Cunha is a member (through the UK) of the following conventions: World Heritage, Convention on Biological Diversity and Wetlands of International Importance (Ramsar). It hopes to shortly be included in the UK ratification of Agreement on the Conservation of Albatrosses and Petrels (ACAP)². It was noted that by following a 'do nothing' scenario the UK could be contravening its obligations to the above Conventions.
- Eradications on this scale must not be undertaken unless the probability of failure is considered to be negligible.
- For Tristan there is a very high probability that a rat eradication would be successful. However, there is a significant possibility that mice would not be eradicated in such an operation. If rats alone were to be eradicated from Tristan, the consensus is that there would be major conservation benefits, in particular including the recovery of seabird populations. This conclusion is notwithstanding the known catastrophic effects of mice on Gough's seabirds: on most of the world's seabird islands, mice appear to be relatively benign.
- However, we speculate that it is the absence of rats *per se* that facilitates the evolution of predatory behaviour in island mice. It is possible that, in the absence of rats, mice on Tristan would evolve such behaviour in the medium- to long-term.
- Even if mice were not successfully eradicated during a rat operation on Tristan, the removal of rats would facilitate a future mouse eradication, since there would be no potential for rat-mouse interaction to reduce the effectiveness of such an operation. A rodent eradication on Tristan could potentially act as a pilot for Gough.
- The eradication of rats from Tristan would have the major conservation benefit of minimising the risk of a catastrophic introduction to Nightingale or Inaccessible Islands.
- Although data are lacking, it seems likely that several key populations (notably of smaller seabird species) on Tristan are at the point of extirpation. Population recovery of such species would be substantially less likely, and slower, if they were extirpated before rat eradication takes place. Therefore, there may be significant gains from eradicating rats from Tristan as soon as possible.

² The UK extended its ratification of ACAP to Tristan da Cunha on 13 April 2006.

- Currently, it is not clear whether mouse eradication on Gough is feasible.
 - The biodiversity gains from a mouse eradication on Gough would be immense.
 - The population size and rate of decline of globally important bird species on Gough is sufficiently slow that a delay of several years will probably not cause irreversible losses of biodiversity in the interim. A possible exception to this is the Gough bunting, whose population trends are unknown, but which may be under threat of medium-term extinction.
 - Given the uncertainty about the feasibility of eradicating mice on Gough, it is sensible to gather more information before producing a detailed plan. Relevant information should be gathered on Gough (assessment of terrain and weather, mouse ecology) and also from other planned mouse eradications (notably MacQuarie Island).
- terms of the current OTEP-funded project. This plan would incorporate the possibility of mice being simultaneously eradicated.
- Derek Brown and a trained New Zealand helicopter pilot will visit Gough in September 2006 to obtain information regarding currently uncertain aspects of the feasibility of and plan for mouse eradication. The project budget will be reviewed and a supplementary application made to OTEP to conduct this study.
 - During 2005/6, fieldwork teams will gather further relevant data about rodents on the two islands, and this information will further inform plans for both islands.
 - Following the expert visit to Gough Island, a formal assessment of the feasibility of mouse eradication will be made. If the operation were deemed to be feasible, an Operational Plan would then be developed.
 - At the point when the feasibility of eradications on both islands has been assessed to the satisfaction of stakeholders, activities to secure funding for one or both operations would begin.
 - During 2005-6, further efforts will be made to publicise the impacts of rodents on the globally important biodiversity of Gough and Tristan, with a view to raising awareness of the issue, and support for action (see Annex 2).

3.2. WORKSHOP CONCLUSIONS

In light of the discussions described above, the workshop reached a consensus on the following actions:

- Derek Brown is to be contracted to write an Operational Plan for the eradication of rats from Tristan da Cunha, during 2006, under the

Annex 1. List of Participants

Name	Institution	Role
Andrea Angel	Percy FitzPatrick Institute, University of Cape Town	Author, Review of Impacts; Gough Island research assistant
Derek Brown	Invasive Species Consultant	Expert Consultant
John Cooper	Avian Demography Unit, University of Cape Town	Tristan da Cunha Conservation Officer; Author, Review of impacts
Richard Cuthbert	RSPB	Gough Island project manager
Anne Green	Government of Tristan da Cunha	Chief Islander; Tristan da Cunha Community
Joseph Green	Tristan da Cunha	Tristan da Cunha Community
Mike Hentley	Foreign & Commonwealth Office	Administrator, Tristan da Cunha
Geoff Hilton	RSPB	Overseas Territories research leader
Mario Leshoro	Robben Island Museum	Workshop host & observer
Peter Ryan	Percy FitzPatrick Institute, University of Cape Town	Gough Island project manager, Tristan da Cunha Conservation Officer
Sarah Sanders	RSPB	Country Programmes Officer for Overseas Territories; Rodent OTEP project manager
Erica Sommer	RSPB	Tristan rodent research officer
Ross Wanless	Percy FitzPatrick Institute, University of Cape Town	Gough Island PhD student

Annex 2. Spreading the message and engendering support during 2006

It is considered desirable to keep the ongoing efforts towards the eradication of Tristan-Gough rodents well publicised, and to take all opportunities to keep relevant international bodies informed of the problem and what is being done about it. We will make the project's reports and media releases available and table information papers that show progress achieved and set out future activities.

An annotated list of relevant meetings and activities follows for the year 2006, in chronological order.

Tristan da Cunha Quincentenary Celebrations, St Helena and Tristan, January/February

- A PowerPoint presentation will be shown to the passengers by Sarah Sanders.
- Copies of the Review/Feasibility/Workshop Report will be made available.
- An illustrated leaflet/brochure, or failing that, complementary copies of the recent issue of *World Birdwatch* with Gough article will be available for distribution.
- We will consider making a collection to fund a specific part of the project not funded by OTEP (e.g. towards cost of making a professional audio-visual presentation).
- With Sir Martin Holdgate's and Gough 1950s Expedition Team Members' requested support, a statement approving of progress and encouraging eradication drawn up and signed by passengers and islanders, addressed as an open letter to the relevant UK authority.

Albatross and Petrels in the South Atlantic: Priorities and Conservation Workshop, Stanley, Falkland Islands, 12-15 March

- Tristan presentation(s) will be made by James Glass, Geoff Hilton and John Cooper to emphasise that rodent eradication is a high priority.
- The project report will be made available, with CD version.
- The workshop will be encouraged to adopt a resolution addressed to the UK Government calling for eradication.

ACAP 2nd Advisory Committee, Brasilia, Brazil, 5-8 June

- The BirdLife International delegation will offer to show the PowerPoint presentation and make report CDs available.

- An executive summary of the report will be formally tabled as an Information Paper by BirdLife International.
- Advisory Committee will be requested to agree on the need for eradication of rodents on islands with ACAP breeding species in its report to the next Meeting of Parties and to recommend that the Meeting adopts a resolution on the matter.

Periodic Report to World Heritage Convention on the Gough and Inaccessible Island World Heritage Site, August deadline(?)

- This was not done in 2005 due to a lack of capacity.
- The report should place emphasis on the rodent problem on Gough and progress to date towards eradication.
- The matter of whether Gough fits World Heritage Site in Danger criteria should be considered.

Biodiversity that Matters Conference. Jersey, 7-12 October 2006

- A talk will be offered in the Alien Invasive Species Session to be convened by Colin Clubbe (Sarah Sanders to make contact with offer). If necessary, John Cooper can present, as he will be attending.
- The Conference Plenary will be requested to adopt a resolution broadly similar to that of the ACAP Meeting of Parties.

ACAP 2nd Session of Meeting of Parties, Christchurch, New Zealand, 13-17 November

- UK will announce (or confirm if done previously) the formal ratification of ACAP on behalf of Tristan da Cunha and table the new Conservation Ordinance as an Information Paper.
- The Meeting of Parties will consider the Advisory Committee report and be urged to adopt a resolution commending ACAP Parties on good progress to date and encouraging swift progression towards eradication exercises for islands as yet untreated. This should be discussed with the UK Delegation prior to the meeting to gain its approval and input. Advice on this issue should be sought from John O'Sullivan and Ben Sullivan (RSPB).
- BirdLife International with local partner support should present an evening public lecture on the rodent eradication project at the time of the Meeting of Parties, with all delegates and local VIPs invited (with an audio-visual presentation funded as above?).

Tristan da Cunha Association 2006 Annual General Meeting, Bournemouth, UK, 22 April

- A UK-based Project Management Team member (Sarah Sanders?) will show the PowerPoint presentation and make report CDs available.



The Royal Society for the Protection of Birds is the United Kingdom charity working to secure a healthy environment for birds and wildlife, helping to create a better world for us all. The RSPB belongs to BirdLife International, the global partnership of bird conservation organisations.

www.rspb.org.uk



The Tristan Agriculture and Natural Resources Department is responsible for biodiversity conservation on Tristan da Cunha. It works in partnership with organisations from around the world, specifically in the UK and South Africa, to reduce the rate of biodiversity loss on the Tristan Island group.



The Percy Fitzpatrick Institute of African Ornithology is part of the Department of Zoology at the University of Cape Town. Its mission is to promote and undertake scientific studies involving birds that contribute to the conservation of biological diversity and the sustained use of biological resources.

www.fitzpatrick.uct.ac.za



The Avian Demography Unit is a research unit in the Department of Statistical Sciences at the University of Cape Town. It contributes to the understanding of bird populations, especially population dynamics, and thus provides input to their conservation.

www.aviandemography.org.za



We are grateful to the Overseas Territories Environment Programme, a joint programme of the Department for International Development and the Foreign and Commonwealth Office to support the implementation of the Environment Charters, and environmental management more generally, in the UK Overseas Territories.