



Department
for Environment
Food & Rural Affairs



Foreign &
Commonwealth
Office



Department
for International
Development



DPLUS011

Darwin Plus: Overseas Territories Environment and Climate Fund Project Application Form

Submit by Monday 7 January 2013

Please read the Guidance Notes before completing this form
Information to be extracted to the database is highlighted in blue

Basic Data

1. Project Title	Ile Vache Marine Restoration Project
2. OT(s) covered by proposal	British Indian Ocean Territory (BIOT)
3. Start Date:	01 May 2013
4. End Date:	30 June 2014
5. Duration of project (cannot be longer than 24 months)	14 months

Summary of Costs	2013/14	2014/15	2015/16	Total
6. Budget requested	£31,120	£1,136	N/A	£32,256
7. Total value of Co-funding	£178,836	£27,827	N/A	£206,663
8. Total Project Budget (all funders)	£209,956	£28,963	N/A	£238,919
9. Names of Co-funders	BIOT Administration, Chagos Conservation Trust (CCT), UK RSPB, Royal Botanic Gardens Kew, Warwick University, Zoological Society London, G4S LLC, HQ BF BIOT			

10. Lead applicant organisation (who will be responsible for delivering outputs, reporting and managing funds)	Chagos Conservation Trust (CCT)
11. Project Leader name	Peter Carr (CCT Executive Committee member)
12. Email address	Dg21environmental@cwnetdg.io
13. Postal address	Environmental, HQ BF BIOT, Diego Garcia, BFPO 485
14. Contact details: Phone/Fax/Skype	Phone: 00246 370 4915 Skype: petethexo

15. Type of organisation of Lead applicant. Place an x in the relevant box.								
OT GOVT	UK GOVT	UK NGO	<input checked="" type="checkbox"/>	Local NGO	International NGO	Commercial Company	Other (e.g. Academic)	

16. Principals in project. Please identify and provide a one page CV for each of these named individuals. You may copy and paste this table if you need to provide details of more personnel or more than one main, or other, project partner.

Details	Project Leader	Project Partner 1 – Main	Project Partner 2	Project Partner 3	Project Partner 4
Surname	Carr	McManus	Stringer	Clubbe	Sheppard
Forename(s)	Peter	John	Clare	Colin	Charles
Post held	Environmental Director, Diego Garcia	Head of British Indian Ocean Territory (BIOT) Section	Head of UK Overseas Territories Unit	Head, UKOTs and Conservation Training	Professor
Institution (if different to above)	Base Operating Service Contractor	UK Foreign & Commonwealth Office	The RSPB	Royal Botanic Gardens, Kew (RBG-Kew)	University of Warwick
Department	Environmental	BIOT	UK Overseas Territories Unit	Herbarium, Library, Art and Archives	Life Sciences
Telephone /Skype					
Email					

*Please note – The British Indian Ocean Territory is a UK Overseas Territory, with a British Representative and his support officers at a US Naval Facility on Diego Garcia. The Territory is otherwise uninhabited. The Territory is administered by the BIOT Section of the Foreign & Commonwealth Office, and therefore BIOT is the main project partner and host country coordinator. However, they will not be allocated funds in the budget (indeed they provide funding in kind).

17. Has your organisation received funding under the Darwin Initiative before? If so, please provide details of the most recent (up to 3 examples).

Reference No	Project Leader	Title

18. If your answer to question 17 was no, provide details of 3 contracts previously held by your institution that demonstrate your credibility as an implementing organisation. These contracts should have been held in the last 5 years and be of a similar size to the grant requested in this application.

CCT has not held similar grants but CCT Executive Committee members have been principals in projects in the relevant Chagos grants listed here, all linked to CCT. CCT has increased its capacity in the last year and is now in a position to hold grants itself.

Contract 1 Title	Strengthening the world's largest Marine Protected Area: Chagos Archipelago (Darwin Initiative, Round 18)
Contract Value	£287,788
Contract Duration	Three years
Role of institution in project	The Project Leader (Dr. John Turner) and the two Project Co-leaders (Professor Charles Sheppard and Dr. Heather Koldewey) are all on the CCT Executive Committee. CCT was consulted as a stakeholder for the project and the CCT Chairman submitted a letter of support for it.

Brief summary of the aims, objectives and outcomes of the contract.	To strengthen the Chagos Marine Protected Area by providing scientific knowledge for effective management, and develop a strategy that engages the support of potential stakeholders through outreach, education and engagement. The legacy will be sound management and increased value of what is currently the world's largest no-take Marine Protected Area and a unique and globally important reference site.
Reference contact details (Name, e-mail, address, phone number).	Dr John Turner [Redacted] School of Ocean Sciences College of Natural Sciences Bangor University Marine Science Laboratories Menai Bridge Anglesey LL59 5AB

Contract 2 Title	BIO403 Improved conservation management of BIOT using revised zone boundaries (OTEP)
Contract Value	Circa £30,000 (excluding US navy involvement)
Contract Duration	One year
Role of institution in project	The Project Manager (Professor Charles Sheppard) is on the CCT Executive Committee
Brief summary of the aims, objectives and outcomes of the contract.	Provide the BIOT Administration with recommendations for an improved system of conservation management, both for its largely uninhabited regions and Diego Garcia. Make available to all visitors clear guides to the location and extent of permitted, restricted and prohibited areas. The latter is linked to new BIOT regulations being introduced regarding yacht visitors. Purpose: Refine and redescribe graphically both the protected and permitted area systems, in order to maximise conservation over the vast, uninhabited and largely unvisited areas of the archipelago.
Reference contact details (Name, e-mail, address, phone number)	Professor Charles Sheppard Charles.Sheppard@warwick.ac.uk School of Life Sciences University of Warwick Coventry, CV4 7AL 02476 524975

Contract 3 Title	BIO602 Environmental Monitoring for Improved Conservation Management (OTEP)
Contract Value	£50,000 (additional circa £250,000 levered from others)
Contract Duration	Five months
Role of institution in project	The Project Manager (Professor Charles Sheppard) is on the CCT Executive Committee
Brief summary of the aims, objectives and outcomes of the contract.	Facilitation and improvement of environmental management.
Reference contact	Professor Charles Sheppard – as above

Project Details

19. Project Outcome Statement: Describe what the project aims to achieve and what will change as a result. (100 words max)

This project aims to restore the ecosystems of Ile Vache Marine by eradicating the invasive black rat (*Rattus rattus*). This will: improve the breeding conditions for Critically Endangered Hawksbill and Endangered Green sea-turtles; allow for the re-colonisation of seabirds from the surrounding six Important Bird Areas; and promote native plant regeneration. Island ecological restoration has been successfully conducted elsewhere and is seen as the only method available to increase biodiversity and biomass of original species. In order to eradicate the rats this project will also manage other non-indigenous species, particularly coconut palms, preventing them from further constraining the native vegetation.

20. Background: (What is the current situation and the problem that the project will address? How will it address this problem? What key themes will it address? (200 words max)

Ile Vache Marine is a tiny island (approximately 1.5 km²) in the Chagos archipelago, a vital area for Endangered sea-turtles and birds that rely on these islands, as far from continental land mass as possible in this ocean. The island is within a Strict Nature Reserve and nesting amongst six proposed or identified IUCN Important Bird Areas. In one of the most ecologically important terrestrial areas within the archipelago, law forbids landing on this uninhabited island. However, it is infested with rats like many islands in Chagos, and therefore inhospitable for endangered turtles and birds. Rats eat turtle and bird eggs, hatchlings, nestlings, and adult animals, completely suppressing population levels. On Ile Vache Marine:

- Green and Hawksbill sea-turtles breed in small numbers (less than five pairs annually between 2008 and 2010).
- Despite being surrounded by islands with numerous bird populations, only four species of breeding bird have been recorded since 1996.

Eradicating the rats will remove the problem. Rat eradication will entail destroying unmanaged former coconut plantations. These rampant growers have been choking native plant species, increasingly encroaching on forests.

Key themes:

- Eradicating or controlling species that have become established
- Habitat or species conservation, management for terrestrial environments

21. Methodology: Describe the methods and approach you will use to achieve your intended outcomes and impact. Provide information on how you will undertake the work (materials and methods) and how you will manage the work (roles and responsibilities, project management tools etc). Give details of any innovative techniques or methods. (500 words max)

Project Manager: Peter Carr

The Island restoration will follow the best practice of rat eradication work on comparable islands around the world, in consultation with some of the leading expertise in the field. Ile Vache Marine has been selected because:

- Ecologically abundant area: internationally important breeding seabird colonies; two species of breeding IUCN Red-Listed sea-turtles; and very healthy populations of the worlds' largest arthropod and IUCN Red-Listed (Data Deficient) Coconut Crab.

- Historical records of large numbers of seabirds (shearwaters) breeding on the island.
- Tiny island, eradication effort manageable and affordable.
- Rat reinvasion possibility deemed negligible.
- Assessment of zero non-target species' risks from direct or indirect poisoning.

The restoration will be carried out in four phases:

1. Vegetation Management

Series of six weekends over three months:

- Calculate rat and land crab densities; secure a genetic sample of rats present.
- Bait acceptance trial.
- Clear-fell and burn coconut trees, fruits and fallen leaves to ease laying of bait stations and modify island habitat for potential seabird re-colonisation and native plant regeneration.
- Cut grid system across the island producing 25 m² grid squares.
- Deploy a bait station in each grid square approximately one month prior to bait being introduced (to reduce neophobic tendencies of rats). Stations will be elevated (two inch) as proven method against bait interference by land crabs. Stations will be GPS Way-Pointed and labelled.

Led in field by Peter Carr; technical advice available from RSPB, RBG-Kew and professional eradication expert; labour sourced from Diego Garcia (DG) - either military volunteers or six paid labourers with experience of vegetation management (employed in ground's maintenance) contracted from Base Operating Service Contractor (BOSC) at Naval Support Facility.

2. Operation Set-up

Seven days:

- Eradication stores removed from secure and authorised BOSC storage facilities on DG and shipped to island.
- Eradication team load and off-load stores and equipment using BPV small craft.
- Base camp and stores dump located in wide sandy beach area on north of island (also safest landing access).

Led by Peter Carr; supported by two paid BOSC labourers (US Department of Defence certified Pest Control Technicians).

3. Eradication

30 days:

- Bait stations loaded with 160g of bait, reduced as required.
- Knockdown hand broadcast of pellets on day one, seven and when leaving island.
- Bait stations loaded with further 160g of brodifacoum at end of eradication phase when team leaves island. Contingency plans exist to remain on island longer than 30 days if required or, return immediately if eradication post-monitoring reveals rats have survived. Contingency plans exist to switch baits if primary bait station bait is not being accepted.

Led by professional eradication expert; assistance from Peter Carr; supported by two aforementioned BOSC labourers.

4. Post-eradication monitoring

- Including the recording of turtle, bird, crab and vegetation data.
- Approximately 30, 60 and 90 days after operation by Peter Carr and another qualified pest control technician from DG. (Recover bait stations or redeploy to island if rats detected).
- Thenceforth annually as part of Chagos Scientific expeditions.

Total BIOT Patrol Vessel support required: 29 days.

(498 words)

22. How does this project:

- a) Deliver against the priority issues identified in the assessment criteria
 - b) Demonstrate technical excellence in its delivery
 - c) Demonstrate a clear pathway to impact in the OT(s)
- (500 words max)

- a) The eradication of rats (Black Rat *Rattus rattus*) on Ile Vache Marine will deliver a clear and measurable conservation result. The outcomes of this project will contribute to the long-term strategic objectives of the BIOT Marine Protected Area by continuing work to restore islands in the archipelago and increasing the conservation value of the BIOT overall. It will contribute to the FCO's ambition as stated in the Overseas Territories White Paper to achieve exemplary environmental management in the uninhabited UK Overseas Territories. Although the Convention on Biological Diversity has not yet been extended to BIOT, the project will contribute to achieving Aichi target 9. The project contributes to commitment 2 of the BIOT Environment Charter to "*Ensure the protection and restoration of key habitats, species and landscapes...*"
- b) The operational plan created for this project has been reviewed by a member of the New Zealand Department of Conservation's eradication advisory group (international experts in this work). This operational plan has been written to best international standards and this, combined with the academic paper following completion of the project, will serve to inform any future rat eradication policies and processes in BIOT (of which there is much scope) and potentially other OTs. The goal of this project – eradicating rats on Ile Vache Marine, a very small remote island – and the activities to generate this result are practical and achievable. A comprehensive risk analysis has been carried out and addressed in planning. Monitoring has been planned, and will be carried out according to international best practice. An exit strategy to encourage sustainability is not required as no further funding will be required once post-eradication monitoring has confirmed success. Biodiversity recovery following eradication will be measured during Chagos scientific research expeditions. The project represents excellent value for money, as costs are being kept to a minimum through appropriate use of volunteers, and there is a high level of co-financing.
- c) The BIOT government is a partner in this project, and they are very supportive of this work. The consortium of institutions involved in the project is robust. The RSPB has past experience in delivering successful rat eradication projects, and RBG-Kew has experience in habitat restoration and in ecological survey on Ile Vache Marine. CCT, the lead applicant, involves all of the organisations with a major role in the BIOT, and will be able to call on expertise from these organisations if needed. The PI, CCT's Peter Carr, has a wealth of experience of implementing conservation projects on the ground in BIOT. Expert input to this project will guide the implementation of future operations, when the presence of an external contractor should not be needed for such an extended period (if at all). The success of this project will inform and build momentum for further restoration projects within the Territory, and potentially other OTs. Each island cleared of rats in the BIOT will reduce the risk of rats spreading to other islands. Restored islands will support more birds and other native wildlife.

(499 words)

23. Who are the stakeholders for this project and how have they been consulted (include local or host government support/engagement where relevant)? Briefly describe what support they will provide and how the project will engage with them. (250 words max)

Ile Vache Marine is uninhabited.

The principal stakeholder in this project is the BIOT office of the UK FCO, without their permission and full engagement the project could not be delivered. Consultation with the BIOT Commissioner's Representative (British Representative on Diego Garcia) has been full and open since the project's conception. The British Representative's staff (including on the BIOT Patrol Vessel - BPV) will: provide logistical support throughout the project; are providing man power for Phase One; have devoted BPV time from "British Operations" to assist with Phase One; and will provide a 24 hour listening watch for all phases of the project via the BIOT Police Station.

Further logistical support is required from the Base Operating Service Contractor (BOSC) on Diego Garcia. Consultation has been undertaken to ensure their full participation, including with the incoming contractor due on island in early 2013.

The principal technical stakeholder is the UK RSPB. The RSPB were involved in the genesis of the project, have been fully consulted throughout the development of the operational plan and were the final arbitrators on the validity of the plan, after consultation with international experts in the field. The RSPB continue to be a conduit for technical assistance and liaison with international organisations involved in eradication work.

The secondary technical stakeholders are: the Royal Botanical Gardens Kew, who have provided input to the habitat management of the island; and Professor Charles Sheppard who has been consulted in his role as the Scientific Advisor to the BIOT Commissioner.

(250 words)

24. Institutional Capacity: Describe the implementing organisation's capacity (and that of partner organisations where relevant) to deliver the project.

(500 words max)

Based upon Diego Garcia, Peter Carr representing CCT (the implementing organisation) is best placed to undertake the project delivery. There are inherent and unavoidable complications when delivering an environmental project in BIOT, due to the nature of operating through a remote US Naval Support Facility. CCT have the experience, knowledge and requisite skills-set to ensure:

- the logistical challenge of acquiring the specialist rodent bait (from New Zealand) is delivered on time;
- that the challenges of habitat management on a remote oceanic island are met including safety, sustainability and delivery of personnel and equipment (on to an island where personnel have to swim to shore and equipment has to be floated on in waterproof barrels);
- that liaison with on-island stakeholders (British Representative and the Master of the BPV) and other key players (Fishery Protection Officer if still applicable, CO NSF, NAVFAC FE Environmental, PD BOSC) are all engaged and informed.

Peter Carr has over four years experience of operating on all islands of BIOT and extensive pest control experience on both Diego Garcia and the outer islands. This expertise will be combined for this project with an internationally recognised rodent eradication expert as a consultant, providing a broad base of field experience capable of executing a rat eradication project on a remote tropical oceanic island.

The stakeholders within BIOT based upon Diego Garcia, particularly BF BIOT forces and the BPV crew, are all trained and experienced in operating from crafts on to oceanic islands, and in the case of the BPV crew have supported a previous eradication attempt on Eagle Island. The infrastructure of BF BIOT, BPV and the BOS Contractor provides expertise in all fields required to safely deliver the project e.g. medical, chain saw use, equipment maintenance, pest control and small boat handling.

The technical off-island stakeholders (RSPB and Royal Botanic Gardens Kew) have a vast amount of experience in overseeing and providing expertise to similar (and much bigger and more complicated) projects throughout the UK Overseas Territories. Crucially, members of staff of both organisations have visited BIOT and are therefore fully aware of the complex nature of the operation,

The principal stakeholder, the UK FCO, epitomises a cautious and thought-through approach to project development and implementation. Without FCO support the project could not proceed and the FCO would not support the project if they believed there exists a high potential for failure. To have this arm of the British Government supporting the concept both philosophically and materially speaks volumes for the meticulous planning, thorough research and team selection for the venture.

25. Expected Outputs

Output (<i>what will be achieved e.g. capacity building, action plan produced, alien species controlled</i>)	Indicators of success (<i>how we will know if its been achieved e.g. number of people trained/ trees planted</i>)	Status before project/baseline data (<i>what is the situation before the project starts?</i>)	Source of information (<i>where will you obtain the information to demonstrate if the indicator has been achieved?</i>)
1. Habitat management in preparation of rat eradication. This will include the control of alien and invasive species of plants.	Former area of introduced for crop coconuts cleared and clearance and control of alien species (especially <i>Pipturus argenteus</i>) by the end of quarter 1 of the project.	35% of Ile Vache Marine was converted to coconut plantations in the past, left unmanaged for 40 years this monoculture is severely restricting biodiversity on the island, especially nesting seabirds.	Project manager of this phase, Peter Carr, will report.
2. Black Rat <i>Rattus rattus</i> (invasive alien species) eradicated.	By end of quarter 1 in year 2, post eradication monitoring confirms that all have been eradicated on Ile Vache Marine.	The island is infested with rats that restrict seabird breeding numbers and impact upon breeding sea turtles.	Post-eradication monitoring (30, 60 and 90 days after) by Peter Carr and another qualified pest control technician (report as per output 3 below). Further periodic inspections as part of Chagos scientific expeditions with reporting as appropriate e.g. academic papers, conference presentations etc.
3. Post-eradication monitoring report produced in the form of an academic paper (confirming outcome and to share lessons).	Report produced and disseminated to key stakeholders and networks by end of quarter 1 in year 2.	The majority of rat eradication projects, and hence reports on their methodology and findings, have so far been carried out in temperate zones rather than tropical islands (Ref: Varnham K. (2010) <i>Invasive rats on tropical islands: Their history, ecology, impacts and eradication</i> , RSPB Research Report No. 41).	Report produced and disseminated appropriately (e.g. to other OTs and via RSPB networks) to inform future eradication work (including potentially on other Chagos islands). If possible this will be published in a peer-reviewed journal.

26. Expected Outcomes: How will each of the outputs contribute to the overall outcome of the project? (100 words max)

Clear-felling the former coconut plantation will: ease the laying of the rat bait stations; promote native plant species propagation; and improve the island habitat for potential seabird re-colonisation. Currently these areas are dark, dank and inhospitable.

Eradicating rats from the island will allow Critically Endangered Hawksbill and Endangered Green sea-turtles to breed unfettered and seabirds to re-colonise from the surrounding six Important Bird Areas.

Academic paper detailing eradication lessons to be shared widely in this fast growing field, in which knowledge of eradications on tropical islands is still in its infancy.

(91 words)

27. Main Activities

Output 1	Activities or tasks to be done to deliver the outputs. Include activities on information sharing and collaboration with other OTs
1.1	Professional rat eradication expert contracted.
1.2	Continued technical liaison between the PI Peter Carr, Royal Botanic Gardens Kew, RSPB and the contracted professional rat eradication expert.
1.3	Six paid labourers with experience of vegetation management (employed in Ground's Maintenance on Diego Garcia) will be contracted from the BOS Contractor at the Naval Support Facility on Diego Garcia for a series of six three day weekends (to undertake outputs 1.4 – 1.8 with the PI Peter Carr).
1.4	Assess rat and land crab density; secure genetic sample of rats present.
1.5	Bait acceptance trial conducted.
1.6	Clear-fell and burn coconut palms, fruits and fallen leaves as well as other alien plants; cross-cut trunks will be left to rot <i>in situ</i> .
1.7	Cut in grid system for bait stations - the grid lanes will be spaced at 25m intervals and will run the length and breadth of the island. Hand-held GPS and tape measures will be used to determine 25m intervals around the island perimeter. A single compass bearing will be followed "east to west" and again "north to south" to ensure parallelism of cut lines.
1.8	Elevated (by two inches) bait stations deployed (GPS Way-Pointed and labelled but not initially baited) at 160 points – at the start, end and all intersections of the grid system. They will be elevated to limit the bait take by land crabs, and in advance to reduce the neophobic tendencies of rats to the introduced bait stations.
Output 2	
2.1	Two paid labourers (US Department of Defence certified Pest Control Technicians) will be contracted from the BOS Contractor at the Naval Support Facility on Diego Garcia (to undertake outputs 2.2 – 2.7 with the PI Peter Carr and the professional rat eradication expert).
2.2	Eradication stores and equipment will be shipped in waterproof rat-proof containers on the BIOT Patrol Vessel (BPV) Pacific Marlin to Ile Vache Marine and be off-loaded on to the island using BPV small craft. Base camp and the stores dump will be located in the area of the wide sandy beach on the northern side of the island, which also provides the safest landing access.
2.3	All bait stations will be supplied with 160g of the second generation anticoagulant bait brodifacoum (@ either 0.005% or 0.002% active ingredient – bait acceptance trial dependant) in the form of 8 x 20g blocks. The bait stations will be checked daily for seven days and any bait removed will be replenished. On day seven the bait station load will be reduced to 80g for the

	remaining 21 days and continue to be checked daily and replenished as required.
2.4	On day one, seven and 14 a hand broadcast of Pestoff pelletised brodifacoum (@ 0.002% active ingredient) will be spread throughout the island. This will be applied at 4 kg/100m ² in the interior of the island on day one, seven and 14 and at 1.5kg/50m along the coastline from the edge of vegetation to the limit of the high tide mark on the same days. In the interior, bait will be broadcast midway between all bait stations. Along the coast bait will be broadcast from the edge of the vegetation towards the shore at 50m intervals around the perimeter of the island.
2.5	When no further bait is being taken by rats from bait stations, baited mechanical traps (T-Rex Traps) will be deployed throughout the island for a minimum period of seven days to check for bait station shy rodents. Mechanical snap traps will be set in each 25m ² grid square in the area of still baited bait stations. If after seven days no further rats are trapped and no bait is taken (by rats) from the stations, the eradication attempt will have been deemed successful and stores, equipment and personnel will be recovered to Diego Garcia by the BIOT Patrol Vessel (BPV), Pacific Marlin. If rats are still detected and this requires a stay beyond the predicted maximum stay of 30 days, this is planned for. A home-made chocolate wax will be used as bait for the mechanical traps.
2.6	Prior to the eradication team departing the island, all bait stations will be loaded with a further 160kg of rodent blocks and a final hand broadcast of pelletised brodifacoum will be delivered.
2.7	On completion of the eradication, stores, equipment, bait and all rubbish will be removed from the island. Bait stations will not be removed until after the first post-operation monitoring and only if the monitoring proves conclusively that the operation was successful.
Output 3	
3.1	Post-eradication monitoring (30, 60 and 90 days after) by the PI Peter Carr and another qualified pest control technician.
3.2	Post-eradication academic paper completed by the PI Peter Carr with technical review and input by the RSPB, the Royal Botanic Gardens, Kew and the professional rat eradication expert.
3.3	Post-eradication academic paper disseminated (e.g. to other OTs and via RSPB networks).

28. Risks

Description of the risk	Likelihood the event will happen (H/M/L)	Impact of the event on the project (H/M/L)	Steps the project will take to reduce or manage the risk
Unsuccessful field operations	L	N/A	With the preparatory work, the amount of bait, the tiny size of the target island and the presence of an experienced eradication expert, the prospect of an unsuccessful operation is minimal. On-going monitoring plans are in place to detect the presence of any rats post-operation.
Lack of availability of key staff	L	M	Peter Carr is a linchpin to the operation. If he is unavailable, Ms. Risa Caneda his deputy on island is capable of handling all of the on-island preparations, including the pre-eradication work required on Ile Vache Marine.
Sickness or injury of project team members	L	H	The remoteness of the island, the passage time back to Diego Garcia, the lack of adequate medical facilities on Diego Garcia and the requirement to air MEDEVAC any serious casualties to either Singapore or South Africa means if there is a sickness or injury that requires urgent

Description of the risk	Likelihood the event will happen (H/M/L)	Impact of the event on the project (H/M/L)	Steps the project will take to reduce or manage the risk
			attention, it becomes a major problem. BOS Contractors will be on official duty and therefore will be covered by insurance if a MEDEVAC flight is required. The professional eradication expert must also have appropriate insurance cover. A First Aider will always be present. For the periods when chain sawing will take place (phase one) one of the UK military medics is likely to be present. There are no dangerous activities during the eradication phase.
Stakeholder conflict with the BIOT Patrol Vessel	L	H	The BIOT Administration and the company who will be managing the MPA Patrol Contract are both stakeholders in the BPV programme. It is imperative to the success of this eradication operation that dedicated BPV time (excluding emergency tasks for the BPV) is devoted to the eradication effort. This time should be directed by the UK FCO in order that all stakeholders are clear on the BPV sailing hours-time and allocation.
Weather and sea conditions	L	L	Whilst landing on Ile Vache Marine is not advisable in inclement weather, adequate time exists to conduct any landings in calm waters. Life on Ile Vache Marine will be bearable for the eradication team due the climate and the lack of dangerous terrestrial organisms in the Chagos.
Biosecurity (rat re-infestation from another island)	L	L	The distance from the nearest rat-infested island and the depth of water and speed of current through the passes, coupled with no access to the island renders re-infestation hugely improbable. On-going monitoring plans are in place to detect the presence of any rats post-operation.
Conservation impact	L	L	The baiting operation is based on sound and proven techniques, with brodifacoum bait having a proven track record worldwide. This is a second generation rodenticide (brodifacoum) in pellet and block form which kills rats in as few as 3 days with an average 4.7 days. Prior ecological surveys have confirmed there are no other species at risk from the eradication operation.
Public interest	L	L	With no public access allowed to the island and exceedingly limited access to the entire Territory, the risk of public interest is deemed negligible except from what information is released deliberately by the eradication project stakeholders.
Visitors	L	L	There is no access allowed to Ile Vache Marine and extremely limited access to the atoll and entire Territory. It is not envisaged that outside of the eradication team another human will be present within 100 miles.

29. Sustainability: How will the project ensure benefits are sustained after the project has come to a close? If the project requires ongoing maintenance or monitoring, who will do this? (200 words max)

After the habitat management has been undertaken and the eradication of Black Rats is complete, the project becomes self-sustaining. The project requires monitoring periodically, ideally at one, two and three months after eradication, to ensure all rats were eradicated, and this has been factored in to the overall plan. The exact dates for the post-eradication inspections are flexible.

An academic paper will be produced and disseminated confirming the eradication outcome and to share the project lessons. This will include a baseline of turtle, bird, crab, vegetation and some invertebrate data which will be updated with further rat monitoring as part of planned scientific expeditions programme to the Chagos. These expeditions are currently happening annually. Seabird recovery is seldom instant and may take decades rather than years.

(126 words)

30. Monitoring & Evaluation: How will the project be monitored and who will be responsible? Will there be any independent assessment of progress and impact? When will this take place, and by whom? (250 words max)

There will be ongoing liaison between the PI and project partners to ensure that the project is delivered as planned, to time and within budget.

The “active” part of this project, vegetation management and rat eradication, will take place over seven months. During this time, progress will be reported back by the PI Peter Carr at specific points to the project partners. The reporting points are:

1. Results of rat and land crab density assessments and confirmation of genetic rat sample collection.
2. Results of rat bait acceptance trial and confirmation of bait to be used in eradication.
3. Confirmation of completion of vegetation management (clear-felling and burning of coconuts; bait station grid system cut in; bait stations deployed).
4. Completion of rat eradication phase (30 days).

The remaining seven months of the project will entail post-eradication monitoring, evaluation, reporting and dissemination. A post-eradication academic paper will be completed by the PI Peter Carr, with technical review and input by the RSPB, the Royal Botanic Gardens Kew and the professional rat eradication expert. If possible this will be published in a peer-reviewed journal.

The results of the project will be long-term monitored by independent terrestrial scientists as part of the Chagos scientific research expeditions, at present these are occurring annually. A baseline of ecological data has been gathered prior to the eradication attempt for researchers to compare future changes against i.e. breeding bird and turtle numbers, vegetation composition. Results will be reported as appropriate, e.g. academic papers, conference presentations etc.

(250 words)

The project completion report is **due up to 3 months** after the project is over and is linked to the final payment.

31. Use of information: If your application is successful, the information in this form may be published on the internet or used in publications. If there are any parts of the application which you do not want to be used in this way, please indicate them in the box below.

There are no parts of this application that need to remain confidential.

32. Financial controls: (Who is responsible for managing the funds? What experience do they have? What arrangements are in place for auditing expenditure?)

The CCT Treasurer, Commander R J R Martin, Royal Navy, will be responsible for managing the funds. Commander Martin has been CCT Treasurer (on a voluntary basis) since April 2007. From 2001 to 2011 he was NetRegs Programme Manager at the Environment Agency, where he managed a budget of £10m.

CCT is currently in the process of appointing an auditor, who will be in place by February 2013. Until the 2011-12 financial year, CCT's income was not large enough to require accounts to be audited. There was a steep rise in income in 2011-12 (mostly due to a large legacy bequest) and accounts will be independently examined from now on.

Please complete the separate Excel spreadsheet which provides the Budget for this application. Some of the questions earlier and below refer to the information in this spreadsheet.

NB: Please state all costs by financial year (1 April to 31 March) and in GBP. **Budgets submitted in other currencies will not be accepted.** Use current prices – and include anticipated inflation, as appropriate, up to 3% per annum. The Darwin Initiative cannot agree any increase in grants once awarded.

33. Value for Money

Please explain how you worked out your budget and how you will provide value for money through managing a cost effective and efficient project. You should also discuss any significant assumptions you have made when working out your budget. (300 words max)

The budget has been worked out based upon actual quotes or known prices for flights, labour, bait, equipment and associated stores. Involvement of personnel from off-island has been minimised (to one person, the professional rat eradication expert) to limit the requirement for expensive commercial and AMC flight costs. The cheapest qualified labour has been sourced to undertake habitat management and pest control operations, if appropriate volunteers are not forthcoming. The representatives of the principal stakeholders (CCT, UK FCO, RSPB, RBG-Kew and Warwick University) have all donated at least half or all of their time to the project as match funding.

The major assumption involved in the project is the use of the BIOT Patrol Vessel (BPV) for transporting personnel and equipment to and from the island. If this was to be paid for the operation would become prohibitively expensive. The BIOT Administration has confirmed that the BPV will be available for use for the time required to undertake this project successfully, at no charge.

(164 words)

Provide a project implementation timetable that shows the key milestones in project activities. Complete the following table as appropriate to describe the intended workplan for your project (Q1 starting April 2013)

Activity	No of Months	Year 1				Year 2				Year 3			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Output 1							N/A	N/A	N/A	N/A	N/A	N/A	N/A
1.1 Professional rat eradication expert contracted.	0.1	▪											
1.2 Continued technical liaison between the PI Peter Carr, Royal Botanic Gardens Kew, RSPB and the contracted professional rat eradication expert.	14	▪	▪	▪	▪	▪							
1.3 Six paid labourers with experience of vegetation management (employed in Ground's Maintenance on Diego Garcia) will be contracted from the BOS Contractor at the Naval Support Facility on Diego Garcia for a series of six three day weekends (to undertake outputs 1.4 – 1.8).	0.4	▪											
1.4 Assess rat and land crab density; secure genetic sample of rats present.	0.1	▪											
1.5 Bait acceptance trial conducted.	0.1	▪											
1.6 Clear-fell and burn coconut palms, fruits and fallen leaves as well as other alien plants; cross-cut trunks will be left to rot <i>in situ</i> .	0.2	▪											
1.7 Cut in grid system for bait stations - the grid lanes will be spaced at 25m intervals and will run the length and breadth of the island. Hand-held GPS and tape measures will be used to determine 25m intervals around the island perimeter. A single compass bearing will be followed "east to west" and again "north to south" to ensure parallelism of cut lines.	0.2		▪										
1.8 Elevated (by two inches) bait stations deployed (GPS Way-Pointed and labelled but not initially baited) at 160 points – at the start, end and all intersections of the grid system. They will be elevated so land crabs do not take bait and in advance to reduce the neophobic tendencies of rats to the introduced bait stations.	0.1			▪									
Output 2							N/A	N/A	N/A	N/A	N/A	N/A	N/A

Activity	No of Months	Year 1				Year 2				Year 3			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
2.1	Two paid labourers (US Department of Defence certified Pest Control Technicians) will be contracted from the BOS Contractor at the Naval Support Facility on Diego Garcia (to undertake outputs 2.2 – 2.7 with the PI Peter Carr and the professional rat eradication expert).	1.2			▪								
2.2	Eradication stores and equipment will be shipped in waterproof rat-proof containers on the BIOT Patrol Vessel (BPV) Pacific Marlin to Ile Vache Marine and off-loaded on to the island using BPV small craft. Base camp and the stores dump will be located in the area of the wide sandy beach on the northern side of the island, which also provides the safest landing access.	0.23			▪								
2.3	All bait stations will be supplied with 160g of the second generation anticoagulant bait brodifacoum (@ either 0.005% or 0.002% active ingredient – bait acceptance trial dependant) in the form of 8 x 20g blocks. The bait stations will be checked daily for seven days and any bait removed will be replenished. On day seven the bait station load will be reduced to 80g for the remaining 21 days and continue to be checked daily and replenished as required.	1			▪								
2.4	On day one, seven and 14 a hand broadcast of Pestoff pelletised brodifacoum (@ 0.002% active ingredient) will be spread throughout the island. This will be applied at 4 kg/100m ² in the interior of the island on day one, seven and 14 and at 1.5kg/50m along the coastline from the edge of vegetation to the limit of the high tide mark on the same days. In the interior, bait will be broadcast midway between all bait stations. Along the coast bait will be broadcast from the edge of the vegetation towards the shore at 50m intervals around the perimeter of the island.	0.5			▪								
2.5	When no further bait is being taken by rats from bait stations, baited mechanical traps (T-Rex Traps) will be deployed throughout the island for a minimum period of seven days to check for bait station shy rodents. Mechanical snap traps will be set in each 25m ² grid square in the area of still baited bait stations. If after seven days	0.5			▪								

Activity	No of Months	Year 1				Year 2				Year 3			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
no further rats are trapped and no bait is taken (by rats) from the stations, the eradication attempt will have been deemed successful and stores, equipment and personnel will be recovered to Diego Garcia by the Pacific Marlin. If rats are still detected and this requires a stay beyond the predicted maximum stay of 30 days, this is planned for. A home-made chocolate wax will be used as bait for the mechanical traps.													
2.6 Prior to the eradication team departing the island, all bait stations will be loaded with a further 160kg of rodent blocks and a final hand broadcast of pelletised brodifacoum will be delivered.	0.1			▪									
2.7 On completion of the eradication, stores, equipment, bait and all rubbish will be removed from the island. (Bait stations will not be removed until after the first post-operation monitoring and only if the monitoring proves conclusively that the operation was successful).	0.1			▪									
Output 3							N/A	N/A	N/A	N/A	N/A	N/A	N/A
3.1 Post-eradication monitoring (30, 60 and 90 days after) by the PI Peter Carr and another qualified pest control technician.	3				▪	▪							
3.2 Post-eradication academic paper completed by the PI Peter Carr with technical review and input by the RSPB, the Royal Botanic Gardens, Kew and the professional rat eradication expert.	1					▪							
3.3 Post-eradication academic paper disseminated (e.g. to other OTs and via RSPB networks).	1					▪							

CERTIFICATION 2013/14

On behalf of the trustees of The Chagos Conservation Trust (CCT)

I apply for a grant of £32,256 in respect of **all expenditure** to be incurred during the lifetime of this project based on the activities and dates specified in the above application.

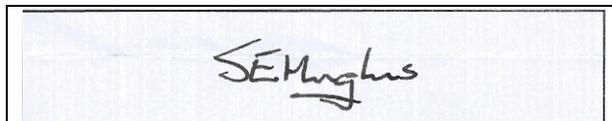
I certify that, to the best of our knowledge and belief, the statements made by us in this application are true and the information provided is correct. I am aware that this application form will form the basis of the project schedule should this application be successful. *(This form should be signed by an individual authorised by the lead institution to submit applications and sign contracts on their behalf.)*

I enclose CVs for project principals and letters of support. Our most recent accounts are also enclosed.

CCT's last two complete annual accounts are enclosed, but these are unverified as the organisation's income has not been large enough until recently to require independent verification. CCT has not to date produced an annual report, we are now in the process of producing our first such publication.

Name (block capitals)	SIMON ERSKINE HUGHES
Position in the organisation	SECRETARY

Signed



Date:

7th January 2013

Application Checklist for submission

	Check
Have you provided actual start and end dates for your project?	√
Have you provided your budget based on UK government financial years i.e. 1 April – 31 March and in GBP?	√
Have you checked that your budget is complete , correctly adds up and that you have included the correct final total on the top page of the application?	√
Has your application been signed by a suitably authorised individual? (clear electronic or scanned signatures are acceptable in the email)	√
Have you included a 1 page CV for all the principals?	√
Have you included a letter of support from the <u>main</u> partner(s) organisations?	√
Have you included a copy of the last 2 years' annual report and accounts for the lead organisation? An electronic link to a website is acceptable. <i>CCT's last two complete annual accounts are enclosed, but these are unverified as the organisation's income has not been large enough until recently to require independent verification. CCT has not to date produced an annual report, we are now in the process of producing our first such publication.</i>	
Have you read the Guidance Notes?	√
Have you checked the Darwin Plus website immediately prior to submission to ensure there are no late updates?	√

Once you have answered the questions above, please submit the application, not later than midnight GMT at the end of Monday 7 January 2013 to Darwin-Applications@ltsi.co.uk using the first few words of the project title **as the subject of your email**. If you are e-mailing supporting documentation separately please include in the subject line an indication of the number of e-mails you are sending (e.g. whether the e-mail is 1 of 2, 2 of 3 etc). You are not required to send a hard copy.

DATA PROTECTION ACT 1998: Applicants for grant funding must agree to any disclosure or exchange of information supplied on the application form (including the content of a declaration or undertaking) which the Department considers necessary for the administration, evaluation, monitoring and publicising of Darwin Plus. Application form data will also be held by contractors dealing with Darwin Plus monitoring and evaluation. It is the responsibility of applicants to ensure that personal data can be supplied to the Department for the uses described in this paragraph. A completed application form will be taken as an agreement by the applicant and the grant/award recipient also to the following:- putting certain details (i.e. name, contact details and location of project work) on the Darwin Initiative and Defra/FCO/DFID websites (details relating to financial awards will not be put on the websites if requested in writing by the grant/award recipient); using personal data for the Darwin Initiative postal circulation list; and sending data to Governor's Offices outside the UK, including posts outside the European Economic Area. Confidential information relating to the project or its results and any personal data may be released on request, including under the Environmental Information Regulations, the code of Practice on Access to Government Information and the Freedom of Information Act 2000.