DPLUS024

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

Submit by Monday 23 September 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	**Darwin Fellowship – MRes Carbon sequestration in community forests, St Helena**
2. OT(s) covered by proposal	St Helena
3. Start Date:	31st January 2014
4. End Date:	1st August 2015
5. Duration of project (cannot be longer than 24 months)	18 months

Summary of Costs	2013/14	2014/15	2015/16	**Total**
6. Budget requested		£17,158	£4,459	£21,617
7. Total value of Co-funding		£5,500	£2,750	£8,250
8. Total Project Budget (all funders)		£22,658	£7,209	£29,867
9. Names of Co-funders	Environmental Management Division; St Helena National Trust (work in kind)			

10. Lead applicant organisation (who will be responsible for delivering outputs, reporting and managing funds)	Environmental Management Division (EMD), Environment & Natural Resources Directorate, St Helena Government.
11. Project Leader name	Shayla Ellick
12. Email address	
13. Postal address	Essex House, Jamestown, St Helena Island, S.A.O, STHL 1ZZ
14. Contact details: Phone/Fax/Skype	

15. Type of organisation of Lead applicant. Place an x in the relevant box.												
OT GOVT	x	UK GOVT		UK NGO		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**
Surname	**Ellick**	**Hillman**	
Forename(s)	**Shayla**	**Chris**	
Post held	**Species Conservation & Environmental Research Officer**	**Director**	
Institution (if different to above)		**St Helena National Trust (SHNT)**	
Department	**Terrestrial Conservation Division**		
Telephone/Skype			
Email			

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 Q17 was No, provide details of 3 contracts previously held by your institution that demonstrate your credibility as an implementing organisation. These contacts should have been held in the last 5 years and be of a similar size to the grant requested in this application. (If your answer to Q17 was Yes, you may delete these boxes, but please leave Q18)

Contract 1 Title	Solid Waste Management Project – Operational Management Support Link
Contract Value	£96,580
Contract Duration	16th April 2012 to 31st March 2014
Role of institution in project	Manage the Link
Brief summary of the aims, objectives and outcomes of the contract.	St Helena's Solid Waste Management Project includes procurement of specialist vehicles and plant, landfill bird proof netting and the redevelopment of the islands Landfill Site. Primarily, the project delivery, standard and reduction of bird strike risk, is tied to the certification of the islands first airport. The redevelopment project includes many technical aspects including a waste reception building, the excavation of waste cells, the installation of specialist bird netting to cover waste cells, a civic amenity re-cycling facility, methods of preventing groundwater contamination, means for monitoring landfill gas, surface water drainage systems, and improvements to the internal roads to ensure all weather access. SLR – the Operational Management Support Link provided technical support, design, contract cost assurance and ad hoc advice in relation to the Solid Waste Management Project including providing tender documents and bill of quantities, site drawings and draft contract.

Client reference contact details (Name, e-mail, address, phone number).	Originally Head of EMD, Tara Pelembe Tel: + (290) 22270 Contact person now Isabel Peters, Acting Head

Contract 2 Title	Supporting Critical Species Recovery and Horticultural Needs on St Helena
Contract Value	£87, 288
Contract Duration	May 2008 – April 2010
Role of institution in project	Managed and delivered on project
Brief summary of the aims, objectives and outcomes of the contract.	The aim of the project was to reduce the threats to St Helena's critically endangered plant species and habitats enabling ANRD to effectively implement species recovery action plans. The outcomes of the project included a capacity audit, staff training and development an established seed collection programme with upgraded seed banking facilities and protocols for species propagation.
Client reference contact details (Name, e-mail, address, phone number)	Darren Duncan, (Then) Chief Agriculture and Natural Resources Officer Tel: + (290) 24724 Email: darren-duncan@enrd.gov.sh

Contract 3 Title	Restoration of a Functioning Bastard Gumwood population on St Helena
Contract Value	£52,950
Contract Duration	April 2011 – March 2014
Role of institution in project	Manage and deliver on project
Brief summary of the aims, objectives and outcomes of the contract.	The project aimed to restore a self-sustaining bastard gumwood (a unique endemic) population on St Helena, through restoration and management of two key sites.
Client reference contact details (Name, e-mail, address, phone number).	Darren Duncan, (Then) Chief Agriculture and Natural Resources Officer Tel: + (290) 24724 Email: darren-duncan@enrd.gov.sh

Project Details

19. Project Outcome Statement: Describe what the project aims to achieve and what will change as a result. (100 words max)
The MRes will investigate carbon sequestration of selected endemic tree species, in order to provide a scientific basis to register a carbon off-setting scheme. This will offer visitors information on the carbon sequestration potential of schemes on St Helena. In turn, the project will also allow calculations of current and future carbon capacity of restoration sites on the island. This project will enable global businesses and international travellers to offset their carbon footprint by funding tree planting initiatives on Saint Helena. In addition, this would feed into St Helena's biodiversity targets and allow development of community forests and habitat creation/restoration.

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)

The MRes will be linked to 'Creating Community Forests to Enhance Biodiversity and Provide Educational Activities (Ref: 20005)', a Darwin Initiative grant secured by SHNT commencing October 2013. The aim is, 'to create three…sustainable Community Forests to be enjoyed…by islanders and tourists alike; ensuring…key island biodiversity and environmental knowledge by creating a self-sustaining carbon sequestration project, outdoor classrooms for alternative education and Social Enterprise providing benefits to local livelihoods'.

The project aims to develop new revenue streams and increase appropriate skills to make the management of these sites environmentally and financially sustainable for generations to come.

As part of the Community Forests Project, SHNT wishes to develop a carbon sequestration and offsetting programme, using endemic and native plants, for all three Community Forest sites. This is vital particularly with the current development of St. Helena's airport. Unfortunately, very little is currently known about the carbon sequestration potential of endemic species. This project would fill a knowledge gap and help deliver the Community Forests project objectives.

A funded MRes would add to the island's knowledge base allowing carbon sequestration decisions to be made from a position of authority. The results would further our appreciation of the island's terrestrial cycles and systems.

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)

Contact has been made with several universities who have on-going research in similar fields, with initial replies from several indicating interest. These include Dr Rob Marchant (University of York) who has managed tree carbon analysis work in East Africa. Dr Alan Gray, (Centre for Ecology and Hydrology), has expressed interest in taking on an external supervisor role. Dr Gray has a long association with St Helena and has managed research here on several occasions.

The first task once enrolled on the MRes would be to undertake an authoritative literature review to determine best practice research methods. The results of this, in consultation with the project supervisors, would guide the development of an appropriate methodology. It is expected that the supervisors would visit St Helena during the critical stage of planning and field work. Likewise, the student would attend the university to develop appropriate skills and field equipment expertise. This period would be used to attend stand-alone modules in quantitative research methods, statistics and to take advantage of other appropriate learning opportunities

The methodology will be undertaken on the species named below and at a number of sites including High Peak, Blue Point and Millennium Forest. Methods are likely to include:

- taking measurements of trees and utilising equations to quantify carbon storage potential of individual species
-some destructive sampling where necessary and when not in conflict with other conservation goals
- use of small oven/ infrared gas analyser in the field for carbon analysis

The selected species include those planted throughout the Community Forest sites: *Commidendrum robustum* (Gumwood), *Trochetiopsis ebenus* (Dwarf Ebony), *Phylica polifolia* (Rosemary), *Commidendrum rugosum* (Scrubwood); the project could also include other species if not in conflict with on-going species management (some are critically endangered).

This project is innovative and timely. This will be the first time such research has been carried out on St Helena and could offer a new route for the conservation of critically endangered species. With the development of an airport (to be opened in 2016) and a rapid rise in tourist numbers (600 at present, projected to peak at 30,000 by 2022) the opportunity for off-setting schemes is apparent. The work would

pave the way for future research of other endemic species to develop new revenue opportunities for urgent conservation work.

The student, Shayla Ellick, has had weekly study time approved by full-time employers to dedicate to the project. In-kind support will be offered by EMD and SHNT colleagues including:

- Staff time for help with field work and accessing sites
- Internet access
- Academic and learning support
- Reviewing work as and when required
- Provide Skype access

The student would travel to the UK institution to meet with supervisor/s and undertake relevant modules, in particular, research skills/statistics. This would be early in the project to allow the development of field work methods and organising shipping of the appropriate analysis equipment.

Likewise the supervisors would visit St Helena during the field work period.

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 project directly addresses Objectives A, D & F of St. Helena's National Environmental Management Plan (engage island community and stakeholder in effective environmental management, including through promotion of the benefits of the island for island residents and tourists, and through sustainable use; safeguard St. Helena's environment…for future generations through effective environmental management; minimise the impact of climate change through effective mitigation and adaptation); Objectives I & IV of the Global Strategy for Plant Conservation (Plant diversity is well understood, documented and recognized; Education and awareness about plant diversity, its role in sustainable livelihoods and importance to all life on Earth is promoted); & also addresses Articles 6, 10, 12(b), 13 and 18(2 & 5) of the Convention on Biological Diversity.
The results of the project will allow the development of a useful tool for estimating carbon sequestration potential of restoration sites. The findings will enable economic valuation of selected species, encouraging green economic growth on the island. In addition the project will help to provide mitigation options for climate change impacts associated with the airport.

b- The project will be carried out under consultation with supervisors who are highly experienced in this field, ensuring tried and tested methods are used. This ensures robust accountability and focuses on research and evidence-based approaches to environmental management. Dr Alan Gray (CEH) has a strong understanding of St Helena environments and the critically endangered tree species. Dr Rob Marchant (University of York) has expressed a strong interest in the project and has carried out similar work in East Africa and New Zealand. His research interests are: biogeogeography, climate change, interactions with ecosystem use as characterised by ecosystem services and carbon storage. The University of York appears to be a strong contender for this role. There are links between EMD and the Environment Department of University of York where the project would sit.

c- With the development of St Helena's airport in progress, mitigation against negative impacts of the airport are needed; this project will provide the evidence/justification for large-scale planting/ restoration projects to mitigate effects. The results of the project will also encourage local community to plant species in gardens etc. Also input directly into the Tourism vision for St Helena of branding the island as a 'green' location.

A project of this kind that up-skills an existing member of staff both enhances the environmental and conservation knowledge base and offers St Helena conservation an increased skill base within the staff teams.

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)

The project will be managed locally by EMD & SHNT; discussions have taken place between these two organisations on the best way to take the project forward and a collaborative approach between these and the UK supervisors will be used.

EMD will allow the student weekly study time to dedicate to the project, in addition to providing advice and support on fieldwork etc. where required.

SHNT staff will also be available for advice, support and guidance. The Darwin Community Forests project Steering Group will receive regular reports on the progress of the project.

In kind staff time for help with fieldwork will be provided from both EMD and SHNT. Moreover, vehicle and travel costs will be offered as further in-kind match funding by EMD.

Dr Alan Gray & the UK institution/supervisor will provide technical knowledge on carbon sequestration research and will provide guidance throughout the project. Replies indicating interest in supervision of the project have been received from several universities, with a particularly favourable reply from the University of York, who do similar research in East Africa.

The South Atlantic Research Institute will also provide support and resources for the project where required (and have been contacting universities in relation to this).

Other island organisations (Tourism and Education departments) will benefit from the results of the project, and could help in the promotion of the results.

Other international organisations (RBG Kew and RSPB) have indicated support for the project, and are available for technical advice and guidance when needed.

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

Environmental Management Division (EMD)

EMD is: the focus of environmental management for the St. Helena Government (SHG) through creation and implementation of policy and regulation, provision of advice, underpinned by clear, transparent, research-led evidence-base; supported by a systematic monitoring and evaluation and a comprehensive communications and stakeholder engagement strategy.

EMD has 9 strategic objectives outlined in its strategic plan – all activities are focussed on delivery of these objectives – these include implementing a £1.3 million waste management plan, developing environmental policy and law, marine and terrestrial nature conservation

EMD delivers the majority of strategic plan targets on time and on budget – including its team and strategic plan, the creation of a National Environmental Management Plan, Solid Waste Management Strategy and delivery of waste management system, Environmental law, endemic plant propagation and restoration, and importantly, the National Conservation Area network. The Nature Conservation Section will lead on this project – the staff cohort includes long term local restoration workers, returning students and short term technical support posts.

EMD teams have over 20 years' experience managing and restoring habitats, monitoring and research (formerly with the Agriculture and Natural Resources Directorate). They have brought species back from population bottlenecks (sometimes down to one isolated specimen) and thus improving their status, carried out species and conservation research and engaged in annual awareness events through:

- Marine Awareness Week
- Nursery Open Day
- Stakeholder Engagement Forum
- St Helena Science Fair

The teams present at local, regional and international workshops and conferences, develop conservation protocols and policies, carry out guided walks, assist tourists, undertake footpath maintenance, prepare signage and interpretation panels, provide certificated training, offer work experience to students and people with learning disabilities, work across sectors and with national and international partners.

EMD has unrivalled knowledge of the biodiversity with extensive experience of monitoring and management. EMD sits within ENRD and the wider SHG structure. Through SHG the project will receive:

- HR support
- Financial and salary services
- Auditing
- Vehicle maintenance
- Health and safety advice
- Appropriate training

In addition administrative support will be provided by EMD admin staff, similarly infrastructure including office space will be contributed as will transport costs for travel to sites.

Saint Helena National Trust (SHNT)

SHNT have been monitoring and managing the St Helena Environment over the past 12 years including the critically endangered Wirebird annual census, recent research demonstrating that removal of cats enhances Wirebird, Millennium Forest establishment, PostBox Walks, High Hill & Heart-shaped waterfall facilities enhancement & maintenance, built heritage maintenance, bird hazard surveys. The current team of three experienced fieldworkers will be available fulltime from April 2014.

SHNT have expertise in managing funded Darwin projects covering community engagement, restoration work, education and invertebrate specialisms.

Presently St Helena has a large number of highly skilled conservationists and researchers within EMD, SHNT and who work independently of this; there are also strong links with a number of academic institutions. In terms of on-island knowledge this offers a huge potential. These factors make this an opportune time for research of this nature.

25. Expected Outputs

Output (*what will be achieved e.g. capacity building, action plan produced, alien species controlled)*	Indicators of success *(how we will know if its been achieved e.g. number of people trained/ trees planted)*	Status before project/baseline data *(what is the situation before the project starts?)*	Source of information *(where will you obtain the information to demonstrate if the indicator has been achieved?)*
1. Carbon sequestration of selected endemic plants investigated and reported	Literature review completed. 5 endemic species + 5 non-native species assessed for the carbon content	The carbon capture and storage potential of endemic species are not presently known	Master's thesis, literature reviews
2.Student successfully completed postgraduate study.	MRes achieved if results show positive benefits, then they will be acted on to establish an off-setting scheme	A clear knowledge gap	University transcript Data results of field work

3. Carbon off-setting scheme feasibility explored	SHNT scheme set up, or justification provided as to why the scheme is not viable	A clear knowledge gap	Community Forests Darwin report

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

1. Carbon sequestration of selected endemic plants investigated and reported – an essential aspect of the proposed thesis and the ultimate output for assessing the carbon off-setting potential of a number of the endemic tree species of St Helena

2. Student successfully completed postgraduate study – from this St Helena will be provided with a robust piece of academic work that explores new methods for raising resources for essential conservation work. In addition, the island expertise will be significantly improved.

3. Carbon off-setting scheme feasibility explored – and if shown to be a viable option, implemented raising the resource potential for conservation

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	
1.2	
1.3	

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
Core personnel leaving the island	L	H	The student is bonded to SHG for 3 years following undergraduate scholarship so likelihood of leaving, particularly during this opportunity for further academic study, is extremely low
Breakdown of equipment	L	M	When required, two samples will be taken to allow duplication of analysis, both on island and at the UK institution.

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)

The benefits of this project are manifold: providing calculations of current and potential carbon capacity of restoration sites around the island; furthering the branding of the island as a 'green' location by giving visitors evidence-based information on their contributions to conserving island biodiversity;

These benefits will be used by the island for years to come; the evidence produced from the project will be self-sustaining.

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)
The student will be required to report to the Darwin Community Forest project steering group during its scheduled meetings, where feedback, guidance and support will be given. While on island regular meetings with supervisors will take place via Skype. In addition, supervisors will undertake a visit to the island during the field work period to ensure the project is running smoothly. The independent assessment will be via thesis moderation.
The project completion report is **due <u>up to</u> 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.

32. Financial controls: (Who is responsible for managing the funds? What experience do they have? What arrangements are in place for auditing expenditure?)
All project funding will be routed through the EMD accounts section which operates under audited SHG accounting procedures. All monies will be placed into a designated account and have a designated financial officer to ensure finances/budgets are monitored. The Project Leader will have an overview and will regularly monitor the budget and ensure value for monies for purchased goods. An independent auditor will audit expenditure. EMD already has experience of successfully managing projects (see section 18, contract 1).

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)

As there is currently no university selected we have estimated the cost of tuition fees based on the universities that have indicated a strong interest in supervising the project.

Travel costs to and from the island are based on current pricing.

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			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Output 1	Carbon sequestration of selected endemic plants investigated and reported.	18								
1.1	Literature review	12								
1.2	Field work	9								
1.3	Thesis write-up	6								
Output 2	Student successfully completed postgraduate study	18								
2.1										
2.2										
2.3										
Output 3	Carbon offsetting scheme feasibility explored	3								
3.1										
3.2										
3.3										
3.4										
Output 4										
4.1										
4.2										
4.3										
4.4										
4.5										

CERTIFICATION 2013/14

On behalf of the government of St Helena

I apply for a grant of £21,617.00 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 audited/independently verified accounts and annual report are also enclosed (delete as appropriate):

Name (block capitals)	SHAYLA ELLICK
Position in the organisation	SPECIES CONSERVATION & ENVIRONMENTAL RESEARCH OFFICER

Signed  **Date:** 23/09/13

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 main 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.	
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 23 September 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.