Applicant: Manco, Bryan Organisation: Department of Environment and Coastal Resources Funding Sought: £49,300.00

DPLR2\1009

Native Plant Nurseries Refurbishments for Habitat Restoration and Climate-Friendly Landscapes

TCI has over 500 species of native plants (eight endemic; ≈40 near-endemic). ≈100 of these have landscaping value, but are underutilized as commercial nurseries do not understand propagation needs. DECR has expertise, growing 118 species and writing propagation protocols in the old nursery. The old nursery was undersized, and was destroyed in 2017 hurricanes Irma and Maria. A renovated, expanded nursery and Providenciales satellite nursery will supply plants for habitat restoration and applied conservation projects, and landscape use.

DPLR2\1009

Native Plant Nurseries Refurbishments for Habitat Restoration and Climate-Friendly Landscapes

Section 1 - Project Title & Contact Details

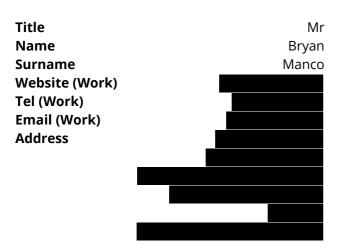
Q1. Project Title

Native Plant Nurseries Refurbishments for Habitat Restoration and Climate-Friendly Landscapes

Q2. Please select whether you are applying as an organisation or as an individual (Guidance section 3 and Guidance Glossary)

 \odot Organisation

PRIMARY APPLICANT DETAILS



GMS ORGANISATION

Туре	Organisation
Name	Department of Environment and
	Coastal Resources
Phone (Work)	
Email (Work)	
Address	

Section 2 - Overseas Territory(ies)

Q3. Overseas Territory (Guidance section 1.3):

Which UK Overseas Territory(ies) will your project be working in? Please note that in case of a non-permanent resident population you need to demonstrate a clear, meaningful, long-term link to the territory.

☑ Turks & Caicos Islands (TCI)

* if you have indicated a territory group with an asterisk, please give detail on which territories you are working on here:

No Response

In addition to the UKOT(s) you have indicated, will your project directly benefit any other UK OT(s) or country(ies)?

⊙ No

Section 3 - Project Partners

Q4. Project partners (Guidance section 3.2)

In this section, please give details of all the partners involved (including the Lead Partner) and provide a summary of their roles.

Project Leader name (Guidance section 3.1):	Bryan Manco		
Lead Partner name (if applying as an organisation; Guidance section 3.1):	Department of Environment and Coastal Resources		
Lead Partner Website (if applicable):	No Response		
Is the Lead Partner based in a UKOT where the project is working (Guidance section 3.1)?	⊙ Yes		
List other partners involved and where are they based (Guidance section 3.2):	Turks and Caicos National Trust Salt Mills Plaza Grace Bay Road Grace Bay Providenciales Turks and Caicos Islands		

Summary of roles and responsibilities of each partner in the project:	DECR will manage the project including securing the contractor through the TCI Government Procurement process, relaying the building plan to the contractor, overseeing the building process, and managing the established facility. The Turks and Caicos National Trust will assist with creation and distribution of educational materials, and with distribution of plants once the facility is complete.
l confirm that all listed partners are aware of this application and have	Checked

Attach a Cover Letter for your application (Guidance section 4.2).

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indicated support:

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Section 4 - Project Summary & Description

Q5. Project Summary (Guidance section 3.8)

Please provide a brief summary of your project. This may be used in communication activities and/or published online, if your application is successful.

TCI has over 500 species of native plants (eight endemic; ≈40 near-endemic). ≈100 of these have landscaping value, but are underutilized as commercial nurseries do not understand propagation needs. DECR has expertise, growing 118 species and writing propagation protocols in the old nursery. The old nursery was undersized, and was destroyed in 2017 hurricanes Irma and Maria. A renovated, expanded nursery and Providenciales satellite nursery will supply plants for habitat restoration and applied conservation projects, and landscape use.

Q6a. Description (Guidance section 2.1 and 6)

Please provide a description of your project, including:

- the overall objective
- the current situation and the problem the project is trying to address
- what success will look like and how you will measure it

Please be as specific as possible when describing the project, using quantified data and evidence where available. You may wish to consider: what are the specific threats to the environment that the project will attempt to address, and what should we know about these threats? What does your successful project look like? And how will you demonstrate whether and how your project has been successful?

The overall objective is to have DECR's Native Plant Nursery refurbished and expanded on its new site. TCl will have a functional native plant propagation facility to serve the needs of DECR's applied conservation projects for specific taxa, extensive habitat restoration projects, and native landscaping projects. The Caicos Pine Recovery Project and Native Plant Nursery was established by DECR at the TCl Government Farm on North Caicos in 2009. It suffered hurricane damage, and despite renovations, was destroyed beyond repair in 2017 hurricanes Irma and Maria. A new hurricane resistant and adaptable structure was begun with support from the local power company (recycled power poles). However, capital funds to complete the nursery have not been available and projects are lacking the facilities to fulfil demands for native plants. DECR staff have persevered, maintaining small propagation initiatives in their own properties and on a borrowed Government Farm plot, but this is not sustainable.

A small nursery was established at the DECR headquarters on Providenciales to supply plants for National Environmental Centre, Children's Park, and Coastal Garden use. This nursery also suffered damage in the 2017 hurricanes.

The project will renovate and expand the nurseries, including a shade house, plant benches, potting benches, tool and materials storage area, water tower, flood benches, rain shields, plumbing, and site security. It will be completed by qualified contractors, rather than the DECR staff which have neither expertise nor time to complete the building process.

When the main nursery is complete, it will produce native plants on a regular output schedule. The completed facility will be viable for decades, and has been specifically designed for resistance to hurricanes, and the ability to protect the stock during severe weather. DECR will keep track of germination, propagation, and horticultural maintenance work through inventory and protocols records, building upon protocols already written for numerous species. The nursery will focus mainly on the following efforts:
Continual production of the national tree, Caicos pine, for habitat restoration;

• Production of native plant species threatened by wild collection for the landscape industry including Buccaneer palm, Turks head cactus, and woolly nipple cactus;

• Maintenance and propagation of living collections to preserve extremely rare plants, such as the Lucayan pear cactus, known currently from a single remaining wild specimen;

• Rehabilitation of native plants rescued from development areas for reintroduction to other wild areas and native plant landscapes.

• Dissemination of plants to schools, organizations (National Trust), and community groups who will use the plants in native tree planting events - most especially in an effort to replace popular but environmentally harmful balloon releases done for events.

• Supply native plants to landscape projects for Government offices. Currently, most Government offices are either not landscaped at all; or they are landscaped with introduced species which have no ecological value locally and are high-maintenance on fertilizers, pesticides, and water which cause management and ecological problems of their own.

• Training to newer DECR staff, volunteers, and community members in propagation techniques so people can begin private native plant propagation (DECR will work with individuals who want to establish native plant agricultural businesses so the nursery is not undercutting profits they may generate).

• Create informational materials on native plants and bush medicine in collaboration with the Turks and Caicos National Trust.

The facility has been successful before, following its original development using recycled materials and a very modest budget. Refurbishing and expanding it will allow for increased production of native plants for conservation, restoration, and landscape uses.

Q6b. Long-term sustainability (Guidance section 2.1 and 6)

Please describe the long-term benefits of the project and the change it will bring about. How will the outcomes of the project be sustained after the funding is finished?

The long-term benefits of this project will be realized by the facility being more hurricane resistant than the others built before it, (the current skeleton structure withstood the 2017 hurricanes without damage)

and its production of native plants for conservation, restoration, and landscape use being higher than the old nursery. Once the facility is built, minor repairs can be covered by DECR's environmental monitoring budget, and consumable supplies continue to received either as donations or covered by the same recurrent budget in DECR. Newer staff in the department will be trained with propagation methods, and the protocols that are written down will be shared so that the knowledge is not lost. The facility will be managed by current DECR staff whose primary role is to look after the nursery, and the department will seek local volunteers to assist with the day-to-day work and plant rescues as required.

(Optional) Please upload any additional and supporting materials or files (such as maps of project sites, etc) below. Maximum of 5 pages:

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Section 5 - Project Outcome(s)

Q7. Project Outcome(s) (Guidance section 1.2)

Successful Darwin Plus Local projects must demonstrate measurable outcomes in <u>at least one of the</u> <u>themes</u> of Darwin Plus, either by the end of the project or soon after through a credible plan.

Please tick which theme(s) of Darwin Plus your project contributes to:

Checked	Biodiversity: improving and conserving biodiversity, and slowing or reversing biodiversity loss and degradation;
Checked	Climate change: responding to, mitigating and adapting to climate change and its effects on the natural environment and local communities;
Checked	Environmental quality: improving the condition and protection of the natural environment
Checked	Capability and capacity building: enhancing the capacity within OTs, including through community engagement and awareness, to support the environment in the

short- and long-term.

Please justify your selection. Please use quantitative information where possible here.

Biodiversity - By propagating native, endemic, and near endemic species, and maintaining an ex-situ living collection of these plants.

Climate Change - By encouraging planting of native trees and habitat restoration to serve as carbon storage, and for covering otherwise bare ground in potential landscape areas.

Environmental Quality - By promoting native plants as landscape options, improving green space and providing wildlife habitat.

Capacity Building – By training newer DECR staff, community volunteers, and prospective native plant agronomists on horticultural techniques for native plant propagation.

Section 6 - Workplan

Q8. Workplan (Guidance section 2.2)

<u>Please provide anticipated dates for the start and end of your planned project here.</u> Please use the <u>Darwin Plus Local Project Workplan</u> (available at: <u>https://darwinplus.org.uk/apply</u>) to provide a list of the individual activities you have planned for this project, a brief description of what each activity entails, and the months in which the activities will be carried out. If the project involves only one activity (e.g. a purchase), please still provide project start and end dates (noting estimated times for procurement). <u>Please note that your project must be completed by 31 March 2024.</u>

Start date:	End date:	Duration (e.g. 3 months):
01 October 2023	31 March 2024	6 months

Please upload the completed Darwin Plus Local Project Workplan with your proposed project activities here

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Section 7 - Costs

Q9. Costs (Guidance section 2.2 and please read the Finance Guidance)

Please provide a breakdown of costs to be funded through Darwin Plus Local (in GBP).

Are you seeking any matched funding for this project? (Please note that this is optional and there is no requirement to seek matched funding for Darwin Plus Local projects).

⊙ No

Budget line	Explanation	Cost in GBP
Staff costs:		
Consultancy costs:		
Overhead costs:		
Travel & subsistence costs:		
Operating costs:		

Capital equipment:	
Other Costs	
Total:	49,300.00

This section provides more information on the budget to help evaluators understand how you will use the funds you are requesting. You do not need to list all costs, but please list and detail costs of more than £1,000 per item below, under the appropriate budget line.

Details of staff costs over £1,000 (if relevant)

N/A

Details of overhead costs over £1,000 (if relevant):

N/A

Details of travel and subsistence costs over £1,000 (if relevant):

This line will fund inter-island travel, ground transportation, and subsistence within TCl for projectrelated staff to carry out legal and permitted collection of seeds and other propagation materials, including visits to known areas of important plant conservation significance (South Caicos, East Caicos, Big Ambergris Cay, Grand Turk, Salt Cay). This will focus on securing sustainable propagation material of the (currently) eight endemic plants, approximately 40 near-endemic plants, and plants with high poaching pressure (desirable in landscape industry). It will also support costs of moving propagated plants to the satellite nursery in Providenciales.

Details of operating costs over £1,000 (if relevant):

This line will fund the purchase of nursery consumables that cannot be secured by donation: Seed trays and flats, nursery pots (4", 6", 1-gallon, and 3-gallon), potting media, basic fertilizers, and hand tools.

Details of capital equipment costs over £1,000 (if relevant):

This line will fund the construction components, including materials and labour, towards the nursery renovation and expansion. It will include:

-Completion of top wiring and installation of sliding shade cloth

-Security fencing and hoarding (where needed) for sides of structure

-Construction of plant, potting, and flood benches; and gates

-Construction of tool and supply shed and water tower

-Construction of rain shade roof (clear corrugate)

-Installation of gravity-fed plumbing

-Installation of ground cloth

Details of consultancy costs over £1,000 (if relevant):

N/A

Details of other costs over £1,000 (if relevant)

This line will support the opening programme/ launch of the nursery, and the production (printing) of educational materials.

If your project budget was prepared in another currency and converted to GBP, please provide the exchange rate, its source, and the date it was accessed:

Other currency:	Exchange rate:	Source of this exchange rate:	Date exchange rate accessed:
USD	1.27	www.xe.com	26 June 2023

Darwin Plus Local has been created to build capacity and contribute to local economies in-territory.

What % of the total will be spent in the OTs?

If less than 80% of the total project spend is to be spent within the OT(s), please explain why.

All funds will be spent within TCI.

Section 8 - Local and National Priorities

Q10. Local and national priorities

Please explain how this project aligns with local and national priorities? You may wish to consider the project in the context of national environmental laws, objectives, strategies, territory specific agreements, action plans or policies.

This project aligns with: TCI Environment Charter: Guiding principles 1, 2,5, 6, 7, and 10; TCIG Commitment 2 Climate Change Charter: Guiding Principle 8 Draft Biodiversity and Environment Strategies: (as yet unpublished) National Tree Restoration Strategy: Habitat restoration, and protocols Draft Biodiversity Protection Bill: Focus on sustainably-sourced native plants in landscaping Turks and Caicos Islands Vision 2040: Sustainable Development Dimension 3; Necessary Conditions NC3.1: Good ecosystems, marine and aquatic resource management; NC3.2: Disaster risk management and climate change resilience. National Physical Development Plan 2020 Themes 2 Resilience, Sustainability, and Multi-functionality; and 4 Nature as Beauty DECR Mission Focus of the Darwin plus 114 project

Will the project take place on Government owned land or water or involve biocontrol, invasive alien species control or eradication?

⊙ Yes

Please attach evidence that you have Government support for this project i.e. a Letter of Support. Applications which indicate that they do not take place on Government land or water, but which propose work that appears to the reviewers would be difficult/impossible to carry out without working on government land or waters may be ineligible if no Letter of Support is provided.

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Section 9 - Project Risks

Q11. Project Risks

Please demonstrate your consideration of any risks involved in this project and how you intend to manage them. Please note the importance of health and safety and environmental risk assessment in the design of your project. If there is any possibility that your project may have negative impacts on the environment or human health, it is important that you provide a comprehensive analysis of potential environmental and human health risks, and the prevention measures you will take to ensure the work does not cause harm.

Depending on your project, you may wish to consider:

- Biosecurity risks particularly for projects involving external equipment.
- Safeguarding risks particularly for projects involving vulnerable groups such as children, older people or people with disabilities.

Risk	Mitigation
Biosecurity risks include import of aggregates and consumable materials, the risk being hitchhiking pests and disease.	Agricultural material is subject to sanitary measures and inspection, and is only permitted in within sealed bags and containers.
Biosecurity risks include accidental inter-island movement of pests and disease on permitted wild-harvest propagation material.	Propagation material will be sourced from healthy populations, and will be treated for plant pests prior to inter-island movement.
Health and safety risks includes exposure to dust from potting materials, splinters and cuts from rough wood and other nursery material, and heat exhaustion from working on site.	Staff is supplied with PPE and is trained in use proper use of materials. Staff is instructed to take regular breaks when working in the sun, especially under shade cloth as it does not feel as oppressive.

Do you require more fields?

⊙ Yes

Risk	Mitigation
Severe weather interruption of construction, or destruction of recently completed facilities	New structure is designed for hurricane resistance, including ability to protect stock within the nursery during storms.
No Response	No Response

No Response

No Response

No Response

No Response

No Response

No Response

Section 10 - Terms & Conditions

Q12. Terms and conditions (Guidance section 3.10)

By applying for Darwin Plus Local you are adhering in full to the grant Terms and Conditions in full (available at: https://dplus.darwininitiative.org.uk/apply and as referenced in the Guidance at section 3.10). For information, the Terms and Conditions include requirements for all applicants to (amongst other requirements as per the full Terms and Conditions):

- Uphold a zero tolerance for inaction approach to tackling sexual exploitation, abuse, and harassment.
- Where appropriate, make all reasonable and adequate efforts to address gender inequality and other power imbalances.
- Notify all cases of fraud and theft (whether proven or suspected) relating to the project to the Grant Administrator as soon as they identified.

Please indicate you have read, and understood, and will adhere to the Terms and Conditions.

Checked

Supporting documents list (please have these ready to attach with application)

- Cover Letter of no more than two A4 pages. (Guidance section: 4.2 has information on what this cover letter should include).
- If the project takes place on public land or water or is addressing invasive alien species, a Letter of support from OT Government.
- Project Workplan in the template provided for Darwin Plus Local (available at: https://darwinplus.org.uk/apply).
- Map and additional information (optional) maximum five additional pages.

If your application is successful

If your project application is successful, the Fund Administrator (NIRAS) will ask you to provide some financial evidence for due diligence checks before you receive your project grant. (Please see section 3.3 of the Darwin Plus Local Finance Guidance). Please be ready to provide this evidence promptly.

- Financial evidence for organisations: Year-end financial statements, the latest management accounts or audited accounts (if you have these).
- **Financial evidence for individuals**: Proof of identity such as a passport, ID card or driving licence and solvency (such as bank statements) and a police check.

Section 11 - Certification

Certification

I certify that, to the best of my knowledge and belief, the statements made in this application are

true and the information provided is correct.

Checked

I have the authority to submit an application on behalf of my organisation.

Checked

Name:	Bryan Manco		
Position in the organisation: (if applicable)	Assistant Director of Research and Development		
Signature (please upload e-signature)	 <u>▲ BNMsignatureDECR</u> 05/05/2023 ① 17:39:15 ipg 41.26 KB 		
Date:	26 June 2023		

Section 12 - Submission Checklist

Checklist for submission

	Check
I have read the Guidance documents, including the "Darwin Plus Local Guidance" and the "Darwin Plus Local Finance Guidance".	Checked
If my proposed project takes place on public lands or water or is addressing alien invasive species, I have uploaded a Letter of Support from Government.	Checked
I have uploaded a cover letter that details the information requested in the guidance (Guidance section 4.2 has information on what this cover letter should include).	Checked
I have read, and can meet, the current Terms and Conditions for this fund.	Checked
I have provided actual start and end dates for my project that fit this Round.	Checked
I have provided my summary budget based on UK government financial years i.e. 1 April – 31 March and in GBP in the application form.	Checked
I have uploaded my project workplan using the specific template provided.	Checked
(If copying and pasting into Flexi-Grant) I have checked that all my responses have been successfully copied into the online application form.	Checked
The application has been signed by a suitably authorised individual (clear electronic or scanned signatures are acceptable).	Checked

I have checked the Darwin Plus website immediately prior to submission to ensure				
there are no late updates.				

I have read and understood the Privacy Notice on the Darwin Plus website. Checked

We would like to keep in touch!

Please check this box if you would be happy for the lead applicant (Flexi-Grant Account Holder) and project leader (if different) to be added to our mailing list. Through our mailing list we share updates on upcoming and current application rounds under Darwin Plus. We also provide occasional updates on other UK Government activities related to biodiversity conservation and share project news. You are free to unsubscribe at any time.

Checked

Data protection and use of personal data

Information supplied in the application form, including personal data, will be used by Defra as set out in the **Privacy Notice**, available from the <u>Forms and Guidance Portal</u>.

This **Privacy Notice must be provided to all individuals** whose personal data is supplied in the application form. Some information may be used when publicising Darwin Plus including project details (usually title, lead partner, project leader, location, and total grant value).

Project Title:

Darwin Plus Local

Provide a **Project Workplan** that shows the key milestones in project activities. Complete the following table as appropriate to describe the intended workplan for your project. Round 2 is for a **maximum of six months** with activities starting from 1 October 2023 and all projects must be completed by 31 March 2024.

Please add/remove columns to reflect the length of your project. For each activity (add/remove rows as appropriate) indicate the number of months it will last, and shade only the months in which an activity will be carried out. The workplan can span multiple pages if necessary.

Activity #	Description (max 25 words)	No. of	UK Financial Years 2023/24					
		months	Calendar Year 2023			Calendar Year 2024		
			Oct	Nov	Dec	Jan	Feb	Mar
1	Complete plans (EMS)	0.5	х					
2	Submit Plans to Planning Dept for approval	0.5	х					
3	Draw up and post tender	0.5		X				
4	Select contractor	1			x			
5	Construction	2.0				x	х	
6	Punch-list	0.5						х
7	Educational Materials	0.5		X				
8	Completion and opening	0.5						x