Darwin Plus:
Overseas Territories Environment and Climate Fund
Final Report

Important note *To be completed with reference to the Reporting Guidance Notes for Project Leaders: it is expected that this report will be a maximum of 20 pages in length, excluding annexes*

Darwin Project Information

Project reference	DPLUS030
Project title	Building systems and capacity to monitor and conserve BVI's flora
Territory(ies)	British Virgin Islands
Contract holder Institution	Royal Botanic Gardens, Kew (Kew)
Partner institutions	National Parks Trust of the Virgin Islands (NPTVI)
Grant value	£98,896
Start/end date of project	01 April 2015 – 31 March 2017
Project leader name	Dr Martin A. Hamilton
Project website/Twitter/blog etc.	Kew UKOTs Twitter (https://twitter.com/KewUKOTs) (#KewBVI) Twitter moment (https://twitter.com/i/moments/852142318857715713) NPTVI Facebook page (*https://www.facebook.com/NPTVI*); Storify (https://storify.com/KewUKOTs/building-systems-and)
Report author(s) and date	Dr Martin A. Hamilton, 27 June 2017

1 Project Overview

PLEASE NOTE: Supporting documents referred to in this report as Annexes have been uploaded to an FTP site and can be downloaded from here.

The British Virgin Islands (BVI) are part of the Caribbean (Figure 1) biodiversity hotspot. This project was designed to develop the necessary capacity and systems to monitor and conserve BVI's flora. Before the start of this project, threatened plant species and their habitats were not adequately monitored in BVI and existing botanical collections were not representative of wild plant diversity. In order to effectively conserve the BVI's flora, especially in a changing climate, NPTVI staff responsible for maintaining *ex-situ* collections and *in-situ* populations of threatened species required training (see Annexes 11 [certificates on pgs. 10-12], 12, 13, 14, 16 [certificates on pgs. 17-19]) and access to botanical data systems and monitoring data (see Annexes 11 [pgs. 7-8], 12, 16) that this project provided.

As BVI is part of the Puerto Rican Bank (Figure 2) floristic area, the project harnessed regional (University of Puerto Rico (UPR); Puerto Rico Departamento de Recursos Naturales y Ambientales (DRNA); US Fish and Wildlife Service (USFWS) Caribbean Ecological Services Office; and Parque Doña Inés arboretum of the Fundación Luis Muñoz Marín (FLMM)) and international (Kew, Fera Science and Gibraltar Botanic Gardens) expertise to strengthen local capacity and develop the botanical collections, resources and data systems in BVI. Training was provided for NPTVI staff at UPR Mayaguez Campus Herbarium (MAPR), DRNA herbarium (SJ) and protected areas and USFWS refuges in Puerto Rico (see Annexes 10, 12, 13); Kew in the UK (see Annexes 11,16); and J.R. O'Neal Botanic Gardens (JRONBG) in BVI (see Annexes 10,

12, 13, 14, 15, 17) and various field sites in Puerto Rico and BVI (see Annexes 10, 12, 13, 14, 15, 17). A botanical data system (BRAHMS database) was deployed locally to provide off-line access to all existing botanical collections and monitoring data (see Annexes 11, 12, 16).

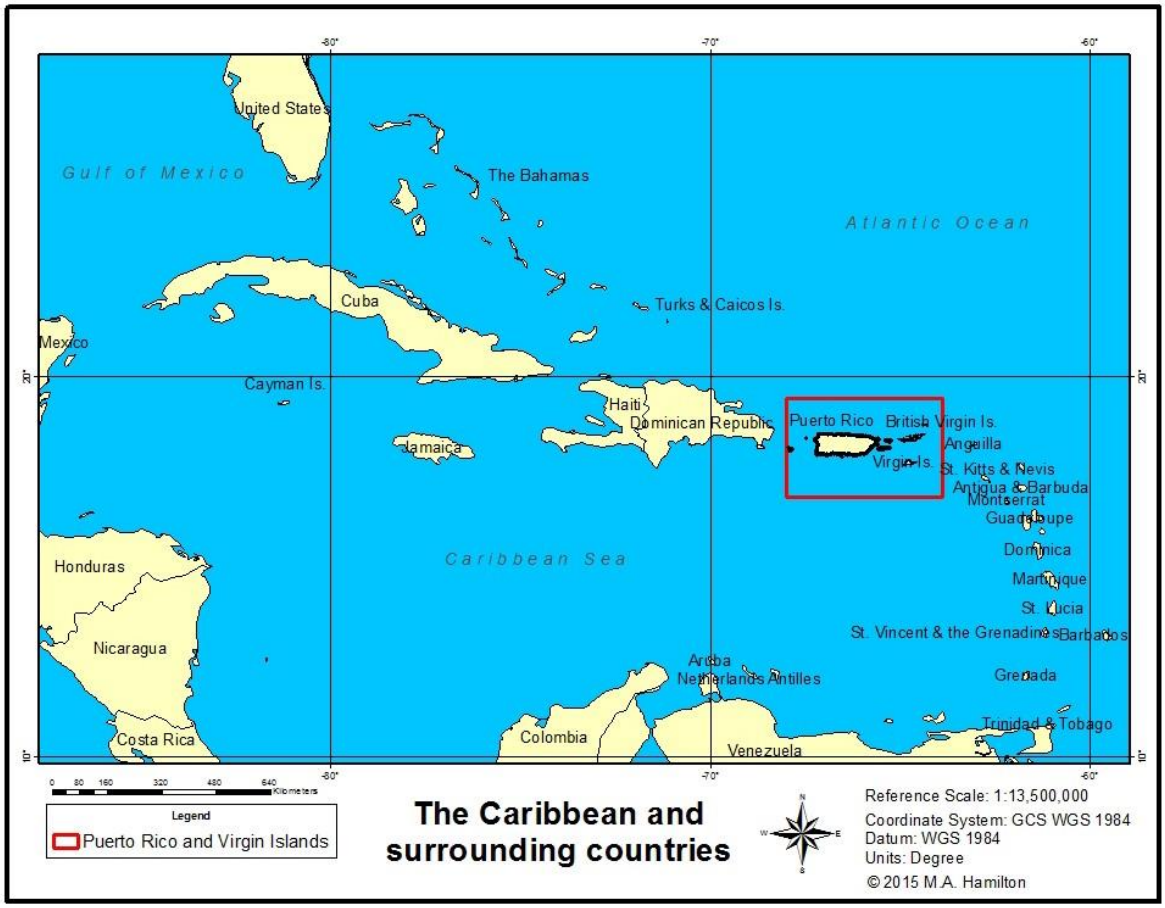

Figure 1: Map of the Caribbean and surrounding countries.

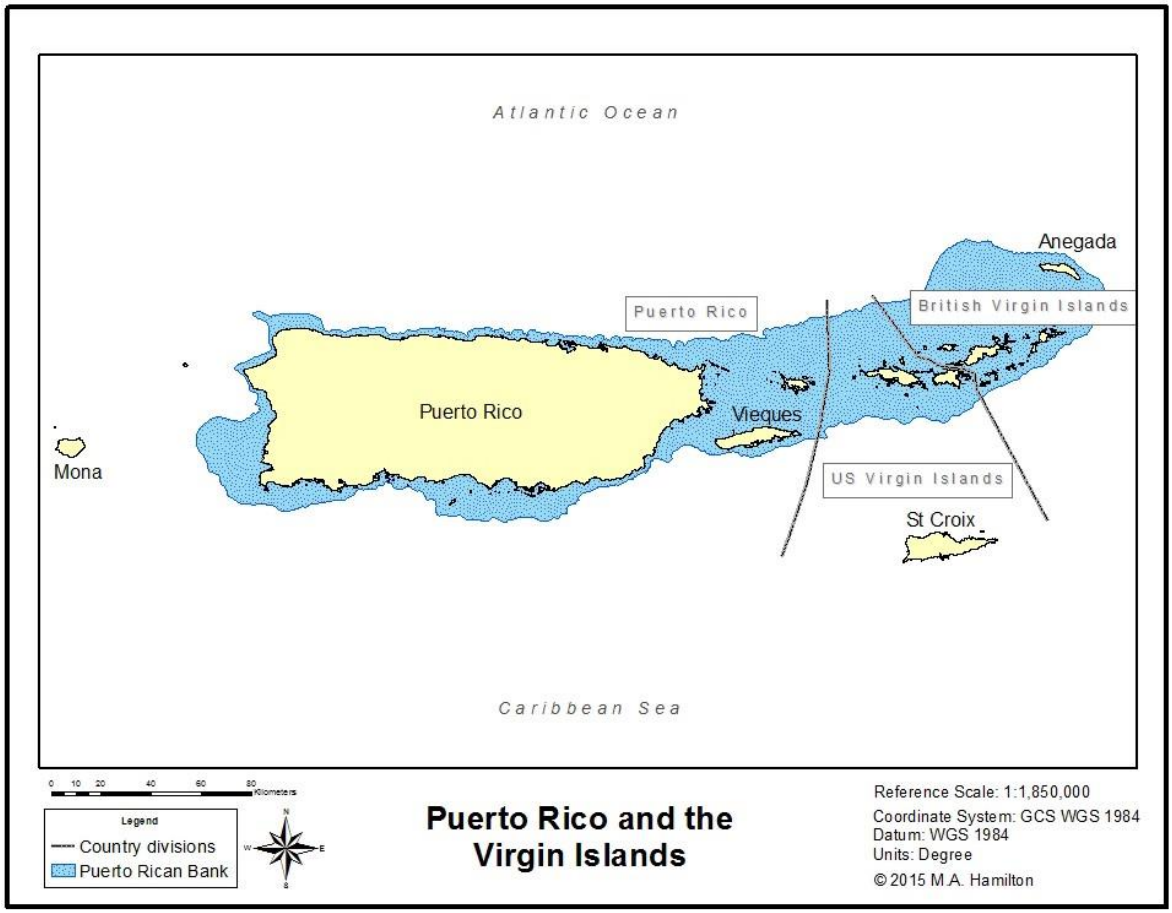

Figure 2: Map of the Puerto Rican Bank.

Kew, MAPR, DRNA and USFWS provided specialist support to build botanical capacity (Figure 3; Annexes 7, 10-17), deploy a botanical database (Figure 4; Annexes 11, 12, 16) and increase BVI's botanical collections (Annexes 14, 17, 19). The combination of expertise together with a long-standing programme of collaborative work between Kew, Puerto Rico partners and NPTVI has resulted in increased local botanical expertise and will ensure delivery of the project outputs leading to a secure future for BVI's threatened plant species. The training delivered through this project provided NPTVI staff with the skill set to implement a 'Conservation Strategy' (see Annex 6) developed by the project to enhance the *ex-situ* collections, monitor wild and *ex-situ* plant health and instigate a well-managed conservation monitoring programme as discussed in subsequent sections. We have consolidated regional collaboration and activity supported by the Puerto Rican Bank Plant Conservation Task force (http://herbaria.plants.ox.ac.uk/bol/prvi) which convened a workshop and meeting on 18 & 19 April 2016 (see Annex 13).

Figure 3. Training sessions for NPTVI staff: Nursery management session at J.R. O'Neal Botanic Gardens (L) and Brahms database session at SJ herbarium (R).

The new BVI botanical database using Brahms software (http://tinyurl.com/ltsz9v2) has provided a vital new off-line resource at the J.R. O'Neal Botanic Gardens (Figure 4 - Right). The system holds all botanical data previously digitised by Kew and NPTVI. The merging of the University of Puerto Rico online herbarium (MAPR) with Kew data and digitisation of the SJ herbarium holdings from BVI (see Annexes 12, 13) has provided new data to the partners and established a lasting network for data sharing. The system has already provided information necessary for implementing actions to enable long-term conservation of BVI's threatened plant species (see Annex 18), the habitats they comprise (see Annexes 14, 17, 18) and the ecosystem services they deliver. This system and the strategy will provide an insurance policy for potential staff turnover and the institutional continuity for sound conservation planning.

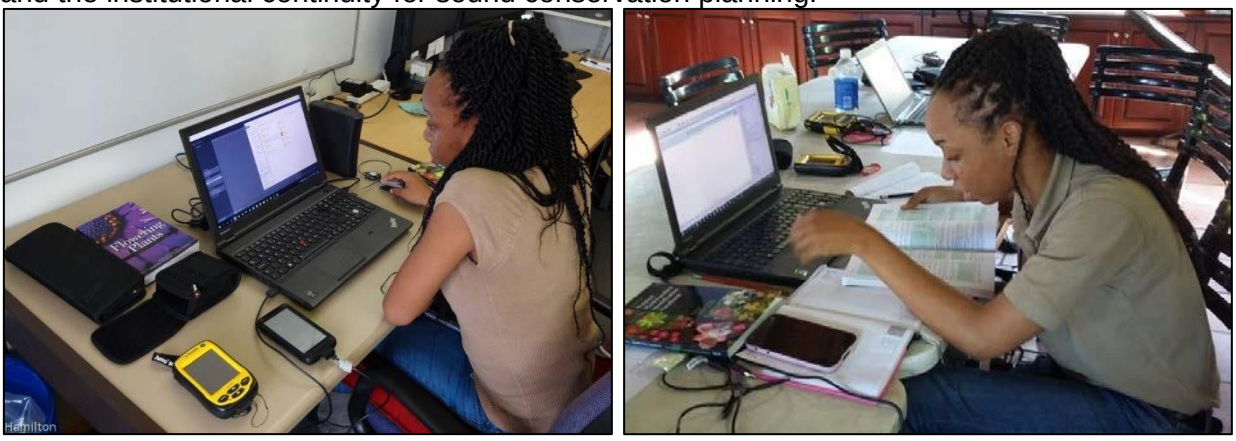

Figure 4: Natasha Harrigan (NPTVI) undertaking data collection training at Kew, September 2015 (L) and cleaning field data subsequently collected in BVI within the local database using Brahms software, January 2016 (R).

2 Project Stakeholders/Partners

Kew were able to fully engage new partners at DRNA, USFWS and FLMM in the project through ongoing work in Puerto Rico, bringing a wealth of new botanical expertise on-board. Kew was also able to engage Dr Chris Malumphy from Fera Science Ltd (UK) through our previous partnership in TCI funded by Darwin Plus and the Gibraltar Botanic Gardens horticulturist, Andrew Gdaniek, through discussions during a UKOTs conference where NPTVI and Kew presented posters about a previous Darwin project in BVI. The named project partners (Kew and NPTVI) and the newly engaged partners worked closely together throughout the project to organise training and field activities (see Annexes 10-17). Formal project steering group meetings were held in the first year (see Annexes 8, 10 [pg 35 - Appendix 3: DPLUS 030 planning meetings] and 11 [pgs 7-8]) and in the second year (see Annexes 13 [pg. 37 - Appendix 2: DPLUS 030 planning meetings] and 14 [pg. 70 - Appendix 4: DPLUS Steering Group Meeting Minutes and pg. 75 - Appendix 5: Horticultural Workshop Meeting Minutes) as well as regular informal communications via email and Skype.

Figure 5. Collaborative project fieldwork in February 2017: Kew's Dr Colin Clubbe examines plant material with NPTVI's Keith Grant while Natasha Harrigan collects data using skills gained during project training.

The project partners were able to undertake highly collaborative fieldwork (Figure 5; Annexes 10, 12, 13, 14, 15, 17; see also Kew Twitter #KewBVI and #KewPR) and training sessions (see Annexes 11, 12, 13, 14, 16) that led to new discoveries (see Annexes 10, 12, 15, 17) and strengthened capacity for NPTVI staff (see Annexes 11, 12, 13, 14, 16).

The BVI public was engaged through local (see Annex 18) and social (see NPTVI Facebook and Kew Twitter) media. NPTVI also gave presentations and set-up displays about the project and threatened species at annual events (e.g. Arbor Day, Flower Show) at the JRONBG (see NPTVI Facebook). The BVI government were engaged through formal channels (see Annex 20) and informal channels (see NPTVI Facebook and Kew Twitter) using targeted communications. Introductions were made between NPTVI staff to Puerto Rican government and agency officials and Puerto Rican staff to BVI government and agency officials to facilitate future collaborations.

3 Project Achievements

3.1 Outputs

The conservation strategy (see Annex 6) developed for local implementation provides bespoke guidelines for BVI detailing the data collection protocol, propagation material collection protocol, nursery production protocol and monitoring protocol for health of wild plants and *ex-situ* collections. The protocols were developed jointly between Kew and NPTVI staff to ensure successful implementation. The *ex-situ* collections (seed/nursery) have been strengthened (see Annex 19) to support conservation, community engagement and future restoration efforts. The training provided through the project have seen the J.R. O'Neal collections expand (Figure 6) to include several threatened species that were previously not represented (see Annexes 14, 17).

Figure 6. Natasha Harrigan's training has resulted in successful propagation of many species new the NPTVI collections: Natasha sowing seed collected during fieldwork (Left); Natasha caring for establishing seedlings (Centre); Potted up and established saplings of threatened Virgin Islands endemic, *Calyptranthes thomasiana* grown by Natasha from seed (Right)

The target list of threatened plant species (see Annex 19) was refined to focus only on the twenty-two species assessed for the IUCN Red List and provide the basis for collecting the necessary material to meet project Output 2 (see Annex 19). Overall, the project exceeded its targets in all but one area. A single species, *Maytenus cymosa*, was not secured. This was due to personal staff issues beyond the control of the project. The species was not secured in the seed bank and vegetative propagation was unsuccessful; therefore, only 95% (target was 100%) of the BVI threatened plants were secured in the nursery by the end of the project. Of the twenty-two species on the target list, 19 were orthodox (bankable) and 15 (79%, exceeding target of 75%) were accessioned into the NPTVI and/or Kew seed banks by the end of the project. Of the target list species, fifteen occur in more than one population. By the end of the project, eleven species (73%, exceeding target of target 50%) were represented in the NPTVI threatened plant collections from more than one population.

Figure 7. Implementation of the BVI threatened plant species conservation strategy: (Left to Right) Natasha Harrigan and Keith Grant collecting field data for threatened species in Sage Mountain National Park, Tortola; Natasha Harrigan updating BRAHMS database at JRONBG with field data collected by other NPTVI staff; Seed of BVI threatened species in the NPTVI seed bank freezer properly processed and stored at JRONBG; DNA samples of BVI threatened species drying in silica gel at JRONBG prior to shipment to Kew.

Output 1:	**NPTVI staff capacity to manage rare and threatened species enhanced**		
Indicator	*Baseline*	*Change recorded*	*Source of evidence*

1.1 Training programme designed	No programme existed	Training programme designed and agreed	Annexes 7, 10 pgs. 35-36.
1.2 NPTVI staff attend training courses	Training required	Training delivered and assessed	Annexes 11, 12, 13, 16
1.3 Regional workshop organised and knowledge shared	No regional workshop since 2012 and current NPTVI staff did not attend previous	Symposium and Workshop organised and presentations delivered April 2016.	Biodiversity Without Boundaries 2016 agenda; Annex 13
Output 2:	***Ex-situ* collections strengthened to support conservation**		
Indicator	*Baseline*	*Change recorded*	*Source of evidence*
2.1 target species list of threatened plants developed	No list available	List developed and species locations available in database.	Annex 19
2.2 Seed and live material collections from threatened plants held in *ex-situ*	Few species/populations held in *ex-situ*	21 of 22 species (95%) held in *ex-situ*; 15 of 18 species seed banked (73%); 11 of 15 species (83%) from more than one location.	Annex 19
Output 3:	**Conservation Strategy for local implementation**		
Indicator	*Baseline*	*Change recorded*	*Source of evidence*
3.1 Conservation Strategy locally implemented	No strategy or standards exist	Conservation strategy produced for local implementation and in use by NPTVI	Annex 6 (strategy); Figures 5, 6, 7; and Annexes 12-15, 17 (implementation)
Output 4:	**BVI Botanical database deployed and populated**		
Indicator	*Baseline*	*Change recorded*	*Source of evidence*
4.1 Brahms installed on NPTVI computer Two NPTVI staff fully trained in database use 3500 BVI records extracted from UKOTs Online Herbarium database imported into BVI Botanical database	No botanical database in BVI; no offline access to existing botanical data; no NPT staff with Brahms experience	Brahms installed on dedicated NPTVI computer at JRONBG with 3500 BVI records imported One staff member fully trained in database management and a further two other staff trained in database use	Annexes 8, 11, 12

3.2 Outcome

The project has developed the critical regional partnerships (see 0.4 and section 2) and provided the necessary training (see Annexes 11-13, 16) and on-going support for NPTVI to implement the conservation strategy that will ensure BVI's threatened species and their habitats are well maintained and monitored (see Annexes 9, 10, 12-15, 17-19).

Outcome	Threatened species and their habitats are well maintained and monitored, BVI's botanical capacity is strengthened and a new plant conservation strategy is implemented		
Indicator	*Baseline*	*Change recorded*	*Source of evidence*
0.1 Threatened species and their habitats are well maintained and monitored.	No monitoring being undertaken and no active management of areas of threatened species habitat.	Monitoring undertaken to enable collection of plant material to secure 21 of 22 species in *ex-situ*.	Annexes 9, 10, 1215, 17-19
0.2 BVI's botanical capacity is strengthened and a new plant conservation strategy is implemented.	Botanical capacity lacking and no protocols to establish plant conservation strategy.	Botanical capacity increased through overseas training for one NPTVI staff member and in-country training for four NPTVI staff; Strategy produced.	Annexes 11-13, 16. Annex 6
0.3 Secure access to botanical resources through enhanced data systems developed and skills acquired.	Lacking access to botanical resources in BVI.	Copies of all Kew data/images and important botanical literature provided to NPTVI electronically and in hard copy (where available).	Annexes 11-13, 16.
0.4 Consolidated regional and international partnerships empower BVI partners to secure biodiversity into the future.	Lacking regional partnerships.	Four Puerto Rican partners fully engaged with project to provide training and support for NPTVI. Regional workshop held in April 2016.	Annexes 10, 12-14, 18. Project partners attended and presented at the "Biodiversity Without Boundaries Conference" from 18-22 April 2016; Annex 13; Figure 8

3.3 Long-term strategic outcome(s)

NPTVI has a dedicated team of wardens responsible for maintaining the *ex-situ* collections held at the J.R. O'Neal Botanic Gardens and management of the populations of threatened species within the other national parks. The capacity building through specialist training and support to NPTVI staff undertaken during this project has enabled the local team to develop their longterm conservation efforts. The project's impact is clearly visible through the new *ex-situ* collections developed (see Annexes 18 and 19), new knowledge and location data for threatened species (see Annexes 10, 12-15, 17, 18) and the access to the database deployed by the project (see Annex 11). NPTVI will be able to deliver effective species conservation and habitat management in BVI well beyond the life of the project using the new skills and resources made available through the project. The regional workshop (see 3.2: 0.4 above, Figure 8) brought together UKOTs and small island developing states (SIDS) plant conservationists to share knowledge and expertise. It also forged new networks that have grown over the intervening period. The workshop and joint fieldwork between NPTVI and Puerto Rican colleagues has resulted in a strong collaboration and an active WhatsApp group the regularly shares information and provides advice.

Figure 8. Puerto Rican Bank Plant Conservation Task force workshop participants on 19 April 2016 at FLMM.

A key outcome of this project – threatened species conservation strategy – has helped to embed good environmental decision-making, a key strategic priority for the BVI Government, by providing current species distribution and population size data for the BVI National GIS. This, in-turn, provides the opportunity for planning applications to be compared with threatened species locations and management or mitigation recommendations to be made.

4 Sustainability and Legacy

Securing the BVI populations of globally threatened species in *ex-situ* conservation collections is a direct result of the capacity building and international collaboration that this project enabled. The ability of NPTVI staff to confidently identify, monitor, collect and reproduce the twenty-two species of threatened plants in BVI will have a lasting legacy far beyond the project (see Annexes 17-19). The data collected during the project on species distribution, phenology and status will inform species and habitat management for years to come.

The project has provided fundamental baseline information and capacity building for the NPTVI that will enable them to respond to local government priorities and requests. The time dedicated during and following the project by NPTVI staff for training and fieldwork demonstrates the local commitment to the project and its legacy. The on-going regional communication (see Annexes 12-14 and social media) demonstrate the increased interest and capacity within the NPTVI. The project was well received locally and publicised in the local press (see Annex 18) helping to ensure sustainability of the NPTVI's resources to plant conservation.

Figure 9. Natasha Harrigan shows Kew and Puerto Rican colleagues the BVI threatened plant *ex-situ* collections she has developed during a post-project field visit in June 2016.

The project leader, Dr Martin Hamilton, and colleagues from Kew's UKOTs Programme have developed subsequent funding proposals to ensure the collaborations with BVI partners continue over the coming years and include further BVI visits by Puerto Rican colleagues (see Figure 9).

5 Lessons learned

The project application identified three risks: (1) Hurricane impacts local infrastructure and delays project implementation; (2) No wild plant material available for collection; and (3) Trained staff leave NPTVI.

Fortunately, no hurricanes or major storm events were experienced; however, a severe drought in the Caribbean during late 2014 and throughout 2015 significantly impacted the project's ability to collect material for *ex-situ* collections. To ensure that training was reinforced and to embed workflows, the project team decided that collections of native species with available seed not on the target list should also be collected. This allowed the implementation of the protocols in the strategy (Annex 6) and brought in new collections of plants. Although not ideal, the project was able to secure new material and implement workflows designed through the strategy protocols. Although climatic conditions in BVI limited opportunities for the project to collect seed of target species, the project team collected necessary asexual propagation material of the target species and continued monitoring for seed production and collecting material when available beyond the end of the project as part of the conservation strategy. This demonstrates the commitment of the NPTVI to plant conservation and the legacy of the project as it has empowered local staff through training and delivery of the strategy to guide activities.

After securing project funding, two significant changes occurred. First, one of the NPTVI staff members identified for overseas training left the organisation. Second, Kew were able to fully engage other Puerto Rican partners in the project as described in section two above. The steering committee agreed to expand the training opportunities for NPTVI staff locally by bringing Puerto Rican partners to BVI. This was accomplished by only sending one NPTVI staff member overseas for training (Annexes 11 and 16). The result was training and networking for many more NPTVI staff than originally planned (see Figures 3, 5 and 8; Annexes 10-14).

Kew underwent a major restructuring between the time the project proposal was submitted and the project start date. This resulted in lots of uncertainty and a very challenging atmosphere to deliver the project; however, the Kew staff involved remained focused and committed to the delivery of the project even though several members of the Kew team experienced significant changes to their contractual arrangements. These changes resulted in small variances to the project budget with regard to staff time and project overheads. Fortunately, all staff members needed to assist in the project were still available post-restructure.

The formal steering group meetings worked very well to ensure all partners understood the project, the outputs and the expected outcome. Informal communications were also very effective, especially planning for the successful field visits and training sessions; however, some of the remote meetings (via Skype) were often difficult to organise due to time differences. Good organisation and advanced planning is crucial for all partners to be engaged. The steering committee agreed meetings and travel for year two well in advance to help overcome some of the planning issues experienced in year one.

BGCI's developing publication *'From Idea to Realisation – BGCI's Manual on Planning, Developing and Managing Botanic Gardens'* was expected by mid-2016. The project steering group was awaiting this publication before finalising the protocols and overall strategy as the new publication was expected to include updated and relevant information that will contribute significantly to the project outputs. Unfortunately, the BGCI publication launch was delayed until after the project finished. This meant our final document was not able to include some relevant references and information, but this did not halt progress on the strategy document and workflows were being implemented before the end of the project.

Due to an unforeseen personal matter, NPTVI staff member, Natasha Harrigan, was unable to travel to Kew for a planned training visit in August 2016. The short notice and the nature of the issue meant that the trip has been postponed until Q4 of 2016-17. This had a minimal impact on the overall project timetable, but did cause some set-backs. The issue meant that seed collections were not made of one target species (*Maytenus cymosa*). As such, collection of seed from the species was not possible during the life of the project and asexual propagation of the species to meet Output 2, Indicator 2.2 failed. The steering group closely monitor the issue and took necessary steps to ensure the necessary training was delivered and has put a collection plan in place for the first quarter following the end of the project.

5.1 Monitoring and evaluation

In the preparation of this application, a project work plan was developed in consultation with NPTVI. This was used as the main monitoring tool by the project manager and the steering group

for tracking project progress between project meetings (see Annexes 8, 10, 11, 13 and 14) during the life of the project. This system enabled the project team to learn, adapt and make informed decisions to maximise the impact of the project (and ensure value for money). The work plan itself was a living document that was updated during the project, as necessary (see section five above). This worked very well for a project of this size and would be used again in the future by the project team.

Figure 10. Project partners meetings: June 2015, J.R. O'Neal Botanic Gardens, Tortola, BVI (Top); April 2016, US Fish and Wildlife Service Office, Cabo Rojo, Puerto Rico (Bottom).

As discussed in section two and the previously in section 5.0, the partners were all involved in M&E through formal (Figure 10) and informal communications. Tracking achievements was done through direct communication with NPTVI staff and reviewed during steering group meetings (see section two). Project reports, minutes of meetings and relevant correspondence was circulated to all partners. The steering committee agreed that the M&E worked well and no changes were implemented during the project.

5.2 Actions taken in response to annual report reviews

Time was taken to ensure that the PI continued to pay close attention to high quality and detailed reports with supporting photos in response to the comments by the AR1 reviewer.

6 Darwin Identity

The Darwin Initiative was acknowledged and the logo was used on BVI Government (see Annex 20) and press briefing documents, all project reports (see Annexes 6, 10-17) and presentations about the project. Tweets about the project included the @DarwinDefra (where character limits allowed) and/or the hashtag #KewBVI &/or #KewPR.

The Darwin Initiative funding was recognised as a distinct project with a clear identity through all reports, press releases and presentations delivered. The Darwin Initiative is well understood in BVI due to the previous projects funded in the territory and the efforts of the NPTVI and Kew to promote this important funding source for the UKOTs.

7 Finance and administration

This section seeks information about the finances of your project **since your last annual report.** Please amend the financial years in the tables to suit the reporting period and add/remove rows in the sub-tables if necessary.

7.1 Project expenditure

Project spend (indicative) since last annual report	2016/17 Grant (£)	2016/17 Total actual Darwin Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs			5%	Variance due to restructuring.
Consultancy costs			~	~
Overhead Costs			2%	Variance due to restructuring.
Travel and subsistence			0%	
Operating Costs			~	~
Capital items			~	~
Others			~	~
TOTAL	£48,180	£47,324		

Staff employed (Name and position)	Cost (£)
Dr Martin Hamilton, Research Leader (UKOTs)	
Ms Sara Barrios, Conservation Partnership Co-ordinator (Islands)	
TOTAL	£10,793

Consultancy – description of breakdown of costs	Other items – cost (£)
N/A	£0
TOTAL	£0

Capital items – description	Capital items – cost (£)
N/A	£0
TOTAL	£0

Other items – description	Other items – cost (£)
N/A	£0
TOTAL	£0

7.2 Additional funds or in-kind contributions secured

Source of funding for project lifetime	Total (£)
Kew staff time match funding	
NPTVI staff time match funding	
Kew student travel scholarship	
Gibraltar Botanic Garden Curator Travel Scholarship	
TOTAL	£87,960

Source of funding for additional work after project lifetime	Total (£)
N/A	£0
TOTAL	£0

7.3 Value for Money

Kew costs were developed using actual salary costs of each individual involved with overheads calculated at 40% of normal amount sought by Kew for externally-funded projects. All BVI staff time was match-funding demonstrating the government's commitment to this project. The long working collaboration between Kew and NPTVI enabled fieldwork costs to be calculated using much-reduced rates for local accommodation and transport through previously established local contacts (i.e. house rentals versus hotel rooms, local car hire companies providing local rates). NPTVI staff that visited Kew had access to local bedsits/B&B's that Kew uses regularly to keep travel and accommodation costs down.

Kew has invested significantly in Brahms development and has a close working relationship with the developer, Oxford University. This investment enables non-specialist, trained users to quickly take up use of the system as is seen through its global use. Brahms software is free for project use and Oxford University has committed to keeping the current version of the software freely available unlike commercial alternatives.

Overall, this project delivered value for money because without it, threatened species would be lost. BVI's tourism and green economy is built around its environment and a secure future for its biodiversity is crucial.

Annex 1

The project did not develop a logframe for the application process.

Annex 2

The project did not require a logframe for the application process; therefore, we have not developed a logframe subsequently.

Annex 3 Standard Measures

Code	Description	Totals (plus additional detail as required)
Training Measures		
1	Number of (i) students from the UKOTs; and (ii) other students to receive training (including PhD, masters and other training and receiving a qualification or certificate)	(i) 0. (ii) 0.
2	Number of (i) people in UKOTs; and (ii) other people receiving other forms of long-term (>1yr) training not leading to formal qualification	(i) 0. (ii) 0.
3a	Number of (i) people in UKOTs; and (ii) other people receiving other forms of short-term education/training (i.e. not categories 1-5 above)	(i) 4. (ii) 0.
3b	Number of training weeks (i) in UKOTs; (ii) outside UKOTs not leading to formal qualification	(i) 8. (ii) 6
4	Number of types of training materials produced. Were these materials made available for use by UKOTs?	0
5	Number of UKOT citizens who have increased capacity to manage natural resources as a result of the project	6
Research Measures		
9	Number of species/habitat management plans/ strategies (or action plans) produced for/by Governments, public authorities or other implementing agencies in the UKOTs	1
10	Number of formal documents produced to assist work in UKOTs related to species identification, classification and recording.	1
11a	Number of papers published or accepted for publication in peer reviewed journals written by (i) UKOT authors; and (ii) other authors	(i) 0. (ii) 0.
11b	Number of papers published or accepted for publication elsewhere written by (i) UKOT authors; and (ii) other authors	(i) 0. (ii) 1.
12b	Number of computer-based databases enhanced (containing species/genetic information). Were these databases made available for use by UKOTs?	2. Yes.
13a	Number of species reference collections established. Were these collections handed over to UKOTs?	0

Code	Description	Totals (plus additional detail as required)
13b	Number of species reference collections enhanced. Were these collections handed over to UKOTs?	2. Yes.
Dissemination Measures		
14a	Number of conferences/seminars/workshops/stakeholder meetings organised to present/disseminate findings from UKOT's Darwin project work	4
14b	Number of conferences/seminars/ workshops/stakeholder meetings attended at which findings from the Darwin Plus project work will be presented/ disseminated	3
Physical Measures		
20	Estimated value (£s) of physical assets handed over to UKOT(s)	0
21	Number of permanent educational/training/research facilities or organisation established in UKOTs	0
22	Number of permanent field plots established in UKOTs	0
23	Value of resources raised from other sources (e.g., in addition to Darwin funding) for project work	

Annex 4 Publications

Type *	Detail (title, author, year)	Nationality of lead author	Lead author institution Nationality	Gender of lead author	Publishers (name, city)	Available from (e.g. weblink, contact address, annex etc)
Journal*	Bárrios, S. et al., 2017. Conserving the threatened plants of the British Virgin Islands (BVI). *BG Journal*, 14(1), pp.27–29.	Portuguese	British	Female	Botanic Gardens Conservation International: Richmond, UK	Annex 9 https://www.bgci.org/resources/bgjournal/
Manual*	Hamilton, M.A., et al., (2017). *British Virgin Islands threatened plant species conservation strategy: Protocols to enhance ex-situ collections, monitor wild and ex-situ plant health and instigate a well-managed plant conservation monitoring programme*.	British/American	British	Male	Royal Botanic Gardens, Kew: Richmond, U.K.	Annex 6 https://spaces.hightail.com/space/jiSEOdUqFD
Report*	Hamilton, M.A., 2015. *Puerto Rican Bank (British Virgin Islands & Puerto Rico) June 2015, Fieldwork report and photographic supplement. Overseas Fieldwork Committee (OFC) registration number 559-8*	British/American	British	Male	Royal Botanic Gardens, Kew: Richmond, Surrey, U.K.	Annex 10 https://spaces.hightail.com/space/jiSEOdUqFD
Report*	Hamilton, M.A. et al., 2015. *NPTVI training visit to Royal Botanic Gardens, Kew, September-October 2015.*	British/American	British	Male	Royal Botanic Gardens, Kew: Richmond, Surrey, U.K.	Annex 11 https://spaces.hightail.com/space/jiSEOdUqFD
Report*	Barrios, S., 2016. *Puerto Rican Bank (British Virgin Islands & Puerto Rico) January 2016 fieldwork report. Overseas Fieldwork Committee registration number 559-9.*	Portuguese	British	Female	Royal Botanic Gardens, Kew: Richmond, Surrey, U.K.	Annex 12 https://spaces.hightail.com/space/jiSEOdUqFD
Report*	Hamilton, M.A. & Barrios, S.B., 2016. *Puerto Rican Bank (British Virgin Islands &*	British/American	British	Male	Royal Botanic Gardens, Kew:	Annex 13 https://spaces.hightail.com/space/ji

	Puerto Rico) April 2016 fieldwork report. Overseas Fieldwork Committee registration number 559-10.				Richmond, Surrey, U.K.	SEOdUqFD
Report*	Hamilton, M. A., Barrios, S., Corcoran, M.R., Gdaniec, A. and Sanchez, M.D. (2016). *Puerto Rican Bank (British Virgin Islands & Puerto Rico) June-July 2016 fieldwork report.* Hamilton, M. A. (editor). *Overseas Fieldwork Committee registration number 559-11*.	British/American	British	Male	Royal Botanic Gardens, Kew: Richmond, Surrey, U.K.	Annex 14 https://spaces.hightail.com/space/jiSEOdUqFD
Report*	Hamilton, M.A., 2016. *Puerto Rican Bank (British Virgin Islands & Puerto Rico) September-October 2016 fieldwork report. Overseas Fieldwork Committee registration number 559-12*.	British/American	British	Male	Royal Botanic Gardens, Kew: Richmond, Surrey, U.K.	Annex 15 https://spaces.hightail.com/space/jiSEOdUqFD
Report*	Hamilton, M. A., Barrios, S., Corcoran, M.R. & Harrigan, N., 2017. *NPTVI training visit to Royal Botanic Gardens, Kew, January 2017*.	British/American	British	Male	Royal Botanic Gardens, Kew: Richmond, Surrey, U.K.	Annex 16 https://spaces.hightail.com/space/jiSEOdUqFD
Report*	Hamilton, M. A., Barrios, S., Corcoran, M.R., Clubbe, C., Heller, T.M., Newton, R., Malumphy, C. and Sanchez, M.D., 2017. *Puerto Rican Bank (British Virgin Islands & Puerto Rico) February-March 2017 fieldwork report. Overseas Fieldwork Committee registration number 559-13*.	British/American	British	Male	Royal Botanic Gardens, Kew: Richmond, Surrey, U.K.	Annex 17 https://spaces.hightail.com/space/jiSEOdUqFD

Annex 5 Darwin Contacts

Ref No	**DPLUS030**
Project Title	**Building systems and capacity to monitor and conserve BVI's flora**
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Fax/Skype	
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Annex 6 British Virgin Islands threatened plant species conservation strategy

Hamilton, M.A., Barrios, S., Clubbe, C., Corcoran, M.R., Grant, K., Harrigan, N., Heller, T.M., Varlack, L., Woodfield-Pascoe, N. and Sanchez, M.D., (2017). *British Virgin Islands threatened plant species conservation strategy: Protocols to enhance ex-situ collections, monitor wild and ex-situ plant health and instigate a well-managed plant conservation monitoring programme*. Hamilton, M. A. (ed.). Richmond, Surrey, U.K.: Royal Botanic Gardens, Kew.

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Annex 7 Kew UKOTs team field data collection workflow

Hamilton, M.A., 2017. *Kew UKOTs team field data collection workflow: Quick reference guide for data collection using ArcPad 10, BRAHMS 7 & LightRoom 4*, Richmond, Surrey, UK. Available online.

Download from: https://spaces.hightail.com/space/jiSEOdUqFD

Annex 8 DPLUS030 Steering Group Meeting November 2015

Minutes and notes from November 2015 DPLUS030 Steering Group Meeting.

Download from: https://spaces.hightail.com/space/jiSEOdUqFD

Annex 9 BG Journal - Conserving threatened plants of BVI

Bárrios, S., Harrigan, N.,Pascoe, N.,Grant, K.,Corcoran, M.,Heller, T.,Newton, R.,Sanchez, M.D., Clubbe, C.,Hamilton, M.A., 2017. *Conserving the threatened plants of the British Virgin Islands (BVI)*. BG Journal, 14(1), pp.27–29. Available online.

Download from: https://spaces.hightail.com/space/jiSEOdUqFD

Annex 10 *June 2015 Fieldwork report*

Hamilton, M.A., 2015. *Puerto Rican Bank (British Virgin Islands & Puerto Rico) June 2015, Fieldwork report and photographic supplement. Overseas Fieldwork Committee (OFC) registration number 559-8*, Richmond, Surrey, U.K.: Royal Botanic Gardens, Kew.
Available online.

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Annex 11 *NPTVI training visit September-October 2015*

Hamilton, M.A. et al., 2015. *NPTVI training visit to Royal Botanic Gardens, Kew, SeptemberOctober 2015.*, Richmond, Surrey, U.K.: Royal Botanic Gardens, Kew. Available online.

Download from: https://spaces.hightail.com/space/jiSEOdUqFD

Annex 12 *January 2016 Fieldwork report*

Barrios, S., 2016. *Puerto Rican Bank (British Virgin Islands & Puerto Rico) January 2016 fieldwork report. Overseas Fieldwork Committee registration number 559-9.*, Richmond, Surrey, U.K.: Royal Botanic Gardens Kew. Available online.

Download from: https://spaces.hightail.com/space/jiSEOdUqFD

Annex 13 *April 2016 Fieldwork report*

Hamilton, M.A. & Barrios, S.B., 2016. *Puerto Rican Bank (British Virgin Islands & Puerto Rico) April 2016 fieldwork report. Overseas Fieldwork Committee registration number 559-10* M.A. Hamilton, ed., Richmond, Surrey, U.K.: Royal Botanic Gardens, Kew. Available online. Download from: https://spaces.hightail.com/space/jiSEOdUqFD

Annex 14 *June-July 2016 Fieldwork report*

Hamilton, M. A., Barrios, S., Corcoran, M.R., Gdaniec, A. and Sanchez, M.D. (2016). *Puerto Rican Bank (British Virgin Islands & Puerto Rico) June-July 2016 fieldwork report.* Hamilton, M. A. (editor). *Overseas Fieldwork Committee registration number 559-11*. Richmond, Surrey, U.K.: Royal Botanic Gardens, Kew. Available online.

Download from: https://spaces.hightail.com/space/jiSEOdUqFD

Annex 15 *September-October 2016 Fieldwork report*

Hamilton, M.A., 2016. *Puerto Rican Bank (British Virgin Islands & Puerto Rico) SeptemberOctober 2016 fieldwork report. Overseas Fieldwork Committee registration number 559-12*, Richmond, Surrey, U.K.: Royal Botanic Gardens, Kew. Available online.

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Annex 16 *NPTVI training visit January 2017*

Hamilton, M. A., Barrios, S., Corcoran, M.R. & Harrigan, N., 2017. *NPTVI training visit to Royal Botanic Gardens, Kew, January 2017*, Richmond, Surrey, U.K. Available online.

Download from: https://spaces.hightail.com/space/jiSEOdUqFD

Annex 17 *February-March 2017 Fieldwork report*

Hamilton, M. A., Barrios, S., Corcoran, M.R., Clubbe, C., Heller, T.M., Newton, R., Malumphy, C. and Sanchez, M.D., 2017. *Puerto Rican Bank (British Virgin Islands & Puerto Rico) February-March 2017 fieldwork report. Overseas Fieldwork Committee registration number 559-13* M. A. Hamilton, ed., Richmond, Surrey, U.K.: Royal Botanic Gardens, Kew.
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Download from: https://spaces.hightail.com/space/jiSEOdUqFD

Annex 18 The BVI Beacon newspaper articles

Compilation of newspaper articles written during the project highlighting Darwin project activities.

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Annex 19 Output 2 *Ex-situ* collections summary

Summary table of threatened plant species and collections secured to support conservation.

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Annex 20 BVI Government briefing document - DPLUS 030

Briefing document provided to the BVI Government to highlight the key details of the project “Building systems and capacity to monitor and conserve BVI’s flora” funded by the UK Government’s Darwin Initiative through the Overseas Territories Environment and Climate Fund, project reference DPLUS030.

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