Darwin Plus:
Overseas Territories Environment and Climate Fund
Annual Report

To be completed with reference to the "Project Reporting Information Note"
(https://darwinplus.org.uk/resources/information-notes)

It is expected that this report will be a **maximum of 20 pages** in length, excluding annexes)

Submission Deadline: 30th April 2023

Submit to: BCF-Reports@niras.com including your project ref in the subject line

Darwin Plus Project Information

Project reference	DPLUS131
Project title	A "B-Line" to Re-Wildling: Anguilla's Pollinator Project
Territory(ies)	Anguilla
Lead Partner	Anguilla National Trust
Project partner(s)	Agriculture Unit- Department of Natural Resources (AU), Gender Affairs Anguilla (GAA), Alderney Wildlife Trust (AWT)
Darwin Plus grant value	
Start/end dates of project	Jul 2021-Jun 2024
Reporting period (e.g. Apr 2022-Mar 2023) and number (e.g. Annual Report 1, 2)	Apr 2022-Mar 2023
Project Leader name	Farah Mukhida
Project website/blog/social media	
Report author(s) and date	Farah Mukhida, Louise Soanes, Isabel Rosario, Kemoloy Murphy, 28 Apr 2023

1. Project summary

Approximately 75% of the world's crops depend on pollinators. Despite their importance, 40% of insect pollinator species (especially bees and butterflies) and 16.5% of vertebrate pollinators (including birds and bats) are facing extinction due to human activities.

The greatest threats to pollinator survival include landscape structure changes, agricultural practices (including pesticide use), and fragmentation/degradation of habitat. Climate change models predict higher temperatures, droughts, and flooding. These global climatic processes are desynchronising when flowers are in bloom and pollinators are present in required abundance and diversity to provide necessary ecosystem services. In response to these threats and in recognition that solutions cannot always be artificially engineered, efforts are being taken across the world to rewild habitats.

A small island, Anguilla is particularly vulnerable to environmental stressors. Extreme weather events are expected to become more frequent with long-lasting impacts. Combined with concerted efforts to increase food security, wild spaces are being fragmented as they are converted to agricultural land and seasonal monocultures. A heavy reliance on tourism which involves clearing large tracts of land and substituting native vegetation with less resilient, non-

native ornamentals, is further threatening Anguilla's vegetation and the biodiversity that exists symbiotically with it.

This project takes a "joined up" approach to restore and conserve Anguilla's pollinators and degraded habitats. It joins-up habitats by creating rewilded pollinator pathways (B-lines) and joins-up people through collaborative, community-based actions. An assessment of Anguilla's B-Line pollinators (bees, butterflies, birds, bats) informs a collaboratively developed National Pollinators Strategy. Through the creation of sustainable alternative livelihood opportunities (beekeeping), and an increase in public awareness, this project fosters support for community-based conservation and increased species and habitat resiliency while addressing biodiversity loss.

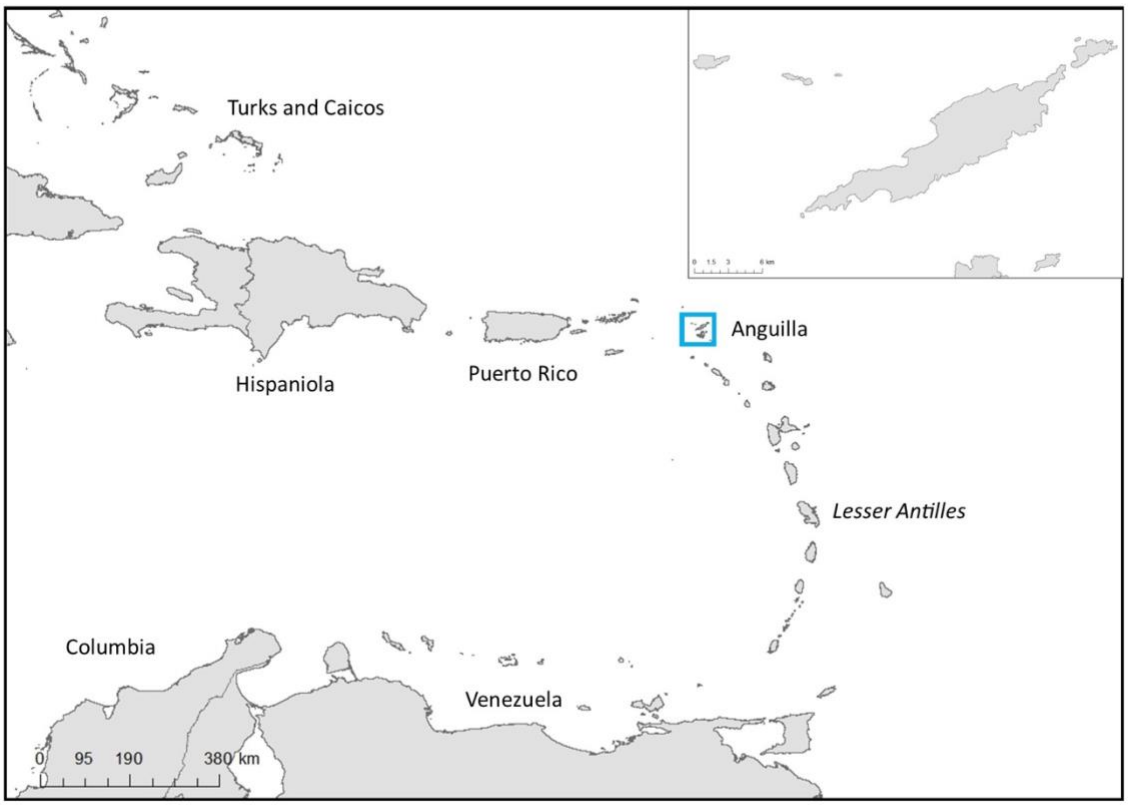

Figure 1. Anguilla, at the top of the Lesser Antilles island chain.

2. Project stakeholders/partners

Stakeholders involved to date in this project include:
Government of Anguilla agencies (AU, GAA) who sit on the Project Steering Committee, have assisted with the development of the communications and outreach plan (Evidence 1) as well as the National Pollinator Strategy (NPS) (Evidence 2) and a National Pesticide Policy (NPP) (draft) (Evidence 3), and have benefited from beekeeping training, one member of AU has also joined the newly established Queen Bee Cooperative. Government of Anguilla agencies will continue to be involved in pollinator conservation and management post-project through the implementation of the NPS and NPP.

The general public have participated in outreach activities including family fun-days, night-time bat walks, bug hotel building, and replanting activities (Evidence 1). Members of the public have also been engaged through out project's iNaturalist page.

The Queen Bee Cooperative, established as part of this project In November 2021, continues to progress beekeeping in Anguilla and further trainings have been undertaken over the last year provided by Mr Richard Matthias from the Iyanola Apiculture Collective (Evidence 4).

A major component of this project over the last year was the development of the National Pollinator Strategy and as an additional project output the National Pesticide Policy. These were developed using a participatory workshop approach attended by key stakeholders including **Government agencies** (Department of Natural Resources (Agriculture Unit, Environment Unit), Department of Health Protection, Department of Education, Gender Affairs Anguilla), the **Anguilla Farmers Association, tourism (hotel) sector (**landscaping departments), the **private sector** (Anguilla Garden Centre), **beekeepers and beekeeping collective** (QBC) and **Civil Society Organisations** (Anguilla Farmers Association, Anguilla Beautification Club) (Evidence 2, 3).

3. Project progress

3.1 Progress in carrying out project Activities

Activities being conducted through this DPLUS131 project fall within four main Outputs: 1. Ecosystem values of Anguilla's pollinators and potential effects of climate change identified; 2. Evidence-based, climate change-informed national "B-Line" pollinator strategy produced through a collaborative process; 3. Re-wilding of Anguilla for the short- and long-term benefit of pollinators implemented, monitored, and evaluated; and 4. National capacity to plan, manage, implement, and monitor a national pollinator strategy is raised, supported by enhanced technical skills, greater public awareness, and vested community interest.

Output 1. Ecosystem values of Anguilla's pollinators and potential effects of climate change identified

Activities under Output 1 included completing bird pollinator assessments (using already-collected terrestrial bird data), conducting bee and butterfly assessments, including habitat requirements (with assistance from a regional expert), conducting a mainland bat assessment, including habitat requirements (with assistance from a regional expert), and collating and analysing climate change data an forecasts to elucidate potential climate change impacts.

All of these activities were completed during the first year of the project (Evidence 5). We, however, continued to collect insect data using a Flower-Insect Timed Survey approach which monitors pollinator diversity (at the family level) and abundance. We monitor ten sites across the mainland island on a quarterly basis. So far, we have conducted two rounds of monitoring (Quarter 3, Year 2 and Quarter 4, Year 2) and monitoring will continue into the third year of the project (Evidence 5).

Output 2. Evidence-based, climate change-informed national "B-Line" pollinator strategy produced through a collaborative process.

Activities under Output 2 for the second year of the project included holding a stakeholder workshop to develop a national "B-Line" pollinators strategy and drafting an evidence-based, climate-change informed NPS.

A two-day stakeholder workshop to develop the NPS was held on 8 and 9 June 2022, attended by 22 individuals, including representatives from the ANT, Department of Natural Resources (Agriculture Unit, Environment Unit), Department of Health Protection, Gender Affairs Anguilla, hotel sector, beekeepers and QBC, private sector (Anguilla Garden Centre), youth (Albena Lake Hodge Comprehensive School Environmental Club), and community-based organisations (Anguilla Beautification Club). The workshop was facilitated by Dr Jenny Daltry, Caribbean Alliance Director (Re:wild, Fauna & Flora International). The workshop involved plenary sessions to develop a long-term vision for Anguilla's pollinators and the habitats on which they

depend as well small break-out groups drafting action strategies for birds, bats, insects (butterflies, flies, beetles) and honey bees which were integrated into the NPS (Evidence 2).

Taking advantage of the support and interest of local stakeholders, encouragement from project partner AU, and recognising that the issue will be raised as an action point within the NPS (through prior discussions with AU), we also held an introductory one-day workshop to introduce the policy development process, to collect views and positions and to discuss concerns about pesticides use and regulation. This meeting was held on 1 June 2022, attended by 24 individuals, representing the ANT, Department of Natural Resources (Agriculture Unit, Environment Unit), Department of Health Protection, Gender Affairs, hotel sector, beekeeping collective (QBC) and Anguilla's Farmers Association. A working group was established following this workshop (and the NPS workshop), comprised of representatives from the ANT, Agriculture Unit-Department of Natural Resources, Environment Unit-Department of Natural Resources, Fisheries Unit-Department of Natural Resources, Department of Health Protection, Anguilla Farmers Association and the hotel sector. The policy development process and the drafting of the policy document was led by Mr. Stanley Reid (lawyer and former Deputy Governor of Anguilla). The NPP has been drafted (Evidence 3) and is now ready for sharing with the Government of Anguilla Executive Council for review, approval and adoption. The drafting and submission of this important policy document already achieves one of the priority actions identified in the NPS.

Output 3. Re-wilding of Anguilla for the short- and long-term benefit of pollinators implemented, monitored, and evaluated

Activities under Output 3 for the second year of the project included developing and disseminating re-wilding protocols for community/homeowner and tourism partners, partnering with individual households, communities, schools, hotels, and villas to establish and monitor a "B-Line" and pollinator pathways by planting native vegetation within disturbed habitats, building, installing, and monitoring bee, bird, and bat nesting/roosting boxes on re-wilded habitat, and distributing hummingbird and bee feeders.

Re-wilding protocols for community and tourism partners have been developed and integrated into a comprehensive "how-to" guide, *Building Your Backyard Pollinator* Garden (Evidence 1). The guide is currently being professionally printed and will be made available at garden centres (including hardware stores that sell gardening supplies), the ANT and AU offices, the post office and other public spaces.

Through our communication and outreach activities, we have encouraged local landowners and community groups to collect and plant native seedlings that we are growing in our project nursery. To date, we have provided native tree seedlings to 28 community members and organisations to plant on their properties. In addition, to celebrate World Bee Day, we planted 19 lignum vitae trees along one of Anguilla's mainland boulevards as well as within the Morris Vanterpool Primary School schoolyard and spoke to students about Anguilla's pollinators, especially insects. Working with community groups over the past year, we have also focused our efforts on the restoration of two wetlands: (1) Cove Bay, where we have planted 16 black mangrove, 37 red mangrove, 10 white mangrove and 18 buttonwood and (2) Road Salt Pond where although space is limited around the edge of the pond, we have planted 14 mangrove seedlings between the paved road and the pond's margin. So far, private landowners have pledged to re-wild 597 acres of land.

As part of this activity, we have been engaging with large hotel resorts on Anguilla and thus far have established partnerships with two major hotels (Aurora Anguilla Resort & Golf Club, Belmond Cap Juluca) who have both expressed an interest in supporting the Queen Bee Collective by providing space for apiaries and in rewilding their grounds to support not only western honey bees but Anguilla's pollinators in general.

For monitoring purposes, we have been recording the contact details of the community members who have been re-wilding their properties and the GPS coordinates of where they have been conducting activities (e.g. planting trees and installing bug hotels) this allows us to monitor the expansion of the project's B-line and also to identify areas where further work may be required as we move into Year 3 of this project (Evidence 6).

With support from our project partner the Alderney Wildlife Trust, in June 2022 we held two bug box building family events. These were attended by 40 members of the local community. We also installed a large bug hotel at the Government of Anguilla's Agricultural grounds (Evidence 1). We have mapped the location of the placement of these boxes to help us highlight the B-line recovery network that is being created (Evidence 6),

In May 2022, we hosted a World Biodiversity Day family event that focused on Anguilla's pollinators. At this event (and since this event), we gave away 17 hummingbird feeders with feed syrup and instructions on how to maintain the feeders and make further batches of feed. We have mapped the location of the placement of these boxes to help us highlight the B-line recovery network that is being created (Evidence 6). We recently placed an order to purchase additional feeders for give-away to interested members of the public in advance of the 2023 hurricane.

Output 4. National Capacity to plan, manage, implement and monitor a national pollinator strategy is raised, supported by enhanced technical skills, greater public awareness, and vested community increase.

Activities under Output 4 for the second year of the project included planning and undertaking on-the-job mentoring of ANT and AU staff and other nationals in applied re-wilding strategies and alternative livelihood opportunities, establishing a beekeeping cooperative, continuing to implement our public awareness campaign, and providing opportunities for citizen science.

On-the job mentoring of project staff and other nationals has continued and over the last year has included training for 10 women and 3 men in beekeeping practicals (Evidence 4) and 13 children and 34 adults in pollinator house construction (Evidence 1).

During the first year of this project, 18 women (including three ANT staff members) were trained in beekeeping theory through an on-line training programme facilitated by the Iyanola Apiary Beekeeping Cooperative and the University of the West Indies. During the second year, ten of the women (including three ANT staff members) and three male ANT and AU staff members have since received practical training in hive creation, management and care and supplemental feeding. Through this training, two wild hives were re-hived and placed within two different apiaries located across the island. All training was conducted by Mr. Richard Matthias, Master Beekeeper, President of the Iyanola Apiary Beekeeping Cooperative and President of the Association of Caribbean Beekeeping Organisations.

Mr. Matthias has also advised on the formation of Anguilla's first beekeeping collective. The collective, the Queen Bees Collective, is now comprised of ten women who have completed basic beekeeping training (assisted remotely by Mr. Matthias, and on-island by two ANT male staff members) (Evidence 4).

Building on this, Belmond Cap Juluca met with the QBC in March 2023 and has also offered space on the hotel grounds to establish a third apiary if required and the QBC has submitted a concept note to hotel management outlining the vision of the Collective and potential areas for support and collaboration (Evidence 4).

As part of our public awareness and outreach, we have published two newspaper articles, four social media posts, two radio announcements and conducted two public presentations. Thus far, we have reached 5060 users on Facebook and 216 on Instagram. More specifically, public awareness activities have included (Evidence 1):

- Six press releases posted to Facebook, Instagram and shared with two newspapers (The Anguillian, The Daily Herald), four radio stations (Radio Anguilla, Kool FM, Heartbeat Radio, Klass FM).
- Four public activities: two evening bat and insect presentations and walks (attended by 35 members of the public), two pollinator house construction workshops (attended by 47 members of the public)
- Nine Facebook static posts, five Instagram static posts (four ANT Instagram posts, one Re:wild Instagram posts), and three WhatsApp status posts.

- Celebration of World Bee Day (20 May 2022): As part of this event, we partnered with colleagues from across the Caribbean who also participated in the online beekeeping course. We planted 19 lignum vitae trees along one of Anguilla's mainland boulevards as well as within the Morris Vanterpool Primary School schoolyard and spoke to students about Anguilla's pollinators, especially insects.
- Celebration of International Biodiversity Day (21 May 2022): For this event, we celebrated Anguilla's pollinators with an afternoon of family-oriented activities that focused on raising awareness about the importance of pollinators and Anguilla's pollinator diversity. Activities included pollinator-focused arts and crafts activities, a guided walk during which pollinators were discussed, a scavenger hunt, decorating plant pots and planting basil and tarragon seedlings, lignum vitae seedling and hummingbird feeder give-aways, face painting and a honey tasting.
- A Facebook trivia competition, with all questions related to pollinators, leading up to the International Biodiversity Day Festival (five Facebook posts).
- Public presentation about Anguilla's pollinators during the NPS and NPP development workshops.
- Public presentation about Anguilla's honeybees.
- Six information pamphlets related to pollinators.
- A brief beekeepers' guide (what to look for during hive inspections).
- A guide to Building Your Backyard Pollinator Garden.

We have also provided updates on this project with the Minister and Permanent Secretary responsible for environment/natural resources through one-on-one meetings, to national groups through presentations (Evidence 1, 2) and the wider scientific community through a short paper that has been accepted for publication through the Chartered Institute of Ecology and Environmental Management, and will be published in their June 2023 edition of the InPractice magazine (Evidence 1).

In addition, at the end of October 2022, results of the project were presented at the 11th Caribbean Beekeeping Congress in St. Vincent (Evidence 1).

To support citizen science engagement, we established an iNaturalist page specific for the Anguilla Pollinator Project. The creation of this page was a first for the ANT and represented a new way for us to engage community members in biodiversity collection. Since its establishment (and to-date), there are currently 64 observers, 269 identifiers, 850 observations and 253 species (recognising that not all species may actually be pollinators). This page will be maintained indefinitely.

3.2 Progress towards project Outputs

This DPLUS131 has four main Outputs: 1. Ecosystem values of Anguilla's pollinators and potential effects of climate change identified; 2. Evidence-based, climate change-informed national "B-Line" pollinator strategy produced through a collaborative process; 3. Re-wilding of Anguilla for the short- and long-term benefit of pollinators implemented, monitored, and evaluated; and 4. National capacity to plan, manage, implement, and monitor a national pollinator strategy is raised, supported by enhanced technical skills, greater public awareness, and vested community interest.

Output 1: Ecosystem values of Anguilla's pollinators and potential effects of climate change identified.

In Anguilla, prior to this project, there was a notable lack of data on the diversity, abundance and distribution of insect pollinators. A 2007 report detailed some basic baseline data on the bat species present, and the ANT had collected bird data since 2013 from 16 survey sites distributed across mainland Anguilla, but this data had not been analysed. During the first year of this project, we greatly increased our local understanding of the pollinators present on Anguilla and conducted

a desk-based review of the potential impacts that climate change may have on them. To further support this activity throughout Year Two, we implemented an extensive public outreach campaign to raise the profile of Anguilla's pollinators (Evidence 1) and, through the establishment of the Queen Bee Cooperative (Evidence 4), we have promoted alternative livelihood opportunities within the Anguillian community.

While we continue to work on supporting this outcome in the long-term, all of the means of verification stated in our project proposal have now been met.

Output 2. Evidence-based, climate change-informed national "B-Line" pollinator strategy produced through a collaborative process.

A two-day stakeholder workshop to develop the NPS was held on 8 and 9 June 2022, attended by 22 individuals, including representatives from the ANT, Department of Natural Resources (Agriculture Unit, Environment Unit), Department of Health Protection, Gender Affairs Anguilla, hotel sector, beekeepers and QBC, private sector (Anguilla Garden Centre), youth (Albena Lake Hodge Comprehensive School Environmental Club) and community-based organisations (Anguilla Beautification Club) (Evidence 2).

In further support for this Output through the implementation of one of the priority conservation actions identified and at the request of project partner AU, we also held an introductory one-day workshop to introduce the policy development process, to collect views and positions, and to discuss concerns about pesticides use and regulation. This meeting was held on 1 June 2022, attended by 24 individuals. A working group was established following this workshop (and the NPS workshop), comprised of representatives from the ANT, Agriculture Unit-Department of Natural Resources, Environment Unit-Department of Natural Resources, Fisheries Unit-Department of Natural Resources, Department of Health Protection, Anguilla Farmers Association and the hotel sector. The policy development process and the drafting of the policy document was led by Mr. Stanley Reid (lawyer and former Deputy Governor of Anguilla) (Evidence 3). The NPP has been drafted and is now ready for sharing with the Government of Anguilla Executive Council for review, approval, and adoption.

The means of verification for this project outcome have now been achieved). For the final year of this project, we will focus on lobbying Government's Executive Council to officially endorse both the National Pollinator Strategy and the National Pesticide Policy.

Output 3. Re-wilding of Anguilla for the short- and long-term benefit of pollinators implemented, monitored, and evaluated.

Over the past year of this project partners (ANT and AU) have continued to propagate the globally threatened Lignum vitae *Guaiacum officinale*, red mangrove *Rhizophora mangle*, black mangrove *Avicennia germinans*, white mangrove *Laguncularia racemosa*, buttonwood *Conocarpus erectus*, seagrape *Coccoloba uvifera*, and other native and culturally-important flowering plant species in our project nursery ready for distribution. To date, we have distributed 44 seedlings, 17 hummingbird feeders and 26 bug hotels to local community members. We have formed partnerships with two of the major hotels on Anguilla and have conducted re-wildling events with one of the local primary schools and at two wetland/mangrove sites (Evidence 6)

Our means of verification for this output speak to the number of local community members we have involved in re-wilding activities and the amount of habitat that is re-wilded. These means of verification are still valid for this output as they directly link to the progress we are making in re-wilding Anguilla.

Output 4. National capacity to plan, manage, implement, and monitor a national pollinator strategy is raised, supported by enhanced technical skills, greater public awareness, and vested community interest.

Over the first two years of this project, we have already made great strides in our efforts to increase local capacity, public awareness and vested community interest. Our public outreach strategy has included social media posts (Facebook, Instagram), newspaper press releases, International Biodiversity Day festival (focus on Anguilla's pollinators), outdoor activities, presentations for national and regional audiences, short manuscript on Anguilla's pollinators and project results; uploading of pollinator images by the public to the iNaturalist Anguilla Pollinator Project; and public perception and knowledge surveys about Anguilla's pollinators (in Year 1)

(Evidence 1). We have further increased vested community interest through the creation of the Queen Bees Cooperative who have pledged to support native pollinator recovery through playing their part in re-wildling activities (Evidence 4).

The means of verification for this output remain valid as they relate to the number of nationals we can convince of the value of Anguilla's pollinators and the number we can inspire to take part in re-wilding activities, this output has already been partially achieved through our public outreach campaign and capacity building through training in pollinator surveys and beekeeping.

3.3 Progress towards the project Outcome

The Outcome of this project is a joined-up approach to improving habitat connectivity for at-risk pollinators, making them more resilient to climate change while providing communities with opportunities for engagement and alternative livelihoods.

To date, we have established pollinator ecological baselines and monitoring programmes that have included the training of nationals to ensure local agencies are able to implement continued long-term monitoring of Anguilla's key pollinator populations. We have engaged a range of local community members and local stakeholders in pollinator and re-wildling activities thereby increasing local support and understanding of the importance of Anguilla's pollinators. In Year 2, we created a stakeholder-informed National Pollinator Strategy and have already completed one of the major actions identified in this plan, namely the development of an island-wide Pesticide Policy. Both the NPS and the NPP are awaiting endorsement from Government of Anguilla's Executive Council (**Measurable indicator 02**), but it is likely to be looked upon favourable given the extensive involvement of both government agencies and local stakeholders in the development of these key documents. Looking forward to the final year of this project, we will continue to increase our re-wilding efforts to reach our target of at least 400 acres of Anguilla's disturbed habitats (**Measurable indicator 01**). Local agencies are committed to continuing to work towards conserving Anguilla's pollinators in the long-term. Through the development of the NPS and NPP, we have formed working groups composed of government agencies, local NGOs and other key stakeholders to ensure that these two important strategies/policies continue to be driven forward and implemented post-project. In addition, the ANT has recently been awarded Darwin Plus Local funding to assist in the development and implementation of a monitoring programme for bats using novel acoustic methods and to develop a bespoke biodiversity database. This new project will support that the long-term monitoring of Anguilla's pollinators through efficient data collection, collation, and storage methods (**Measurable indicator 03**). We are confident that we are on track to achieve project outcome by the end of the project and believe that the indicators stated for measuring the achievement of the project outcome are still relevant.

3.4 Monitoring of assumptions

Executive Council continues to support the effective management of Anguilla's threatened and at-risk species.
We have engaged the Minister of Natural Resources throughout this project from its conception through to our early implementation phases. In addition, our partnerships with Government Agencies (Department of Natural resources and Gender Affairs Unit) ensure that higher level government officials will remain updated on and connected to the project activities.

Nationals willing to cooperate on pollinator conservation initiatives.
To date we have been encouraged by the level of local interest in the project, we have recorded a good attendance at project-related outreach activities including a range of stakeholders who participated in the development of the National Pollinator Strategy and the National Pesticide Policy workshop.

National strategy correctly identifies and addresses main threats, capacity needs, and resources to conserve and protect species and rewild the environment.

We held a participatory workshop in June 2022 to develop the National Pollinator Strategy. The workshop was well-attended with representation from the Environment Unit and Livestock Division of Department of Natural Resources, Anguilla National Trust, Department of Education, the Farmer's Association, the Anguilla Enhancement Project, Anguilla's Beautification Club, Anguilla Garden Centre, and the Queen Bee Collective. In addition, regional and international experts were in attendance (Roland Gauvain, Alderney Wildlife Trust and Dr Jenny Daltry, Fauna & Flora, Re:Wild). This mix of stakeholders, who represent different industries and areas of expertise ensured that the NPS correctly addressed and identified main threats, capacity needs and resources to conserve and protect species and rewild the environment. There was an overall consensus on the vision, outcomes and activities detailed in the resulting National Pollinator Strategy.

Field activities can be rescheduled if extreme weather events affect Anguilla during the project period. As Atlantic hurricane season approaches, the impact of a severe hurricane on project activities is always at the forefront of our minds. While we have seedlings currently growing in our project nursery we plan to have out-planted the majority of these in July-August before the peak period of hurricane activity (September-October). For any seedlings that are not of a sufficient size/condition to plant out before September we have protocols in place for moving them inside a secure room at the agriculture department. We have also developed protocols that will secure our project beehives in the event that a severe storm is predicted to pass Anguilla. We have not planned any international visitors/trips during the peak hurricane period to avoid the risk of having to reschedule project activities.

Sufficient data exist to support consensus amongst conservationists and natural resource managers within Anguilla on the likely impacts of climate change.
Through a desk-top literature review undertaken in Year 1 we understand that there is a clear consensus from research scientists that climate change will affect the regions pollinator populations through habitat changes and shifts in distribution. We drew on these conclusions during the development of our National Pollinator Strategy and considered how we can make Anguilla's pollinators more resilient to climate change.

COVID-19 restrictions do not delay fieldwork.
Covid-19 is no longer considered a risk for this project's implementation.

Trained expertise remains in Anguilla.
This project has already involved and trained 60 nationals of Anguilla (including 30 youth, 30 adults - including 10 women in beekeeping). Training has focused on pollinator species identification, pollinator housing construction, policy development, and beekeeping). We are confident that by the end of this project we will have increased local capacity and understanding, regardless of whether some individuals choose to leave the island.

4. Project support to environmental and/or climate outcomes in the UKOTs

This project directly relates to several local government priorities and multi-lateral agreements. To date we have collected baseline ecological data that has fed into the development of both a National Pollinator Policy and a National Pesticide Policy. We have increased local capacity in biological monitoring, and significantly increased public understanding on the importance of biodiversity especially related to the ecosystem services that they provide (e.g. agricultural services, and beekeeping).

During the second year of this project, this project has contributed to:

- *Implementing National Biodiversity Strategy and Action Plan (NBSAP)* by gathering and collating "data on the components of biodiversity that are important for conservation and sustainable use," using "guidelines, tools, and processes necessary for identifying, monitoring, regulating, and conserving biodiversity," establishing and maintaining "technical training in the conservation and sustainable use of biodiversity," and promoting environmental awareness and education.
- *Implementing National Environmental Management Strategy (NEMS)* by promoting "environmental education training, capacity building, and awareness.
- *Implementing Anguilla Agricultural Policy* by increasing public awareness about Anguilla's biodiversity and ecosystem services.
- *Implementing Convention on Biodiversity (CBD)* by identifying and monitoring biodiversity important for its conservation and sustainable use as well as the activities that place this biodiversity at risk (Article 7), establishing and maintaining education and training programmes to support capacity building in biodiversity conservation (Article 12), and promoting and encouraging "understanding of the importance of, and the measures required for, the conservation of biodiversity" (Article 13).
- *Implementing CBD's International Pollinator Initiative* by "monitoring changes in the diversity, population levels and frequency of pollinators through time" using best practice methodologies (Element 1), strengthening stakeholders' capacity to manage pollinator diversity and raising stakeholder awareness about the value of pollinators (Element 3).
- *Applying FAO's Global Action on Pollinator Services for Sustainable Agriculture* by recognising the ecological and socio-economic values of pollinators, applying best practice for their conservation, and supporting alternative livelihoods.

This project is also fosters cross-agency partnerships between Government agencies (AU-DNR, GAA), non-government agencies (ANT), regional organisations (Association of Caribbean Beekeeper Organisations – of which the QBC is a formal member, Iyanola Apiculture Collective) and regional and international experts (Jenny Daltry, Roland Gauvin, Karl Questel, Baptiste Angin, Richard Matthias).

5. Gender equality and social inclusion

Project partners recognise that many actions to support pollinators and pollination could be more effective with improved governance and collaboration across jurisdictions (government, nongovernment, and private). We also recognise the roles that both men and women play within those jurisdictions. While farming is a male-dominated industry, backyard gardening is more female-dominated. Our unique partnership with the Gender Affairs Unit in Anguilla has helped us to appropriately consider and integrate gender matters within this project and in the development of the National Pollinator Strategy. Also notable is that the Queen Bee Collective is primarily comprised of women. This bias towards women's active engagement is intentional: ensuring that there are increased opportunities for women to be engaged in agriculture-based alternative livelihoods that have the potential to generate revenue is important.

Day-to-day management of the project is handled by an almost all-women coordinating team comprised of the Executive Director and Project Manager of the ANT (two female), the AU-DNaR Agriculture Officer (one female, one male), the Director of Gender Affairs Anguilla (one female), and the Director of Alderney Wildlife Trust (one male). The local, on-the-ground project implementation team is mixed gender, comprised of ANT and AU-DNR staff members (four male, six female).

Ethnicity and age are equally well-represented based on Anguilla's population demographics.

Please quantify the proportion of women on the Project Board[1].	67%
Please quantify the proportion of project partners that are led by women, or which have a senior leadership team consisting of at least 50% women[2].	50%

6. Monitoring and evaluation

All project partners, led by Farah Mukhida have been responsible for ensuring that the project is on schedule and is monitored. The established PSC has meets bi-annually and informally throughout the year as and when is required. We have also established a project WhatsApp group that includes all project partners to allow for easy, quick communication and project updates. The newly established Queen Bee Collective (that has members from both ANT and AU) has now taken over the day-to day management and monitoring of the apiaries that were established by this project. The Cooperative will continue to benefit from training opportunities (including further training from Mr Richard Matthias) until this project's close, and then will be in a self-sustaining position.

7. Lessons learnt

The major challenge we faced during the last year was related to the establishment of the Queen Bees Collective (QBC) apiaries. As western honeybees are non-native species, with wild and managed hives already existing in Anguilla, we made a conscious collective decision that the QBC apiaries would be established through the re-hiving of existing wild hives into managed hives, so as not increase competition with native pollinators. Wild hives, however, are notoriously unpredictable and have a tendency to swarm after re-hiving. Over the project period, we have removed 12 wild hives and have re-hived them into hive boxes; two remain. This is not an unexpected outcome, and the QBC are continuously learning and improving their skills in establishing hives and apiary management. We continue to draw on the assistance of St. Lucia-based master beekeeper Mr. Richard Matthias who has expressed his commitment to help us in our beekeeping journey.

8. Actions taken in response to previous reviews (if applicable)

Review comment 1. Although the broad details are covered, it would be good to see a bit more detail of the actual restoration protocols planned at a site level.

A *Building Your Backyard Pollinator Garden* has been produced. The guide covers general information about pollinators, pollinators specific to Anguilla (insects, birds, bats), plants associated pollinators, threats facing pollinators, and practical, easy-to-follow steps that can be taken to protect and enhance pollinator habitat, including practical instructions on how to create pollinator-friendly gardens (picking and preparing the site, identifying and sourcing pollinator friendly plants (and seeds), when and how to plant, and plant and garden care) (Evidence 1).

We have created a working list of pollinator-friendly plants which guide us in seed collection and planting (Evidence 1). We have identified crown-owned lands (including road-sides), schools,

[1] A Project Board has overall authority for the project, is accountable for its success or failure, and supports the senior project manager to successfully deliver the project.

[2] Partners that have formal governance role in the project, and a formal relationship with the project that may involve staff costs and/or budget management responsibilities.

church yards, wetlands, ANT-owned properties, and other open spaces that could potentially be enhanced with pollinator-friendly plants. These sites have been mapped and gaps in the “B-Line” have been identified (Evidence 6). Supporting these actions, we have also created a protocol for internal (ANT, AU-DNaR) use for our own nursery which include how to source and grow plants from seed and how to care for them before giving them away for planting in gardens and spaces across the island.

Review comment 2. There is no reference to how risks will be managed within the M&E plan.

A risk assessment has now been completed for the project and is detailed below:

Risk 1. Executive Council/Government of Anguilla does not continue to support the effective management of Anguilla’s threatened and at-risk species.
Probability of occurrence: Low
Impact on the project: High
Mitigation action(s): Integrating and involving Government of Anguilla agencies in all aspects of project development and implementation. Government of Anguilla officials were engaged during the project development phase and have been included directly within this project as a full project partner (AU and GAA). Both AU and GAA have integrated this project into their work programmes, with all three project partners (ANT, AU, GAA) assisting with field-based activities, nursery management, and the creation of the beekeeping collective. Beyond partner agencies, the Department of Health Protection and Fisheries and Marine Resources Unit-Department of Natural Resources are also key members of the Pesticide Policy (development) working group. AU is the designated body that will present the NPP to Executive Council upon its completion. Government of Anguilla agencies have also assisted in the development of the NPS. Updates continue to be provided through meetings with the Minister and Permanent Secretary responsible for natural resources. The Minister has publicly endorsed the work of this project on Facebook.

Risk 2. Nationals are unwilling to cooperate on pollinator conservation initiatives.
Probability of occurrence: Low
Impact on the project: High
Mitigation action(s): Integrating and involving the public in project development implementation. The ANT already has an active membership of 100 individuals, many of whom have expressed their support for this project. In addition, both the ANT and AU have established partnerships with the Anguilla Beautification Club, Anguilla Enhancement Project, Anguilla Farmers Association and the high school Environmental Club - organisations that all work directly with communities, provide us with avenues and opportunities to promote this project and engage communities in activities that promote pollinator conservation and re-wilding actions. The development and implementation of a public awareness plan also supports and encourages local community participation in project activities. By using the iNaturalist platform, citizen science contributions will be easily facilitated. We will also train and involve anyone interested in monitoring protocols (including Flower-Insect Time Counts for non-insect specialists) and species identification. Given the small size of the organisation and limited staff, the ANT has a long history of partnering with the public and encouraging volunteering and data collection, species and habitat monitoring, and reporting sightings. We will draw on this already-established relationship with the public, schools, youth organisations as well as AU’s strong relationship with the Anguilla Farmers Association to support active involvement and cooperation on this project.

Risk 3. National strategy correctly identifies and addresses main threats, capacity needs, and resources to conserve and protect species.
Probability of occurrence: Low
Impact on the project: High
Mitigation action(s): Ensuring a participatory approach national pollinator strategy development, drawing on the knowledge and expertise of national and regional experts and stakeholders and applying an evidence- and precautionary-based approach.

This project establishes baselines for both pollinators and their habitats and through on-going monitoring, long-term trends in pollinator populations (at least at the family level) can be determined. The NPS is meant to be a living document that is adjusted as necessary as information/data becomes available and/or as national contexts/on-the-ground situation changes/evolves.

Risk 4. Field activities are affected by extreme weather.
Probability of occurrence: Medium
Impact on the project: Medium
Mitigation action(s): Field activities can take place outside of the peak hurricane season.

Risk 5. COVID-19 delays fieldwork.
Probability of occurrence: Low
Impact on the project: Low
Mitigation action(s): Ensuring multiple staff trained to ensure that fieldwork could continue even if someone falls ill.

Risk 6. Fluctuations in currency.
Probability of occurrence: Medium
Impact on the project: Medium
Mitigating action(s): Purchasing the majority of equipment and/or consumables at the start of the project; carefully managing funds and taking advantage of cost reduction opportunities (e.g. purchasing items in bulk, linking with the Association of Caribbean Beekeeping Organisations, Alderney Wildlife Trust to secure discounts on equipment and materials). The value of the GBP has fallen dramatically since this project has launched. All major equipment has already been purchased. Re-wilding activities which require pots and soil can be expensive, but we will be able to save on cost of pots by re-using those that we already have and by transferring hardened plants into biodegradable bags for public distribution.

Review comment 3. The logframe seems to have two outputs which are separate in the implementation timetable merged into a single output in the logframe, which risks confusion. This should be clarified and aligned as appropriate.
Output 3 of the logframe integrates Output 3 and Output 4 of the submitted implementation table. The logframe is correct and the implementation table has been amended accordingly.

9. Risk Management

No new risks arose during the second year of the project.

10. Other comments on progress not covered elsewhere

No other comments.

11. Sustainability and legacy

This project represented the first phase of, and foundation to, our long-term commitment of working with pollinators. The established project nursery will continue to be used to grow seedlings for re-planting activities across the island. Our re-wildling partners created through this project, including community groups, schools, hotels partners, and the Queen Bee Cooperative, have committed to supporting this initiative in the long-term. In addition, through our public awareness campaign and capacity building activities local peoples are now more aware of the benefits that native plants and pollinators have on the functioning and resilience of Anguilla.

In April 2023 we will launch a newly funded Darwin Local project in partnership with the UK Centre for Ecology and Hydrology to conduct more in-depth studies related to Anguilla's bat populations. This project will add further to our baseline knowledge of Anguilla's pollinators and help to establish new long-term monitoring programmes using acoustic recorders.

The inspiration behind this project came from the Channel Islands' Inter-Island Pollinator Project. We hope that our project will similarly inspire others, especially other islands in the Caribbean, to pursue something similar within their own island contexts, learning from our experiences and replicating our achievements. We intend to report on this project in its final year through regional Webinars as well as through attendance at international and regional meetings and conferences.

12. Darwin Plus identity

The Darwin Initiative has been recognised on all materials produced through this project, including pollinator reports and outreach materials. All social media posts (Facebook/Instagram) include the tags #dplus #darwininitiative and all Instagram posts are linked to Defra's handle (@defrauk).

13. Safeguarding

Has your Safeguarding Policy been updated in the past 12 months?	No
Have any concerns been investigated in the past 12 months	No
Does your project have a Safeguarding focal point?	Yes – Farah Mukhida, [redacted]
Has the focal point attended any formal training in the last 12 months?	No
What proportion (and number) of project staff have received formal training on Safeguarding?	Past: 20%, 1 Planned: 0%, 0
Has there been any lessons learnt or challenges on Safeguarding in the past 12 months? Please ensure no sensitive data is included within responses. Not applicable.	
Does the project have any developments or activities planned around Safeguarding in the coming 12 months? If so please specify. No.	

14. Project expenditure

Table 1: Project expenditure during the reporting period (1 April 2022 – 31 March 2023)

Project spend (indicative) in this financial year	2022/23 D+ Grant (£)	2022/23 Total actual D+ Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs	[redacted]			
Consultancy costs				
Overhead Costs				
Travel and subsistence				
Operating Costs				
Capital items				
Others (Please specify) *Beekeeping materials/kits* *Hummingbird feeders* *Pollinator box construction supplies* *Re-wilding supplies (pots, soil, fertlisers)* *Public awareness materials* *(International Biodiversity Day materials, presentation and outdoor activity refreshments, pollinator guides)*				
TOTAL	**107,465.0**	**107463.8**		

Highlight any agreed changes to the budget and **fully** explain any variation in expenditure where this is +/- 10% of the budget. Have these changes been discussed with and approved by Darwin Plus?

Table 2: Project mobilising of matched funding during the reporting period (1 April 2022 – 31 March 2023)

	Matched funding secured to date	Total matched funding expected by end of project
Matched funding leveraged by the partners to deliver the project.	[redacted]	
Total additional finance mobilised by new activities building on evidence, best practices and project (£)		

15. OPTIONAL: Outstanding achievements or progress of your project so far (300-400 words maximum). This section may be used for publicity purposes

I agree for the Biodiversity Challenge Funds Secretariat to publish the content of this section (please leave this line in to indicate your agreement to use any material you provide here).

File Type (Image / Video / Graphic)	File Name or File Location	Caption, country and credit	Online accounts to be tagged (leave blank if none)	Consent of subjects received (delete as necessary)
Image	IMG_8369 (box.com: Photos folder)	Some of the members of the Queen Bees Collective Country: Anguilla Credit: Farah Mukhida/Anguilla National Trust	Facebook & Instagram: @axatrust	Yes
Image	IMG_8183 (box.com: Photos folder)	Bug box Country: Anguilla Credit: Farah Mukhida/Anguilla National Trust	Facebook & Instagram: @axatrust	N/A
Image	Tetrio Sphinx (box.com: Photos folder)	Frangipani moth caterpillar *Pseudosphinx tetrio*	Facebook & Instagram: @axatrust	Yes

Annex 1: Report of progress and achievements against logframe for Financial Year 2022-2023 – if applicable

Project summary	SMART Indicators	Progress and Achievements April 2022 - March 2023	Actions required/planned for next period
Impact Enhanced resilience of Anguilla's at-risk habitats and species inspires other islands to conserve native pollinators and other wildlife		We continue to increase baseline knowledge and understanding of Anguilla's key pollinator populations and to implement major island-wide activities (including re-wildling and the development of a pesticide policy) to support their increased resilience and recovery. We intend to share the results of this project more widely in Year 3.	
Outcome A joined-up approach to improving habitat connectivity for at-risk pollinators, making them more resilient to climate change while providing communities with opportunities for engagement and alternative livelihoods.	0.1 Rewilding and National pollinator strategy interventions are applied to at least 400 acres of Anguilla's disturbed habitats for the benefit of pollinators by the end of the project 0.2 National pollinators strategy endorsed by the Government of Anguilla Executive Council and local communities by the end of the project 0.3 Work plans and budgets of responsible national agency and supporting partners demonstrate intention to continue implementing action plans beyond the life of this project	Since the beginning of the project, we have established 28 re-wilding partners and private landowners have pledged to re-wild 597 acres of land (Evidence 6) A National Pollinator Strategy that includes an implementation plan and outlines key action implementors was created through a well-attended two-day participatory workshop (Evidence 2). In addition to the NPS, a National Pesticide Policy was similarly drafted by an NPP working group (Evidence 3). The NPP was informed by a comprehensive one-day stakeholder workshop. The NPP was identified within the NPS as a priority action. Implementation of the NPS, has, where relevant, been incorporated into the Anguilla National Trust's work plan and budget. The formation of working groups to drive forward the NPS and NPP will ensure these important project	Continue our re-wilding initiatives including a national tree-planting event and further distribution of seedlings and hummingbird feeders and bat nest-box building activities. Schedule presentation of the NPS and NPP to Government of Anguilla's Executive Council for approval.

Project summary	SMART Indicators	Progress and Achievements April 2022 - March 2023	Actions required/planned for next period
		outputs continue to be implemented post-project.	
Output 1. Ecosystem values of Anguilla's pollinators and potential effects of climate change identified	1.1 Bird pollinator assessment, based on 10 years of terrestrial bird monitoring data from the Anguilla mainland, completed by the end of Q2Y1 and re-assessed at the end of the project in Q1Y4 1.2 Bee, butterfly, and bat assessments completed by the end of Q4Y1 and re-assessed at the end of the project in Q1Y4 1.3 Projected effects of climate change on pollinators reviewed by end of Q4Y1 and re-assessed at the end of the project in Q1Y4 1.4 Results of baseline pollinator assessments presented to at least 30 stakeholders, including the Anguilla's Farmers Association, by end of Q1Y2 (Insert original Output level indicators)	With most baseline work having already been completed during the first year of the project, results of our biodiversity assessments were presented during the NPS stakeholder workshop (Evidence 2). A guide to creating pollinator-friendly gardens has been created (Evidence 1) and is currently being printed for public dissemination.	
Activity 1.1. Complete assessment of bird pollinators using already collected terrestrial bird data.		Completed Y1	Continue to monitor iNaturalist/eBird web platforms for the presence of any additional migratory pollinator species
Activity 1.2. Conduct bee and butterfly assessments, including habitat requirements, on the Anguilla mainland.		On-going	Continue to conduct Flower-Insect Timed surveys and bat acoustic surveys (supported by DPLUS Local funding) throughout Year 3 to further

Project summary	SMART Indicators	Progress and Achievements April 2022 - March 2023	Actions required/planned for next period
			increase our understanding of the diversity and distribution of species.
Activity 1.3. Conduct bat assessment, including habitat requirements, on the Anguilla mainland and compare to the results of a 2007 desk-top review.		Completed in Year 1	Implement bat acoustic monitoring programme that will include the deployment of passive acoustic stations and AI software analysis, supported by DPLUS Local funding.
Activity 1.4. Collate and analyse climate change data and forecasts for the northern Lesser Antilles to elucidate likely climate change impacts on Anguilla's pollinators and the habitats on which they rely.		Completed Year 1	Continue to review published reports and journal articles to keep abreast of information related to pollinators and climate change.
Activity 1.5. Compile all species and habitat data into an Anguilla pollinators report.		Completed Year 1	Continue to collect insect pollinator (at the family level) diversity, abundance, phenology and distribution.
Activity 1.6. Present results of pollinator assessments to stakeholders, including the Anguilla Farmers Association		Completed (baseline pollinator assessments were presented to stakeholders during our National Pollinator Strategy workshop in June 2022 (Evidence 2) and *Building Your Backyard Pollinator Guide* (Evidence 1) has been created)	Continue to promote and raise awareness of Anguilla's pollinators as part of this project's communication action plan and disseminate the *Pollinator Guide* to the public.
Activity 1.7. Conduct pollinator assessments at end of the project and compare to baseline results from Y1 assessment to determine change in pollinator density and distribution.		Completed in Year 1	Conduct more comprehensive surveys of key pollinator groups including the passive acoustic monitoring of bats by the end of the project.
Output 2. Evidence-based, climate change-informed national "B-Line" pollinator strategy produced through a collaborative process	2.1 Climate change-informed national pollinator strategy workshop conducted with at least 30 stakeholders in Q2Y2 2.2 National "B-Line" pollinator strategy finalised and disseminated to all stakeholders within Anguilla by Q3Y2	A National Pollinator Strategy was created through a two-day stakeholder workshop held in June 2022.	

Project summary	SMART Indicators	Progress and Achievements April 2022 - March 2023	Actions required/planned for next period
Activity 2.1. Hold stakeholder workshop to develop a national "B-Line" pollinators strategy, identifying priority conservation actions for Anguilla's pollinators and developing a "B-Line" manifesto.		Completed (workshop held in June 2022) (Evidence 2)	No further action required.
Activity 2.2. Write up, peer-review, and publish the evidence-based, climate change-informed National "B-Line" pollinators strategy		Completed (NPS drafted) (Evidence 2)	Present NPS to the Government of Anguilla Cabinet for approval/endorsement.
Output 3. Re-wilding of Anguilla for the short- and long-term benefit of pollinators implemented, monitored, and evaluated	3.1 At least 300 re-wilding partners (including homeowners, hotel and villa landscape managers/departments) identified and involved in re-wilding initiatives across Anguilla's 7 districts (and within at least 14 villages), beginning in Q4Y2 and running throughout the remainder of the project 3.2 Re-wilding protocols developed and shared with all re-wilding partners (including homeowners, hotel and villa landscape managers/departments) by Q4Y2 3.3 "B-lines" encompassing a total of at least 400 acres and including at least one mangrove site established through re-wilding initiatives by the end of the project 3.4 At least 5000 seeds and seedlings distributed to participating re-wilding partners by the end of the project 3.5 At least 50 bee, 50 bird, and 50 bat boxes constructed and installed within rewilded habitat by the end of the project	Project partners have continued to propagate seedings in our project nursery for distribution. To date, we have distributed 44 seedlings, to more than 28 national partners including landowners, school community groups and major hotels. We have also distributed 17 hummingbird feeders and facilitated a workshop where 26 bug hotels were constructed by local community members; private landowners have pledged to re-wild 597 acres of land (Evidence 6).	

Project summary	SMART Indicators	Progress and Achievements April 2022 - March 2023	Actions required/planned for next period
	3.6 500 hummingbird, bee, and butterfly feeders sourced and distributed as an emergency response following extreme weather events by the end of the project		
Activity 3.1. Develop and disseminate re-wilding protocols for community/homeowner and tourism partners.		Completed (*Building Your Backyard Pollinator Guide*) (Evidence 1)	Continue to support re-wilding partners in their re-wildling efforts.
Activity 3.2. Partner with individual households, communities, schools, hotels, and villas to establish and monitor a "B-Line" and pollinator pathways within the Anguilla mainland by planting native vegetation within disturbed habitats, following best practice protocols		In progress, on-going (so far partnered with 23 local community members, 2 community groups, 1 school and two major hotels) (Evidence 6)	Continue to create partnerships across Anguilla.
Activity 3.3. Build, install, and monitor bee, bird, and bat nesting/roosting boxes on re-wilded habitat, in collaboration with school children, households, hotels, and villas.		In progress, on-going (two bug-hotel building events were held June 2022 facilitated by Roland Gauvain from the Alderney Wildlife Trust) (Evidence 1)	Schedule further bat, bird, and nesting box building activities.
Activity 3.4. Source and distribute hummingbird and bee and butterfly feeders, especially after extreme weather events which significantly reduce natural food supplies.		In progress, on-going (17 hummingbird have been distributed to date, with more having been ordered for distribution to the public) (Evidence 6)	Distributed hummingbird feeders once they have arrived on-island.
Output 4. National capacity to plan, manage, implement, and monitor a national pollinator strategy is raised, supported by enhanced technical skills, greater public awareness, and vested community interest	4.1 Communications and public awareness plan developed by end of Q2Y1 4.2 At least 70% of nationals (c.8,500 people) know about the project and can articulate why rewilding Anguilla is important and necessary by the end of the project 4.3 At least 300 individuals, representing households, villas and/or hotels, and farms, are involved in rewilding activities by the end of the project, including at least 20 individuals	During the first two years of this project, we have already made great strides in our efforts to increase local capacity, public awareness, and vested community interest, including through social media posts, newspaper press releases, an International Biodiversity Day festival, outdoor activities, presentations for national and regional audiences, a short manuscript on Anguilla's pollinators and project results. The public has also been directly contributing to our knowledge and information base through the uploading of pollinator images by the public to the iNaturalist Anguilla Pollinator Project page. Enhanced public awareness at the end of the project can be measured and compared to the results of our initial baseline survey conducted at the start of the project. (Evidence 1). We have further increased vested community interest through the creation of the Queen Bees Collective, with members having pledged to support native pollinator recovery through playing their part in re-wildling activities (Evidence 4).	

Project summary	SMART Indicators	Progress and Achievements April 2022 - March 2023	Actions required/planned for next period
	attending a pollinator nest box/feeding station-building workshop 4.4 At least 50 individuals involved in citizen science pollinator data collection by the end of the project 4.5 At least 20 persons trained in insect and bat identification and monitoring techniques by the end of the project 4.6 At least 15 women trained in beekeeping and the production of bee products as a cottage industry alternative livelihood in between Q2Y3 and the end of the project 4.7 Project methods and lessons learned disseminated to relevant natural resource managers within the Caribbean UKOTs by the end of the project		
Activity 4.1. ANT staff and other participating nationals complete self-assessment competencies questionnaire to identify training needs (repeated at project end to measure impact on capacity).		Completed in Year 1.	Review self-competency assessments at Q4Y3 to evaluate any impact on local capacity
Activity 4.2. Plan and undertake training and on-the-job mentoring of ANT and AU-DNR staff and other nationals in applied re-wilding strategies and alternative livelihood opportunities (including, pollinator identification and monitoring, rewilding best practice, beekeeping, and honey production – particularly amongst women stakeholders).		In progress, on-going (on-the job mentoring of project staff and other nationals included training for 10 women in beekeeping practicals; 3 men in beekeeping practicals (Evidence 4); 47 children and adults in pollinator house construction; brief training guide for beekepers) (Evidence 1)	Continue training related to pollinator surveys and assessments and re-wilding activities.

Project summary	SMART Indicators	Progress and Achievements April 2022 - March 2023	Actions required/planned for next period
Activity 4.3. Establish beekeeping/bee product production cooperative, open initially to those trained through 4.2.		Completed, with training and operations on-going (QBC officially formed and with members having received further practical training in hive creation, management and care and supplemental feeding; through this training, twelve wild hives were re-hived and placed within three different apiaries located across the island; due to natural swarming tendencies, only two hives (in two apiaries) remain (Evidence 4).	Undertake additional training in hive management, with training provided by Mr Richard Matthias; continue to manage and monitor (and potentially expand) existing hives/apiaries.
Activity 4.4. Conduct rapid public survey to evaluate knowledge, attitudes, and performance of Anguilla's pollinators (with gender disaggregated and repeated at project end to evaluate project impact).		Completed in Year 1	To be repeated at end of project.
Activity 4.5. Develop and implement an advocacy and public awareness campaign guided by the findings of 4.4, including but not limited to newspaper articles, press releases, social media, art displays and exhibits, and re-wilding competitions		Completed, with implementation ongoing (see Activities 4.7 and 4.8 in logframe)	Continue with the implementation of the plan.
Activity 4.6. Develop and implement opportunities for citizen science engagement, using iNaturalist.		In progress, on-going (iNaturalist page created specific for Anguilla Pollinator Project in Year 1; since its establishment (and to-date), there are currently 64 observers, 269 identifiers, 850 observations and 253 species)	Continue to promote and monitor this page.
Activity 4.7. Publicise and report on project progress and results through national and international media and directly to national groups, cross-territory stakeholders, international scientific community, and the Government of Anguilla Executive Council		In progress, on-going (communications and outreach included: 6 press releases posted to Facebook and Instagram and shared with 2 newspapers and 4 radio stations; 4 public activities: 2 evening bat and insect presentations and walks (attended by 35 members of the	Continue with the implementation of the project's communication plan

Project summary	SMART Indicators	Progress and Achievements April 2022 - March 2023	Actions required/planned for next period
		public); two pollinator house construction workshops (attended by 47 members of the public); 2 public presentations; 9 Facebook static posts; 5 Instagram static posts; 3 WhatsApp status posts; celebrated World Bee Day (20 May 2022) and International Biodiversity Day (21 May 2022) with family fun and re-wilding event; Facebook trivia competition, with all questions related to pollinators, leading up to the International Biodiversity Day Festival; pollinator garden guide) (Evidence 1); guide for beekeepers) (Evidence 4)	
Activity 4.8. Share and discuss project methods, results, lessons learned, and opportunities for replication through regional and international forums (including, for example, Caribbean Conservation Network, BirdsCaribbean, the Caribbea Initiative, and the Chartered Institute of Ecology and Environmental Management).		In progress, on-going (submitted manuscript accepted for publication in the Chartered Institute of Ecologists and Environment Managers quarterly InPractice magazine; presentation at the Association of Caribbean Beekeepers Organisation, September 2022) (Evidence 1)	Identify further opportunities to present this work at regional and international conferences by the end of the project

Annex 2: Project's full current logframe as presented in the application form (unless changes have been agreed)

Project summary	SMART Indicators	Means of verification	Important Assumptions
Impact: Enhanced resilience of Anguilla's at-risk habitats and species inspires other islands to conserve native pollinators and other wildlife			
Outcome: A joined-up approach to improving habitat connectivity for at-risk pollinators, making them more resilient to climate change while providing communities with opportunities for engagement and alternative livelihoods.	0.1 Rewilding and National pollinator strategy interventions are applied to at least 400 acres of Anguilla's disturbed habitats for the benefit of pollinators by the end of the project 0.2 National pollinators strategy endorsed by the Government of Anguilla Executive Council and local communities by the end of the project 0.3 Work plans and budgets of responsible national agency and supporting partners demonstrate intention to continue implementing action plans beyond the life of this project	0.1 Rewilded habitat maps; strategy intervention reports; photographs 0.2 Government of Anguilla Executive Council minutes; community engagement reports 0.3 Institutional work plans and budgets	Executive Council continues to support the effective management of Anguilla's threatened and at-risk species. Nationals willing to cooperate on pollinator conservation initiatives. National strategy correctly identifies and addresses main threats, capacity needs, and resources to conserve and protect species and rewild the environment.
Outputs: **Output 1.** Ecosystem values of Anguilla's pollinators and potential effects of climate change identified	1.1 Bird pollinator assessment, based on 10 years of terrestrial bird monitoring data from the Anguilla mainland, completed by the end of Q2Y1 and re-assessed at the end of the project in Q1Y4 1.2 Bee, butterfly, and bat assessments completed by the end of Q4Y1 and re-assessed at the end of the project in Q1Y4 1.3 Projected effects of climate change on pollinators reviewed by end of Q4Y1 and re-assessed at the end of the project in Q1Y4	1.1 Terrestrial bird pollinator database; terrestrial bird pollinator distribution map; Anguilla pollinators report 1.2 Bee, butterfly, and bat species list; bee and butterfly distribution map; Anguilla pollinators report 1.3 Climate change species impact maps; Anguilla pollinators climate change vulnerability report	Field activities can be rescheduled if extreme weather events affect Anguilla during the project period. Sufficient data exist to support consensus amongst conservationists and natural resource managers within Anguilla on the likely impacts of climate change. COVID-19 restrictions do not delay fieldwork.

Project summary	SMART Indicators	Means of verification	Important Assumptions
	1.4 Results of baseline pollinator assessments presented to at least 30 stakeholders, including the Anguilla's Farmers Association, by end of Q1Y2	1.4 PowerPoint presentation; presentation attendance sheet	
Output 2. Evidence-based, climate change-informed national "B-Line" pollinator strategy produced through a collaborative process	2.1 Climate change-informed national pollinator strategy workshop conducted with at least 30 stakeholders in Q2Y2 2.2 National "B-Line" pollinator strategy finalised and disseminated to all stakeholders within Anguilla by Q3Y2	2.1 Workshop agenda; workshop participants attendance sheets; PowerPoint presentations; pollinator distribution maps; pollinator species and habitat conservation strategies; "B-Line" manifesto 2.2 National "B-Line" pollinator strategy	National and regional stakeholders continue to be willing to cooperate on habitat and species conservation initiatives
Output 3. Re-wilding of Anguilla for the short- and long-term benefit of pollinators implemented, monitored, and evaluated	3.1 At least 300 re-wilding partners (including homeowners, hotel and villa landscape managers/departments) identified and involved in re-wilding initiatives across Anguilla's 7 districts (and within at least 14 villages), beginning in Q4Y2 and running throughout the remainder of the project 3.2 Re-wilding protocols developed and shared with all re-wilding partners (including homeowners, hotel and villa landscape managers/departments) by Q4Y2 3.3 "B-lines" encompassing a total of at least 400 acres and including at least one mangrove site established through re-wilding initiatives by the end of the project	3.1 Re-wilding partner database (with gender disaggregated); re-wilding partner maps 3.2 Re-wilding protocols 3.3 "B-Line" rewilding map; monitoring data on plant survival and growth; landscape photographs; plant distribution list; community engagement forms and database	Field activities can be rescheduled if extreme weather events affect Anguilla during the project period. National and regional stakeholders continue to be willing to cooperate on habitat and species conservation initiatives. Plants grown in nursery and successfully transplanted to rewilding sites. Plants grown in nursery are not adversely affected/lost during hurricanes or other extreme weather events; plants are moved to secure locations if Anguilla is under a hurricane warning.

Project summary	SMART Indicators	Means of verification	Important Assumptions
	3.4 At least 5000 seeds and seedlings distributed to participating re-wilding partners by the end of the project 3.5 At least 50 bee, 50 bird, and 50 bat boxes constructed and installed within rewilded habitat by the end of the project 3.6 500 hummingbird, bee, and butterfly feeders sourced and distributed as an emergency response following extreme weather events by the end of the project	3.4 Re-wilding plant database; plant distribution list 3.5 Bee, bird, and bat box construction and installation protocols; monitoring data on bee, bird and bat box usage 3.6 Hummingbird and bee feeder distribution list; community reports of feeder usage	
Output 4. National capacity to plan, manage, implement, and monitor a national pollinator strategy is raised, supported by enhanced technical skills, greater public awareness, and vested community interest	4.1 Communications and public awareness plan developed by end of Q2Y1 4.2 At least 70% of nationals (c.8,500 people) know about the project and can articulate why rewilding Anguilla is important and necessary by the end of the project 4.3 At least 300 individuals, representing households, villas and/or hotels, and farms, are involved in rewilding activities by the end of the project, including at least 20 individuals attending a pollinator nest box/feeding station-building workshop 4.4 At least 50 individuals involved in citizen science pollinator data collection by the end of the project	4.1 Communications and public awareness plan 4.2 Knowledge-Attitudes-Performance (KAP) surveys at start and end of the project; newspaper articles; radio press releases; social media posts; social media analytics; PowerPoint presentations; public art displays and exhibits; Rewilding Anguilla competition 4.3 Community engagement forms and database (with gender disaggregated); Anguilla Wildlife Certified hotels; photographs; workshop attendance sheets and photographs 4.4. iNaturalist project page; iNaturalist entries	Trained expertise remains in Anguilla. COVID-19 restrictions do not delay training activities. Improved knowledge leads to improved behaviours to conserve biodiversity and rewild disturbed habitats.

Project summary	SMART Indicators	Means of verification	Important Assumptions
	4.5 At least 20 persons trained in insect and bat identification and monitoring techniques by the end of the project	4.5 Training evaluation sheets (with gender disaggregated); training workshop agendas; workshop attendance sheets (with gender disaggregated); monitoring protocols; biodiversity datasheets	
	4.6 At least 15 women trained in beekeeping and the production of bee products as a cottage industry alternative livelihood in between Q2Y3 and the end of the project	4.6 Training evaluation sheets (with gender disaggregated); training workshop agendas; workshop attendance sheets (with gender disaggregated); community engagement forms and database (with gender disaggregated); bee products production datasheets and database	
	4.7 Project methods and lessons learned disseminated to relevant natural resource managers within the Caribbean UKOTs by the end of the project	4.7 Case studies; presentation abstracts; PowerPoint presentations; minutes of meetings	

Activities (each activity is numbered according to the output that it will contribute towards, for example 1.1, 1.2 and 1.3 are contributing to Output 1)

Output 1. Ecosystem values of Anguilla's pollinators and potential effects of climate change identified

1.1 Complete assessment of bird pollinators using already collected terrestrial bird data.
1.2 Conduct bee and butterfly assessments, including habitat requirements, on the Anguilla mainland.
1.3 Conduct bat assessment, including habitat requirements, on the Anguilla mainland and compare to the results of a 2007 desk-top review.
1.4 Collate and analyse climate change data and forecasts for the northern Lesser Antilles to elucidate likely climate change impacts on Anguilla's pollinators and the habitats on which they rely.
1.5 Compile all species and habitat data into an Anguilla pollinators report.
1.6 Present results of pollinator assessments to stakeholders, including the Anguilla Farmers Association.
1.7 Conduct pollinator assessments at end of the project and compare to baseline results from Y1 assessment to determine change in pollinator density and distribution.

Output 2. Evidence-based, climate change-informed national "B-Line" pollinator strategy produced through a collaborative process
2.1 Hold stakeholder workshop to develop a national "B-Line" pollinators strategy, identifying priority conservation actions for Anguilla's pollinators and developing a "B-Line" manifesto.
2.2 Write up, peer-review, and publish the evidence-based, climate change-informed National "B-Line" pollinators strategy.

Project summary	SMART Indicators	Means of verification	Important Assumptions
Output 3.Re-wilding of Anguilla for the short- and long-term benefit of pollinators implemented, monitored, and evaluated 3.1 Develop and disseminate re-wilding protocols for community/homeowner and tourism partners. 3.2 Partner with individual households, communities, schools, hotels, and villas to establish and monitor a "B-Line" and pollinator pathways within the Anguilla mainland by planting native vegetation within disturbed habitats, following best practice protocols. 3.3 Build, install, and monitor bee, bird, and bat nesting/roosting boxes on re-wilded habitat, in collaboration with school children, households, hotels, and villas. 3.4 Source and distribute hummingbird and bee and butterfly feeders, especially after extreme weather events which significantly reduce natural food supplies. **Output 4. National capacity to plan, manage, implement, and monitor a national pollinator strategy is raised, supported by enhanced technical skills, greater public** 4.1 ANT staff and other participating nationals complete self-assessment competencies questionnaire to identify training needs (repeated at project end to measure impact on capacity). 4.2 Plan and undertake training and on-the-job mentoring of ANT and AU-DNR staff and other nationals in applied re-wilding strategies and alternative livelihood opportunities (including, pollinator identification and monitoring, rewilding best practice, beekeeping, and honey production – particularly amongst women stakeholders). 4.3 Establish beekeeping/bee product production cooperative, open initially to those trained through 4.2. 4.4 Conduct rapid public survey to evaluate knowledge, attitudes, and performance of Anguilla's pollinators (with gender disaggregated and repeated at project end to evaluate project impact). 4.5 Develop and implement an advocacy and public awareness campaign guided by the findings of 4.4, including but not limited to newspaper articles, press releases, social media, art displays and exhibits, and re-wilding competitions. 4.6 Develop and implement opportunities for citizen science engagement, using iNaturalist. 4.7 Publicise and report on project progress and results through national and international media and directly to national groups, cross-territory stakeholders, international scientific community, and the Government of Anguilla Executive Council. 4.8 Share and discuss project methods, results, lessons learned, and opportunities for replication through regional and international forums (including, for example, Caribbean Conservation Network, BirdsCaribbean, the Caribbea Initiative, and the Chartered Institute of Ecology and Environmental Management). Other project management activities: X.1 Establish Project Steering Committee and meet biannually (remote members to participate by Zoom). X.2 Project inception meeting X.3 Project biannual reports/donor technical and financial reports X.4 Monthly financial accounts X.5 End of project audit			

Annex 3: Standard Indicators

Table 1 Project Standard Indicators

DPLUS Indicator number	Name of indicator using original wording	Name of Indicator after adjusting wording to align with DPLUS Standard Indicators	Units	Disaggregation	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
DPLUS-A01	Number of people from key national and local stakeholders completing structured and relevant training	Number of project staff and other local stakeholders who have received theoretical and practical training in beekeeping	People	Women Men	18	10 3		18 3	21
DPLUS-A03	Number of local/national organisations with improved capability and capacity as a result of project	Number of national government and non-government agencies with improved capability and capacity as a result of project	Number	None	4	4 (same as Year 1)	4 (same as Year 1 and 2)	4	4
DPLUS-B02	Number of new/improved species management plans available and endorsed	Number of new species conservation strategies available and endorsed	Number	None					1
DPLUS-C01	Number of best practice guides and knowledge products published and endorsed	Number of re-wilding guides published	Number	None		1			1
DPLUS-D01	Hectares of habitat under sustainable management practices	Acres of re-wilded habitat	Number	None					400

Table 2 Publications

Title	Type (e.g. journals, manual, CDs)	Detail (authors, year)	Gender of Lead Author	Nationality of Lead Author	Publishers (name, city)	Available from (e.g. weblink or publisher if not available online)
Climate Change Predictions for Anguilla	Report	Anguilla National Trust, 2021	Female	British	Anguilla National Trust, North Side	Anguilla National Trust
Climate Change Impacts on Anguilla's Pollinators	Report	Anguilla National Trust, 2021	Female	British	Anguilla National Trust, North Side	Anguilla National Trust
National Pollinator Strategy	Strategy	Anguilla National Trust, 2022	Female	Canadian	Anguilla National Trust, North Side	Anguilla National Trust
Building Your Backyard Pollinator Garden: a guide to Anguilla's pollinators, plants and habitat hints	Guidelines	Anguilla National Trust	Female	Canadian	Anguilla National Trust, North Side	Anguilla National Trust

Checklist for submission

	Check
Different reporting templates have different questions, and it is important you use the correct one. Have you checked you have used the **correct template** (checking fund, type of report (i.e. Annual or Final), and year) and **deleted the blue guidance text** before submission?	x
Is the report less than 10MB? If so, please email to BCF-Reports@niras.com putting the project number in the Subject line.	x
Is your report more than 10MB? If so, please discuss with BCF-Reports@niras.com about the best way to deliver the report, putting the project number in the Subject line.	
Have you included means of verification? You should not submit every project document, but the main outputs and a selection of the others would strengthen the report.	x
Do you have hard copies of material you need to submit with the report? If so, please make this clear in the covering email and ensure all material is marked with the project number. However, we would expect that most material will now be electronic.	
If you are submitting photos for publicity purposes, do these meet the outlined requirements (see section 15)?	x
Have you involved your partners in preparation of the report and named the main contributors	x
Have you completed the Project Expenditure table fully?	x
Do not include claim forms or other communications with this report.	