

## Darwin Plus: Overseas Territories Environment and Climate Fund Annual Report

To be completed with reference to the “Writing a Darwin/IWT Report” Information Note: (<https://dplus.darwininitiative.org.uk/resources/reporting-forms-change-request-forms-and-terms-and-conditions/>). It is expected that this report will be a maximum of 20 pages in length, excluding annexes)

**Submission Deadline: 30<sup>th</sup> April 2021**

### Darwin Plus Project Information

Project reference	DPLUS086
Project title	Future-proofing endangered species conservation in Anguilla
Territory(ies)	Anguilla
Lead organisation	Fauna & Flora International
Partner institutions	Anguilla National Trust, Durrell Wildlife Conservation Trust, Royal Society for the Protection of Birds
Grant value	£291,992
Start/end dates of project	1 April 2019 – 31 March 2022
Reporting period (e.g. Apr 2020-Mar 2021) and number (e.g. Annual Report 1, 2)	1 April 2020 – 31 March 2021
Project Leader name	Dr Jenny Daltry
Project website/blog/social media	
Report author(s) and date	Dr Jenny Daltry, Farah Mukhida and Dr Louise Soanes, April 2021

### 1. Project summary

Scientists predict up to 43% of species could disappear due to climate change, with Caribbean islands forecast to be hardest hit<sup>1</sup>. The biodiversity-rich but low-lying archipelago of Anguilla is exceptionally vulnerable, as was demonstrated by the devastating impacts of hurricanes Irma and Maria in 2017. As many models predict even more severe hurricanes in the Caribbean<sup>2</sup> along with rises in temperature and sea level, multiple extinctions and ecosystem collapse could ensue, and jeopardise human communities in turn<sup>3</sup>.

The Government of Anguilla’s Climate Change Strategy (2012) and National Environmental Strategy (2005) recognised the pressing need for resilience to climate change, while the Biodiversity and Heritage Conservation Act called for action plans for Anguilla’s threatened species. However, international guidelines on species action planning offer surprisingly little advice on how to help endangered species adapt to climate change.

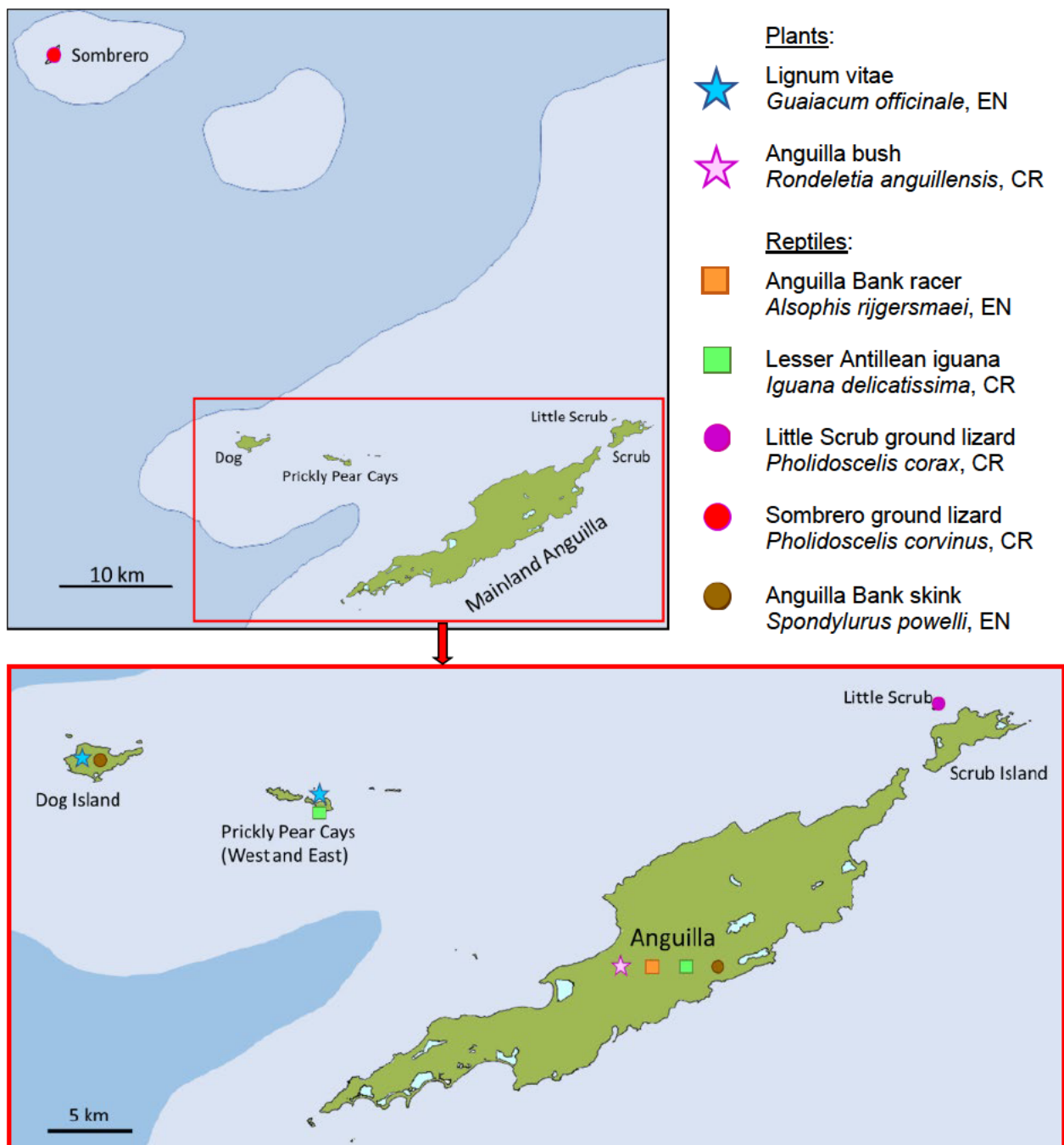
<sup>1</sup> Malcolm, J.R., Liu, C., Neilson, R.P., Hansen, L., & Hannah, L. (2006) Global warming and extinctions of endemic species from biodiversity hotspots. *Conservation Biology*, 20, 538–548.

<sup>2</sup> IPCC (2014) *Climate Change 2014: Synthesis Report*. Intergovernmental Panel on Climate Change, Geneva, Switzerland.

<sup>3</sup> Brown, N. (2008) *Climate Change in the UK Overseas Territories: An Overview of the Science, Policy and You*. Joint Nature Conservation Committee, Peterborough, UK.

This innovative project focuses on safeguarding Anguilla’s seven globally threatened reptiles and plants most at risk from climate change impacts according to species vulnerability analyses: Lesser Antillean iguana *Iguana delicatissima* (Critically Endangered), Sombrero ground lizard *Pholidoscelis corvinus* (Critically Endangered), Little Scrub ground lizard *P. corax* (Critically Endangered), Anguilla Bank skink *Spondylurus powelli* (Endangered), Anguilla Bank racer *Alsophis rijgersmaei* (Endangered), lignum vitae tree *Guaicum officinale* (Endangered) and the Anguilla bush *Rondeletia anguillensis* (Critically Endangered). Most of these are restricted range species that are endemic either to Sombrero Island or the Anguilla Bank, and they include some of the rarest species in the Caribbean. This work spans the whole of Anguilla including its offshore islands (Figure 1).

**Figure 1. Anguilla, showing its offshore islands and seven globally threatened species vulnerable to climate change.** Symbols signify confirmed presence of the species on the island, rather than exact localities. Island banks are indicated with paler blue (shallower sea): these were historically connected by land bridges and share the same flora and fauna. Note Sombrero island has always been isolated from the Anguilla Bank and has its own suite of endemic species, of which the Sombrero ground lizard is just one.



In what we believe to be a world first, this project is enabling local stakeholders to develop a suite of species recovery plans that are designed to boost the resilience of endangered reptiles and plants to climate change. The action planning process in Year 1 was highly participatory and incorporated innovative computer models to identify and test how alternative conservation actions could affect the species' prospects of survival. The project is now implementing priority actions, such as combatting harmful invasive aliens, restoring habitats and reintroducing endemics to former ranges, so that even by the project end, the target species will be demonstrably more resilient.

## **2. Project stakeholders/partners**

This Darwin project was developed at the request of the Anguilla National Trust (ANT) and is jointly led and coordinated by ANT and Fauna & Flora International (FFI) with technical input from other NGO partners named on the proposal: Durrell Wildlife Conservation Trust (Durrell) and the Royal Society for the Protection of Birds (RSPB). All four partners have been actively involved in project development through Year 2: ANT and FFI worked together on all aspects of the project while Durrell and RSPB contributed their expertise to species conservation action planning and provided additional mentoring to ANT staff. All four partners formed a Project Steering Committee in Year 1 along with representatives from the Anguilla Hotel and Tourism Association, the Department of Natural Resources, the Department of Physical Planning, and the Department of Lands and Surveys. While it was not possible for all parties to meet in person in Anguilla in Year 2 due to the global pandemic, 10 Zoom meetings were held with relevant partners during the year to discuss project progress, plan upcoming activities and help to resolve problems.

Numerous residents also actively participated throughout Year 2. Community members reported sightings of endangered species and alerted the project team to invasive species. We received requests to rescue and relocate Anguilla Bank racers from their properties (rather than killing them on sight) and to hold "pop-up" education events at schools and places of work. Many residents also assisted with biodiversity and biosecurity monitoring on the offshore cays, worked with project staff to collect endangered plant seeds and to plant seedlings (Activity 2.3), and participated in community events to raise awareness about Anguilla's endangered species. The latter included the first annual Endangered Species Festival (held in November 2021) and field trips (Activity 3.4).

Overall, the partnership has functioned well despite the frequent international travel restrictions and other constraints from the global pandemic. While some of our international team members were unable to assist directly with implementation on the ground, it is to the great credit of all the team members based in Anguilla – including the Project Coordinator Dr Louise Soanes and the entire ANT team – that nearly all planned activities were accomplished on time and to a high standard. They stepped up to take on additional tasks, provided regular updates and actively sought further advice and training via email and Zoom from remote team members when needed.

In Year 2, the project team continued to exchange technical skills with the Agence Territoriale de l'Environnement (ATE) in St Barths (exchange of knowledge on how to construct iguana artificial nests and the ecology of Anguilla Bank racers, lignum vitae and Anguilla Bank skinks). We also formed a fruitful new partnership with two agencies in Dominica – the NGO WildDominique and the Government of Dominica's Forestry and Wildlife Division – which generously donated 10 healthy wild Lesser Antillean iguanas to aid recovery and combat inbreeding depression in Anguilla's small population (Activity 2.1). Our Dominican allies benefitted in return from some practical and technical support from the Anguillan field team, as outlined below. FFI has previously collaborated with partners in Dominica (including the Darwin Initiative project 10-010) but to the best of our knowledge this is the first time that the Government and WildDominique have formally collaborated on a conservation project with Anguilla.

### **3. Project progress**

#### **3.1 Progress in carrying out project Activities**

**Output 1. Climate change-informed species action plans produced by a participatory process for Anguilla's terrestrial Endangered species that are most at-risk to climate change**

**Activity 1.1 Complete literature review and rapid field surveys of the status, distribution and ecology of the seven target species (*Iguana delicatissima*, CR; *Pholidoscelis corvinus*, CR; *P. corax*, CR; *Spondylurus powellii*, EN; *Alsophis rijgersmaei*, EN; *Guaiaicum officinale*, EN; *Rondeletia anguillensis*, CR) (COMPLETED)**

Completed in Year 1. See Year 1 Annual Report.

**Activity 1.2 Complete analysis and report on the climate change vulnerability assessments for Anguilla's globally threatened terrestrial species (COMPLETED)**

Completed in Year 1. See Year 1 Annual Report.

**Activity 1.3 Collate and analyse climate change data and forecasts for the northern Lesser Antilles to elucidate likely climate change impacts on species and habitats in Anguilla, including offshore cays (COMPLETED)**

Completed in Year 1. See Year 1 Annual Report.

**Activity 1.4 Drawing on findings from 1.1–1.3, conduct Population Viability Analyses (PVAs) of the seven target species to calculate extinction risk (repeated at project end to measure impact on viability) (ONGOING)**

First phase completed in Year 1 (see Year 1 Annual Report). To be re-evaluated in Year 3. We have prepared a manuscript detailing these methods and results (Annex 3: 14).

**Activity 1.5 Hold stakeholder workshops to present and discuss findings from 1.1-1.4 and, using a participatory process, develop action plans for the target reptiles and plants (COMPLETED)**

Completed in Year 1. See Year 1 Annual Report.

**Activity 1.6 Write up, peer-review and publish the climate change-informed conservation action plans for the threatened reptiles and plants (COMPLETED)**

Although our participatory processes for identifying conservation needs and solutions were applied to each of the seven target species in turn in Year 1 (Activity 1.5), we decided that rather than having seven different species action plans, or even two plans for the reptiles and plants respectively, it would be more practical to combine the actions into a single document with one large work plan. This is because we found a high degree of overlap in terms of the threats, objectives and actions required even for unrelated species (e.g. the proposed solution of creating an alien-free 'mainland island' was independently identified as a priority for five of the seven species of reptiles and plants). Furthermore, as many of the actions are to be led by ANT, having all their tasks in one document helps them plan their staff schedules and resources more easily.

The consolidated conservation action plan for Anguilla's endangered reptiles and plants was finalised in 2020 (Annex 3: 18) and shared with the ministry responsible for natural resources as well as the Department of Natural Resources, the Department of Lands and Surveys, and the Department of Physical Planning. The plan was actively used by project partners throughout Year 2 to guide the activities under Output 2.

**Output 2. At least six priority interventions prescribed by the action plans to increase climate change resilience are implemented, monitored and evaluated**

**Activity 2.1 Translocate at least 10 *Iguana delicatissima* from a healthy source population to reinforce the colony on Prickly Pear Cays, Anguilla, with the necessary CITES permits, health assessments and genetic records. (COMPLETED)**

In 2020, project leaders approached the Government of Dominica's Forestry and Wildlife Division to ask whether it would be possible to source a small number of Lesser Antillean iguanas from their relatively large but threatened population. The Government of Dominica generously agreed to our request for 10 healthy wild individuals to supplement Anguilla's small population, which is now largely confined to Prickly Pear East (a newly reintroduced colony with only 23 founders). Ten was deemed sufficient to combat potential inbreeding depression without "genetically swamping" Anguilla's population (Annex 3: 1).

Four ANT staff travelled to Dominica as part of a cross-territory exchange between 25 February and 26 March 2021. Our team assisted both the Forestry and Wildlife Division and the NGO WildDominique to design and construct outdoor enclosures to hold iguanas while awaiting results of genetic tests to determine whether they are hybrids (*I. delicatissima* x *I. iguana*) or purebred *I. delicatissima*. While on Dominica, the ANT team also assisted with catching invasive alien *I. iguana* (12 green iguanas were captured and euthanised). Twenty iguanas fitting the Lesser Antillean iguana phenotype were captured and held in the new holding facility and, happily, all were confirmed as purebred *I. delicatissima* through genetic tests by France-based Labofarm. Ten of the 20 individuals were chosen for Anguilla based on their size, sex, and body condition, and flown to Anguilla on 26 March with the necessary permission and CITES export papers from Dominica (see Annex 3: 2). As soon as they arrived in Anguilla, the iguanas were inspected by a local veterinarian and promptly translocated to Prickly Pear East.

In addition to the 10 individuals sourced from Dominica, a lone male iguana found on the Anguilla mainland on 18 December 2020 was also translocated to Prickly Pear East in January 2021 after it was confirmed through genetic testing to be purebred *I. delicatissima*.

Photographs of the iguanas translocated from Dominica (10) and mainland Anguilla (1) to Prickly Pear East are shown in Annex 3: 3.

**Activity 2.2 Establish and monitor artificial sandy nesting sites in *Iguana delicatissima* habitat on Prickly Pear East (ONGOING)**

The project team created an artificial sandy nesting site for Lesser Antillean iguanas on Prickly Pear East in July 2020 (this was quite late in the nesting season, but our team was unable to do this any earlier due to Covid-19 restrictions). No nesting activity was recorded in 2020 but the site is now ready for the 2021 season (Annex 3: 4). Two more sites were identified as potential artificial nesting grounds and will be cleared, maintained, and monitored in Year 3.

**Activity 2.3 Plant seeds and seedlings of *Guaiaacum officinale* and *Rondeletia anguillensis* in locations identified by Output 1 and provide follow up care (ONGOING)**

In addition to the 40 trees grown in Year 1, 280 lignum vitae *Guaiaacum officinale* were reared in pots in Year 2 (150 from seed and 130 from doomed wild seedlings) by the project team and Anguillian residents (including 100 children). Thus far, 121 residents have taken seedlings of various sizes home to plant on their properties. Names and contact details of almost all individuals have been recorded with their permission for follow-up.

The Anguilla bush *Rondeletia anguillensis*, on the other hand, has proved far more difficult to grow from either seed or 'wildlings'. Various substrates, sprouting conditions and watering regimes were trialled in Years 1 and 2 with almost no success. While our team (assisted by a local gardener) will continue experimenting with growing conditions, we believe it has become even more imperative to focus on conserving existing plants in the wild. Fortunately during our field assessments, we discovered a considerable number (>100 plants) in Fountain Cavern National Park, a small crown-owned protected site. Other, privately-owned sites with this species have been identified and earmarked as priority areas for acquisition through purchase should the opportunity arise. ANT is also committed to working with any landowners who are considering construction projects to identify and avoid destroying the small but nationally significant sites for this rare shrub.

**Activity 2.5 Eradicate invasive alien mice from Sombrero Island in accordance with the 2018 eradication feasibility study and operational plan to facilitate recovery and resilience of *Pholidoscelis corvinus* and other Sombrero endemics**

The eradication operation was postponed to Year 3, with approval from Darwin, but a large amount of the necessary preparatory work was conducted in Year 2, including finalising the Operational Plan and Health & Safety Plan, selecting the project team (including international experts and national eradication personnel) and procuring the bait and additional equipment. The team also began making flavoured wax blocks, which will be used during the operation to help verify whether any mice remain.

**Activity 2.6 Implement biosecurity surveillance and rapid response protocols to prevent further incursions by harmful invasive alien species on priority islands for endangered species (Dog Island, Prickly Pear Cays, Little Scrub, and Sombrero) (ONGOING)**

Six trained field staff, two interns and 29 volunteers conducted 13 biosecurity checks on the Prickly Pear Cays (27 May, 24 June, 16 July, 28 August, 1 October, 30 October and 18 December 2020, and 19 January, 22 February and 26 March 2021) and Dog Island (25 May, 22 July and 29 September), including inspecting and maintaining over 200 permanent bait stations designed to intercept rats (Annex 3: 5). Happily, our team detected no signs of invasive alien rodents or green iguanas on any of the offshore islands.

**Activity 2.7 Translocate at least 30 *Spondylurus powelli* (and/or another target reptile species) from mainland Anguilla to reintroduce this species to Prickly Pear East in accordance with Output 1 and IUCN Reintroduction Specialist Group guidelines (PENDING)**

Following positive initial discussions with landowners, we drafted a plan for reintroducing Anguilla Bank skinks *Spondylurus powelli* from the Anguilla mainland. In addition, we prepared a feasibility study and plan to translocate Little Scrub ground lizards *Pholidoscelis corax* to Prickly Pear West to save the species from the inexorable loss of habitat to sea level rise and storm damage on Little Scrub islet (Annex 3: 6). After considering the options, we resumed discussions with the landowners. Most are in favour of the translocations but a small number are concerned about the possible impact of endangered species on their future development prospects. Despite our best efforts to convince them that the reptiles could co-exist with housing and indeed most other types of development, a few individuals are still reluctant to accept the animals on their island. We will continue to engage them in discussions but we recognise that the Prickly Pear Cays are privately owned by multiple parties and it is crucial to have consensus from all before moving any lizards here.

The Prickly Pear Cays are a prime area for conserving native species because they are free from harmful invasive alien vertebrates (rats were eradicated from both islands in 2018 under DPLUS060). However, the project team has secured permission from the Government of Anguilla to scope out the option of turning Fountain Cavern National Park into a 'mainland island' sanctuary, by encircling the park with a specialised mesh fence to permanently exclude harmful alien vertebrates such as goats, rats, cats and invasive green iguanas. Skinks and other threatened species could then thrive here. We have consulted several groups with expertise in creating pest-free mainland islands in Hawai'i (Pacific Rim Conservation) and New Zealand (Wildlife Management International Ltd and Wildlands Consultants Ltd) and propose more detailed research in Year 3 to design the fence, as soon as such specialists are able to travel to Anguilla.

**Activity 2.8 Implement at least one additional conservation measure prescribed by the action plans (Output 1), to be discussed with and approved by Darwin.**

While this activity was not scheduled until Year 3, the species action plan (Annex 3: 18) contains a wide array of tasks and our team is striving to accomplish many of these whenever possible. For example, one major recurring theme that arose during the action planning workshops in Year 1 was the urgent need to revise and update Anguilla's national protected species list (Schedule 1 of the Biodiversity and Heritage Conservation Act). Therefore, when ANT secured an audience with the new minister responsible for natural resources in Year 2, the Project Co-leader took the opportunity to formally request urgent amendments to the list, using the evidence provided by



this project. We are delighted to report the successful listing of endangered reptiles on the national list of protected species (Schedule 1 of the Biodiversity and Heritage Conservation Act) and the removal of the invasive alien green iguana *Iguana iguana* from this protection. Please see section 3.2, Output 2, for more details.

Several other priority interventions from the action plan have been identified for implementation in Year 3 and will be submitted for approval by Darwin shortly.

**Activity 2.9 Establish and launch long term monitoring programme for the target reptile and plant species to evaluate project impacts on status and distribution (ONGOING)**

Baseline surveys of the status and distribution of all seven target species were completed in Year 1 (Activity 1.1) and they are now being monitored by the trained ANT staff and volunteers. Field personnel have continued to collect distribution and ecological data whenever they encounter the target species on Anguilla and the offshore islands.

In Year 2, our team recorded Anguilla bushes in two new locations and Anguilla Bank racers in four. During routine monitoring in Year 2, five adult and two immature Lesser Antillean iguanas were observed on Prickly Pear East. The discovery of juveniles is a very welcome indicator that the iguanas translocated to the Prickly Pear Cays are now reproducing successfully.

**Output 3. National capability to plan, manage, implement, and monitor climate change-informed species conservation actions is raised, supported by enhanced technical skills and greater public awareness and cooperation**

**Activity 3.1 ANT staff and other participating nationals complete self-assessment competences questionnaires to identify training needs (repeated at project end to measure impact on capacity) (ONGOING)**

The first assessment was conducted in Year 1 (see Year 1 Annual Report). To be re-evaluated in Year 3.

**Activity 3.2 Plan and undertake training and on-the-job mentoring of ANT staff and other nationals in applied conservation management (ONGOING)**

In Year 2, 31 nationals were trained in biosecurity and biodiversity monitoring protocols and in plant propagation methods. Durrell, FFI and ANT staff also provided training to four Dominican nationals on iguana husbandry, including enclosure design, stocking densities, food and health care (see Activity 2.1).

**Activity 3.3 Conduct public survey to evaluate knowledge, attitudes and behaviour towards endangered wildlife and climate change (repeated at project end to evaluate impact) (ONGOING)**

The first assessment was conducted in Year 1 (see Year 1 Annual Report). To be re-evaluated in Year 3.

**Activity 3.4 Develop and implement an advocacy and public awareness campaign guided by the findings of 3.3 (ONGOING)**

The project's advocacy and public awareness activities within Anguilla are being led by ANT, which employs a variety of media and approaches to reach as many residents as possible. Campaign actions in Year 2 included:-

- ANT staff visited six primary schools, Anguilla's secondary school, and six businesses on 18 May, 16 September, 20 October, 4 November 2020 and 16 February 2021, engaging with 1,611 individuals, to introduce students, teachers, and other members of the public to Anguilla Bank racers, lignum vitae trees, hawksbill turtles and other endangered species. To support these "pop up" education events, a set of fact sheets about the species was produced and disseminated to all participants (Annex 3: 7).
- Photographs of endangered species (accompanied with brief information) and a blog about Lesser Antillean iguanas were shared via the ANT's Facebook and Instagram pages (51 total

posts, with a combined reach of 46,049 individuals to date on Facebook, many of them nationals) (Annex 3: 8). To put this figure in context, around 15,000 people live on Anguilla.

- The ANT held its annual “*Where The Wild Things Are*” Summer programme between 11 and 14 August 2020, attended by 52 children between the ages of three and seven. On 11 August, programme activities focused on the Anguilla Bank racer and included a short talk and a walk through its habitat to search for these harmless snakes. On 12 August, the children potted *lignum vitae* seedlings, which they took home to plant in their gardens (see Activity 2.3).
- The ANT and FFI, with assistance from the University of Roehampton, designed and produced a visitor’s guide on how to protect Anguilla’s environment. The pamphlet highlights Anguilla’s endangered species and will be shared with visitors upon entry by the Immigration Department once the island fully re-opens to tourists later this year (Annex 3: 9).
- The ANT launched a Wildlife Friendly Certified programme for hotel and villa partners. The certification programme is a voluntary programme that recognises and promotes tourism stakeholders that have adopted wildlife-friendly practices, including those that safeguard Anguilla’s endangered species (Annex 3: 10). One hotel has so far been certified as Wildlife Friendly while a second is currently being assessed.
- Over the last year, the ANT presented on the project’s seven focal endangered species and the activities being undertaken through this project to the Toastmaster’s Club (22 August 2020, 25 attendees – online and in person), the Albena Lake Hodge Comprehensive School Entrepreneurship class (14 October 2020, 17 attendees), Grades 1 and 2 classes at the Vivien Vanterpool Primary School (21 January 2021, 29 attendees), Albena Lake Hodge Comprehensive School Fourth Form Biology class (28 January, 10 attendees), and The Zion Ebenezer Methodist Church congregation (9 February, 21 attendees).
- In January 2021, the ANT launched a new theme for its monthly public outdoor/hiking activity: Anguilla’s endangered species. The 30 January outing (31 participants) focussed on the Anguilla bush while the 27 March 2021 outing (23 participants) involved searching for Anguilla Bank skinks.
- In addition to those above, members of the public have been directly engaged in this project during the reporting period. 31 residents assisted with biosecurity and biodiversity monitoring on both the Anguilla mainland and offshore cays, and 24 members helpfully reported sightings of Anguilla Bank racers, Anguilla Bank skinks and invasive alien green iguanas. The project team followed up on these reports with site visits to collect relevant data on their habitat and distribution.

### **Activity 3.5 Publicise and report on project progress and result through national and international media and directly to national groups, cross-territory stakeholders, international scientific community, and Executive Council (ONGOING)**

On 10 September 2020, the Project Co-leader Farah Mukhida met the newly elected Minister for Natural Resources, Mr Kyle Hodge, and apprised him of the Darwin Plus project, its purpose, value and expected results. The urgent need to protect Anguilla’s endangered species by listing them on Schedule 1 of the Biodiversity and Heritage Conservation Act was also discussed. After the meeting, a summary report of recent conservation work, including highlights from this project, was shared with the Minister along with a list of recommended amendments to the Biodiversity and Heritage Conservation Act. The result of this request is detailed in section 3.2 (Output 2).

ANT also submitted a request to the ministry for Fountain Cavern National Park to be vested to the ANT to enable it to be managed for the benefit of Anguilla’s native and threatened biodiversity. This small but important protected area is not managed by any agency. The project team recently discovered that the national park holds one of the biggest groups of Anguilla bushes and could potentially become a sanctuary for other endangered species.

On 3 March 2021, the Project Coordinator and Project Co-leader presented this project at the UK Overseas Territories Conservation Forum (UKOTCF) meeting “*Staying Connected for Conservation in a Changing World*” with 56 people in attendance (Annex 3: 11). As a result of our contribution to this session, some of our recommendations were included in the Conference Conclusions and Recommendations that will be circulated to the UK and all UKOT governments (Annex 3: 12).



### **Activity 3.6 Share and discuss project methods, results, lessons learned and opportunities for replication through regional and international forums (including regional conferences of Caribaea Initiative and BirdsCaribbean) (ONGOING)**

All conferences attended by the project team in Year 2 were held online. In addition to the UKOTCF meeting (see Activity 3.5 above), project leaders presented papers to:

- “*Approaches to Addressing the Climate Emergency in the Overseas Territories and the UK*” hosted by the Chartered Institute of Ecology and Environmental Management (CIEEM), 13 July 2020;
- “*Nature-based Solutions in the UK Overseas Territories*”, hosted by RSPB, 16 September 2020; and
- The annual conference of the IUCN SSC Iguana Specialist Group, November 2020. This included a working group session on Lesser Antillean iguanas, one of the target species of this project. (Annex 3: 13).

### **Activity 3.7 Produce and disseminate case studies outlining methods, results and lessons learned from designing and implementing the climate change-informed action plans for the target species**

Not scheduled until Year 3. However, we have prepared a manuscript detailing our Population Viability Analysis methods and results, which incorporate climate change predictions (Annex 3: 14).

### **Activity 3.8 Procure equipment to enhance national conservation capacity, including purchasing a boat to facilitate the management of offshore islands and other coastal areas by ANT and Government of Anguilla (ONGOING)**

In Year 2, the project procured a further £[REDACTED]-worth of equipment plus £[REDACTED]-worth of consumables for conservation work in Anguilla, including field survey tools, camping gear and nursery equipment (this figure includes matched funds). These are, and will continue to be, used in Anguilla for project work.

The new 34' work boat (total cost approximately £[REDACTED] was built in Year 1 and named *Corvina* after the Sombrero ground lizard. Its engines were unfortunately delayed by the global pandemic but are now on their way from Japan. The boat should therefore be ready for launching shortly.

## **Other Project Management activities**

### **Activity X.1 Establish Project Steering Committee and meet quarterly (remote members to participate by Skype) (ONGOING)**

The Project Steering Committee, comprising of representatives from FFI, ANT, Department of Natural Resources, Durrell, and RSPB was unable to meet in person in Year 2 because of the global pandemic, but 10 smaller group meetings were held during the year (e.g. Annex 3: 17).

### **Activity X.3 Project biannual reports/ donor technical and financial reports (ONGOING)**

In addition to the half year technical report to Darwin Plus for Year 2 of the project, FFI submitted the second technical and financial report to John Ellerman Foundation, the first technical and financial report to the Prince of Wales's Charitable Fund, an interim technical and financial report to US Fish and Wildlife Service, an interim report to the FFI Species Fund, and illustrated updates to private sponsors.

### **Activity X.4 Monthly financial accounts (ONGOING)**

The Project Leader maintains the project financial plan and complete accounts of spending each month, with input from FFI's and ANT's financial teams.

## 3.2 Progress towards project Outputs

### **Output 1. Climate change-informed species action plans produced by a participatory process for Anguilla's terrestrial Endangered species that are most at-risk to climate change (COMPLETED)**

Prior to this project, there existed a global IUCN action plan for Lesser Antillean iguana and a sub-regional action plan, but neither took any explicit account of the impacts of climate change. Furthermore, the IUCN plan largely overlooked Anguilla and expired in 2016. There were no plans or projects for any of our other six species.

A climate change-informed species action plan for Anguilla endangered reptiles and plants was drafted through a series of stakeholder planning workshops in Year 1. The plan was finalised in 2020 and submitted in Year 2 to the Department of Natural Resources and to their parent ministry. The combined action plan defines an overall goal as well as specific goals for each reptile and plant species by 2030 (Annex 3: 18). The plan contains a suite of objectives that speak to research and monitoring, policy and legislation, biosecurity, conservation translocations, education and outreach, and capacity, all considering the best available forecasts of the impacts of climate change on sea level, storm surges, hurricanes, temperature and rainfall. For species on the main island of Anguilla, we have also endeavoured to predict how people and the island's economy are likely to respond to climate change. For example, Anguilla is likely to see increased development pressure inland, as people are forced to flee low-lying coastal areas, and potentially more land will be brought under cultivation as a coping strategy, especially if tourism wanes.

All the target indicators for Output 1 have been accomplished, as described in the log frame, and agreed actions for all seven species are being implemented (Output 2).

### **Output 2. At least six priority interventions prescribed by the action plans to increase climate change resilience are implemented, monitored and evaluated (ONGOING)**

Priority interventions identified as part of the reptile and plant action planning process (Output 1), include the following: (i) reintroduce Anguilla Bank skinks to Prickly Pear East (part of the Prickly Pear Cays, which were recently cleared of invasive rats by DPLUS060); (ii) conduct a conservation introduction of Little Scrub ground lizards to Prickly Pear West (ditto) or another suitable site; (iii) increase the population size and resilience of the Sombrero ground lizard by eradicating invasive alien mice and replanting native vegetation on Sombrero Island; (iv) release additional Lesser Antillean iguanas to boost the genetic diversity and resilience of the small reintroduced population on Prickly Pear East; (v) conduct a feasibility study for constructing a mainland island on Anguilla to conserve larger populations of iguanas, racers and skinks in the absence of invasive alien animals; (vi) translocate Anguilla bush seedlings and trees from high risk areas to protected areas and the offshore cays; and (vii) rear lignum vitae seedlings in a nursery and working with landowners, resorts and developers to plant these attractive native trees nationwide. As stakeholders also noted serious gaps in the level of legal protection afforded to most of Anguilla's wildlife, the project team agreed to (viii) lobby for the inclusion of all threatened reptiles and plants on Schedule 1 of the Biodiversity and Heritage Conservation Act. Given that most of the land on which Anguilla bushes are found is privately owned, we further agreed the need to (ix) develop a fundraising strategy for land acquisition by the ANT. Other action points are detailed in the combined action plan produced under Output 1 (Annex 3: 18).

Good progress has been made to address threats and improve the status of Anguilla's endangered reptiles and plants. With reference to our log frame, Indicator 2.1 has been exceeded. The national population of Lesser Antillean iguanas in Anguilla has been boosted by as much as 50% through the addition of 10 individuals from Dominica, and evidence of successful breeding (juveniles observed) was confirmed in Year 2 on Prickly Pear East, where one artificial nest site has been constructed so far. Indicator 2.2 is also on track for the lignum vitae, with 320 seedlings produced (more than the target of 300), but we will assess how many are still thriving by the project end. We are still struggling to find effective methods for propagating the Anguilla bush (Activity 2.3), however, which makes it is even more imperative to focus on strengthening the protection of existing colonies in the wild.

Indicators 2.3 and 2.4 are well on track to be accomplished in Year 3. With reference to 2.4, the project team has been actively and successfully keeping three important offshore cays (Dog

Island, Prickly Pear East and Prickly Pear West) free from harmful invasive rodents and green iguanas. Little Scrub and Sombrero Island are to be added to the biosecurity programme in Year 3.

We have also made good progress towards Indicator 2.5, having completed feasibility studies for translocating both Anguilla Bank skinks and Little Scrub ground lizards to the Prickly Pear Cays. It is uncertain whether either will be implemented in Year 3, however, because not all island landowners have given their consent yet. The project team will continue to engage with the owners to try to understand and address their concerns. We will decide by the next half-year report whether it will be necessary to submit a change request for Indicator 2.5. In the meantime, we will step up some of the other planned actions to conserve Anguilla Bank skinks and Little Scrub ground lizards, including restoring some of the natural vegetation on Little Scrub islet to increase the reptiles' natural food supply.

Indicator 2.6 calls for at least one additional key intervention from Output 1 (Annex 3: 18) to be implemented by end of project. We are delighted to report success in updating Schedule 1 of the Biodiversity and Heritage Conservation Act, thanks to requests from both the ANT and the Department of Natural Resources and using evidence from this project. At their Executive Council meeting on 17 December 2020, the government ministers agreed to formally protect all of Anguilla's endangered reptiles, remove the invasive alien green iguana from the list of protected species, and update the conservation status of species already listed (Annex 3: 15). The legislative amendments were taken to the House of Assembly on 4 March 2021 and accepted, with unanimous approval from both the Government and the Opposition (Annex 3: 16). Putting Anguilla's most endangered terrestrial species on the protected list underscores the need to implement conservation action plans and affords natural resources management agencies with the legal mandate to act. Several other priority interventions from the action plan have been identified for implementation in Year 3 and will be submitted for approval by Darwin shortly.

To conclude, the project is on track to achieve Output 2 and could well achieve and exceed all the proposed indicators by the end of Year 3. While there is some risk that Indicator 2.5 might not be completed (because we do not wish to proceed with any translocations without the unanimous free prior informed consent of the local stakeholders), we will deliver more than six of the highest priority interventions prescribed by the new plan for Anguilla's endangered reptiles and plants.

### **Output 3. National capability to plan, manage, implement and monitor climate change-informed species conservation actions is raised, supported by enhanced technical skills and greater public awareness and cooperation**

Substantial progress continued to be made in Year 2. Of the seven planned indicators, the project has already met the targets for three: Indicator 3.1 Communications and public awareness communications plan developed by Q2Y1; Indicator 3.5 Project methods and lessons learned disseminated to relevant natural resource managers within all Caribbean UKOTs and other sub-regional islands by end of project; and Indicator 3.6 At least GBP 100,000 generated in cash and/or in-kind to continue implementing action plans after the grant period (a further GBP 448,945 was secured by FFI in Year 1 from the Prince of Wales's Charitable Fund and US Fish & Wildlife Service to implement tasks in Annex 3: 18).

Solid progress has also been made towards all the other indicators. For example, an additional 31 nationals (14 male, 17 female) in ANT, government agencies, and the private sector received training on conservation techniques in Year 2 (re Indicator 3.4) and the new boat for national partners has been built and will be launched shortly (Indicator 3.7). We therefore anticipate this output, and all the agreed indicators, will be achieved and even exceeded before the end of the grant period.

### **3.3 Progress towards the project Outcome**

The intended Outcome is that "globally threatened species in Anguilla are more resilient to climate change through climate-informed recovery interventions, strong management competencies, and more supportive civil society". The project team feels confident about

achieving this outcome by the end of the grant period, considering the considerable progress made in Years 1 and 2, including training and mentoring, outreach, and the participatory development and implementation of Caribbean's first climate-smart recovery plan for endangered plants and reptiles. While it is still early to prove whether our conservation actions have genuinely improved the status and resilience of all seven target species, the conservation action plan (Output 1, Annex 3: 18) is robust and evidence-based, and initial results of actions taken so far (Outputs 2 and 3) are promising.

All four indicators of the Outcome still appear valid. The project is already well on track to achieve Indicator 0.1 (modelling demonstrates at least 50% improvement in the viability of target species over the next 50 years by implementing the action plans) and Indicator 0.2 (At least four critically threatened species achieve at least a 10% increase in population size and/or number of populations by end of Year 3). In fact the latter target has already been achieved for at least two of the project's seven target species: The national Lesser Antillean iguana population has increased by at least 50% through their reproduction on Prickly Pear East (juveniles observed for the first time in 2020) and the addition of 10 individuals from Dominica, and the population of lignum vitae on mainland Anguilla is also expanding thanks to planting nearly 150 young trees on private lands (with more scheduled to be planted in Year 3). Regarding Indicator 0.3 (Work plans and budgets of the responsible national agency and supporting partners demonstrate intention to continue implementing action plans beyond the life of this project), FFI has secured additional funds to continue conservation work until at least the end of 2022 and ANT has begun formulating new proposals to continue implementing the action plans. ANT has also integrated the action plan tasks from Output 1 into its five-year strategic plan (2020-2024).

We therefore expect to achieve all four indicators by the project end, as long as we are able to keep to the agreed work plan for Year 3.

### **3.4 Monitoring of assumptions**

#### **Assumption 1: Climate change impacts, including human land use, are forecast within sufficiently accurate bounds**

When we developed the endangered species action plan (Output 1), we used the most up-to-date climate change projections for this region and cross-checked our findings with the storm surge models developed by Environment Systems Ltd for DPLUS091 (also in Anguilla). These projections show that Anguilla's lowest lying areas on the mainland and offshore cays will be inundated through sea level rise and/or storm surges. Anguilla is already feeling the effects of climate change with a shrinking coastline, severe storm surge events and more severe hurricanes. We note that NOAA is considering moving the start of the hurricane season from 1 June to 15 May, because meteorologists have reported storms forming earlier in the year, and 2021 is expected to have a more active than usual hurricane season, with 17 named storms predicted. During the action planning process, we postulated that these changes could lead to people relocating further inland and, through undermining Anguilla's beachside tourism industry, there may be greater pressure to reinvest in farming, fishing and other livelihoods.

Over the last quarter-century, Anguilla has been in a cyclical state of disaster and recovery: From Hurricanes Luis and Marilyn in 1995, Georges in 1998, Jose in 1999, Omar in 2008, Earl in 2010, Gonzalo in 2014, then Irma - the strongest Atlantic hurricane on record - in 2017 and the Covid-19 pandemic since early 2020. Again and again, these disasters have shown up the fragility of Anguilla's economy, which is almost entirely dependent on tourism. From September 2017 to November 2018 and again from March 2020 onwards, Anguilla's tourism industry faltered. Hotels, restaurants and airports tried to rebuild after being severely damaged by Hurricane Irma but are suffering again from strict travel restrictions imposed to limit the spread of Covid-19. Tourism clearly cannot be relied upon as the primary source of income, and calls to diversify livelihoods and land use are growing louder. To stimulate spending, the banking sector has offered zero-finance loans that have markedly increased both residential and commercial construction and consequently led to even more clearing of natural vegetation across Anguilla. A new proposal for developing Scrub Island - the large island immediately to the East of Anguilla - was recently submitted to the Government of Anguilla and might well be approved considering the territory's urgent need to generate more jobs.

Although we did not foresee the global pandemic, these developments corroborate the predictions we made in the endangered species action planning process: Pressure is rising on habitats inland, leaving Anguilla's smaller and more remote offshore islands as the best hope for conserving many of the territory's endangered and endemic wildlife.

### **Assumption 2: Action plans correctly identify and address the main threats, capacity needs and resources to achieve true species recovery and resilience**

Output 1 was developed through a participatory process involving government and non-government agency representatives, community members, and technical experts. The problems and solutions we identified were also informed by a sound understanding of conservation biology (e.g. the risks and effects of bottlenecks and inbreeding depression) and the findings from climate change modelling. Furthermore, we conducted Population Viability Analyses (using Vortex™) to help inform and test viable solutions, and applied IUCN guidelines for the more major interventions, including wildlife translocations and invasive species eradications. The action plan (Annex 3: 18) is thus based on best available scientific information and international best practices but carefully tailored to Anguilla to ensure the planned interventions are genuinely feasible and make effective use of both existing and likely future resources. The validity of our approach will be clearer towards the end of the project, but based on PVA modelling, we have good reason to believe the planned actions will make a significant difference to the future survival of Anguilla's most endangered wildlife.

While we believe that Assumption 2 has been upheld, the species action plan should be viewed as a working document that can be updated when new evidence and opportunities arise. For example, we do not know whether our intentions to restore vegetation cover on Little Scrub and Sombrero islands will be successful, given how little soil remains here and the increasing severity of hurricanes and storm surges. We also recognise that we may not see the full impacts of our interventions until after the Darwin Plus grant has ended, because this is a 10-year action plan, and because some results will naturally take time to take root. The project team is committed to implementing the 10-year plan, however, and will monitor results and impacts long after the present grant ends.

### **Assumption 3: Major field activities can be rescheduled if extreme weather events occur during grant period**

Fortunately, there were no severe weather events in 2020 but projections for Year 3 suggest an unusually active 2021 hurricane season with an estimated 17 named storms in the Atlantic. As usual, we will try to avoid major field activities during the peak hurricane season (September through October) and continue to be vigilant for any storm warnings. Impending storms are typically announced by NOAA several days in advance, and safe areas will be identified for the project's equipment, nursery plants and any animals in captivity should a major storm arise.

Having recently dealt with the aftermath of the Category 5 Hurricane Irma and other severe hurricanes, our project team has experience coordinating and implementing post-disaster conservation actions, including monitoring and evaluating environmental impacts and biosecurity monitoring. Some of the equipment purchased by the project in Year 1, including solar-powered generators, radios and two InReach satellite communication units, will help the project team members and others to continue to function and keep in touch in the event of a major strike.

### **Assumption 4: Sufficient data exist to support consensus within Anguilla on the likely impacts of climate change**

Government ministries have accepted the Department of Natural Resources' climate change policy, and the private sector and community members broadly agree that Anguilla is being affected by climate change, including sea level rise and more severe storm surges, droughts and hurricanes. The results of surveys conducted in Year 1 also indicate that the public perceives hurricanes in particular as a major threat to Anguilla's wildlife.

Converting such knowledge and awareness of these problems into improved behaviour towards wildlife and natural habitats, on the other hand, is more challenging (see Assumption 8 below).

### **Assumption 5: National and regional stakeholders continue willingness to cooperate on biodiversity conservation initiatives**

Community members now regularly contact ANT staff about sightings of endangered reptiles as well as invasive species. Property owners have expressed a high level of interest in growing the attractive native *lignum vitae* trees in their gardens, with over 100 individuals having already taken seedlings to plant. Prickly Pear East landowners continue to be supportive of the reintroduction of Lesser Antillean iguanas to this offshore island and the owners of both the Prickly Pear Cays and Dog Island have granted their approval for trained ANT staff to conduct biosecurity monitoring on their islands in perpetuity.

In another major positive development, the Government of Anguilla agreed to put all of Anguilla's most endangered reptiles and plants on its list of protected species (Schedule I of the Biodiversity and Heritage Conservation Act) using the evidence provided by this project (see Activity 3.5). The Government of Anguilla furthermore endorsed the concept of turning Fountain Cavern National Park into a mainland island sanctuary for native wildlife by using a high-tech mesh fence to exclude harmful feral and alien animals. The project partners are now seeking funding for the initiative.

### **Assumption 6: Young plants can be successfully transplanted from high-risk areas to protected sites**

Over the past year, our team has attempted growing both *lignum vitae* trees and the Anguilla bush from seed, seedling, and cuttings. We have grown *lignum vitae* trees from seed and have had no difficulty moving and planting seedlings. Our colleagues on St Barths have demonstrated success in transplanting even mature *lignum vitae* trees, when necessary.

Less successful have been our attempts to grow the endemic bush. Various substrates, watering regimes, and germinating methods were attempted during Years 1 and 2, with very little success. We suspect this species may have extremely specific mycorrhizal symbiotic relationships that we have been unable to capture, even by taking soil from areas with this species.

While we will continue seeking ways to propagate and transplant Anguilla bushes, our field surveys (Activity 1.1) have discovered several sites that are very small but contain relatively high concentrations of this species. Rather than risk these being lost to development, we are currently developing a plan to identify total land area, ownership and estimated acquisition cost. Happily, one of the clusters we discovered in Year 2 is already within a nominally protected area, Fountain Cavern National Park. This further reinforces the conservation value of this small park and ANT is seeking approval from the Ministry responsible for Natural Resources to manage and conserve this site.

### **Assumption 7: Trained expertise remains in Anguilla**

Thirty-one individuals (14 male, 17 female) benefitted from training in Year 2, including two new ANT interns and residents. While we cannot prevent key persons from going overseas, the fact that multiple people are being trained and actively involved will reduce the risk of a critical loss of expertise. As far as we know, all the trainees intend to stay in Anguilla for the foreseeable future.

### **Assumption 8: Improved knowledge leads to improved behaviour to conserve biodiversity**

While behavioural change can be difficult to assess over the short-term, there are already clear indications that this project's public engagement initiatives are influencing people's perceptions and their relationships with nature. Project team members in Anguilla now regularly receive calls to report sightings of Anguilla Bank racers, iguanas, and skinks. ANT staff have even been asked to rescue snakes trapped in water tanks and storage areas and – while most people understandably still find it difficult to distinguish between the native Lesser Antillean iguana and the invasive common green iguana – we have received requests to save iguanas that have become stuck in outdoor washing machines and even an open tomb! The reports of "Anguilla Bank skink" sightings often turn out to be the invasive alien Underwood's spectacled tegu

*Gymnophthalmus underwoodi*. Nevertheless, we view all these calls as positive signs that the public is opting to report or request assistance, rather than merely kill the reptiles or leave them to die.

ANT's ongoing educational work with children and "pop-up" outreach events in schools and public areas have also helped to bring people closer to nature while also providing a safe space to ask questions and to overcome fears. We intend to continue these outreach and engagement efforts through Year 3.

#### **Assumption 9. The Covid-19 pandemic does not critically disrupt or diminish the project Outcome**

This assumption was added last year, but please see Section 12 regarding the impacts of the Covid-19 pandemic on the project to date. In summary, while we have made some adjustments to the way we work (e.g. increased use of online platforms for meetings and training, and postponed Activity 2.5 from Year 2 to Year 3), the project team has been able to implement most activities as planned and to a high standard. The pandemic is ongoing, but we remain optimistic that we will complete most if not all our work as planned for the rest of the project.

As noted under Assumption 1 above, however, the Covid-19 pandemic has indirectly stimulated more developments on Anguilla and hence more clearing of natural vegetation even in the interior. This could potentially undermine our project Outcome by putting further pressure on some of our target species on the main island Anguilla, such as the Anguilla bush and Anguilla Bank skink. We are swiftly countering this with measures to strengthen wildlife protection on Anguilla (e.g. see section 3.2, Output 2) while at the same time making every effort to restore and conserve Anguilla's uninhabited offshore islands as safe havens for many of the target reptiles and plants (e.g. Activities 2.1, 2.2, 2.5, 2.6, 2.7).

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

The primary purpose of this project is to enhance the resilience of Anguilla's threatened biodiversity and to inspire other islands to incorporate climate change in species action planning, potentially using similar methods and approaches. This project directly supports Anguilla's ability to achieve strategic long-term outcomes for the natural environment, including delivering commitments made by the Government of Anguilla under the various national strategies, policies and legislation listed below. This project is also contributing towards the 2030 Agenda and the Convention on Biological Diversity Aichi Targets (although not explicitly extended to Anguilla).

More specifically, through producing and rolling out the stakeholder- and climate-change informed species action plan, this project has already contributed to:

- The National Biodiversity Strategy and Action Plan, which calls for the gathering of data on "activities that have significant adverse impact on the conservation and sustainable use of biodiversity" and "conservation and sustainable use of biodiversity *in situ* and *ex situ*."
- The National Environmental Management Strategy, which calls for the "meaningful participation of civil society in decision making," "addressing the causes and impacts of climate change," "protecting cultural and natural heritage," and "protecting and conserving biodiversity."
- The Climate Change Policy, which calls for the implementation of "a national strategy for conservation and sustainable use of biodiversity."
- The Biodiversity and Heritage Conservation Act, which provides the legislative requirement for action plans for species listed as threatened or endangered within Schedule 1 of the Act.
- Agenda 2030, which calls for "urgent action to combat climate change and its impacts" and the protection, restoration, and promotion of "sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss."



- The Convention on Biological Diversity, which calls for improving our “knowledge, science base, and technologies relating to biodiversity its values, functioning, status and trends, and the consequences of its loss.”

This project is also building the capacity of natural resource managers and decision makers to take an evidence-based approach to plan and mitigate climate change impacts on Anguilla’s species and habitats, engage public support and coordinate actions on both the mainland and offshore cays. Thus, the first and second years of this project have also contributed to additional aspects of:

- The National Biodiversity Strategy and Action Plan, which calls for “research and training” as well as “exchange of information” as it relates to natural resources management.
- The Climate Change Policy, which calls for “improved understanding of the factors that influence adaptation decision-making.”
- The Convention on Biological Diversity, which calls for increasing public awareness “of the values of biodiversity and the steps they can take to conserve and use it sustainably.”

We believe this project is making effective use of existing partnerships, networks, and relationships. Through involving multiple stakeholders in project implementation and monitoring, technical skills and knowledge are being shared and national capacity to manage Anguilla’s most threatened species will continue to grow.

## **5. OPTIONAL: Consideration of gender equality issues**

Day to day management of the project is handled by an all-female team comprised of the Project Leader Dr Jenny Daltry, Project Coordinator Dr Louise Soanes and the Project Co-leader (and ANT Executive Director) Farah Mukhida. The Project Steering Committee is around 50% female, and the project to date has trained 54 persons, 28 (52%) of them female. Overall, we believe females are well represented in this project, as decision makers, trainers, and as beneficiaries of the new training and learning opportunities.

## **6. Monitoring and evaluation**

The monitoring and evaluation plan is being implemented as described in our proposal. FFI and ANT—specifically, Dr Jenny Daltry (Project Leader), Farah Mukhida (Co-Project Leader) and Dr Louise Soanes (Project Coordinator)—are responsible for ensuring that the project is on schedule and being monitored, and report to the Project Steering Committee and collaborating organisations and relevant stakeholders. The FFI Project Leader met with ANT, Durrell, RSPB and government partners many times by Skype and Zoom during Year 2, and the Project Coordinator was based in Anguilla throughout. This has allowed frequent collaborative reviews of project activities and outputs by FFI and our partners. We have maintained and followed a detailed monthly work plan and financial plan, which are reviewed and updated at least once a quarter. Both FFI and ANT share responsibility for keeping records of activities, outputs and the indicators in the project logframe. ANT have included project indicators into their annual financial and performance reports to the Government of Anguilla.

The large body of data gathered on the status and distribution of all seven target species in Year 1 serves as the baseline for monitoring and measuring project impact on these endangered animals and plants across Anguilla. We used species- and site-specific indicators (Output 1) and biosecurity protocols (Output 2), developed in Year 1, to guide our work in Year 2 and to ensure that our methods follow best practice. All data collected through this project are being inputted into a database managed in Anguilla by the project’s Information Manager, Clarissa Lloyd. These include, for example, data from the routine checks of permanent bait stations used to detect and prevent rodent incursions on Dog Island and the Prickly Pear Cays, and detailed records of the iguanas translocated to, and seen on, Prickly Pear East.

The ANT has also continued to collate and document verbal and other feedback from the public to gauge any evidence of improved understanding, willingness and ability to conserve endangered species, such as individuals offering to be volunteers or helping to conserve the wildlife on their lands.

## 7. Lessons learnt

The project continues to progress well, thanks to the strong working relationships among FFI, ANT, Durrell, RSPB and Department of Natural Resources, our growing understanding of the project sites and target species, and the fact that this project was greatly wanted by the national hosts from the start. Even though FFI was the lead applicant for the Darwin Plus grant, the proposal was developed through a participatory process and the lead national partner – ANT – feels a real sense of ownership and commitment to ensuring it succeeds. ANT staff have continued going above and beyond the call of duty to implement the planned activities. Given that most field team members are involved in several projects, one of the keys to success over this last year has been good coordination and having detailed monthly work plans that covered all activities of this Darwin Plus project as well as other projects in Anguilla. The consolidated work plan directly informed the ANT staff work plans and targets through Year 2, and this practice will be continued through Year 3.

One of the highlights of Year 2 was the new partnership with conservation agencies in Dominica. This not only led to the successful translocation of 10 Lesser Antillean iguanas from Dominica to Prickly Pear East (Activity 2.1) in March 2021 but also built much-needed capacity in Dominica on iguana husbandry, which will help the Government of Dominica's efforts to conserve its native iguana population. As part of a month-long exchange in Q4, ANT staff helped colleagues in Dominica to construct and furnish iguana holding cages, drawing on knowledge and lessons learned over the last five years in Anguilla (and supported remotely by our partner Durrell Wildlife Conservation Trust, which provided invaluable technical support). While searching for Lesser Antillean iguanas, our team also aided Dominica colleagues in capturing alien green iguanas that invaded the island after Hurricane Maria in 2017. With more people on the ground, Wild Dominique and the Department of Forestry were able to capture 12 green iguanas during the month-long period. We are grateful to the Government of Dominica for assisting us in boosting the Lesser Antillean iguana population and its gene pool on Prickly Pear East. Other potential future exchanges are now under discussion.

Another highlight of Year 2 was the listing of all endangered reptile species, and the updating of the conservation status of endangered plants, as protected species on Schedule I of the Biodiversity and Heritage Conservation Act (see section 3.2, Output 2). We were also pleased to have removed the invasive green iguana from the list of protected species, which has long been an anomaly and an obstacle to effective control. These important changes to Anguilla's legislation were made possible thanks to data collected through this project and the collaborative lobbying by both the ANT and the Department of Natural Resources, one of our Project Steering Committee members.

While the translocation of Lesser Antillean iguanas to Prickly Pear East was successful (Activity 2.1), project team members were disappointed that a minority of Prickly Pear landowners have changed their minds about allowing Little Scrub ground lizards and Anguilla Bank skinks to be translocated here (Activity 2.7). The project team will continue to engage the landowners in discussions to allay their concerns, in the hope of getting the green light to translocate one or both species. We will also work to enhance their existing habitats through habitat restoration (revegetating Little Scrub islet to enhance food supply, biosecurity measures on Little Scrub to ensure that the island remains alien-free, and maintaining and rebuilding skink habitat on the main island of Anguilla, including dry stone walls). Through all these efforts we will endeavour to meet our project targets.

Despite that setback on the Prickly Pear Cays, there is nothing substantial we would or could have changed in Year 2, but this underscores the fact remains that most of Anguilla's biodiversity is found on private property and conservation efforts will only be successful if they have the owners' buy-in and support. This also highlights the need for more protected areas on Anguilla – including community managed areas and Other Effective Conservation Measures areas – to safeguard the most critical habitats and species. The project partners will continue to encourage and facilitate public involvement in habitat and biodiversity conservation while also developing a strategy to expand Anguilla's protected areas network.

As noted earlier in this report, we also struggled to find effective ways to propagate or translocate Anguilla bushes (Activity 2.3). While we will continue our efforts and have recruited a resident of

Anguilla who has a particular interest in this Critically Endangered species to help us, we believe this makes it even more imperative to bring more of the existing wild stocks under better protection. With the listing of the Anguilla bush on Schedule 1 of the Biodiversity and Heritage Conservation Act and our efforts to raise awareness about the species and its distribution, we hope to see more landowners making efforts to preserve the plants on their properties. We will also work with the Department of Physical Planning (also a member of the Project Steering Committee) to ensure they are aware of the species' presence in areas where planning applications for development have been submitted and hence guide landowners in developing their site plans. Areas with high concentrations of Anguilla bushes have been identified and mapped by our team as priority areas for inclusion within the national protected areas network, possibly through land acquisition or leases.

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

The review of our Year 1 annual report was shared among all the project partners. All of us were delighted and encouraged by the positive comments.

The only specific instruction we received was to submit a change request for Activity 2.5 (eradicate mice from Sombrero Island) due to travel restrictions imposed by the Covid-19 pandemic. We duly submitted the change request to move Activity 2.5 from Year 2 to Year 3. This was approved by Darwin in July 2020.

## **9. Other comments on progress not covered elsewhere**

No other comments, thank you.

## **10. Sustainability and legacy**

The project was created to give Anguilla the best chance of conserving some of its most endangered species long after the project ends. Using the evidence-based action plan developed through stakeholder workshops in Year 1 (Output 1; Annex 3: 18), we have been implementing priority actions to save Anguilla's most threatened species and their habitats, explicitly taking account of climate change projections, other threats and constraints (such as invasive species), and national interests and capacity (Output 1).

We are optimistic that by the project end, the target species will become significantly more resilient. This legacy will be evaluated using PVA modelling as well as by monitoring population sizes, distribution ranges and habitat quality (Output 2). There are already some positive results to report, for example: the offshore islands that hold some of the endangered species are being kept free of invasive alien rodents and green iguanas; the Lesser Antillean iguana population on Prickly Pear East is reproducing and its small genetic pool has been expanded through the addition of 10 healthy individuals from Dominica; the public are now calling ANT with enquiries about rescuing and relocating Anguilla Bank racers and other wildlife in danger; and the national population and range of *lignum vitae* trees is expanding, with almost 150 seedlings planted out to date.

Given that Output 1 is a 10-year action plan, some of the agreed activities are not expected to be completed, or even started, until after the present grant ends. Most tasks are designed to fit within the normal operating budgets and timetables of the ANT and other partners, but there are several actions that will require substantial extra funding and/or technical expertise. For example, the idea of turning Fountain Cavern National Park into a mainland island sanctuary for native wildlife, free from harmful alien species, has been well received by the Government but will require significant additional funding to implement (e.g. the high-tech mesh fence panels cost around GBP 300 per metre). FFI, ANT and our partners aim to conduct a feasibility study for the mainland island in Year 3, which will then be used to develop an accurate budget and support funding applications for its construction.

Substantial progress continues to be made towards Output 3 in Year 2. So far, 54 persons have benefitted from training to date, including all ANT staff, who continue to build their knowledge and know-how at translocating and growing *lignum vitae*, planning and undertaking

reintroductions, preventing incursions by invasive rodents, planning invasive species eradications, and educating fellow islanders about endangered species. The project has also greatly enhanced the range of equipment on Anguilla for conservation purposes, including camping gear, wildlife monitoring devices and a well-equipped nursery. The most significant piece of equipment we have procured is the new boat, which will facilitate conservation work by ANT and the Department of Natural Resources on the offshore islands for many years to come: Importantly, it will cost these agencies far less to operate the boat than to hire local tour vessels for their fieldwork. The project continues to capture the interest and support of the public, and we feel encouraged by the continued calls by the public to report sightings of the endangered species. Calls from homeowners and landowners to rescue and relocate reptiles and plants at risk are especially promising because they indicate a rising awareness that these native species matter. The impacts of the capacity building and outreach programmes will be evaluated more thoroughly towards the end of the project by repeating the staff competences survey and community awareness survey.

## **11. Darwin identity**

The Darwin Initiative has been recognised on all materials produced through this project, including press releases and social media posts (e.g. Annex 3: 8) and presentations (e.g. see PowerPoints in Annex 3) and has been recognised as a distinct project being conducted by FFI and its partners.

Having linked this project to Darwin Initiative in all our public awareness activities, we believe that there is some understanding of Darwin Initiative within Anguilla although the level of awareness and understanding has not been formally measured. The Darwin Initiative is certainly very well known to the Government of Anguilla and its agencies.

All project partners have Facebook pages and Instagram accounts, and both FFI and RSPB also have active Twitter accounts. Darwin Plus has been linked to Instagram and Facebook posts related to this project through using #DPLUS, #DarwinPlus and @defrauk (e.g. see Annex 3: 8).

## **12. Impact of COVID-19 on project delivery**

When this project was conceived, none of us foresaw the Covid-19 pandemic that emerged in the last quarter of Year 1. Happily, none of the project team members or their families have fallen ill thus far and we were able to deliver most of the planned project activities and outputs in Years 1 and 2. Our team has followed all the rules and advisories (e.g. wearing masks, social distancing, accepting vaccinations when offered, undergoing quarantine) to protect ourselves and others. The most significant change was that the operation to eradicate invasive mice from Sombrero Island (Activity 2.5) had to be postponed from Year 2 to Year 3, with consent from Darwin in July 2020, because certain team members essential for this work were unable to travel in Year 2. Also, while the project commissioned a new boat that was built on Anguilla in Year 1 (Activity 3.8), we experienced delays in procuring and installing the engines due to the global pandemic. New engines are now on their way, so we expect to be able to launch the new vessel in June or July.

While on-water travel for most people (including fishers) was prohibited between March and June 2020 and limited thereafter, ANT staff and the FFI Project Coordinator were granted permission by the Government of Anguilla to continue to conduct necessary work on the offshore islands. This allowed most of our fieldwork to continue uninterrupted throughout Year 2. Our team even received approval to travel to Dominica to collect 10 Lesser Antillean iguanas (Activity 2.1), flying direct each way to avoid passing through other islands with higher infection rates.

Our ability to deliver the remaining project activities through Year 3 will depend on how long the pandemic persists, how our respective governments respond, and any additional precautions that FFI and our partners take to ensure the safety of our staff and communities. At the time of writing, Anguilla has unfortunately seen its worst spike in cases (over 60) and is now back in a strict lockdown until at least 8<sup>th</sup> May. Borders have been closed again. Being a small island nation, however, we are hopeful Anguilla will bring this outbreak swiftly under control. The vaccine is now readily available on Anguilla and a recent memo from the Government of Anguilla to the

ANT has indicated that all ANT staff will be vaccinated (unless medically unable) by the end of July due to their high level of interactions with both the public and visitors to the island.

Assuming field and outreach activities can resume in the next month or two, the project work plan for Year 3 is essentially unchanged. We are fortunate that most of the project team members, including the FFI Project Coordinator and ANT Project Co-leader, are based in Anguilla and will therefore be able to carry on once the lockdown ends. The mouse eradication operation is now scheduled for July and August, if the project's expert rope access climbers from the UK (who have been vaccinated) are able to travel to Anguilla by mid-June. The Ministry of Health has approved their entry and has waived all fees for these individuals, recognising the value of their work and expertise. Eradicating the invasive alien rodents from Sombrero island is still crucial for improving the status of the Sombrero ground lizard, one of the project's target species.

We hope essential international travel will become progressively safer and easier over the coming months, as vaccination programmes in Anguilla, the UK and elsewhere take effect, but we are now proficient in holding meetings – even some staff training sessions – on Zoom and can take advantage of being able to communicate with almost every household on Anguilla using social media and WhatsApp.

Overall, we are optimistic about accomplishing all our planned tasks during the remainder of the project, but we will continue to monitor and adapt to the situation to ensure we will not put anyone at risk or jeopardise the quality and effectiveness of the conservation programme. FFI will continue to liaise with our partners, abide by government instructions and medical advice, and notify Darwin promptly if we are forced to alter or postpone any other activities or outputs in Year 3 due to Covid-19 or any other reason.

### 13. Safeguarding

Please tick this box if any safeguarding violations have occurred during this financial year.

If you have ticked the box, please ensure these are reported to [ODA.safeguarding@defra.gov.uk](mailto:ODA.safeguarding@defra.gov.uk) as indicated in the T&Cs.

In addition to the Anguilla National Trust's **Child and Vulnerable Adult Policy** and the laws and regulations established by the Government of Anguilla (enacted by the Governor of Anguilla), this project follows FFI's safeguarding policies listed:-

FFI's **Safeguarding Children and Adults at Risk Policy & Procedure** was developed in December 2014 and last updated in March 2018. The policy applies to Members of Council and its sub-committees, FFI employees, temporary staff provided through agencies, volunteers and interns, contractors, consultants, service providers and any third parties who carry out work on behalf of FFI, in partnership with FFI or in conjunction with FFI. The policy demonstrates the organisation's commitment to safeguarding children and adults at risk and to complying with the UN Convention on the Rights of the Child; confirms the arrangements and procedures in place to safeguard children and adults at risk, including FFI's code of conduct; and provides clear guidance on how to raise, and how FFI responds to, concerns and allegations regarding the maltreatment of children and adults at risk. The policy expressly states that FFI does not tolerate sexual exploitation and abuse of any kind.

FFI's **Anti-bullying and Anti-harassment Policy** was developed in March 2018. The policy applies to Members of Council and its sub-committees, FFI employees, temporary staff provided through agencies, volunteers and interns, contractors, consultants and any other third parties who carry out work on FFI's behalf. The stated purpose of the policy is to ensure a safe, welcoming and inclusive working environment, which is free from intimidation, threats, discrimination, bullying or harassment; to communicate clearly FFI's zero-tolerance of any form of bullying or harassment; to define the terms 'bullying' and 'harassment' and provide examples, so that there is a clear understanding of the types of conduct that are prohibited; to communicate the importance of reporting incidents of bullying and harassment; and to communicate the procedures in place to manage incidents of bullying and harassment. The policy expressly states that bullying or harassment of any kind against a person or group of people, whether persistent or an isolated incident, will not be tolerated under any circumstances.

FFI's **Whistleblowing Policy** was developed in June 2013 and last updated in December 2019. The policy applies to FFI employees. The stated purpose of the policy is to encourage employees to report suspected wrongdoing in the organisation as soon as possible, in the knowledge that their concerns will be taken seriously and investigated as appropriate, and that their confidentiality will be respected. It provides guidance on how to raise those concerns and aims to reassure employees that they can raise genuine concerns in good faith without fear of reprisals, even if they turn out to be mistaken.

FFI's **partner due diligence procedures** include checking whether any safeguarding concerns have arisen with the partner concerned and the Safeguarding Children and Adults at Risk Policy & Procedure forms part of contracts and agreements with third party contractors and sub-grantees. We are also currently researching LMS platforms (Learning Management Systems) for online training in policies & procedures.

We monitor updates in Government and Charity Commission guidance and review our policies and procedures accordingly.

In terms of **social safeguards**, FFI has publicly available position papers on our approach to Livelihoods and Governance, Free, Prior and Informed Consent, Gender in Conservation, Displacement and Restrictions on Access to Resources and Conservation, and Rangers and Human Rights (links below). Our specialist Conservation, Livelihoods and Governance team supports regional FFI staff and partners to take a holistic, people-centred approach to biodiversity conservation, and ensure project activities are strongly aligned with these principles.

[https://cms.fauna-flora.org/wp-content/uploads/2019/06/FFI\\_2019\\_Position-on-free-prior-and-informed-consent.pdf](https://cms.fauna-flora.org/wp-content/uploads/2019/06/FFI_2019_Position-on-free-prior-and-informed-consent.pdf)

<https://www.fauna-flora.org/approaches/livelihoods-governance/gender>

[https://cms.fauna-flora.org/wp-content/uploads/2017/11/FFI\\_2013\\_FFIs-position-and-approach-to-conservation-livelihoods-and-governance.pdf](https://cms.fauna-flora.org/wp-content/uploads/2017/11/FFI_2013_FFIs-position-and-approach-to-conservation-livelihoods-and-governance.pdf)

[https://api.fauna-flora.org/wp-content/uploads/2017/11/FFI\\_2016\\_Displacement-and-restrictions-on-access-to-resources.pdf](https://api.fauna-flora.org/wp-content/uploads/2017/11/FFI_2016_Displacement-and-restrictions-on-access-to-resources.pdf)

No safeguarding issues were reported during Year 2.

## 14. Project expenditure

**Table 1: Project expenditure during the reporting period (1 April 2020 – 31 March 2021)**

Project spend (indicative) in this financial year	2020/2021 D+ Grant (£)	2020/21 Total actual D+ Costs (£)	Variance %	Comments (where there are significant variances of +/- 10%)
Staff costs				
Project Leader: Dr Jenny Daltry				
Finance Administrator: Isabel Vique				
Project Coordinator: Dr Louise Soanes				
Information Manager: Clarissa Lloyd				
Project Field Staff: Tashim Flemming				
Project Field Staff: Giovanni Hughes				
Herpetology Adviser: Matt Goetz				

<b>Project spend (indicative) in this financial year</b>	<b>2020/2021 D+ Grant (£)</b>	<b>2020/21 Total actual D+ Costs (£)</b>	<b>Variance %</b>	<b>Comments (where there are significant variances of +/- 10%)</b>
Policy Adviser and UKOT Liaison: Lyndon John				
Consultancy costs				
Overhead Costs				
Travel and subsistence				
Operating Costs				
Capital items				
Boat				
Tents and mats				
Others (Please specify)				
Consumables				
ArcView GIS software				
<b>TOTAL</b>				

This leaves a small underspend of GBP [REDACTED] We would like advice on whether this can be carried forward to Year 3.



**Annex 1: Report of progress and achievements against Logical Framework for Financial Year 2020-2021 – if applicable**

Project summary	Measurable Indicators	Progress and Achievements April 2020 - March 2021	Actions required/planned for next period
<p><b>Impact</b></p> <p>Significantly enhanced resilience of Anguilla’s threatened biodiversity directly informs and inspires other islands to incorporate climate change in species action planning.</p>		<p>Using lessons learned from this project, FFI has begun assisting other Caribbean small island developing states to develop and implement species action plans that incorporate climate change forecasts, including Barbados (<i>Phyllodactylus pulcher</i>), Saint Lucia (<i>Erythrolamprus ornatus</i>) and St Vincent &amp; the Grenadines (<i>Iguana insularis</i>).</p>	
<p><b>Outcome</b></p> <p>Globally threatened species in Anguilla are more resilient to climate change through climate-informed recovery interventions, strong management competencies, and more supportive civil society</p>	<p>0.1 Climate change-informed Population Viability Analysis modelling demonstrates at least 50% improvement in the viability of target species over the next 50 years by implementing action plans.</p> <p>0.2 At least four critically threatened species achieve at least a 10% increase in population size and/or number of populations by end of Year 3.</p>	<p>0.1 Population Viability Analysis models were conducted in Year 1 to inform the endangered species action plan (Output 1). Action plan interventions were launched in Year 2 and have proceeded largely as expected. PVA models indicate good prospects of exceeding the target increase in viability for most species.</p> <p>0.2 This target has already been achieved for at least two threatened species: (a) The national Lesser Antillean iguana population has increased by at least 50% through their reproduction on Prickly Pear East (juveniles observed for the first time in 2020) and the addition of 10 individuals from Dominica. (b) The national population of lignum vitae on mainland Anguilla is also growing thanks to</p>	<p>Year 3 will focus on implementing priority measures under Output 2, and on continuing to build the skills and experience of Anguillan nationals and create new opportunities and stories to engage the public (Output 3).</p> <p>Monitoring of the target species – including trees planted and animals translocated in Year 2 - will continue through Years 3, and any significant changes will be measured against baseline data collected in Year 1 (and pre-project data where applicable). Our PVA models should be re-examined and refined in Year 3 to calculate the expected changes in viability (probability of extinction).</p>

Project summary	Measurable Indicators	Progress and Achievements April 2020 - March 2021	Actions required/planned for next period
	<p>0.3 Work plans and budgets of the responsible national agency and supporting partners demonstrate intention to continue implementing action plans beyond the life of this project.</p> <p>0.4 At least 7 natural resources managers and conservation officers demonstrate increased capacity (at least a 30% improvement in capacity level using standardised scoring method) to adaptively manage species conservation needs.</p>	<p>planting out nearly 150 individuals on private lands in Year 2.</p> <p>0.3 Good progress was made in Year 2. FFI secured additional funds to continue conservation work until at least the end of 2022 and ANT has begun formulating new proposals to continue implementing the action plans. ANT has also integrated the action plan objectives and tasks into its five-year strategic plan (2020-2024).</p> <p>0.4 Capacity levels were assessed in Year 1 and will be re-assessed in Year 3.</p>	<p>The capacity of the target beneficiaries will also be re-evaluated in Year 3, using the standardised competences assessment form that we used in Year 1. This will provide a quantitative measure of any change in capacity.</p>
<p><b>Output 1.</b> Climate change-informed species action plans produced by a participatory process for Anguilla's terrestrial Endangered species that are most at-risk to climate change</p>	<p>1.1 Baseline information on distribution, status, and life history of 7 target Endangered and Critically Endangered species updated by Q3Y1.</p> <p>1.2 Projected effects of climate change on Anguilla in general – and the target species in particular – reviewed and updated by Q3Y1.</p> <p>1.3 Action planning workshops conducted with at least 30 stakeholders in Q4Y1, taking account of short- and long-term climate change predictions.</p>	<p>1.1 Completed in Year 1. However, the project team in Anguilla has continued compiling data on the target species through ongoing fieldwork in Year 2 (e.g. several more locations for Anguilla bushes were discovered in 2020).</p> <p>1.2 Completed and reported on in Year 1.</p> <p>1.3 Completed and reported on in Year 1.</p>	

Project summary	Measurable Indicators	Progress and Achievements April 2020 - March 2021	Actions required/planned for next period
	1.4 Action plans finalised and disseminated to all stakeholders within Anguilla by Q1Y2.	1.4 A consolidated action plan for seven endangered species of reptiles and plants was drafted in Year 1 and finalised (and disseminated) in Year 2. We combined the required actions for all seven species into one document because (a) there was some overlap in the measures required for several species and (b) our local partners, especially ANT, decided it would be easier to incorporate the actions into their annual budgets and work plans if they were presented in one place.	
Activity 1.1 Complete literature review and rapid field surveys of the status, distribution and ecology of the seven target species ( <i>Iguana delicatissima</i> , CR; <i>Pholidoscelis corvinus</i> , CR; <i>P. corax</i> , CR; <i>Spondylurus powellii</i> , EN; <i>Alsophis rijgersmaei</i> , EN; <i>Guaicum officinale</i> , EN; <i>Rondeletia anguillensis</i> , CR).		Completed and reported on in Year 1.	Completed.
Activity 1.2 Complete analysis and report on the climate change vulnerability assessments for Anguilla's globally threatened terrestrial species.		Completed and reported on in Year 1.	Completed.
Activity 1.3 Collate and analyse climate change data and forecasts for the northern Lesser Antilles to elucidate likely climate change impacts on species and habitats in Anguilla, including offshore cays.		Completed and reported on in Year 1.	Completed.
Activity 1.4 Drawing on findings from 1.1–1.3, conduct Population Viability Analyses (PVAs) of the seven target species to calculate extinction risk (repeated at project end to measure impact on viability).		PVAs were conducted in Year 1 for all island populations of four target reptiles: The Lesser Antillean iguana, Anguilla Bank racer, Sombrero ground lizard and Little Scrub ground lizard. A manuscript detailing these methods and results was prepared in Year 2 for publication.	PVA models for the first four reptile species will be calibrated, refined and used in Year 3 to assess the impact of project activities (especially those listed under Output 2) on their probabilities of extinction. PVAs for the other three species (Anguilla Bank skink, lignum vitae and Anguilla bush) will be conducted in Year 3 if we have sufficient data to generate robust models.
Activity 1.5 Hold stakeholder workshops to present and discuss findings from 1.1-1.4 and, using a participatory process, develop action plans for the target reptiles and plants (one plan per group).		Completed and reported on in Year 1.	Completed.
Activity 1.6 Write up, peer-review and publish the climate change-informed conservation action plans for the threatened reptiles and plants.		Climate change-informed conservation action plan for all seven reptiles and	Conservation action plan to be reviewed and updated as necessary.



Project summary	Measurable Indicators	Progress and Achievements April 2020 - March 2021	Actions required/planned for next period
		plants was drafted in Year 1 and peer-reviewed and finalised in Year 2.	
<p><b>Output 2.</b> At least six priority interventions prescribed by the action plans to increase climate change resilience are implemented, monitored and evaluated</p>	<p>2.1 <i>Iguana delicatissima</i> population size increased by at least 20% through creation of artificial nest sites and release of at least 10 additional stock by end of project.</p> <p>2.2 At least 300 seedlings of two endangered plant species planted and thriving by end of project.</p> <p>2.3 Invasive mice eradicated from Sombrero island by end of Q2Y3.</p> <p>2.4 Four offshore cays that are essential refuges for threatened species are actively kept free from harmful invasive alien vertebrates (rats, mice, green iguana).</p> <p>2.5 At least one Endangered or Critically Endangered reptile reintroduced successfully to a secure offshore cay, increasing its range by at least 30 hectares by end of project.</p> <p>2.6 At least one additional key intervention from the action plans identified and implemented by end of project (the specific measure[s] will be</p>	<p>2.1 The national population of <i>Iguana delicatissima</i> in Anguilla has been increased by over 20% through adding 10 individuals from Dominica (5 male, 5 female). Evidence of successful breeding (juveniles observed) was confirmed in Year 2 on Prickly Pear East (the alien-free island to which almost the entire national population has been relocated), where one artificial nest site was constructed.</p> <p>2.2 320 lignum vitae seedlings were grown in Year 1 (40) and Year 2 (280), 121 of which were distributed to the public in Year 2 and planted in backyards. More will be propagated and planted in Year 3. We are still finding it difficult to grow and transplant Anguilla bushes and will continue to seek and test new methods in Year 3 (but also strengthen the protection of existing wild stocks where possible).</p> <p>2.3 Good progress was made to prepare for this activity, including completing the operational plan and health &amp; safety plan, selecting personnel and procuring equipment. This activity is still on track to be implemented in Year 3 (June through August).</p> <p>2.4 Good progress continue through Year 2, with three important offshore cays (Dog Island, Prickly Pear East and Prickly Pear West) actively and successfully kept free of harmful invasive rodents and green iguanas. Sombrero and Little Scrub will be added to the biosecurity programme in Year 3, so the project is on track to exceed its target.</p> <p>2.5 Despite initially showing support, a minority of the landowners repealed permission for the project team to (re)introduce either Anguilla Bank skinks or Little Scrub ground lizards to the Prickly Pear Cays over concerns about whether these endangered species would prevent potential future developments. Project staff will continue to engage with the landowners in Year 3 to find a solution because these offshore islands – with or without developments – are crucial for Anguilla’s native wildlife over the long term.</p> <p>2.6 Good progress was made ahead of schedule, with the listing of endangered reptiles on the national protected species list – Schedule 1 of the Biodiversity and Heritage Conservation Act – and the removal of the invasive green iguana from this list. Other new interventions from the action plan have been identified</p>	

Project summary	Measurable Indicators	Progress and Achievements April 2020 - March 2021	Actions required/planned for next period
	submitted for approval by Darwin by Year 2 progress report).	for implementation in Year 3 and will be submitted for approval by Darwin shortly.	
Activity 2.1 Translocate at least 10 <i>Iguana delicatissima</i> from a healthy source population to reinforce the colony on Prickly Pear Cays, Anguilla, with the necessary CITES permits, health assessments and genetic records.		10 Lesser Antillean iguanas were translocated from Dominica (donated by the Government of Dominica) in March 2021 (with the necessary CITES permits, veterinary health assessments and genetic tests confirming they are purebred <i>I. delicatissima</i> ). The translocation followed a peer-reviewed feasibility study, also completed in Q4, Year 2. In addition, a single male <i>I. delicatissima</i> was captured on the Anguilla mainland and translocated to Prickly Pear East in January 2021.	Continue to monitor iguana survival, health and reproduction on Prickly Pear East.
Activity 2.2 Establish and monitor artificial sandy nesting sites in <i>Iguana delicatissima</i> habitat on Prickly Pear East (to enhance reproductive success in accordance with Output 1).		Underway. The project team constructed the first artificial nest site on Prickly Pear East in July 2020 with advice from Agence Territoriale de l'Environnement (ATE), which has previously built artificial nesting areas for this species on St Barths.	At least two more nesting sites to be created on Prickly Pear East and monitored during the next nesting season (Q1Y3).
Activity 2.3 Plant seeds and seedlings of <i>Guaiaacum officinale</i> and <i>Rondeletia anguillensis</i> , including those translocated from sites at high risk, in the Department of Agriculture nursery and suitable habitats identified by Output 1, and provide follow up care as needed.		Over 320 lignum vitae were grown in the ANT nursery and satellite nursery at the Agriculture Unit in Year 1 (40) and Year 2 (280). Nearly 150 have been planted to date.  Anguilla bush seeds were collected in Years 1 and 2, and trials are ongoing to learn how to grow and translocate the species.	More lignum vitae saplings are to be grown in nurseries for planting in suitable areas. We will also continue attempting to grow and transplant Anguilla bushes, with assistance and advice from a local naturalist and RBG Kew, but will also step up efforts to protect critical populations in the wild (including land purchases if possible, and pressing for ANT to manage the population in Fountain Cavern National Park).

Project summary	Measurable Indicators	Progress and Achievements April 2020 - March 2021	Actions required/planned for next period
Activity 2.4 Monitor the growth and survival of planted <i>G. officinale</i> and <i>R. anguillensis</i> populations, including reintroduction sites.		Growth and survival were monitored in the nurseries, with improvements made to germination methods following advice from ATE botanists in St Barths. Nearly 150 lignum vitae have been planted to date, including 121 seedlings distributed to residents to plant on their lands. ANT has their contact information (with permission) to enable their progress to be monitored.	Growth and survival of both species in the nurseries will be monitored throughout Year 3, as will the survival of those that have been planted on private and other lands.
Activity 2.5 Eradicate invasive alien mice from Sombrero Island in accordance with the 2018 eradication feasibility study and operational plan to facilitate recovery and resilience of <i>Pholidoscelis corvinus</i> and other Sombrero endemics.		Useful preparatory work was conducted in Year 2, including selecting the project team (including international experts and national eradication personnel) and procuring the bait and additional equipment. The team has also made thousands of flavoured wax blocks, which will be used during the operation to help detect mice.	The mouse eradication operation is now scheduled to be conducted in June/July/August 2021.
Activity 2.6 Implement biosecurity surveillance and rapid response protocols to prevent further incursions by harmful invasive alien species on priority islands for endangered species (Dog Island, Prickly Pear Cays, Little Scrub, and Sombrero).		Biosecurity monitoring on Dog Island and the Prickly Pear Cays was implemented by trained ANT staff and volunteers throughout Year 2 as planned. No incursions were detected.	Biosecurity on Dog Island and Prickly Pear Cays will continue through Year 3. Biosecurity monitoring on Little Scrub and Sombrero will begin in Year 3.
Activity 2.7 Translocate at least 30 <i>Spondylurus powelli</i> (and/or another target reptile species) from mainland Anguilla to reintroduce this species to Prickly Pear West in accordance with Output 1 and IUCN Reintroduction Specialist Group guidelines.		Feasibility studies for (re)introducing both Anguilla Bank skinks and Little Scrub ground lizards to the Prickly Pear Cays were drafted and peer reviewed. Although all of landowners initially agreed, a few later repealed their permission, stating concerns about how the translocation could impact future development prospects.	Conversations with landowners will continue. If all landowners give their consent, one or both species could be translocated to the Prickly Pear Cays in Year 3.



Project summary	Measurable Indicators	Progress and Achievements April 2020 - March 2021	Actions required/planned for next period
Activity 2.8 Implement at least one additional conservation measure prescribed by the action plans (Output 1), to be discussed with and approved by Darwin.		<p>The 10-year action plan for Anguilla's endangered reptiles and plants, developed through a participatory process in Year 1, setting out a wide range of conservation measures.</p> <p>A notable achievement in Year 2 was amending the Biodiversity and Heritage Conservation Act to protect all of Anguilla's most endangered reptiles, remove the invasive green iguana from the list of protected species, and upgrade the status of the endemic Anguilla bush to Critically Endangered. The Government adopted these changes using evidence provided by this project.</p> <p>Our team has identified several other measures from the action plan we wish to undertake in Year 3.</p>	We will seek permission from Darwin to use funding for one or both of the following tasks, as prescribed by the action plan:- (a) Restore some of the natural vegetation of Sombrero Island and Little Scrub islet (to aid the survival of the Sombrero ground lizard and Little Scrub ground lizard), and (b) Conduct a feasibility study for transforming Fountain Cavern National Park into a 'mainland island', free from harmful invasive alien species.
Activity 2.9 Establish and launch long term monitoring programme for the target reptile and plant species to evaluate project impacts on status and distribution.		Monitoring protocols were established for all seven target species and monitoring has been ongoing throughout Year 2, with data entered into ANT's database.	Monitoring will continue through Year 3.
<b>Output 3.</b> National capability to plan, manage, implement and monitor climate change-informed species conservation actions is raised, supported by enhanced technical skills and greater public awareness and cooperation	<p>3.1 Communications and public awareness plan developed by Q2Y1.</p> <p>3.2 At least 70% of nationals (c. 8,500 people) know about the project and can articulate why the target species merit conservation.</p> <p>3.3 At least 40 Anguillian residents volunteer their time and resources</p>	<p>3.1 Completed and reported on in Year 1.</p> <p>3.2 Baseline public awareness survey was conducted in Year 1. The survey will be repeated in Year 3 to measure project impact.</p> <p>3.3 31 Anguillian residents (14 male, 17 female) have assisted with biosecurity and biodiversity monitoring on Dog Island and the Prickly Pear Cays since the beginning of the project.</p>	



Project summary	Measurable Indicators	Progress and Achievements April 2020 - March 2021	Actions required/planned for next period
	<p>towards implementing the conservation actions by end of project.</p> <p>3.4 At least 30 nationals gain advanced technical skills and experience in developing action plans and implementing conservation actions by end of project.</p> <p>3.5 Project methods and lessons learned disseminated to relevant natural resource managers within all Caribbean UKOTs and other sub-regional islands by end of project.</p> <p>3.6 At least GBP 100,000 generated in cash and/or in-kind to continue implementing action plans after the grant period.</p> <p>3.7 Boat procured, maintained and in active use by the ANT and Government of Anguilla for conservation work on offshore islands and other coastal areas.</p>	<p>3.4 31 nationals (14 male, 17 female) have received and applied advanced training in a range of relevant conservation techniques, including biosecurity and biodiversity monitoring (also see Activity 3.3). Training is ongoing. In Year 3, training will include mouse detection and eradication, rope access climbing, and how to restore vegetation on severely denuded islands.</p> <p>3.5 Underway. In Year 2, project methods and findings were presented at four conferences attended by natural resource managers from the Caribbean UKOTs and other islands, including the CIEEM webinar on “Approaches to Addressing the Climate Emergency in the Overseas Territories and the UK” in July 2020, “Nature-based Solutions in the UK Overseas Territories”, hosted by RSPB in September 2020; The annual conference of the IUCN SSC Iguana Specialist Group in November 2020 and the UKOT Conservation Forum Conference in March 2021. Other relevant meetings and conferences will be attended in Year 3, most of which are likely to be online.</p> <p>3.6 This target was exceeded by FFI and reported on in Year 1 (including £299,945 secured from the Prince of Wales’s Charitable Fund and US\$ 184,700 [approx. £149,000] from the US Fish and Wildlife Service). However, we will develop further grant proposals during Year 3 to support some of the other major actions identified (e.g. developing a mainland island wildlife sanctuary on Anguilla).</p> <p>3.7 The boat was built in Year 1 and equipped in Year 2. We are still waiting on the delivery of the engines, which were delayed by the Covid-19 pandemic, but expect these to be installed in Q1 Year 3. The boat can then be launched and put to work.</p>	
Activity 3.1 ANT staff and other participating nationals complete self-assessment competences questionnaires to identify training needs (repeated at project end to measure impact on capacity).		Baseline assessment was conducted and reported on in Year 1.	Self-assessments to be repeated in Year 3.
Activity 3.2 Plan and undertake training and on-the-job mentoring of ANT staff and other nationals in applied conservation management.		Training and on-the job mentoring of all ANT staff, ANT volunteers and other nationals have been ongoing throughout Year 2, guided by Activity	Training and mentoring of ANT staff, volunteers and other nationals will continue. We will pay attention to other practical aspects of species

Project summary	Measurable Indicators	Progress and Achievements April 2020 - March 2021	Actions required/planned for next period
		3.1 but also taking advantage of additional, external training opportunities where possible. For example, ANT staff received training in advanced iguana husbandry methods from Durrell Wildlife Conservation Trust and in lignum vitae seed germination and seedling care from ATE in St. Barths.	conservation, including mouse detection and eradication, and tree planting, in line with the species action plans. At least one ANT staff will gain advanced boat captaincy skills by understudying with an experienced Fisheries and Marine Resources Unit captain.
Activity 3.3 Conduct public survey to evaluate knowledge, attitudes and behaviour towards endangered wildlife and climate change (repeated at project end to evaluate impact).		Baseline assessment was conducted and reported on in Year 1.	Survey to be repeated in Year 3 to quantify project impact. The project team will also continue to gather qualitative examples and evidence of local knowledge, attitudes and behaviour.
Activity 3.4 Develop and implement an advocacy and public awareness campaign (including but not limited to, newspaper articles, press releases, presentations, CCSleuth, and social media).		The advocacy and public awareness campaign plan was prepared in Year 1 and many planned tasks were implemented in Year 2. See main text, Activity 3.4, for examples.	The campaign will continue to be implemented through Year 3, drawing on news and stories from the project and actively involve the public in fieldwork where safe and appropriate to do so.
Activity 3.5 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 Executive Council.		The project was reported in national and international media, social media platforms, and national meetings (see main text). Project objectives and methods were also presented at the UK Overseas Territories Conservation Forum Conference in March 2021, reaching participants from over a dozen territories including most of the Caribbean UKOTs.	This activity is ongoing.
Activity 3.6 Share and discuss project methods, results, lessons learned and opportunities for replication through regional and international forums (including regional conferences of Caribaea Initiative and BirdsCaribbean).		In addition to the UKOTCF meeting (Activity 3.5), project leaders presented papers to: <i>Approaches to Addressing the Climate Emergency in the</i>	We will continue to explore opportunities to share project objectives, methods, and interim results. While some in-person

Project summary	Measurable Indicators	Progress and Achievements April 2020 - March 2021	Actions required/planned for next period
		<p><i>Overseas Territories and the UK</i>” hosted by the CIEEM, July 2020; “<i>Nature-based Solutions in the UK Overseas Territories</i>”, hosted by RSPB, September 2020; and the annual conference of the IUCN SSC Iguana Specialist Group, November 2020. This included a working group session on Lesser Antillean iguanas, one of the target species of this project. All conferences attended by the project team in Year 2 were held online.</p>	<p>conferences are likely to be cancelled this year due to the pandemic, there are likely to be more opportunities to share information with other practitioners through webinars and conferences held via Zoom and other online platforms.</p>
<p>Activity 3.7 Produce and disseminate case studies outlining methods, results and lessons learned from designing and implementing the climate change-informed action plans for the target species.</p>		<p>Not scheduled until Year 3. However, we have prepared a manuscript detailing our PVA methods and results.</p>	<p>Case studies to be completed in Year 3.</p>
<p>Activity 3.8 Procure equipment to enhance national conservation capacity, including purchasing a boat to facilitate the management of offshore islands and other coastal areas by ANT and Government of Anguilla.</p>		<p>The project procured over £12,875-worth of equipment in Year 2 plus £5,094-worth of consumables for conservation work in Anguilla, including camping gear, mouse eradication supplies and equipment and vegetation restoration materials.</p>	<p>Some additional equipment and consumables for the plant nursery, mouse eradication, and (reptile and) plant reintroductions/translocations are to be purchased in Year 3, as required. The new boat, worth over £110,000, will be completed and launched as soon as possible in Year 3.</p>

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

*N.B. if your application's logframe is presented in a different format in your application, please transpose into the below template. Please feel free to contact [Darwin-Projects@ltsi.co.uk](mailto:Darwin-Projects@ltsi.co.uk) if you have any questions regarding this.*

This is the slightly revised log frame that was submitted with a Change Request and approved in July 2020. Changes from the original application are shown in red.

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<b>Impact:</b>			
Significantly enhanced resilience of Anguilla's threatened biodiversity directly informs and inspires other islands to incorporate climate change in species action planning.			
<b>Outcome:</b> Globally threatened species in Anguilla are more resilient to climate change through climate-informed recovery interventions, strong management competencies, and more supportive civil society	0.1 Climate change-informed Population Viability Analysis modelling demonstrates at least 50% improvement in the viability of target species over the next 50 years by implementing action plans.  0.2 At least four critically threatened species achieve at least a 10% increase in population size and/or number of populations by end of Year 3.  0.3 Work plans and budgets of the responsible national agency and supporting partners demonstrate intention to continue implementing action plans beyond the life of this project.  0.4 At least 7 natural resources managers and conservation officers demonstrate increased capacity (at least a 30% improvement in capacity level using standardised scoring method) to adaptively	0.1 Population Viability Analysis reports.  0.2 Species distribution maps and monitoring reports.  0.3 Institutional work plans, staff work plans, institutional budgets.  0.4 Trainer's reports; line manager observations; Self-assessment scores using competency questionnaire.	Climate change impacts, including human land use, are forecast within sufficiently accurate bounds.  Action plans correctly identify and address the main threats, capacity needs and resources to achieve true species recovery and resilience.



Project summary	Measurable Indicators	Means of verification	Important Assumptions
	manage species conservation needs.		
<p><b>Output 1</b></p> <p>Climate change-informed species action plans produced by a participatory process for Anguilla's terrestrial Endangered species that are most at-risk to climate change</p>	<p>1.1 Baseline information on distribution, status, and life history of 7 target Endangered and Critically Endangered species updated by Q3Y1.</p> <p>1.2 Projected effects of climate change on Anguilla in general - and the target species in particular - reviewed and updated by Q3Y1.</p> <p>1.3 Action planning workshops conducted with at least 30 stakeholders in Q4Y1, taking account of short- and long-term climate change predictions.</p> <p>1.4 Action plans finalised and disseminated to all stakeholders within Anguilla by Q1Y2.</p>	<p>1.1 Species databases; status reports; habitat and species population maps; species population reports.</p> <p>1.2 Climate change species impact maps and reports.</p> <p>1.3 Workshop agendas; workshop participants sign-in sheet; PowerPoint presentations; climate change-informed species conservation strategies and action plans (one for reptiles and one for plants), including (current and expected) species distribution maps.</p> <p>1.4 Action Plan for reptile species; Action Plan for plant species.</p>	<p>Major field activities can be re-scheduled if extreme weather events occur during grant period.</p> <p>Sufficient data exist to support consensus among conservationists within Anguilla on the likely impacts of climate change.</p> <p>National and regional stakeholders continue willingness to cooperate on biodiversity conservation initiatives.</p>
<p><b>Output 2</b></p> <p>At least six priority interventions prescribed by the action plans to increase climate change resilience are implemented, monitored and evaluated</p>	<p>2.1 <i>Iguana delicatissima</i> population size increased by at least 20% through creation of artificial nest sites and release of <b>at least 10</b> additional stock by end of project.</p> <p>2.2 At least 300 seedlings of two endangered plant species planted and thriving by end of project.</p>	<p>2.1 CITES export permits; artificial iguana nesting sites; iguana release and monitoring data sheets and database; habitat and species populations maps; monitoring and evaluation reports.</p> <p>2.2 Reforestation/planting protocols; monitoring data on plant survival and growth</p>	<p>Field activities can be re-scheduled if extreme weather events occur during grant period.</p> <p>National and regional stakeholders continue to be willing to cooperate on habitat and species conservation/ resiliency initiatives.</p>

Project summary	Measurable Indicators	Means of verification	Important Assumptions
	<p>2.3 Invasive mice eradicated from Sombrero island by end of Q2Y3.</p> <p>2.4 Four offshore cays that are essential refuges for threatened species are actively kept free from harmful invasive alien vertebrates (rats, mice, green iguana).</p> <p>2.5 At least one Endangered or Critically Endangered reptile reintroduced successfully to a secure offshore cay, increasing its range by at least 30 hectares by end of project.</p> <p>2.6 At least one additional key intervention from the action plans identified and implemented by end of project (the specific measure[s] will be submitted for approval by Darwin by Year 2 progress report).</p>	<p>2.3 Sombrero Island rodent eradication progress reports and final technical report.</p> <p>2.4 Biosecurity protocols, monitoring datasheets and database for each island; invasive species incursion response reports (if any incursions occur).</p> <p>2.5 Translocation protocols, datasheets and database; Monitoring datasheets, database, and reports; species distribution maps.</p> <p>2.6 Darwin Plus correspondence; Project reports.</p>	<p>Young plants can successfully be transplanted from high-risk areas to protected sites.</p>
<p><b>Output 3</b> National capability to plan, manage, implement and monitor climate change-informed species conservation actions is raised, supported by enhanced technical skills and greater public awareness and cooperation</p>	<p>3.1 Communications and public awareness communications plan developed by Q2Y1.</p> <p>3.2 At least 70% of nationals (c. 8,500 people) know about the project and can articulate why the target species merit conservation.</p> <p>3.3 At least 40 Anguillan residents volunteer their time and resources towards implementing the conservation actions by end of project.</p>	<p>3.1 Communications and public awareness plan.</p> <p>3.2 Knowledge-Attitudes-Performance (KAP) surveys at start and end of project; newspaper articles; social media posts; radio press releases; PowerPoint presentations; social media analytics; CCSleuth kit.</p> <p>3.3 Minutes of meetings; names and details of participating residents.</p>	<p>Trained expertise remains in Anguilla.</p> <p>Improved knowledge leads to improved behaviours to conserve biodiversity.</p>



Project summary	Measurable Indicators	Means of verification	Important Assumptions
	<p>3.4 At least 30 nationals gain advanced technical skills and experience in developing action plans and implementing conservation actions by end of project.</p> <p>3.5 Project methods and lessons learned disseminated to relevant natural resource managers within all Caribbean UKOTs and other sub-regional islands by end of project.</p> <p>3.6 At least GBP 100,000 generated in cash and/or in-kind to continue implementing action plans after the grant period.</p> <p>3.7 Boat procured, maintained and in active use by the ANT and Government of Anguilla for conservation work on offshore islands and other coastal areas.</p>	<p>3.4 Training evaluation sheets; training workshop agenda; workshop attendance sheet; monitoring protocol; biodiversity datasheets.</p> <p>3.5 Case studies; presentation abstracts; PowerPoint presentations; Minutes of meetings.</p> <p>3.6 Memoranda of Understanding; grant proposals and funding agreements; merchandise sales; habitat and species adoption schemes.</p> <p>3.7 Boat registration, log book and other documents; Photographs and video of vessel in use.</p>	
<p><b>Activities</b> (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)</p> <p>1.1 Complete literature review and rapid field surveys of the status, distribution and ecology of the seven target species (<i>Iguana delicatissima</i>, CR; <i>Pholidoscelis corvinus</i>, CR; <i>P. corax</i>, CR; <i>Spondylurus powellii</i>, EN; <i>Alsophis rijgersmaei</i>, EN; <i>Guaicum officinale</i>, EN; <i>Rondeletia anguillensis</i>, CR).</p> <p>1.2 Complete analysis and report on the climate change vulnerability assessments for Anguilla's globally threatened terrestrial species.</p> <p>1.3 Collate and analyse climate change data and forecasts for the northern Lesser Antilles to elucidate likely climate change impacts on species and habitats in Anguilla, including offshore cays.</p> <p>1.4 Drawing on findings from 1.1–1.3, conduct Population Viability Analyses (PVAs) of the seven target species to calculate extinction risk (repeated at project end to measure impact on viability).</p> <p>1.5 Hold stakeholder workshops to present and discuss findings from 1.1-1.4 and, using a participatory process, develop action plans for the target reptiles and plants (one plan per group).</p> <p>1.6 Write up, peer-review and publish the climate change-informed conservation action plans for the threatened reptiles and plants.</p> <p>2.1 Translocate at least 10 <i>Iguana delicatissima</i> from a healthy source population to reinforce the colony on Prickly Pear Cays, Anguilla, with the necessary CITES permits, health assessments and genetic records.</p>			

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<p>2.2 Establish and monitor artificial sandy nesting sites in <i>Iguana delicatissima</i> habitat on Prickly Pear East (to enhance reproductive success in accordance with Output 1).</p> <p>2.3 Plant seeds and seedlings of <i>Guaiaacum officinale</i> and <i>Rondeletia anguillensis</i>, including those translocated from sites at high risk, in the Department of Agriculture nursery and suitable habitats identified by Output 1, and provide follow up care as needed.</p> <p>2.4 Monitor the growth and survival of planted <i>G. officinale</i> and <i>R. anguillensis</i> populations, including reintroduction sites.</p> <p>2.5 Eradicate invasive alien mice from Sombrero Island in accordance with the 2018 eradication feasibility study and operational plan to facilitate recovery and resilience of <i>Pholidoscelis corvinus</i> and other Sombrero endemics.</p> <p>2.6 Implement biosecurity surveillance and rapid response protocols to prevent further incursions by harmful invasive alien species on priority islands for endangered species (Dog Island, Prickly Pear Cays, Little Scrub, and Sombrero).</p> <p>2.7 Translocate at least 30 <i>Spondylurus powelli</i> (and/or another target reptile species) from mainland Anguilla to reintroduce this species to Prickly Pear Cays in accordance with Output 1 and IUCN Reintroduction Specialist Group guidelines.</p> <p>2.8 Implement at least one additional conservation measure prescribed by the action plans (Output 1), to be discussed with and approved by Darwin.</p> <p>2.9 Establish and launch long term monitoring programme for the target reptile and plant species to evaluate project impacts on status and distribution.</p> <p>3.1 ANT staff and other participating nationals complete self-assessment competences questionnaires to identify training needs (repeated at project end to measure impact on capacity).</p> <p>3.2 Plan and undertake training and on-the-job mentoring of ANT staff and other nationals in applied conservation management.</p> <p>3.3 Conduct public survey to evaluate knowledge, attitudes and behaviour towards endangered wildlife and climate change (repeated at project end to evaluate impact).</p> <p>3.4 Develop and implement an advocacy and public awareness campaign (including but not limited to, newspaper articles, press releases, presentations, CCSleuth, and social media).</p> <p>3.5 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 Executive Council.</p> <p>3.6 Share and discuss project methods, results, lessons learned and opportunities for replication through regional and international forums (including regional conferences of Caribaea Initiative and BirdsCaribbean).</p> <p>3.7 Produce and disseminate case studies outlining methods, results and lessons learned from designing and implementing the climate change-informed action plans for the target species.</p> <p>3.8 Procure equipment to enhance national conservation capacity, including purchasing a boat to facilitate the management of offshore islands and other coastal areas by ANT and Government of Anguilla.</p>			
<p>Other Project Management activities:-</p> <p>X.1 Establish Project Steering Committee and meet quarterly (remote members to participate by Skype).</p> <p>X.2 Project inception meeting.</p> <p>X.3 Project biannual reports/ donor technical and financial reports.</p> <p>X.4 Monthly financial accounts.</p> <p>X.5 End of project audit.</p>			

## Checklist for submission

	Check
<b>Is the report less than 10MB?</b> If so, please email to <a href="mailto:Darwin-Projects@ltsi.co.uk">Darwin-Projects@ltsi.co.uk</a> putting the project number in the Subject line.	X
<b>Is your report more than 10MB?</b> If so, please discuss with <a href="mailto:Darwin-Projects@ltsi.co.uk">Darwin-Projects@ltsi.co.uk</a> about the best way to deliver the report, putting the project number in the Subject line.	
<b>Have you included means of verification?</b> You should not submit every project document, but the main outputs and a selection of the others would strengthen the report.	X
<b>Do you have hard copies of material you need to submit with the report?</b> 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.	
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.	