



Darwin Initiative/D+ Project Half Year Report (due 31st October 2019)

Project reference	DPLUS086
Project title	Future-proofing endangered species conservation in Anguilla
Country(ies)/territory(ies)	Anguilla
Lead organisation	Fauna & Flora International
Partner(s)	Anguilla National Trust, Durrell Wildlife Conservation Trust, Royal Society for the Protection of Birds
Project leader	Dr Jenny Daltry
Report date and number	HYR1
Project website/blog/social media etc.	Not yet

1. Outline progress over the last 6 months (April – Sept) against the agreed baseline timetable for the project (if your project has started less than 6 months ago, please report on the period since start up to end September).

The project is on track and has already made good progress against the planned outputs. Below is a summary of progress against the agreed timetable (showing only activities that were intended to begin in Q1 or Q2, or that have begun ahead of schedule):-

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

1.1 Complete literature review and rapid field surveys of the status, distribution and ecology of the seven target species (UNDERWAY): The literature review has been completed and excellent progress made with original field research nationwide:

- i. Lesser Antillean iguana (*Iguana delicatissima*, CR): The project team continued to record and map sightings of iguanas on mainland Anguilla (building on existing data from recent years) and the reintroduced colony on Prickly Pear East.
- ii. Sombrero ground lizard (*Pholidoscelis corvinus*, CR): Population distribution mapped and total population estimated using mark recapture, indicating a total population of 237±52 individuals; only half the number recorded in the previous survey in 1999 (463±68). This drop appears genuine and is probably due to the combined impact of recent, severe hurricanes and invasive alien rodents on Sombrero island.
- iii. Little Scrub ground lizard (*P. corax*, CR): Population distribution mapped and total population estimated using mark recapture, indicating a total population of 457±52 individuals (321 adults and 135 juveniles), approximately 10% fewer than in the previous surveys in 2000 and 2011. Habitat quality has deteriorated, in the wake of a number of severe hurricanes and storm surges, and this species now appears to be heavily dependent on food provided by humans.
- iv. Anguilla Bank skink (*Spondylurus powellii*, EN), Anguilla Bank racer (*Alsophis rijgersmaei*, EN), Lignum vitae (*Guaiacum officinale*, EN) and Anguilla bush (*Rondeletia anguillensis*, CR): Rapid field surveys have been completed on the eastern and southern side Anguilla, the eastern half of Scrub island. The location of all individuals observed have been recorded using GPS to develop distribution maps and identify any strongholds. Surveys will continue

through October. While both *lignum vitae* and Anguilla bush have been discovered in unexpected new localities, the skink and racer appear to have become scarcer and highly localised.

Also in Q2, samples of a possible new endemic – and scarce – bromeliad were collected from the northeast coast of Anguilla. Samples were sent to a bromeliad specialist in the Netherlands for identification. A botanist at the Royal Botanic Gardens, Kew, is applying for a small grant to study this plant and its distribution on Anguilla.

1.2 Complete analysis and report on the climate change vulnerability assessments for Anguilla’s globally threatened terrestrial species (COMPLETED): The analysis was conducted using NatureServe’s Climate Change Vulnerability Index and presented in a 13-page report by Project Coordinator Dr Louise Soanes (“*Climate Change Vulnerability Assessment of Anguilla’s Endangered Terrestrial Species*”). In summary: The Little Scrub ground lizard *Pholidoscelis corax* rated as Extremely Vulnerable, primarily due to its severely restricted range, that will only get smaller with sea level rise; The Sombrero ground lizard *P. corvinus*, Anguilla Bank skink *Spondylurus powelli*, and Anguilla Bank racer *Alsophis rijgersmaei* are Highly Vulnerable; and the Lesser Antillean iguana *Iguana delicatissima*, Anguilla bush *Rondeletia anguillensis* and *lignum vitae* *Guaiacum officinale* are Moderately Vulnerable. This report will now be used to identify and prioritise species conservation measures to counteract the poor vulnerability ratings.

1.3 Collate and analyse climate change data and forecasts to elucidate likely climate change impacts on species and habitats in Anguilla (COMPLETED): The analysis was conducted by Dr Soanes and presented in a 19-page report plus maps. In summary: Regional forecasts predict a 0.5–3.0°C increase in temperature and a likely decrease in precipitation across the northern Lesser Antilles by the end of the century. Tropical storm activity is predicted to increase in intensity and rainfall, but it is uncertain whether the frequency of tropical storms will also increase. A sea level rise of at least 1 m is considered “inevitable” by the end of the century causing severe coastal flooding, particularly the western end of the island (currently dominated by tourism developments) and several of Anguilla’s offshore cays, especially Anguillita, West Cay the Seal islands and lower areas of Dog Island, Prickly Pear East and Scrub Island. Recognising that climate change will have a profound impact on Anguilla’s human population and development choices, this analysis will help identify which habitats are liable to be lost and where endangered species may survive in the future.

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

2.1 Translocate at least 30 *Iguana delicatissima* from Forchue Island, St. Barths, to reinforce the colony on the Prickly Pear Cays, Anguilla (UNDERWAY): Although not scheduled until the second half of Year 2, the project team engaged in talks with the St. Barths environmental agency Agence Territoriale de l’Environnement (ATE) about sourcing 30 sub-adult Lesser Antillean iguanas. ATE agreed in principle to donating iguanas, but unfortunately discovered the bacterial disease *Devriesea agamarum* in some populations on St Barths. This debilitating disease, which was confirmed by tests at Ghent University, may make it too risky to take any iguanas from St Barths to Anguilla. While this is terrible news for St Barths, we still have time to source alternative stock from St Eustatius or Dominica. Project partner Durrell Wildlife Conservation Trust has been advising on health screening and is developing a grant proposal to the Morris Animal Foundation to further investigate the epidemiology of *D. agamarum*, to inform iguana conservation management in Anguilla and neighbouring islands.

2.6 Implement biosecurity surveillance and rapid response protocols to prevent incursions by harmful invasive alien species on priority islands (ONGOING): Trained field staff from the Anguilla National Trust conducted biosecurity checks on the Prickly Pear Cays (see report DPLUS060) and Dog Island in Q1 and Q2, including inspecting and maintain over 200 permanent bait stations to intercept rats. Happily, no signs of invasive alien rodents were detected on any of the three islands.

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

3.1 ANT staff and other participating nationals complete self-assessment competences questionnaires (COMPLETED): Seven staff completed a self-assessment questionnaire in May. The questionnaire described 75 competences from Appleton's (2016) *A Global Register of Competences for Protected Area Practitioners* that are relevant to this project and staff scored themselves from 1 ("Little or no knowledge: extensive training and development needed") to 4 ("High ability: could train and instruct others in this subject"). The results will inform training priorities and provide a baseline for measuring changes over the Darwin project.

3.2 Plan and undertake training and on-the-job mentoring of ANT staff and other nationals in applied conservation management (UNDERWAY): Project Coordinator Dr Louise Soanes was based in the Anguilla National Trust (ANT) office throughout Q1 and Q2, and helped to instruct and guide 10 local project team members and volunteers on wildlife survey planning and data analysis (particularly with reference to activities under 1.1). Dr Jenny Daltry provided further training on reptile survey methods, including taking four ANT staff to Great Bird Island, Antigua, in July (with FFI co-funding and support from the Environmental Awareness Group and Department of Environment, Antigua) to learn and practice methods for surveying and monitoring racer snakes, including capture, handling, measuring and tagging Antiguan racers (*Alsophis antiguae* CR). This experience greatly boosted the team's prowess at finding and catching Anguilla Bank racers for Activity 1.1. Also during this period, four ANT staff accompanied ATE (St Barths) in the field to advance their skills on iguana surveys, including learning how to taking mouth and cloacal swabs to test for disease.

3.3 Conduct public survey to evaluate knowledge, attitudes and behaviour towards endangered wildlife and climate change (UNDERWAY): 300 members of public completed questionnaires regarding Anguilla's endangered wildlife and climate change. The results will be analysed in Q3 to help inform, and monitor the impact of, the project's education and outreach activities.

3.4 Develop and implement an advocacy and public awareness campaign (ONGOING): A strategy for advocacy and awareness raising was drafted at the inception workshop in Q1 and an Endangered species information pamphlet was developed (and circulated to the over 100 members of the Anguilla Hotel and Tourism Association). To help inform and engage the public, the ANT circulated further information to all its members, supporters and the national newspaper about Anguilla's endangered terrestrial species, and called on members of the public to report sightings (and thereby assist Activity 1.1).

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 (ONGOING): The Project launch press release was circulated to Anguilla's radio and press media as well as on the ANT Facebook page. Staff also gave a presentation on the new project at the 4th Annual Caribaea Initiative Research and Conservation Conference, a large regional conference held in the Dominican Republic in Q1. In Q2, the Project Co-leader and Project Coordinator gave another presentation and participated in a climate change session at the Inter-Island Environment Meeting and Wilder Islands Conference, held in Alderney, Channel Islands.

Output X Project Management

X.1 Establish Project Steering Committee and meet quarterly (ONGOING): The Project Steering Committee was formed at the Inception Meeting in May to help plan and review the project. Members comprise representatives from FFI, ANT, Department of Environment, Department of Fisheries and Marine Resources, Durrell Wildlife Conservation Trust and Royal Society for the Protection of Birds.

X.2 Project inception meeting (COMPLETED): The Inception Meeting was held in May at the ANT office in The Valley, Anguilla. Participants included representatives from key government agencies (Department of Environment, Department of Fisheries and Marine Resources, Department of Physical Planning), the Anguilla Hotel and Tourism Association, FFI, and all the ANT staff.

X.3 Project biannual reports/ donor technical and financial reports (ONGOING): Completed reports include the first technical and financial report to John Ellerman Foundation and illustrated updates to private sponsors.

X.4 Monthly financial accounts (ONGOING): The Project maintains detailed accounts of spending each month, which are available for Darwin to review at any time.

2a. Give details of any notable problems or unexpected developments/lessons learnt that the project has encountered over the last 6 months. Explain what impact these could have on the project and whether the changes will affect the budget and timetable of project activities.

On a positive note, FFI secured additional co-funding during the reporting period, including a three-year grant from the Prince of Wales's Charitable Fund to restore Sombrero Island (this first time this fund has supported environmental work in a UKOT) and a two-year grant from the USFWS Neotropical Birds Conservation Act (focused on conserving the habitats of birds that migrate to or via Anguilla, but with complimentary aims to build conservation capacity and restore and improve the management of Anguilla's offshore islands). These funds do not affect the planned budget or timetable, but should help the project team to achieve some additional conservation targets and, importantly, enable work to continue beyond the end of the Darwin grant. Please let us know if you would like more information about the new grants.

2b. Have any of these issues been discussed with LTS International and if so, have changes been made to the original agreement?

Discussed with LTS: Yes/No

Formal change request submitted: Yes/No

Received confirmation of change acceptance Yes/No

3a. Do you currently expect to have any significant (e.g., more than £5,000) underspend in your budget for this year?

Yes No Estimated underspend: £

3b. If yes, then you need to consider your project budget needs carefully. Please remember that any funds agreed for this financial year are only available to the project in this financial year.

If you anticipate a significant underspend because of justifiable changes within the project, please submit a rebudget Change Request as soon as possible. There is no guarantee that Defra will agree a rebudget so please ensure you have enough time to make appropriate changes if necessary.

4. Are there any other issues you wish to raise relating to the project or to Darwin's management, monitoring, or financial procedures?

If you were asked to provide a response to this year's annual report review with your next half year report, please attach your response to this document. Additionally, if you were funded under R25 and asked to provide further information by your first half year report, please attach your response as a separate document.

Please note: Any planned modifications to your project schedule/workplan can be discussed in this report but **should also be raised with LTS International through a Change Request. **Please DO NOT send these in the same email.****

Please send your **completed report by email** to Darwin-Projects@ltsi.co.uk. The report should be between 2-3 pages maximum. **Please state your project reference number in the header of your email message e.g. Subject: 25-035 Darwin Half Year Report**