

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: 30th April 2021

Darwin Plus Project Information

Project reference	DPLUS121
Project title	Strengthening biosecurity to protect Turks & Caicos’ Iguana Islands
Territory(ies)	Turks & Caicos Islands
Lead organisation	Royal Society for the Protection of Birds (RSPB)
Partner institutions	Turks and Caicos National Trust (TCNT); Department of Environment and Coastal Resources (DECR); San Diego Zoo Wildlife Alliance (SDZWA); Department of Agriculture (DoA); Environmental Health Department (EHD); Pine Cay Homeowners Association (PCHA); Waterloo Investment Holdings Ltd (WIHL)
Grant value	£299,603
Start/end dates of project	01 July 2020 – 31 March 2024
Reporting period (e.g. Apr 2020-Mar 2021) and number (e.g. Annual Report 1, 2)	July 2020 – Mar 2021; AR1
Project Leader name	Sarah Havery
Project website/blog/social media	https://www.nationaltrust.tc/2020/09/23/saving-the-iguana-project
Report author(s) and date	Sarah Havery, Simon Busuttil, Glenn Gerber, Della Higgs. April 2021.

1. Project summary

The Turks & Caicos Islands (TCI) has one of the weakest biosecurity capacity of all UKOTs. This multi-sector collaborative project will strengthen biosecurity capacity across TCI, enhancing protection of the islands’ natural assets. Focussing on protecting the Critically Endangered TCI rock iguana, we will mitigate impact of invasive vertebrates and uncontrolled tourism across 11 islands; spanning two national parks and three privately-owned islands. Building on previous successes, this project represents the first attempt at holistic management for invasive vertebrates in the region.

Invasive species are one of the greatest threats to biodiversity in the UKOTs; and biosecurity controls that minimise the risk of new arrivals are the most effective way of reducing this threat. DPLUS055 set a strong foundation of cross-organisational partnership and improved local knowledge of biosecurity, with implementation of biosecurity on two Iguana Islands. Despite this, risks remain high; over the last 3 years there were three incursions of invasive rodents to Big Ambergris Cay, likely through transportation of building materials, and the 10-island Pine Cay complex now free of feral cats remain vulnerable to incursions due to proximity to Providenciales, the main gateway to TCI. The Pine Cay complex was free of rats following an eradication effort

in 2019, but efforts to respond to re-invasions of rats were hampered by the Covid-19 pandemic in 2020 and they have now established again. Because of DPLUS055, TCI partners now have a desire to further implement holistic biosecurity but have highlighted significant capacity gaps to achieve this ambition.

There has been significant previous investment from TCI partners, including funding the 2019 eradication of feral cats and attempted eradication of black rats, and committing to designating biosecurity staff; however further support is needed to meet the challenge to ensure these investments remain sustainable. If these issues are not addressed, the likelihood of further incursions of invasive species to iguana islands will increase and the positive benefits of the eradication rapidly lost.

The TCI partners have further highlighted urgent need to address uncontrolled tourism on Half Moon Bay, TCI's premier eco-destination. Over 20 unregulated tour operators use Half Moon Bay, resulting in rubbish entangling iguanas and poor etiquette, with people touching and feeding them.

2. Project stakeholders/partners

This project was fully devised following the DPLUS055 iguana conservation planning workshop in TCI in July 2019, where the Iguana Islands Partnership (all project partner institutions) and stakeholders agreed the priority actions needed for iguana conservation in TCI.

A project steering group, with the purpose of providing strategic direction and oversight of the project, has been established with two virtual meetings held since the start of the project (meeting notes and actions in Annex 3.2). The group, referred to as 'Iguana Islands Steering Committee', includes Director-level representation from the TCI Government departments and TCNT, as well as independent biosecurity expertise from GBNNSS and strategic oversight from RSPB. Wider Iguana Islands Partnership meetings are to be held three times per year with the first held in January 2021 (meeting notes in Annex 3.9). These wider meetings provide an information sharing platform across the whole partnership and act as a discussion forum open to all personnel involved in the project.

As a result of the Covid-19 travel restrictions, there have been no face to face meetings between the project partners during Year 1. The 2-month travel delay for the Biosecurity Advisor has also delayed engagement activities with the wider TCI project stakeholders, which include:

- TCI Ports Authority, Lew Shipping and Tropical Shipping: The project will provide these stakeholders with biosecurity training and awareness materials, and these stakeholders will support rodent control at the key ports on Providenciales.
- Tourism Board and Visit TCI: TCNT will work with them to develop the 'iguana friendly' voluntary code-of-conduct.
- There is no authority with oversight of tour operators in TCI. Big Blue (an eco-friendly tour operator) will assist TCNT with effectively engaging with all tour operators.

The work plan of the Biosecurity Advisor (Annex 3.8) includes relationship building with all project partners and stakeholders.

The GB Non-Native Species Secretariat (GBNNSS) Project Manager for their OT Biosecurity Project is a member of the steering group and has provided advice to RSPB on supporting the Department of Agriculture (DoA) with advancing biosecurity legislation.

Wildlife Management International Ltd (WMIL), who delivered the feral cat and rat eradication from the 10-island Pine Cay complex in 2019, have been contracted to provide technical input and advice and current plans are to deliver a thorough assessment of the 10-island Pine Cay complex in Year 2 Q3/Q4.

3. Project progress

3.1 Progress in carrying out project Activities

Site management has been maintained, though improvement has been slowed by the C-19 pandemic. Pine Cay has remained cat-free however it has been re-invaded by rats. Rat control has been initiated and a formal rat control plan drawn up by international experts (Annex 3.3). With the arrival of additional capacity on the islands with the Biosecurity Advisor, this will now be implemented on Pine Cay. Biosecurity checks on Little Water Cay have been maintained by TCNT staff, even during TCI's national lockdown. Since the start of the project there has been one clear sign of rats present on Little Water Cay, and an incursion response was implemented. We have been unable to continue biosecurity checks on the other seven islands in the 10-island Pine Cay complex due to the impact of C-19. However, with the arrival of the Biosecurity Advisor on the islands, these will be implemented shortly. Once we have a clear picture of where rats are currently present across the islands, an effective approach will be determined in YR2. Rat control has continued on Big Ambergris Cay and several rat incursions there have been successfully managed. As the pace of island development post C-19 increases, the risk of further incursions does so too. Rodent control has been taking place at all ports other than Heavin' Down rock where again, C-19 restrictions have prevented training events from taking place. A detailed *Casuarina* (Australian pine) management plan has been developed to support the Half Moon Bay stakeholder work. Removing invasive *Casuarina* is a key part of the site improvements to take place there.

The most significant progress towards **strengthening Biosecurity capacity** has been the recruitment of a suitable Biosecurity Advisor who arrived on island despite travel restrictions on April 9th. He will now start supporting organisations and individuals on the islands and developing training programs and supporting materials for use on the islands. Good progress has been made on strengthening the institutional capacity of TCNT. Stakeholder workshops have been held and both Strategic and operational plans have been developed and were signed off by TCNT Council in Dec 2020 and are being actively implemented by TCNT Management (see workshop report in Annex 3.7). The Operational Plan provides for enabling strengthened institutional capacity. A legal drafter has been contracted to support DoA with advancing biosecurity legislation, which has resulted in the production of a second draft of a national biosecurity policy which has gone out for wider consultation with TCI partners (Annex 3.4). Amendments to existing Ordinances and draft Regulations have also been proposed to include provisions for invasive species and biosecurity. They are currently being reviewed by DoA staff and will be advanced with a Cabinet Paper in Year 2. Elections were held in March 2021 which resulted in a change of government with the inevitable changes of personalities and institutions that involves. The project and importance of biosecurity has been communicated to the relevant Ministers via the TCI Government department partners and by the Governor. Several reports of invasive green iguanas on Providenciales have been dealt with by an incipient volunteer response team. One iguana has been caught and killed.

Covid 19 is currently preventing travel by international team members from SDZWA and appointed expert contractors from NZ and this has reduced progress on **understanding the ecological impacts** on the islands. Visits are now scheduled for later in 2021 and early 2022. Progress has been made on analysing blood samples as a baseline, taken from Iguanas during the eradication project in 2019 where brodifacoum was used. Of the 22 iguana plasma samples collected in 2019 and assayed for brodifacoum in 2021, six showed detectable levels (> 0.002 part per million [ppm]). In addition, we previously assayed three other samples collected in June 2019 from the same islands (2 from Lizard Cay, 1 from Bird Cay), using the same lab and methodology, as part of the previous Darwin Plus grant (DPLUS055). All three of these samples showed detectable levels. Two of these samples were collected from animals found dead less than one week following their capture and sample collection: a 710 g male from Bird Cay and a 395 g female from Lizard Cay. These assays were run first as part of a methodological test to ensure brodifacoum detectability. That is, failure to detect brodifacoum in plasma samples collected from animals later found dead would indicate a problem with our methodology. Thus, our methodology for brodifacoum detection was confirmed. Nonetheless, it is important to note that the two animals later found dead appeared healthy and showed no indication of poisoning at the time of capture and sampling. It is too soon to draw any conclusions yet aside from that

the methods being used are appropriate to be repeated in further years to determine toxin longevity in iguanas to inform future eradication projects and long-term management efforts.

In total, nine iguanas (36%, 5 males, 4 females) of the 25 iguanas sampled (13 males, 12 females) had detectable levels of brodifacoum in their plasma. These values ranged from 0.003 to 0.026 ppm (mean = 0.013 +/- a standard deviation [SD] of 0.009). The two animals found dead following their sampling and release had brodifacoum levels of 0.009 and 0.02 (mean = 0.015 +/- 0.008 SD) which did not differ significantly from other animals found to have detectable levels of brodifacoum in their plasma (mean = 0.012 +/- 0.010 SD). There were no significant differences in the sex, mass, or snout-vent length of animals sampled and later found dead versus other animals sampled and found to have detectable levels of brodifacoum in their plasma sample, nor between animals with and without detectable levels of brodifacoum in their plasma at the time of sampling.

It's possible the levels of brodifacoum assayed in samples collected from animals later found dead do not accurately reflect the levels present at the time of death as these two animals may have consumed or assimilated additional rodenticide between their capture/sampling and their time of death some hours to days following release. Further, it is possible additional animals sampled and released later died. Future sampling of these islands may allow us to confirm the survival of some of these animals.

There has been no significant progress with **increasing biosecurity awareness by tour and barge operators** to date. With the arrival of the Biosecurity Advisor on the islands this work is now expected to progress.

Despite international and inter-island travel restrictions the **project team and project partners** have kept in regular contact via video conferencing (see Section 2) and adapted the work programme in response to the pandemic.

3.2 Progress towards project Outputs

Overall, and common to all project outputs, whilst Covid-19 restrictions have significantly slowed progress towards several project outputs, the slow easing of international and inter-island travel restrictions will now allow the pace of change to increase e.g. the Biosecurity Advisor has now arrived on the islands. There is currently confidence that any delays can be compensated for and that all output will be fully achieved by project end.

Some biosecurity management is taking place on three of the ten islands in the Pine Cay complex (Pine Cay, Water Cay and Little Water Cay) and on Big Ambergris Cay and at all ports except Heavin' Down Rock.

Progress towards improving our understanding of the ecological impacts of recent IAS eradication efforts, to inform effective future island restoration/ biosecurity plans in TCI and across the region have been hampered by the inability to visit sites to collect updated data. Progress has been made on analysing blood samples collected in 2019 and we now have a baseline to compare to in future years. Plans have been made for visits (subject to further travel restrictions) in 2021 and 2022.

Some work to increase awareness of the threat from Green Iguanas becoming established on the islands has been done including the setting up of a hotline on which to report sightings.

The project has been managed and monitored effectively throughout with all timesheets, expenditure claims and project reports completed to standard.

3.3 Progress towards the project Outcome

The project outcome is **to increase biosecurity capacity and stakeholder commitment to safeguard the endemic Turks & Caicos rock iguana and its natural habitats**. As indicated above, progress towards this has been slowed by the impact of the C-19 pandemic. However, all indicators are that the project can catch up and the project outcome can be achieved. All

indicators remain relevant and when achieved will deliver the core outcome of the project. With the arrival of the planned additional capacity on the islands it is expected that the project can begin to close the gap on some of the delays that have occurred as a result of Covid-19 restrictions.

Indicators are;

- The 10-island Pine Cay complex remains cat-free and Big Ambergris Cay remains invasive-predator free throughout project and beyond, with rapid and effective responses delivered to invasive mammal incursions.
- Reduction in human impact on iguanas on Big Ambergris Cay through 50% reduction in iguana road mortalities by 2023.
- Improved capacity within TCI partners/stakeholders to lead biosecurity efforts collaboratively and independently by 2023.
- Increased biosecurity awareness shows greater compliance with biosecurity protocols from 10 tour operators using iguana islands by 2023.
- Number of iguanas are stable or increasing against baseline, across the 10-island Pine Cay complex and Big Ambergris Cay throughout project, with an increase in range through one re-introduction in 2021.
- Increased evidence of the benefits of invasive species eradication for iguanas, and regional recommendations for practitioners on multi-island eradications, and biosecurity for islands at high risk of reinvasion, produced by 2023.
- A national biosecurity policy is endorsed by the TCI Government and national biosecurity legislation is drafted and submitted to Cabinet for approval, with the support of at least one Minister.

If these indicators are achieved, then biosecurity capacity both on key individual sites and across TCI will have been increased with consequent benefits for the endemic rock iguanas.

3.4 Monitoring of assumptions

Assumption 1. TCI Government continue to see importance of biosecurity to TCI's native wildlife and related industries: Elections in March 2021 changed the government. All early signs are encouraging that the new Government retains the commitment to biosecurity.

Assumption 2. Tour operators and developers ready to engage in discussions about biosecurity: These parties will inevitably be focussed on recovery post C-19 and this may reduce their ability in the short-term to engage with the project.

Assumption 3. The 10-island eradication project is successful at removing all invasive mammalian predators: This assumption has not held true and the project has adapted accordingly. Rats have re-invaded at least the islands that have been monitored and have thus probably re-invaded all these islands. The project will now implement a control plan ie recognises that eradication, having failed, is unlikely to be successful if tried again.

Assumption 4. The project is not affected by extreme weather events such as hurricanes:
No change

Assumption 5. Private island management continue to engage with collaborative biosecurity efforts: Both privately owned islands are engaging with the project

Assumption 6. The economic impact of the global covid-19 pandemic does not impact TCI Government's ability to engage: TCI is slowly getting back to new normal. It is too early to gauge whether this has changed.

Assumption 7. Private island owners remain committed to developing biosecurity. We believe this holds true as two have committed own funds and to being partners of this project: No change.

Assumption 8. It remains possible for project staff to access all of the islands. This currently holds true due to equipment purchased in DPLUS055: Currently, access restrictions are easing.

Assumption 9. Government agencies are committed to inputting and approving management plans. The key agencies are project partners and are fully supportive of the project: No change at this point.

Assumption 10. Successful recruitment of appropriate candidates: Evidence so far is that this is achievable.

Assumption 11. TCI partners remain committed to addressing biosecurity capacity gaps, as demonstrated with hiring Biosecurity Officer for Pine Cay / Big Ambergris: No change.

Assumption 12. TCI Government continue to see importance of biosecurity to TCI's native wildlife and related industries: No change.

Assumption 13. Islands are accessible by project team: Restrictions are now being eased. There is currently no reason to think this will reverse.

Assumption 14. Specialist group members (volunteers) willing to engage.

Specialist groups are engaging eg the IUCN Iguana Specialist Group recently signed off the TCI Rock Iguana Conservation and Management Plan 2020 to 2024.

Assumption 15. Appropriate consultant available for ecological assessment: International travel restrictions are currently limiting the availability and ability to plan travel, but we believe these restrictions will be lifted and allow this to happen.

Assumption 16. Rat- and cat-free status of the 10-island Pine Cay complex is confirmed: Cat-free status is confirmed. Rats have re-invaded. Project moving to implement a control plan.

Assumption 17. An appropriate lab analysis of blood assays for rodenticide levels is available. We believe this will hold true as we have run some trail samples from DPLUS055 with a lab associated with the partners: This is available allowing analysis.

Assumption 18. Big Ambergris management remain supportive of the project and to continue commitment of co-funding. We believe this will hold true as they are listed as a partner on the project: No change.

Assumption 19. Tour operators, barge operators and other stakeholders ready to engage in further discussions about biosecurity, demonstrated by attendance to 2019 iguana planning workshop: No change.

Assumption 20. Tourism Board is in support of an accreditation scheme: No change.

Assumption 21. There is interest from tour operators for adopting an iguana friendly code of conduct: No change.

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

This project will support the UK's responsibilities under the Convention on Biological Diversity (CBD) Article 8(h) on alien species; Article 12 on research and training; and Article 13 on public education and awareness. The project will deliver against Sustainable Development Goals 15 (Life on Land) and 17 (Partnerships).

The project will also deliver against the 25-Year Environment Plan (2018) target “to prevent human induced extinction or loss of known threatened species in England and the Overseas Territories”, and strategic priorities i (baseline data) and ii (invasive species) of the UK Government’s UK Overseas Territories Biodiversity Strategy (2010).

The project will deliver the priority conservation actions outlined in the Conservation and management plan for the Turks and Caicos rock iguana (2020-2024) published by the IUCN SSC Iguana Specialist Group (*in press*).

Additional TCI government priorities addressed are:

- Revised National Parks Ordinance (2016) through supporting management actions spanning across two national parks (Princess Alexandra Land & Sea National Park, Princess Alexandra Nature Reserve; Fort George Land & Sea National Park);
- The National Tourism Policy and Strategic Implementation Plan (2015);
- the Environmental Charter (2001) Principle 7 (To safeguard and restore native species, habitats and landscape features, and control or eradicate invasive species).

5. OPTIONAL: Consideration of gender equality issues

Our project team comprises 44% women, ranging from technical delivery of biosecurity and awareness raising to Director-level project steering support. 50% of the project steering group members are women.

Through DPLUS055 and the Pine Cay eradication project, women are starting to be seen in lead fieldwork and technical roles in TCI, which culturally is generally viewed as a man’s role. This project will continue to advance this movement and will assist with providing an inclusive environment where women can lead in fieldwork roles.

This project will also help start to address the challenge that conservation jobs in TCI are often not seen as a career, particularly in the NGO sector, and therefore can suffer from high staff turnover. The TCNT wardens on Little Water Cay are often from disadvantaged backgrounds, therefore this project will provide training and support to these roles.

Awareness raising materials for barge operators will be produced in different languages to prevent exclusion.

6. Monitoring and evaluation

The coordination of project monitoring and evaluation of the project is overseen by the project leader and comprises evaluations as follows:

- Project monitoring plan (updated quarterly) – Annex 3.1
- Steering group meetings (approximately 6-weekly) – Annex 3.2
- Iguana Island Partnership meetings (approximately 3 x per year) – Annex 3.9
- Internal RSPB project staff meetings & actions (approximately 6-weekly)
- Regular 1:1 meetings with Biosecurity Advisor (approximately 4-weekly)

Contracts or MoUs with the project partners have been established, indicating responsibility for the delivery of indicators.

The main change to the M&E plan from the initial proposal is a change in project management meetings to adapt to the current circumstances resulting from the pandemic, changing the annual face to face meetings to more regular virtual meetings.

Key monitoring areas and responsibilities:

1. Data collection across biosecurity monitoring and ecological impacts to inform management plans – TCNT, San Diego Zoo, Pine Cay and Big Ambergris Cay will all record biosecurity monitoring data, this will be collated by the Biosecurity Advisor and

will be stored centrally with DECR. A peer review paper will be produced to share lessons learnt.

2. Capacity Building – Achieved through appointing new staff, embedding the Biosecurity Advisor for coordination, training and learning by doing. Information will be collected and shared by each partner on their own staff records and training plans and outcomes.
3. Awareness Raising – TCNT will lead the awareness raising work and manage relations with operators. This will include designing questionnaires and implementing and analysing the feedback to report to the management team. Discussions led by TCNT with four operators and government officials will lead to drafts code of conduct and cabinet paper.

7. Lessons learnt

Covid-19 response restrictions delayed elements of the project and prevented international travel. The latter was identified as potentially weakening the bonds and relationships between the international project partners and therefore potentially the likely success of the project. This applied particularly where greater support and/or increased resources (e.g. the island-based Biosecurity Advisor) did not materialise as scheduled as a result.

The response was that greater efforts to maintain contact and to replace face-to-face contact with other forms of communication were made and means implemented. This appears to have been successful. Good contact and communications are essential whatever the circumstances and if extra effort needs to be made to balance externally induced change then this is a good investment.

The re-invasion by rats of Pine Cay in December 2019 was a disappointment for all parties. With advice from international experts, the project adapted management quickly from an incursion response to a control operation. Initially ad hoc, a formal agreed Control Plan has now been developed. This aspect of the project has highlighted the importance of quick adaptive management to externally-induced changes outside of our control, such as this rat re-invasion during the Covid-19 pandemic where an appropriate response could not be initiated due to international travel and inter-island travel being illegal at the time. Having internationally-recognised technical input on-hand enabled this speedy transition. The change was made more complex by the inability to travel internationally to support on-island staff who were dealing with the change.

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

Following the feedback received when the project was funded, the project was adapted where appropriate during the first change request in June/July 2020. The points and how they were addressed are detailed below:

0. ***It is not clear how the project would align with the CSSF biosecurity project:*** The Project Manager for the GBNNSS UKOTs Biosecurity Project is on the steering group for this project and will continue to support the direction of the project going forwards. They also provided advice to the project leader over Year 1 in terms of advancing the biosecurity legislation work, an outcome from the CSSF project that was completed in March 2020.
1. ***There may need to be an assessment of the likely ecological impact of the pesticide:*** The ecological impact of the rodenticide will depend on where and how it is being deployed and efforts to minimise non-target impacts will be included in all site specific planning. Through Output 3, this project will give us an indication on the ecological impact of the rodenticide used in the 2019 eradication on the iguanas through the blood assays work. The rodenticide used during this project will only be done so with the oversight of EHD and following the advice of international experts, including RSPB's Island Restoration Officer and Wildlife Management International Ltd from New Zealand. Efforts to follow responsible rodenticide use will be made during the project <https://www.thinkwildlife.org/code-of-best-practice/crru-code/>

2. **Output 4 on unregulated tour operators seems less well specified, and a less good fit with the main project aim (e.g. how is a code of conduct or persons touching iguanas relevant to biosecurity?):** Given the importance of tourism for TCI and that the iguana islands are key tourism areas, we felt that engaging operators in the management of key tourism sites was an essential component to implementing biosecurity. The approach is that biosecurity is incorporated into a wider suite of best practice principles and will therefore be included as part of the voluntary code of conduct i.e. regularly clean vessel, bait station on vessel etc. This approach with operators has been used elsewhere, such as in New Zealand, and is also being tried in the UK through the EU LIFE funded 'Biosecurity 4 Life' project.
3. **it remained unclear how the project would be sustained into the future in order to attain the desired outcome of predator-free status of the 10 islands involved:** During the June 2020 change request, we included the addition of Outcome Indicator: 'A national biosecurity policy is endorsed by the TCI Government and national biosecurity legislation is drafted and submitted to Cabinet for approval, with the support of at least one Minister' and associated actions. Achieving sustainability of short-term projects is a real challenge. This project benefits from building on from DPLUS055 and is working with a top-down approach, with activities such as advancing legislation and supporting the strategic development of TCNT; alongside a bottom-up approach, with activities such as training and equipment. We believe this is the most effective approach for embedding biosecurity capacity within key TCI partners in the long-term.
4. **Some means of verification (MoV) do not directly correspond with their indicators (e.g. the MoV for 1.3 can demonstrate agreement of a management plan but not its initiation):** The log frame was amended in the June 2020 change request to ensure the MoVs correspond with the relevant indicators.
5. **It is recommended that the number of people, disaggregated by gender, should be monitored and tracked (e.g. under indicator 2.5) as this will help to track who this project is engaging with:** The Biosecurity Advisor will be keeping a record of gender disaggregated data during the roll out of the training programme. We are determined to ensure gender equality in the project, as outlined in Section 5.

9. Other comments on progress not covered elsewhere

N/A

10. Sustainability and legacy

Biosecurity require long-term ongoing commitment, therefore achieving sustainability of short-term projects over 3-4 years is a difficult challenge. TCI are a widely spread archipelago with multiple pathways, meaning enforcement is also challenging. The pathways include a trade route from Florida – a state struggling with invasive species. It will be challenging and will take time to mainstream these measures into the day-to-day working of TCI partners/stakeholders; but is essential to prevent any further spread of invasive species.

This project benefits from building on a foundation set by DPLUS055 and is working with a top-down approach, with activities such as advancing biosecurity legislation and supporting the strategic development of TCNT; alongside a bottom-up approach, with activities such as providing training and equipment. We believe this is the most effective approach for embedding biosecurity capacity within key TCI partners for the long-term.

Despite struggling with the impacts of the Covid-19 pandemic, the partners have continued to demonstrate impressive support for the project, evidenced by what has still been achieved during this particularly difficult year, as outlined in the sections above. In addition to this, TCI partners have presented the project and need for biosecurity to the new Minister of Tourism, Agriculture, Fisheries, Heritage Religious Affairs and the Environment elected in in March 2021, who is supportive. Therefore, we have not needed to amend our planned exit strategy or project

Outcome because of the pandemic or recent changes in Government. RSPB also remains committed to long-term partnerships with TCI to help ensure sustainability.

There are three central pillars to achieving a sustainable legacy for this project and, despite the initial slow start to the project, progress has been made against all three of these core pillars in Year 1, as follows:

1. **building capacity within TCI partners:** The projects' focus on strengthening capacity within TCNT is already showing benefit, with the production of an updated strategic plan for the organisation and by capable staff being brought into the project team who will continue to develop throughout the project.
2. **Awareness raising and building community support:** TCNT have facilitated the inclusion of iguanas and the impacts of invasive species within the national school curriculum for the first time.
3. **Providing a legal framework for invasive species/biosecurity:** DoA are leading on advancing national biosecurity legislation which will provide a legal framework to addressing invasive species and biosecurity. This has resulted in the production of a second draft of a national biosecurity policy which has gone out for wider consultation with TCI partners (Annex 3.4). Amendments to existing Ordinances and draft Regulations have also been proposed to include provisions for invasive species and biosecurity. They are currently being reviewed by DoA staff and will be advanced with a Cabinet Paper in Year 2. This is being supported by the project via the contracted services of a legal drafter.

11. Darwin identity

The project and results of DPLUS055 were presented at the virtual IUCN Iguana Specialist Group meeting in November 2020.

The Darwin Initiative Logo is included with the Partners' logos on all partnership correspondence.

Mention of the project being Darwin funded is made by partners eg TCIG Department of Environmental Health mention "...as part of the 'Saving the Iguana Islands of the Turks & Caicos' a Darwin-funded project" on the Government's website [here](#) and that of the Turks and Caicos National Trust "Funded by the Darwin Initiative, this project is aiming to establish effective controls and biosecurity .. to provide safe havens for the amazing rock iguana" [here](#).

With the project-funded Biosecurity Advisor post now based in the Turks & Caicos Islands, greater profile will be generated.

12. Impact of COVID-19 on project delivery

Two change requests have been submitted in Year 1 due to the impact of the Covid-19 pandemic. This included an additional year extension to the project, taking the end date to the 31 March 2024.

TCI's economy depends heavily on tourism. With the travel restrictions seen around the world because of the covid-19 pandemic, unemployment in TCI is increasing, and our partners have faced redundancies and/or budget cuts. This project could not have come at a more critical time as the country starts to come out of lockdown and has been greatly received by the partnership. We increased the budget for TCNT staff in Year 1 to support them during this particularly difficult period and initiated a slow start to the project from July to enable this staffing support for TCNT.

The Turks & Caicos Islands' (TCI) opened its borders at the end of July 2020; however, it is still not possible for the international partners and contractors to travel to the Turks & Caicos Islands based on national and institutional advice. The decision was made by the project leader and partners to delay plans for international travel to Year 2, with the one exception being the recruited Biosecurity Advisor. They could travel as their circumstances are different to the rest of the project team as they are relocating to TCI from the UK, which complies with RSPB's current

overseas travel approval process. Despite best efforts however, this travel has also been delayed by 2 months (delayed from February to April 2021) due to flight cancellations resulting from the UK's current lockdown. This delay did mean they were able to receive their first dose of the vaccine before arriving in TCI, by which time most of the project team had also received their first dose.

The overall greatest impact of C-19 on the project was the lack of ability of the partners to respond to the rat incursions on Pine Cay effectively in 2020. This has resulted in the project having to adapt appropriately.

It is likely that some further minor changes are needed to adapt the project to changing circumstances but, fortunately, the outputs and associated activities of the logframe remain relevant and possible to deliver with the approved changes to the timeline and budget.

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 as indicated in the T&Cs.

14. Project expenditure

We have not yet received all financial information from project partners, so a complete detail of expenditure will follow in the expense claim for the fourth quarter of the project.

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

Project spend (indicative) in this financial year	2020/21 D+ Grant (£)	2020/21 Total actual D+ Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs				
Consultancy costs				
Overhead Costs				
Travel and subsistence				
Operating Costs				
Capital items				
Others (Please specify)				
TOTAL				

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>Impact</p> <p>The unique species and habitats of the Turks and Caicos Islands (TCI) are protected from invasive alien species and continue to provide critical nature based national development benefits into the future.</p>		<p>Awareness of the threat of green iguanas to the islands has been raised at Government level. Publicity around the issue and a hot-line to call if one is sighted have also been started.</p> <p>A start has been made on biosecurity capacity raising across the islands.</p> <p>Significant efforts are being made on Pine, Water and Little Water Cays.</p>	
<p>Outcome Increased biosecurity capacity and stakeholder commitment to safeguard the endemic Turks & Caicos rock iguana and its natural habitats.</p>	<p>0.1. The 10-island Pine Cay complex remains cat- free and Big Ambergris Cay remains invasive-predator free throughout project and beyond, with rapid and effective responses delivered to invasive mammal incursions.</p> <p>0.2. Reduction in human impact on iguanas on Big Ambergris Cay through 50% reduction in iguana road mortalities by 2023.</p> <p>0.3. Improved capacity within TCI partners/stakeholders to lead biosecurity efforts collaboratively and independently by 2023.</p>	<p>0.1 Pine Cay remains cat-free. Big Ambergris Cay has dealt effectively with several rat incursions though the risk of invasion remains high. A rapid response to sightings of green iguanas was effectively initiated.</p> <p>0.2 No progress in YR1. There have been far fewer visitors to BAC during 2020 so likely to have reflected fewer road kills but we have no data to support this.</p> <p>0.3 A Biosecurity Advisor has been recruited to coordinate project activities across the partnership in TCI (work plan in Annex 3.8) A institutional strengthening workshop was held in 2020 for TCNT, resulting in an updated strategy and plan for the organisation (workshop report in Annex 3.7).</p>	<p>0.1 Implement the formal rat control plan on Pine Cay and assess situation on remaining islands in 10-island complex</p> <p>0.2 Collect data on road kills on BAC in Year 2</p> <p>0.3 Biosecurity Advisor to identify, record and report on agreed project activities to improve capacity with stakeholders implemented across the islands. These include but are not limited to producing materials, carrying out staff development and training, developing broader awareness materials and giving</p>

Project summary	Measurable Indicators	Progress and Achievements April 2020 - March 2021	Actions required/planned for next period
	<p>0.4. Increased biosecurity awareness shows greater compliance with biosecurity protocols from 10 tour operators using iguana islands by 2023.</p> <p>0.5. Number of iguanas are stable or increasing against baseline, across the 10-island Pine Cay complex and Big Ambergris Cay throughout project, with an increase in range through one re-introduction in 2021.</p> <p>0.6. Increased evidence of the benefits of invasive species eradication for iguanas, and regional recommendations for practitioners on multi-island eradications, and biosecurity for islands at high risk of reinvasion, produced by 2023.</p>	<p>0.4 No progress In Year 1 due to C-19</p> <p>0.5 No progress in Year 1 due to C-19</p> <p>0.6 No progress as per project timeline.</p>	<p>presentations. Exactly what is acted on will depend on circumstance and need</p> <p>0.4 Biosecurity Advisor to i.) carry out initial baseline assessment, ii.) develop awareness and training plans and iii.) meet all stakeholders and iv.) begin implementation of agreed plans.</p> <p>At very least Biosecurity Advisor to meet all tour operators, carry out baseline assessment of their awareness of and commitment to biosecurity and identify how to increase both these. Exact means likely to include training courses, coaching but will be flexible to situation</p> <p>0.5 Collect iguana monitoring data in Year 2</p> <p>0.6 By end of year report on evidence generated over the year as a result of other project activities eg proposed project for Casuarina eradication at Half Moon Bay, new actions that improve biosecurity that have been implemented across islands</p>

Project summary	Measurable Indicators	Progress and Achievements April 2020 - March 2021	Actions required/planned for next period
	0.7 A national biosecurity policy is endorsed by the TCI Government and national biosecurity legislation is drafted and submitted to Cabinet for approval, with the support of at least one Minister.	0.7 A drafted Biosecurity Policy document for TCI has been drafted (Annex 3.4) and has been through consultation led by DoA. Amendments needed to existing Ordinances have been identified (table in Annex 3.5).	0.7 Drafted text will be produced to update existing Ordinances and draft Regulations to include provisions for invasive species and biosecurity by May 2021. A Cabinet paper will be submitted by end 2021.
<p>Output 1. Improved site management of the 10-island Pine Cay complex and Big Ambergris Cay to enhance protection of endemic TCI rock iguana.</p>	<p>1.1. Biosecurity checks completed across the 10-island Pine Cay complex and Big Ambergris Cay at least every 2 months throughout project.</p> <p>1.2. Rodent control initiated and enhanced at priority pathway points (key docks/ports) on Providenciales in 2021 to reduce rodent incursion risk for the 10-island Pine Cay complex and Big Ambergris Cay.</p> <p>1.3. A management plan is agreed and initiated by TCI partners for Half Moon Bay by end 2021.</p> <p>1.4. A management plan is agreed and implemented by TCI partners for Big Ambergris & Little Ambergris Cay by end 2022.</p> <p>1.5. The number of road kills of iguanas on Big Ambergris is reduced by 50% from the DPLUS055 baselines by the end of the project.</p>	<p>1.1 On Pine Cay Biosecurity checks are now replaced by ongoing rat control as rats have re-invaded the island. Ongoing reactive rat control is taking place on Big Ambergris Cay. Over the next year it is intended to strengthen the rigour of control on Pine Cay and the biosecurity protocols and checks on Big Ambergris Cay.</p> <p>1.2 Rodent control is taking place at Sth Dock on Providenciales. Also at all other sea and airports across islands including Sth Caicos. It is not yet taking place at Heavin' Down Rock. Over the next year we will look to strengthen these measures at key ports and introduce biosecurity checks at Heavin' Down Rock.</p> <p>1.3 A management plan for invasive Australian pine (Casuarina) has been developed this year. Over the next year the stakeholders at Half Moon Bay will be brought together and a Management Plan agreed and written.</p> <p>1.4 No progress made on this in Year 1, as per project timetable.</p> <p>1.5 C-19 has prevented visits to BAC this year and we do not know whether there is progress toward this target. There have been far fewer visitors to BAC during 2020 so likely to have reflected fewer road kills but we have no data to support this.</p>	

Project summary	Measurable Indicators	Progress and Achievements April 2020 - March 2021	Actions required/planned for next period
Activity 1.1 Biosecurity monitoring for rats and feral cats is completed monthly across the higher risk sites in the 10-island Pine Cay complex (Little Water Cay, Water Cay and Pine Cay).		Biosecurity monitoring for cats completed monthly on all three islands. None present. Rat control being carried out monthly on Pine Cay. Biosecurity checks being carried out on LWC weekly.	New rat control plan will be implemented on Pine Cay. Biosecurity checks will continue weekly on LWC and be extended to Water Cay. Biosecurity checks will be carried out on remaining 8 islands in the complex.
Activity 1.2 Biosecurity monitoring for rats is completed every 2 months across the lower risk sites in the 10-island Pine Cay complex (Mangrove, Donna, Fort George, Grouper, Lizard and Bird Cays and Star Island).		No checks currently being carried out on these 7 islands.	Checks will be implemented. Data recording and storing will be improved over Year 2 with the oversight of the Biosecurity Advisor and the establishment of a project sharepoint site.
1.3. Biosecurity monitoring for rats is completed monthly across Big Ambergris Cay.		No monitoring being carried out though incursion response measures are in place	Monthly checks to be implemented
1.4. Rodent control established at Heavin' Down Rock, the port that services Pine Cay, by Year 1 Q4 and maintained monthly throughout the project.		No control at present	Control to be implemented
1.5. Rodent control established at the South Dock extension, the port that services Big Ambergris Cay, by Year 1 Q4 and maintained monthly throughout the project.		Control is taking place within South Dock Port area though not part of port that serves BAC	Control to be extended to port area that serves BAC
1.6. Facilitate a stakeholder workshop on the management of Half Moon Bay with key output of an agreed management plan, including biosecurity, by end 2021.		Casuarina Management plan written	Stakeholder conversations to be followed by workshop
1.7. Facilitate a stakeholder workshop on the management of Big Ambergris Cay / Little Ambergris Cay with key output of an agreed management plan, including biosecurity, by end 2022.		No progress	Stakeholder workshop to be carried out
1.8. Signage installed, awareness materials circulated to homeowners and construction workers and vehicle speed restrictions enforced by Big Ambergris Cay management by end of the project.		No progress	Some progress to have been made in particular through stakeholder workshop
Output 2. Improved biosecurity capacity within TCI partners to implement effective biosecurity	2.1. Resources embedded within priority TCI partners/stakeholders	2.1 A Biosecurity Advisor has successfully been recruited to be based in TCI for 2 years	

Project summary	Measurable Indicators	Progress and Achievements April 2020 - March 2021	Actions required/planned for next period
<p>management across the 10-island Pine Cay complex, Big Ambergris Cay and at a national level.</p>	<p>through RSPB seconded post to build dedicated biosecurity capacity by Mar 2021.</p> <p>2.2. Three TCI partners have strengthened biosecurity capacity by 2022.</p> <p>2.3. Commitment from at least one TCI partner to establish permanent biosecurity role(s) by 2023.</p> <p>2.4. TCNT owned institutional strengthening plan, which will include biosecurity, in place by Dec 2020 and strengthened institutional capacity by Dec 2021.</p> <p>2.5. Training programme developed by mid-2021 for staff working on Little Water Cay, Big Ambergris Cay and other priority iguana sites with 6 training courses delivered and 20 newly trained staff by 2023.</p> <p>2.6. the 2018 UK Government capacity needs assessment repeated at end of project to demonstrate training impact.</p> <p>2.7. A national biosecurity policy is drafted and submitted to Cabinet by end 2021</p> <p>2.8. National biosecurity legislation is drafted and submitted to Cabinet for approval, with the support of at least one Minister, by the end of the project.</p>	<p>2.2 TCNT's Conservation Officer has maintained biosecurity efforts across Little Water Cay at existing levels. Further support is needed to strengthen biosecurity capacity in TCI partners.</p> <p>2.3 No progress as per project timeline</p> <p>2.4 TCNT institutional strengthening plan in place</p> <p>2.5 Training programme to be developed from April 2021 onwards</p> <p>2.6 To be carried out at end of project</p> <p>2.7 A second draft of TCI's Biosecurity Policy has been produced and has gone through a consultation led by DoA.</p> <p>2.8 Amendments needed to existing Ordinances and to draft Regulations have been identified to include provisions for invasive species and biosecurity (table in Annex 3.5).</p> <p>2.9 The Biosecurity Advisor has undergone green iguana control training in Florida with US-based expert. Rapid response equipment has been purchased.</p>	

Project summary	Measurable Indicators	Progress and Achievements April 2020 - March 2021	Actions required/planned for next period
	2.9. A green iguana rapid response volunteer team is established with five rapid response kits stored on the main inhabited islands by the end of the project.		
Activity 2.1. Recruit an experienced Biosecurity Officer in Year 1 to be seconded to TCNT by end March2021 for 2 years to coordinate biosecurity efforts, training, staff development support and project delivery across Iguana Islands Partnership within TCI.		A Biosecurity Advisor has successfully been recruited to be based in TCI for 2 years. Travel delays due to the Covid-19 pandemic resulted in a 2-month delay in arrival in TCI.	<i>Action completed</i>
Activity 2.2. Three dedicated biosecurity roles to be established for Little Water Cay, Pine Cay and Big Ambergris Cay by Year 2 Q4 with at least one post maintained beyond the end of the project.		TCNT's Conservation Officer has been responsible for continued biosecurity on Little Water Cay and Pine Cay has a full-time post leading rodent control. Due to the significant financial impacts of the Covid-19 pandemic on the project partners, limited progress has been made on Big Ambergris Cay and there is a need for additional staff support on Pine Cay.	Significant progress towards these three posts to be made in 21/22.
2.3. Facilitate workshop in Year 1 to establish an institutional strengthening plan for TCNT.		An online institutional strengthening workshop was held in 2020 and a strategy and operational plan was produced for TCNT (workshop report in Annex 3.7)	<i>Action completed</i>
2.4. Progress drafting of national biosecurity policy by YR2 Q2 and submit to Cabinet by end 2021.		A legal drafter has been contracted to support DoA with advancing biosecurity legislation. A second draft of the Biosecurity Policy has been produced (Annex 3.4) and has been through consultation led by DoA.	A Cabinet paper will be submitted by end 2021.
2.5. Progress drafting of national biosecurity legislation by YR2 Q4 and submit to Cabinet by the end of the project.		Amendments needed to existing Ordinances have been identified (table in Annex 3.5).	Drafted text will be produced to update existing Ordinances and draft Regulations to include provisions for

Project summary	Measurable Indicators	Progress and Achievements April 2020 - March 2021	Actions required/planned for next period
			invasive species and biosecurity by May 2021.
2.6. Produce biosecurity training materials and resources by end of March 2021.		Resources in two languages produced in draft. Full list of training materials agreed and materials for training kits purchased	Training kits to be completed by May 2021 and all materials to be produced by June 2021
2.7. Develop biosecurity training programme and schedule by integrating into existing staff induction/training programmes for Iguana Islands partners by Year 1 Q2.		No progress	Training programme to be drafted and first courses/units to have been carried out
2.8. Deliver six biosecurity training courses over 2 years to 20 staff and volunteers from 10 partner and stakeholders organisations.		No progress	At least three courses (50%) to be carried out
2.9. Complete a repeated biosecurity capacity needs assessment in Year 3 Q4 to assess improvements against UK Government 2019 and 2018 baseline reports.		Not applicable	Not applicable
Output 3. Improved understanding of the ecological impacts of recent IAS eradication efforts, to inform effective future island restoration/ biosecurity plans in TCI and across the region.	<p>3.1. Ecological assessment of the 10-island Pine Cay complex to confirm cat-free status and assess options for rodent control by end 2021.</p> <p>3.2. Two datasets of iguana surveys from the 10-island Pine Cay complex and two plant datasets from Little Water Cay and Pine Cay collected to monitor biological impact of the cat- and rat-eradication project delivered in 2019.</p> <p>3.3. Annual datasets and data analysis of iguanas and boas on Big Ambergris Cay to monitor impacts of ongoing development activities.</p> <p>3.4. Establish a baseline blood analysis of rodenticide impact on iguanas in YR1 and monitor annually to determine</p>	<p>3.1 Delayed to Year 2 Q3/Q4 due to Covid-19 travel restrictions</p> <p>3.2 Delayed to Year 2 Q3/Q4 due to Covid-19 travel restrictions</p> <p>3.3 Delayed to Year 2 Q3/Q4 due to Covid-19 travel restrictions</p> <p>3.4 Blood assays completed on samples taken in 2019 during the rat eradication project to act as the baseline against which further assays can be</p>	

Project summary	Measurable Indicators	Progress and Achievements April 2020 - March 2021	Actions required/planned for next period
	<p>toxin longevity in iguanas to inform future eradication projects and long-term management efforts.</p> <p>3.5. Translocation suitability plan produced by end-2021 and completion of an iguana reintroduction to Grouper Cay by the end of the project.</p>	<p>compared to in terms of levels of toxin present in iguanas following the 2019 operation.</p> <p>3.5 No progress</p>	
<p>3.1 Complete a thorough rodent and feral-cat assessment survey of the 10-island Pine Cay complex subject to the 2019 eradication effort to confirm feral cat-free status by mid-2021 and to establish an effective rodent control programme on Pine Cay.</p>		<p>Site visit by contractor delayed to Year 2 Q3/Q4 due to Covid-19 travel restrictions.</p> <p>Island management of Pine Cay has confirmed eradication effort has failed, therefore the project has shifted to focus on long-term control for rodents (plan in Annex 3.3) and biosecurity for feral cats.</p>	<p>Site visit by contractor</p>
<p>3.2 Complete two iguana surveys across the 10-island Pine Cay complex to obtain relative abundance and age structure to compare against baselines from DPLUS055 to assess impact of the 2019 eradication effort.</p>		<p>Delayed to Year 2 Q3/Q4 due to Covid-19 travel restrictions</p>	<p>Complete first sets of surveys in Year 2</p>
<p>3.3. Complete two plant surveys across Little Water Cay and Pine Cay to compare against baselines from DPLUS055 to assess impact of the 2019 eradication effort.</p>		<p>Delayed to Year 2 Q3/Q4 due to Covid-19 travel restrictions</p>	<p>Complete first sets of surveys in Year 2</p>
<p>3.4. Complete three annual iguana surveys on Big Ambergris Cay to compare against baselines from DPLUS055 to continue monitoring of development impacts.</p>		<p>Delayed to Year 2 Q3/Q4 due to Covid-19 travel restrictions</p>	<p>Complete first sets of surveys in Year 2</p>
<p>3.5 Complete boa monitoring to compare against baselines from DPLUS055 to continue monitoring of development impacts.</p>		<p>Delayed to Year 2 Q3/Q4 due to Covid-19 travel restrictions</p>	<p>Complete first sets of surveys in Year 2</p>
<p>3.5. Analyse iguana blood samples collected in 2019 from the 10-island Pine Cay complex during DPLUS055 and the 2019 eradication effort for a baseline rodenticide level.</p>		<p>Blood assays completed on 2019 samples providing a baseline</p>	<p><i>Completed</i></p>

Project summary	Measurable Indicators	Progress and Achievements April 2020 - March 2021	Actions required/planned for next period
3.6. Collect blood samples from a total of 30 iguanas per year and analyse blood samples to monitor rodenticide levels in iguanas against the 2019 baseline.		Delayed to Year 2 Q3/Q4 due to Covid-19 travel restrictions	Complete first sets of surveys in Year 2
3.7 Write a peer-review paper outlining the rodenticide results and recommendations for future eradications on islands with iguanas present.		No progress	For Year 3 as per project timeline
3.8. Produce a translocation plan for iguanas to Fort George and Grouper by mid-2021, in light of the results from 3.1.		No progress	Produce translocation plan
3.9. Complete re-introduction of iguanas to Grouper Cay by end of project following translocation plan (Action 3.9).		No progress	For Year 3 as per project timeline
<p>Output 4: Increased awareness of biodiversity, biosecurity and the impacts of invasive species resulting in improved/better managed tour & barge operator practices.</p>	<p>4.1. A baseline questionnaire survey on basic biosecurity practices of 100% tour/barge operators completed by end 2020 and repeated at end of project shows >50% have adopted new practices after a targeted public awareness campaign delivered 2021-22.</p> <p>4.2. 'Iguana friendly' voluntary code of conduct developed and agreed by the Tourism Board by end 2022 and 10 tour operators and barge operators sign up.</p> <p>4.3. Up to five tour companies expressing interest in signing up to a TCI Government-approved accreditation scheme, with voluntary agreement by five hotels to use only accredited operators for their guests by 2023.</p>	<p>4.1 Baseline questionnaire has been developed (see Annex 3.10). To be used with 100% barge/tour operators in year 2</p> <p>4.2 No progress in Year 1. A full draft to be developed and agreed by end Year 2.</p> <p>4.3 No progress in Yr 1. None necessarily expected in Year 2.</p>	

Project summary	Measurable Indicators	Progress and Achievements April 2020 - March 2021	Actions required/planned for next period
4.1. Design a repeated questionnaire survey on basic biosecurity practices and collect baseline data on 100% tour/berge operators in TCI by end 2021.		Questionnaire designed with input from professional social scientist (see Annex)	Questionnaires to have been presented to 100 % of barge/tour operators by end 2021
4.2. Develop an 'Iguana friendly' voluntary code-of-conduct with Tourism Board by end of 2021.		No progress	Draft to be developed and agreed with Tourism Board
4.3. Produce biosecurity awareness materials and resources, promoting 'Iguana friendly' code-of-conduct by Year 2 Q4.		No progress	Draft Iguana Friendly code-of-conduct developed by Year end
4.4. Deliver a targeted awareness campaign to tour & barge operators through meetings, workshops and events encouraging adoption of voluntary code-of-conduct.		No progress	AT least 50% of identified barge/tour operators to have been met by end Year
4.5. Hold meetings to obtain voluntary agreements from five hotels in TCI on only using operators who are adopting the 'Iguana friendly' code-of-conduct by the end of the project.		Not applicable	Not applicable
4.6. Repeat the questionnaire survey on basic biosecurity practices at the end of the project.		Not applicable	Not applicable
4.7. Write a report and present the results of the biosecurity awareness of tour/berge operators and recommendations to TCI Government in respect to a formalised		Not applicable	Not applicable
Output5: Project managed and monitored effectively.	<p>5.1 Project monitoring plan developed in first 3 months and reviewed quarterly.</p> <p>5.2 Regular communication maintained between the team; quarterly skype calls and annual visits and reports from managers.</p> <p>5.3 Annual face to face project meetings take action to address any challenges and maintain engagement of senior managers within project partners.</p>	<p>5.1 Project monitoring plan drafted and used to steer project.</p> <p>5.2 2 meetings held by iguana islands steering committee (Annex 3.2); one meeting held of the wider Iguana Islands partnership (Annex 3.3)</p> <p>5.3 Delayed to Year 2 Q3/Q4 due to Covid-19 travel restrictions</p>	<p>5.1 Quarterly review to continue throughout</p> <p>5.2 Regular steering committee and wider partnership meetings to continue</p> <p>5.3 Aim for F2F meetings in Year 2</p>

Project summary	Measurable Indicators	Progress and Achievements April 2020 - March 2021	Actions required/planned for next period
	5.4 Technical and financial reporting to RSPB and Darwin accurate and on time and to high standard.	5.4 Technical and financial reporting received from SDZWA on time. Some delays with receiving supporting financial paperwork from TCNT	5.4 Technical and financial reporting as per schedule laid out in contracts
5.1 In Year 1 Q2 develop and agree project monitoring plan and use it as a project management tool to monitor implementation progress.		A project monitoring plan has been drafted (Annex 3.1) and is used to guide the project.	The monitoring plan will be reviewed and updated quarterly.
5.2 Quarterly conference calls for core project team to plan forthcoming work schedule and to update on progress and challenges.		A project steering group has been established and 2 meetings have been held (meeting notes & actions in Annex 3.2). Wider Iguana Island Partnership meetings are to be held 3 times per year, one was held in January 2021 (Annex 3.3)	6-weekly project steering group meetings Iguana Islands Partnership meetings 3 times per year
5.3 Bi-annual internal (project team) technical and financial reporting to RSPB.		Technical and financial reporting received from SDZWA on time. Some delays with receiving supporting financial paperwork from TCNT	Technical and financial reporting as per schedule laid out in contracts. Support TCNT with financial reporting.
5.4 3x annual meeting of project team and management in TCI (Providenciales) just prior to the spring fieldwork session (March/April each year) for planning and sharing of data between all project partners from subsequent years.		Not been possible in Year 1 due to Covid-19 travel restrictions	Aim for F2F meetings in Year 2
5.5 Mid-term evaluation with project team.		<i>NA – as per project timeline</i>	To complete in Year 2 Q4
5.6 Complete end of project review and evaluation with project team in YR3 Q4		<i>NA – as per project timeline</i>	<i>NA – as per project timeline</i>

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 if you have any questions regarding this.

Project Summary	Measurable Indicators	Means of Verification	Important Assumptions
<p>Impact:</p> <p>The unique species and habitats of the Turks and Caicos Islands (TCI) are protected from invasive alien species and continue to provide critical nature based national development benefits into the future.</p> <p>(Max 30 words)</p>			
<p>Outcome:</p> <p>(Max 30 words)</p> <p>Increased biosecurity capacity and stakeholder commitment to safeguard the endemic Turks & Caicos rock iguana and its natural habitats.</p>	<p>0.1. The 10-island Pine Cay complex remains cat- free and Big Ambergris Cay remains invasive-predator free throughout project and beyond, with rapid and effective responses delivered to invasive mammal incursions.</p> <p>0.2. Reduction in human impact on iguanas on Big Ambergris Cay through 50% reduction in iguana road mortalities by 2023.</p> <p>0.3. Improved capacity within TCI partners/stakeholders to lead biosecurity efforts collaboratively and independently by 2023.</p> <p>0.4. Increased biosecurity awareness shows greater compliance with biosecurity protocols from 10 tour operators using iguana islands by 2023.</p> <p>0.5. Number of iguanas are stable or increasing against baseline, across the 10-island Pine Cay complex and Big Ambergris Cay throughout project, with an increase in range through one re-introduction in 2021.</p> <p>0.6. Increased evidence of the benefits of invasive species eradication for iguanas, and regional recommendations for practitioners on multi-island eradications, and biosecurity for islands at high risk of reinvasion, produced by 2023. 0.7 A national biosecurity policy is endorsed by the TCI Government</p>	<p>0.1.1. Quarterly biosecurity reports & incursion response reports for 10-island Pine Cay complex and Big Ambergris Cay</p> <p>0.2.1 Big Ambergris Cay management plan; photos of road mortality mitigation measures.</p> <p>0.2.2 Comparative reports on iguana road mortality on Big Ambergris against existing baselines.</p> <p>0.3.1. TCI partner staff work plans include leading biosecurity efforts and stakeholder training.</p> <p>0.3.2. Repeated capacity assessment report against 2018 UK Government baseline.</p> <p>0.3.3. Cabinet paper to TCI Government for addressing biosecurity capacity gaps.</p> <p>0.4.1. Half Moon Bay management plan</p> <p>0.4.2 MOU/agreement with Tourism Board for voluntary ‘Iguana Friendly’ code of conduct scheme</p> <p>0.4.3. Repeated assessment report of barge/tour operator biosecurity practices.</p>	<p>TCI Government continue to see importance of biosecurity to TCI’s native wildlife and related industries.</p> <p>Tour operators and developers ready to engage in discussions about biosecurity.</p> <p>The 10-island eradication project is successful at removing all invasive mammalian predators.</p> <p>The project is not affected by extreme weather events such as hurricanes.</p> <p>Private island management continue to engage with collaborative biosecurity efforts</p> <p>The economic impact of the global covid-19 pandemic</p>

	and national biosecurity legislation is drafted and submitted to Cabinet for approval, with the support of at least one Minister.	<p>0.4.4. Report to TCI Government with results of voluntary tour operator code of conduct outlining recommendations on formalising an accreditation scheme.</p> <p>0.5.1. Report on iguana populations numbers.</p> <p>0.5.2. Translocation plan for Grouper Cay.</p> <p>0.5.3. Progress update report against IUCN SSC Species Action Plan for TCI rock iguana.</p> <p>0.6.1. Recommendations paper submitted to IUCN Iguana Specialist Group, Invasive Species Specialist Group and regional group.</p> <p>0.7.1 TCI Government National Biosecurity Policy document</p> <p>0.7.2 Draft National Biosecurity Legislation & Cabinet submission statement</p>	does not impact TCI Government's ability to engage
<p>Outputs:</p> <p>1. Improved site management of the 10-island Pine Cay complex and Big Ambergris Cay to enhance protection of endemic TCI rock iguana.</p>	<p>1.1. Biosecurity checks completed across the 10-island Pine Cay complex and Big Ambergris Cay at least every 2 months throughout project.</p> <p>1.2. Rodent control initiated and enhanced at priority pathway points (key docks/ports) on Providenciales in 2021 to reduce rodent incursion risk for the 10-island Pine Cay complex and Big Ambergris Cay.</p> <p>1.3. A management plan is agreed and initiated by TCI partners for Half Moon Bay by end 2021.</p> <p>1.4. A management plan is agreed and implemented by TCI partners for Big Ambergris & Little Ambergris Cay by end 2022.</p> <p>1.5. The number of road kills of iguanas on Big Ambergris is reduced by 50% from the DPLUS055 baselines by the end of the project.</p>	<p>1.1.1 Records of biosecurity checks through quarterly datasheets, reports.</p> <p>1.2.1 Training materials, monitoring schedule, staff timesheets, data records.</p> <p>1.3.1 Management plan signed off by TCI Government/TCNT council for Half Moon Bay.</p> <p>1.4.1 Agenda, workshop report and management plan for Big Ambergris & Little Ambergris Cay; Signed MoU between TCI partners for management of Big Ambergris & Little Ambergris Cay.</p> <p>1.5.1 Data and comparative reports to existing baselines on iguana road kills on Big Ambergris Cay.</p>	<p>Private island owners remain committed to developing biosecurity. We believe this holds true as two have committed own funds and to being partners of this project.</p> <p>It remains possible for project staff to access all of the islands. This currently holds true due to equipment purchased in DPLUS055.</p> <p>Government agencies are committed to inputting and approving management plans. The key agencies are project partners and are fully supportive of the project.</p>

<p>2. Improved biosecurity capacity within TCI partners to implement effective biosecurity management across the 10-island Pine Cay complex, Big Ambergris Cay and at a national level.</p>	<p>2.1. Resources embedded within priority TCI partners/stakeholders through RSPB seconded post to build dedicated biosecurity capacity by Mar 2021.</p> <p>2.2. Three TCI partners have strengthened biosecurity capacity by 2022.</p> <p>2.3. Commitment from at least one TCI partner to establish permanent biosecurity role(s) by 2023.</p> <p>2.4. TCNT owned institutional strengthening plan, which will include biosecurity, in place by Dec 2020 and strengthened institutional capacity by Dec 2021.</p> <p>2.5. Training programme developed by mid-2021 for staff working on Little Water Cay, Big Ambergris Cay and other priority iguana sites with 6 training courses delivered and 20 newly trained staff by 2023.</p> <p>2.6. the 2018 UK Government capacity needs assessment repeated at end of project to demonstrate training impact.</p> <p>2.7. A national biosecurity policy is drafted and submitted to Cabinet by end 2021</p> <p>2.8. National biosecurity legislation is drafted and submitted to Cabinet for approval, with the support of at least one Minister, by the end of the project.</p> <p>2.9. A green iguana rapid response volunteer team is established with five rapid response kits stored on the main inhabited islands by the end of the project.</p>	<p>2.1.1 Staff in posts, contracts. Work programmes.</p> <p>2.2.1 Contracts for new staff, work programmes.</p> <p>2.3.1 Letter/MOU from TCI partner(s), biosecurity job description.</p> <p>2.4.1 Agenda for strengthening workshop; signed attendee list.</p> <p>2.4.2 Cabinet update paper on TCNT institutional strengthening plan; agenda and outcomes document from Strategic Operational Planning workshop.</p> <p>2.5.1 Training materials, training programme schedules, attendance lists, feedback forms, photographs, biosecurity-inclusive work plans.</p> <p>2.5.2 Biosecurity code of practice (CoP) cabinet paper, cabinet meeting minutes approving CoP.</p> <p>2.6.1. TCI biosecurity capacity assessment report.</p> <p>2.7.1 Biosecurity policy document, Cabinet paper</p> <p>2.8.1 Biosecurity legislation document, Cabinet paper, briefings, Ministerial letter of support.</p> <p>2.9.1 Signed volunteer agreements of green iguana rapid responders, photographs of rapid response kits</p> <p>2.9.2 Reports of responses delivered to green iguana sightings within a database</p>	<p>Successful recruitment of appropriate candidates.</p> <p>TCI partners remain committed to addressing biosecurity capacity gaps, as demonstrated with hiring Biosecurity Officer for Pine Cay / Big Ambergris.</p> <p>TCI Government continue to see importance of biosecurity to TCI's native wildlife and related industries.</p>
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<p>3. Improved understanding of the ecological impacts of recent IAS eradication efforts, to inform effective future island restoration/ biosecurity plans in TCI and across the region.</p>	<p>3.1. Ecological assessment of the 10-island Pine Cay complex to confirm cat-free status and assess options for rodent control by end 2021.</p> <p>3.2. Two datasets of iguana surveys from the 10-island Pine Cay complex and two plant datasets from Little Water Cay and Pine Cay collected to monitor biological impact of the cat- and rat-eradication project delivered in 2019.</p> <p>3.3. Annual datasets and data analysis of iguanas and boas on Big Ambergris Cay to monitor impacts of ongoing development activities.</p> <p>3.4. Establish a baseline blood analysis of rodenticide impact on iguanas in YR1 and monitor annually to determine toxin longevity in iguanas to inform future eradication projects and long-term management efforts.</p> <p>3.5. Translocation suitability plan produced by end-2021 and completion of an iguana reintroduction to Grouper Cay by the end of the project.</p>	<p>3.1.1 Final technical report publication reviewing Pine Cay eradication project, Photographs</p> <p>3.2.1 Iguana & plant database owned by TCIG, reports</p> <p>3.3.1 Iguana & boa databases; reports</p> <p>3.4.1 Report on blood analysis outlining management recommendations</p> <p>3.5.1 Plan document, photograph, iguana database, translocation report</p>	<p>Islands are accessible by project team.</p> <p>Specialist group members (volunteers) willing to engage.</p> <p>Appropriate consultant available for ecological assessment.</p> <p>Rat- and cat-free status of the 10-island Pine Cay complex is confirmed.</p> <p>An appropriate lab analysis of blood assays for rodenticide levels is available. We believe this will hold true as we have run some trail samples from DPLUS055 with a lab associated with the partners.</p> <p>Big Ambergris management remain supportive of the project and to continue commitment of cofunding. We believe this will hold true as they are listed as a partner on the project.</p>
<p>4. Increased awareness of biodiversity, biosecurity and the impacts of invasive species resulting in improved/better managed tour & barge operator practices.</p>	<p>4.1. A baseline questionnaire survey on basic biosecurity practices of 100% tour/barge operators completed by end 2020 and repeated at end of project shows >50% have adopted new practices after a targeted public awareness campaign delivered 2021-22.</p> <p>4.2. 'Iguana friendly' voluntary code of conduct developed and agreed by the Tourism Board by end</p>	<p>4.1.1 Questionnaire surveys, data analysis report. Posters, radio sessions, tv advertisements, Leaflets, photographs of meetings</p> <p>4.2.1 Signed voluntary agreements, protocol for sign up to voluntary scheme.</p>	<p>Tour operators, barge operators and other stakeholders ready to engage in further discussions about biosecurity, demonstrated by attendance to 2019 iguana planning workshop.</p>

	<p>2022 and 10 tour operators and barge operators signup.</p> <p>4.3. Up to five tour companies expressing interest in signing up to a TCI Government-approved accreditation scheme, with voluntary agreement by five hotels to use only accredited operators for their guests by 2023.</p>	<p>4.3.1. Cabinet paper submitted with recommendations for accreditation scheme.</p> <p>4.3.2. Records of interest from tour companies and hotel agreement letters/MoUs.</p>	<p>Tourism Board is in support of an accreditation scheme.</p> <p>There is interest from tour operators for adopting an iguana friendly code of conduct.</p>
<p>5. Project managed and monitored effectively.</p>	<p>5.1 Project monitoring plan developed in first 3 months and reviewed quarterly.</p> <p>5.2 Regular communication maintained between the team; quarterly skype calls and annual visits and reports from managers.</p> <p>5.3 Annual face to face project meetings take action to address any challenges and maintain engagement of senior managers within project partners.</p> <p>5.4 Technical and financial reporting to RSPB and Darwin accurate and on time and to high standard.</p>	<p>5.1 Monitoring plan and quarterly updates.</p> <p>5.2 Skype meeting minutes and project manager's reports.</p> <p>5.3 Meeting action points completed, attendance list for annual meetings.</p> <p>5.4 Technical and financial reports and approval notes from Darwin.</p>	
<p>Activities (each activity is numbered according to the Output that it will contribute towards, for example 1.1, 1.2 and 1.3 are contributing to Output 1)</p> <p>1. Improving site management</p> <p>1.1. Biosecurity monitoring for rats and feral cats is completed monthly across the higher risk sites in the 10-island Pine Cay complex (Little Water Cay, Water Cay and Pine Cay).</p> <p>1.2. Biosecurity monitoring for rats is completed every 2 months across the lower risk sites in the 10-island Pine Cay complex (Mangrove, Donna, Fort George, Grouper, Lizard and Bird Cays and Star Island).</p> <p>1.3. Biosecurity monitoring for rats is completed monthly across Big Ambergris Cay.</p> <p>1.4. Rodent control established at Heavin' Down Rock, the port that services Pine Cay, by Year 1 Q4 and maintained monthly throughout the project.</p> <p>1.5. Rodent control established at the South Dock extension, the port that services Big Ambergris Cay, by Year 1 Q4 and maintained monthly throughout the project.</p> <p>1.6. Facilitate a stakeholder workshop on the management of Half Moon Bay with key output of an agreed management plan, including biosecurity, by end 2021.</p> <p>1.7. Facilitate a stakeholder workshop on the management of Big Ambergris Cay / Little Ambergris Cay with key output of an agreed management plan, including biosecurity, by end 2022.</p> <p>1.8. Signage installed, awareness materials circulated to homeowners and construction workers and vehicle speed restrictions enforced by Big Ambergris Cay management by end of the project.</p>			

2. Building biosecurity capacity

- 2.1. Recruit an experienced Biosecurity Officer in Year 1 to be seconded to TCNT by end March 2021 for 2 years to coordinate biosecurity efforts, training, staff development support and project delivery across Iguana Islands Partnership within TCI.
- 2.2. Three dedicated biosecurity roles to be established for Little Water Cay, Pine Cay and Big Ambergris Cay by Year 2 Q4 with at least one post maintained beyond the end of the project.
- 2.3. Facilitate workshop in Year 1 to establish an institutional strengthening plan for TCNT.
- 2.4. Progress drafting of national biosecurity policy by YR2 Q2 and submit to Cabinet by end 2021.
- 2.5. Progress drafting of national biosecurity legislation by YR2 Q4 and submit to Cabinet by the end of the project.
- 2.6. Produce biosecurity training materials and resources by end of March 2021.
- 2.7. Develop biosecurity training programme and schedule by integrating into existing staff induction/training programmes for Iguana Islands partners by Year 1 Q2.
- 2.8. Deliver six biosecurity training courses over 2 years to 20 staff and volunteers from 10 partner and stakeholders organisations.
- 2.9. Establish a green iguana response network through training a volunteer response team and establishing five green iguana incursion response kits across the main inhabited islands in TCI by the end of YR2
- 2.8. In Year 3 and beyond the project, biosecurity training led by key DECR/TCNT/EHD staff for specialised roles across the Iguana Islands Partnership.
- 2.9. Complete a repeated biosecurity capacity needs assessment in Year 3 Q4 to assess improvements against UK Government 2019 and 2018 baseline reports.

3. Understanding ecological impacts

- 3.1 Complete a thorough rodent and feral-cat assessment survey of the 10-island Pine Cay complex subject to the 2019 eradication effort to confirm feral cat-free status by mid-2021 and to establish an effective rodent control programme on Pine Cay.
- 3.2 Complete two iguana surveys across the 10-island Pine Cay complex to obtain relative abundance and age structure to compare against baselines from DPLUS055 to assess impact of the 2019 eradication effort.
- 3.3. Complete two plant surveys across Little Water Cay and Pine Cay to compare against baselines from DPLUS055 to assess impact of the 2019 eradication effort.
- 3.4. Complete three annual iguana surveys on Big Ambergris Cay to compare against baselines from DPLUS055 to continue monitoring of development impacts.
- 3.5 Complete boa monitoring to compare against baselines from DPLUS055 to continue monitoring of development impacts.
- 3.5. Analyse iguana blood samples collected in 2019 from the 10-island Pine Cay complex during DPLUS055 and the 2019 eradication effort for a baseline rodenticide level.
- 3.6. Collect blood samples from a total of 30 iguanas per year and analyse blood samples to monitor rodenticide levels in iguanas against the 2019 baseline.
- 3.7 Write a peer-review paper outlining the rodenticide results and recommendations for future eradications on islands with iguanas present.

3.8. Produce a translocation plan for iguanas to Fort George and Grouper by mid-2021, in light of the results from 3.1.

3.9. Complete re-introduction of iguanas to Grouper Cay by end of project following translocation plan (Action 3.9).

4. Increased biosecurity awareness by tour and barge operators.

4.1. Design a repeated questionnaire survey on basic biosecurity practices and collect baseline data on 100% tour/barge operators in TCI by end 2021.

4.2. Develop an 'Iguana friendly' voluntary code-of-conduct with Tourism Board by end of 2021.

4.3. Produce biosecurity awareness materials and resources, promoting 'Iguana friendly' code-of-conduct by Year 2 Q4.

4.4. Deliver a targeted awareness campaign to tour & barge operators through meetings, workshops and events encouraging adoption of voluntary code-of-conduct.

4.5. Hold meetings to obtain voluntary agreements from five hotels in TCI on only using operators who are adopting the 'Iguana friendly' code-of-conduct by the end of the project.

4.6. Repeat the questionnaire survey on basic biosecurity practices at the end of the project.

4.7. Write a report and present the results of the biosecurity awareness of tour/barge operators and recommendations to TCI Government in respect to a formalised accreditation scheme by the end of the project.

5. Project management

5.1 In Year 1 Q2 develop and agree project monitoring plan and use it as a project management tool to monitor implementation progress.

5.2 Quarterly conference calls for core project team to plan forthcoming work schedule and to update on progress and challenges

5.3 Bi-annual internal (project team) technical and financial reporting to RSPB.

5.4 3x annual meeting of project team and management in TCI (Providenciales) just prior to the spring fieldwork session (March/April each year) for planning and sharing of data between all project partners from subsequent years.

5.5 Mid-term evaluation with project team.

5.6 Complete end of project review and evaluation with project team in YR3 Q4.

Annex 3 Onwards – supplementary material (optional but encouraged as evidence of project achievement)

Annex 3.1: Project monitoring plan

Annex 3.2: Project steering group meeting notes and actions

Annex 3.3: Pine Cay rodent control plan document

Annex 3.4: Draft 2 of Biosecurity Policy

Annex 3.5: Table of identified needs for Ordinance and Regulations updates

Annex 3.6: Biosecurity training plan

Annex 3.7: TCNT institutional strengthening workshop report

Annex 3.8: Biosecurity Advisor work plan

Annex 3.9: Iguana Islands Partnership meeting agenda, notes and actions

Annex 3.10: Draft biosecurity questionnaire

Annex 3.11: TCNT biosecurity data

Annex 3.12: Photographs of project activities

Checklist for submission

	Check
Is the report less than 10MB? If so, please email to Darwin-Projects@ltsi.co.uk putting the project number in the Subject line.	Yes
Is your report more than 10MB? If so, please discuss with Darwin-Projects@ltsi.co.uk about the best way to deliver the report, putting the project number in the Subject line.	No
Have you included means of verification? You should not submit every project document, but the main outputs and a selection of the others would strengthen the report.	Yes
Do you have hard copies of material you need to submit with the report? If so, please make this clear in the covering email and ensure all material is marked with the project number. However, we would expect that most material will now be electronic.	No
Have you involved your partners in preparation of the report and named the main contributors	Yes
Have you completed the Project Expenditure table fully?	No
Do not include claim forms or other communications with this report.	