



Darwin Plus: Final Report

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

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

Submission Deadline: no later than 3 months after agreed end date.

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

Darwin Plus Project Information

Project reference	DPLUS121
Project title	Strengthening Biosecurity to Protect Turks & Caicos’ Iguana Islands
Territory(ies)	Turks & Caicos Islands
Lead Organisation	RSPB
Project partner(s)	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)
Darwin Plus Grant value	£299,603
Start/end date of project	01 July 2020 – 31 March 2024
Project Leader name	Joe [REDACTED]
Project website/Twitter/blog etc.	n/a
Report author(s) and date	Joe [REDACTED], Simon [REDACTED] <i>with input from</i> Glenn [REDACTED], Giuliano [REDACTED], Graham [REDACTED], June 2024

1 Project Summary

The Turks & Caicos Islands (TCI) has one of the weakest biosecurity capacities of all UKOTs¹. This multi-sector collaborative project is aimed to strengthen biosecurity capacity across TCI, enhancing protection of the islands’ natural assets. Focussing on the high profile and well-known Endangered TCI Rock Iguana, seeking to mitigate the impact of invasive vertebrates and plants and uncontrolled tourism across 11 islands: spanning three national parks and three privately-owned islands (fig 1). Building on previous successes, this project represented 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,

¹ As identified by GBNNSS https://www.nonnativespecies.org/assets/Document-repository/OT_Biosecurity_project_report_2020-2.pdf

risks remained high; between 2016 and 2019 there were three incursions of invasive rodents to Big Ambergris Cay.

Following DPLUS055, TCI partners had a desire to further implement holistic biosecurity and highlighted significant capacity gaps to achieve this ambition.

There has been significant previous investment from TCI partners, including funding the Pine Cay cat and rat* eradication and committing to designating biosecurity staff; however further support was needed to meet the challenge to ensure these investments remained sustainable.

TCI partners had 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.

*Unfortunately, prior to project start in 2020, the rat eradication was confirmed to have failed and therefore the focus of the project to implement effective biosecurity on the Pine Cay complex was adapted to implement an effective rodent suppression strategy ([Lessons learnt](#)).

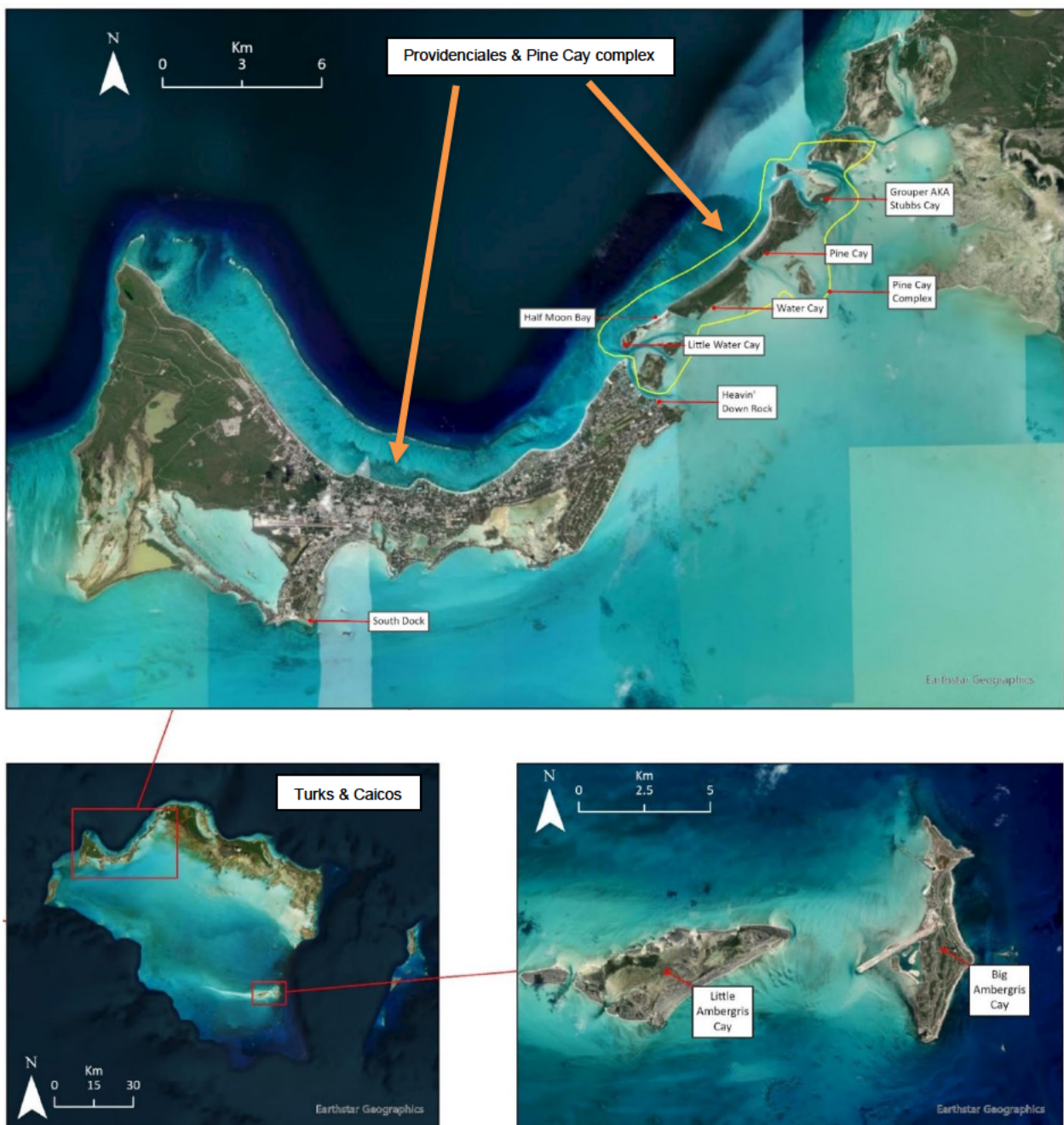


Figure 1 map showing project area - the "iguana islands"

2 Project Partnerships

This project was fully devised following the DPLUS055 iguana conservation planning workshop in TCI in July 2019, where the Iguana Islands Partnership (made up of all project partner institutions) and stakeholders agreed the priority actions needed for iguana conservation in TCI. The partnership includes local and international NGOs, local government, and private islands.

The partners to the project are:

- **The Turks & Caicos National Trust (TCNT)** is a non-profit organisation established in 1992 to protect, conserve and promote the cultural, historic and natural heritage of the Turks and Caicos Islands. TCNT is responsible for the management of a suite of natural and cultural heritage sites in TCI, including two Iguana Islands, Little Water Cay & Little Ambergris Cay.
- **TCI Government departments including The Department of Environment and Coastal Resources (DECR), The Department of Agriculture (DoA) and The Environmental Health Department (EHD)** Provide relevant oversight of operations, awareness raising of key issues and coordination at key sites i.e. DECR is the management authority for four Iguana Islands within the Protected Areas network included in this project (Mangrove, Donna, Lizard and Bird Cays), and for the island for iguana re-introduction, Grouper Cay. DoA in particular have played a crucial role in driving forward the amendments to and eventual passing of the Animal and Plant Health Ordinances ([Output 2](#)).
- **The Pine Cay Homeowners Association (PCHA)** is the management authority for the privately-owned Iguana Island Pine Cay, and oversees the *Meridian Club*, the hotel responsible for the running of the island.
- **Waterloo Investment Holdings Ltd (WIHL)** are the investment company responsible for the management of Big Ambergris Cay – the most important TCI Iguana Island in the world.
- **San Diego Zoo Global (SDWZA)** is the largest zoo-based conservation organisation in the world and has been a leader in the conservation and research of Caribbean iguanas for 25 years. SDWZA lead the iguana and boa data collection and analysis and monitoring of the biological impacts of the 2019 Pine Cay feral cat/rat eradication.
- **Wildlife Management International (WMIL)** continued to provide advice to the partnership especially in the early days of the project when it was evident the rodent eradication had been unsuccessful.
- **RSPB** is the project lead. RSPB has been working with the OTs for over 25 years. The underlying principle of our work is to establish enduring relationships with local partners in order to help support the development of sustainable and locally-lead conservation programmes. The UK Overseas Territories are a major strategic priority for the RSPB, and we have a track record of successful project delivery in the OTs with Darwin. RSPB is responsible for project/grant administration and overall management and leads the drafting and submission of this, and all project reports.

Partners have had sight of this report and given opportunity to input. A final iguana partnership meeting is expected to take place in mid-2024 to discuss the outcomes of this project.

The above 'core' partnership has grown (informally) during the course of the project. This includes:

- **Visit TCI** In particular, co-founder Agile Levin has been a valuable asset to the completion of a number of field activities during this project, not least the removal of Australian Pine (*Casuarina equisetifolia*) from Half Moon Bay As well as continuing to advocate for responsible tourism for iguanas and educating tourists on this Endangered species via their [website](#).
- **South Bank Marina** Have financially and logistically supported storage and maintenance of the SDZWA boat used for access to Little Water Cay and Half Moon Bay over the project lifetime

- **Turks & Caicos Society for the Prevention of Cruelty to Animals (TCSPCA)** Advised on humane and legal methods for capture and euthanasia of feral cats and Green Iguanas
- Tour operators supporting the voluntary iguana code of conduct ([Output 4](#)) include three of the largest four companies plus some smaller operators: **Caicos Dream Tours, Big Blue Collective, Caribbean Cruisin', Island Vibes, Ocean Vibes** and **Caicos Catalyst**.

There is a clear commitment from all key partners to continue the partnership post project end. Partners such as Pine Cay have expressed interest in developing broader work programs, such as supporting the removal of *Casuarina* from the island and there is also potential for the partnership to grow, with the former Pine Cay biosecurity officer now working on Parrot Cay, a private island to the north of Pine Cay ([Sustainability and legacy](#)). The end-of-project meeting to be held in 2024 will formalise this.

As a result of strategic review, SDWZA is exiting from its Caribbean work programme. The scientific work that has underpinned the conservation work will most likely continue through another body – the Caribbean Wildlife Foundation, led by Dr Glenn Gerber. Change is expected to be minimal.

Furthermore, broader national biosecurity is being addressed with the DoA in particular who are partner to the RSPB-led, Darwin-funded inter-territory biosecurity project [Enabling effective biosecurity in the UK Overseas Territories \(DPSTR001\)](#) – a project that builds on many lessons and achievements from this iguana partnership project.

3 Project Achievements

3.1 Outputs

Output 1: Improved site management of the 10-island Pine Cay complex and Big Ambergris Cay to enhance protection of endemic TCI rock iguana.

Biosecurity checks were successfully implemented throughout the project on Big Ambergris Cay (**indicator 1.1**) and are continuing post-project carried out by Ambergris staff. The former Project Biosecurity Advisor, Simon Busuttill, continues to support Big Ambergris Cay management and staff in this effort. Several sightings/incursion events were responded to during the project's lifetime (2 rat, 1 cat) with the wrecking of the *Phila Rosa* (**annex 5.4**) the most prominent and genuine risk. Notification of this wreck to the partners was slow, but an effective response to this was mounted, led by RSPB and supported by Big Ambergris Cay manager and staff. Bait stations were placed on board the boat and a line of bait stations was placed along 1200m of beach immediately opposite and visited fortnightly and then monthly for 7.5 months. No sign of rats was detected, and we believe that no incursion occurred.

On Pine Cay (**indicator 1.2**) a quarterly baiting operation was developed (**annex 5.1, 5.2**) with support of international expertise, *Wildlife Management International Ltd. (WMIL)* and implemented by the Biosecurity Advisor, Simon Busuttill and Pine Cay Biosecurity Officer, Nichoy Bent as well as staff from TCNT on Little Water Cay. Since Nichoy left the project in Nov 2023, at least two baiting efforts were completed on Pine Cay by staff. Simon remains in-territory providing support to Pine Cay management and staff as necessary ([Output 2](#)).

The partnership has continued to implement biosecurity pathway mitigation on Providenciales (**indicator 1.3**) DeH maintained rodent control at South Dock during the project, though no additional rodent control operations were completed at the extension on South Dock that services Big Ambergris Cay. It was identified this is a lower pathway risk to Big Ambergris Cay than initially thought because it is largely for construction materials (i.e., not food stuffs which is more likely to attract rats). Positively however by end of the project one of the two barges regularly servicing Big Ambergris Cay began implementing rodent control with rat stations being actively maintained on-board (**annex 5.4**). We continue to engage Big Ambergris Cay management to encourage operators to implement better biosecurity on these barges (see [Output 2](#)).

Significant progress was made to enhance site management of Half Moon Bay (**indicator 1.4**). Revision of the management plan for Little Water Cay was begun (**annex 5.3**) to include biosecurity/rodent monitoring and *Casuarina* removal at Half Moon Bay (**annex 5.4**). This has

stalled with significant staff losses at TCNT. A proposal submitted to TCIG Cabinet for Half Moon Bay to be formally managed by TCNT as part of the Little Water Cay site was submitted. This is yet to be formally agreed but for all intents and purposes, Half Moon Bay is effectively under the conservation management of TCNT though their staff capacity issues continue to hamper effective management. A small group of volunteers supported by RSPB continue to carry out management in the absence of any TCNT staff ([Lessons learnt](#)). New signage encouraging proper use of Half Moon Bay and Little Water Cay was developed and a warden hut erected to enable TCNT staff to engage tourists re: iguana etiquette at Half Moon Bay ([Output 4](#)) (**annex 5.4**). Within the project timeframe some 90% of all *Casuarina* was cut and treated with glyphosate (to prevent re growth). This is a major success of the project, and the earliest cut-and-treated areas are already showing signs of native species recovery. The remaining 10% will be cut and treated by the volunteers in the next two months.

Whilst we did not develop a specific management plan on Big Ambergris/Little Ambergris Cay (**indicator 1.5**), the priority action for the islands is the biosecurity operations, which are now being embedded on Big Ambergris Cay ([Output 2](#)).

Data collected by SDZWA during the course of the project indicates that roadkill numbers on Big Ambergris Cay are reduced from DPLUS055 baseline (**indicator 1.6**). 56 dead iguanas on Big Ambergris (fig 2) were recorded. While most of the were mummified, many individuals were killed within 24 hours of sighting.

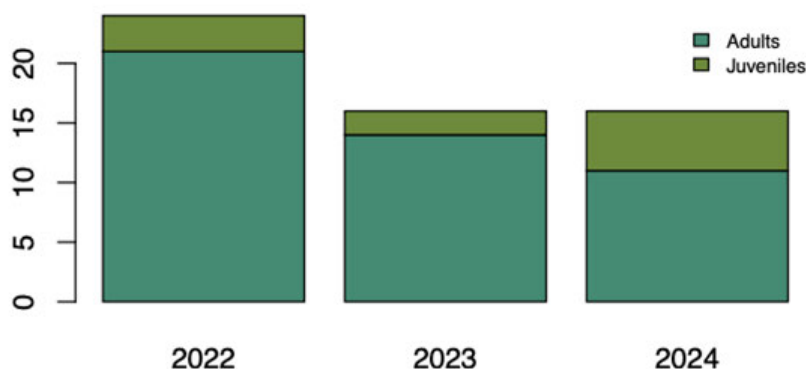


Figure 2 Roadkill *cyclura carinata* on Big Ambergris Cay. Different shades of green correspond to the relative age of the individual collected

This initial reduction is not likely attributable to action from the project. However, bumper stickers (**Annex 5.4**) for construction vehicles were distributed and the regular communications with island management and construction workers has kept up a good awareness of this issue. In order to fully understand the roadkill issue, SDWZA are drafting a paper for peer review publication using data gathered during this project that models' roadkill rates on Big Ambergris Cay for adult and juvenile iguanas and demonstrates the role that the number of people on island, active construction sites, proximity to buildings, and other factors play in explaining mortality rates. RSPB developed an iguana friendly building code with support of local architects Blee Halligan "*Designing for iguanas – advice for TCI developers*" and we hope to utilise this in future to aid responsible development both on Big Ambergris Cay, and else such as Water Cay (**annex 5.5**).

Output 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.

There were initial delays to getting Biosecurity Advisor on island due to COVID restrictions. Once in place, and with the additional support of Nichoy Bent as Pine Cay Biosecurity Officer this significantly raised the on-island capacity to implement biosecurity (and rodent control) during the project (**indicator 2.1**).

Biosecurity knowledge skills and capacity is significantly raised and embedded across the partnership (**indicators 2.2, 2.3**). By end of project both the private islands had taken on carrying out biosecurity operations with their own staff – with continued occasional post-project support from the former Biosecurity Advisor. On Big Ambergris Cay the Security Supervisor has taken a

keen interest in implementing biosecurity across the island, completing monthly checks, whilst on Pine Cay two members of staff have received support from both Simon and Nichoy and are now effectively implementing rodent control operations to a much-improved standard (i.e., bait in boxes, semi-annual/quarterly checks).

The Department of Agriculture is highly committed to addressing biosecurity (**indicator 2.3**) evidenced by DoA Quarantine Officers now in post at Providenciales airport from 2022. Furthermore, DoA are the lead partner in TCI for the newly funded Darwin Plus Strategic project: *Enabling effective biosecurity in the UK Overseas Territories* ([DPSTR001](#)) which will embed a Biosecurity Officer within the department. The DoA led the development of a national Biosecurity Policy and subsequent amendments to two pieces of legislation to encompass biosecurity responsibilities (see below).

Stakeholder workshops were held and a TCNT strategic and operational plan (**annex 5.6**), which includes biosecurity, developed, and agreed by TCNT council in December 2020 (**indicator 2.4**).

There has been regular and ongoing training delivered through the project to staff on both the private islands and TCNT staff working at Little Water Cay and Half Moon Bay (**indicator 2.5**) Unfortunately, staff retention across the partnership has been exceptionally low ([Lesson learnt](#)) therefore securing this knowledge has been a challenge, particularly within TCNT. Fortunately, regular visits and good relationships between the staff implementing biosecurity/rodent control operations on Pine Cay, Big Ambergris Cay and Simon Busuttil (who remains on island post project) gives us confidence that the knowledge and understanding of the importance of biosecurity can be maintained. See [Output 4](#) re: Biosecurity awareness.

Biosecurity legislation is now in place in TCI (**indicator 2.7, 2.8**). A biosecurity policy was drafted with support of RSPB and was approved by Cabinet in May 2022. Subsequently both the Animal and Plant Health Ordinances have been revised and gained support from other departments (i.e., DeH, DECR) during inter-departmental consultations. The decisions to amend existing legislation rather than develop new legislation was a deliberate choice. These have been consistently championed by DoA Director, Wilhelmina Kissoonsingh and were passed at the House of Assembly and published in the gazette on 28 June 2024 (**annex 5.7**).

A public hotline for reporting Green Iguanas has been set up and continues to be maintained. Reported incursions are responded to and where possible animals are caught and euthanised (**indicator 2.9**). Efforts to raise awareness have been prioritised on Providenciales (Chalk Sound area, South Dock) and targeted at key stakeholders such as dockyard workers, landscape, and gardening firms sharing materials (**annex 5.4**). All reports (positive and false) are documented (**annex 5.8**). Over the project lifetime, <20 reports have been made and 7 Green Iguanas captured and euthanised by a combination of the Biosecurity Advisor, DECR/DoA staff and volunteers. A testament to this success is evidenced by an immediate response by port staff at South Dock recognising a Green Iguana and dispatching it immediately without the need for RSPB staff to respond. Both DECR and DoA staff responded to this sighting and the animal was found to be a gravid female with 22 eggs – a significant catch (**annex 5.4**).

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

All islands in the Pine Cay complex have remained cat-free since the cat eradication in 2019 (**indicator 3.1**). With the rat eradication confirmed to have failed at the initiation of this project, the scope shifted to rodent control as opposed to biosecurity (i.e., managing rat numbers rather than keeping them off).

Between 2022 and 2024 SDWZA team continued to monitor iguana populations as part of a long-term capture-mark-release program. Given the rat eradication failed, no significant change in iguana numbers were observed on islands that did not require cat eradication (i.e., islands with rats but not cats) However, iguanas are increasing marginally on at least two islands where cats were removed (Water Cay, Pine Cay) and on Little Water Cay (fig 3) (**indicator 3.2**). SDWZA is currently in the process of analysing the project data and comparing with that previously collected

in 2017-2021 to determine if significant changes in population density/size has occurred on specific islands following the eradication.

Island	Year	Length	Tr. 1	Tr. 2	Tr. 3	Tr. 4
Big Ambergris Cay	2022	24	287	229	281	260
Big Ambergris Cay	2023		188	232	248	237
Big Ambergris Cay	2024		NA	NA	NA	NA
Donna Cay	2022	1.1	NA	NA	NA	NA
Donna Cay	2023		NA	NA	NA	NA
Donna Cay	2024		29	42	24	35
Half Moon Bay	2022	2.4	69	56	44	51
Half Moon Bay	2023		NA	NA	NA	NA
Half Moon Bay	2024		35	52	47	40
Little Water Cay	2022	3.5	70	117	99	74
Little Water Cay	2023		NA	NA	NA	NA
Little Water Cay	2024		99	106	138	117
Mangrove Cay	2022	1.85	NA	NA	NA	NA
Mangrove Cay	2023		NA	NA	NA	NA
Mangrove Cay	2024		22	46	37	30
Pine Cay	2022	10	1	0	0	2
Pine Cay	2023		0	3	2	2
Pine Cay	2024		1	2	1	3
Water Cay	2022	4.2	36	24	47	42
Water Cay	2023		NA	NA	NA	NA
Water Cay	2024		57	67	63	51

Figure 3 Total number of individuals counted during each transect replicate on different islands. The length, in km, for each transect is indicated (Length). NA values indicate that in that particular year and island the transect was not performed. Zeros indicate that during a specific transect zero animals were counted.

Meanwhile, a comparison of the mean number of juveniles counted in different years was completed on three specific sites: Little Water Cay, Half Moon Bay, and Water Cay (fig 4). Juvenile iguanas are no longer impeded by cats and thus able to move freely eastwards from Little Water Cay and Half Moon Bay onto Water Cay (and eventually Pine Cay – not shown below).

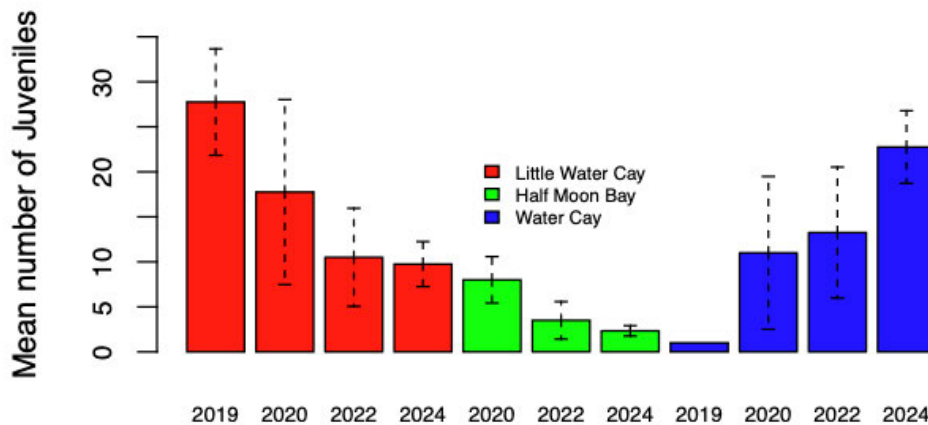


Figure 4 Mean number of juvenile iguanas counted during transects on Half Moon Bay, Little Water Cay and Water Cay

Unlike on Pine Cay, Big Ambergris Cay remains both cat and rat free and the data suggests that both iguana and boa populations are stable (**indicator 3.3**). This in spite of growing development activity on the island and ongoing road mortality ([Output 1](#)).

In 2018 (pre project) SDWZA estimated a boa population size of 4,765 individuals (95% CI 3,804–6,094) based on a total of 843 observations. In 2023 the population size of was estimated at 9,935 individuals (95% CI 9,195–10,675) based on a total of 2,187 observations. Whilst this is an increased estimate of the census population size, this is due to better data rather than an increasing population trend. In fact, in 2023, 2024 we have observed what appears to be a lower density of snakes during March annual surveys (mean = 72) than in the two previous years (mean =127).

A baseline blood analysis was established to determine impact of rodenticide on iguanas used during the 2019 rat eradication attempt (**indicator 3.4**). Of the 22 iguana plasma samples collected in 2019 and assayed for brodifacoum in 2021, 6 showed detectable levels (> 0.002 part per million [ppm]). In addition, we previously assayed 3 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](#)). In total, 9 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). A further 27 iguanas were sampled in 2022 (2 from Pine Cay, 19 from Little Water Cay/Half Moon Bay, 2 from Lizard Cay, and 4 from Bird Cay) but no significant levels of rodenticide were detected, thus no further samples were collected during the project. A paper for peer reviewed publication on the impact of rodenticide on TCI iguanas during and following the attempted rat eradication is in preparation.

In July/August 2023 a total of 84 adult iguanas were collected from the north end of Little Water Cay and translocated to two sites: 74 adults were moved to Grouper Cay; 10 juveniles (approximately 3-5 years old) were moved to Devil's Cut Cay (Pine Cay) (fig 1) (**indicator 3.5**). Transects walked in Feb/Mar 2024 indicated the animals had dispersed throughout both cays and appeared healthy and robust. We anticipate reproduction this summer on Grouper Cay. Given both cays still have rats, if successful these translocations should pave the way for future translocations to islands with extant rodent (but not cat) populations.

Output 4: Increased awareness of biodiversity, biosecurity and the impacts of invasive species resulting in improved/better managed tour & barge operator practices

Amongst the private island partners, Pine Cay and Big Ambergris Cay, we have seen a significant change in their attitudes towards biosecurity given that both islands are integrating biosecurity operations (or rodent control in the case of Pine Cay) into their operations ([Output 1](#)). Staff are knowledgeable and engage regular with Simon Busuttill.

We commissioned a local consultant, *Parker's Publishing and Design*, to conduct a survey of biosecurity awareness amongst key stakeholders. In addition, the consultant provided recommendations for DoA for improving biosecurity awareness in TCI (**annex 5.9**) (**indicator 4.1**). An online survey was developed comprising of 14 questions about TCI's indigenous species, non-native invasive species, biosecurity risk reduction plans and best practices. This was sent to 36 individual stakeholders from DoA, Government departments (i.e., DECR, Port Authority) and private sector entities. There was a low response rate (55%) with only 20 responses returned. We interpreted this as evidence of the lack of awareness and concern amongst the wider community (particularly those involved in trading – the main pathway for biosecurity lapses). 75% (15) of responses made reflected that they are 'very knowledgeable' or 'know a little' about 'globally recommended and mandated biosecurity' practices.

The voluntary code of conduct has been developed by the partnership and agreed by key implementing partners, TCNT and DECR (as the focus of the code is at their sites – Little Water Cay and Half Moon Bay) (**indicator 4.2**) The core principles of the code are: (1) do not feed iguanas, (2) do not harass/chase/touch iguanas, (3) stick to dedicated paths and trails, (4) do not bring pets (cats and dogs) to the island, (5) do not litter, (6) do no smoke or start fires.

The Government-run Tourism Board was dissolved during the course of the project and a new body, a private company *Experience TCI* established in 2023. In the absence of an appropriate body to administer any accreditation and gain formal sign-up from operators (**indicator 4.3**) we hosted workshops and engaged multiple tour companies to encourage the promotion of the iguana code of conduct (**annex 5.4**). The following tour operators are now promoting the code of conduct to tourists; [Caicos Dream Tours](#), [Big Blue Collective](#), [Caribbean Cruisin'](#), [Island Vibes](#), [Ocean Vibes](#), [Caicos Catalyst](#). Caicos Dream Tours, likely the largest operator, are actively displaying the code of conduct on their vehicles (**annex 5.4**). In February 2024, Project Lead, Joe Jeffcoate, undertook a secret shopper exercise with Caicos Dream Tours and confirmed they were actively encouraging the code to guests prior to landing on Half Moon Bay. The code of conduct will be displayed on TCNT's new website (in development).

To support the messaging around Half Moon Bay, RSPB commissioned a small co-funded study on the economic benefits of TCI Rock Iguanas (**annex 5.10**) and materials were developed to promote the key outcomes (**annex 5.11**) This report identified that iguanas provide c.\$50m tourism spend over the last 10 years and support 160 permanent jobs. We have begun to target the commercial sector more specifically now and in 2024, Simon Busuttill coordinated two training sessions with Grace Bay Hotels – owners of a suite of 7 hotels in TCI – to promote the economic benefits of rock iguanas, the importance of biosecurity, and the Iguana code of conduct. TCHTA management committee were also engaged to encourage the use of reputable providers and those supporting the iguana code of conduct, though this will take time ([Lessons learnt](#)).

Output 5: Project managed and monitored effectively

The project has been effectively managed and monitored (**indicator 5.1**) despite numerous hurdles, not least COVID-19 national restrictions and changes to/challenges with staff capacity across the partnership ([Lessons learnt](#)). The project was subject to Darwin Plus mid-term review completed by Peter McCarter, and we thank him for his insights (see [Monitoring & evaluation](#))

Biosecurity Advisor, Simon Busuttill took up the role of Project Manager which aided the face-to-face communication between partners and has been crucial to the project's success (**indicator 5.2**). Annual steering group meetings helped guide the project and high-level support across the partnership has been apparent and regular engagement in territory from project lead/senior RSPB staff took place (**indicator 5.3**). Technical reports to RSPB were facilitated by in-territory project manager and all reports provided to Darwin on time (**indicator 5.4**).

3.2 Outcome

The project Outcome to “**Increase biosecurity capacity and stakeholder commitment to safeguard the endemic Turks & Caicos rock iguana and its natural habitats**” has been well achieved by project end.

Potential cat incursions have been effectively responded to and the islands remain cat-free. Big Ambergris Cay too is cat free and remains rat free too. Incursions, such as the wrecking of the Phila Rosa ([Output 1](#)), have been effectively responded to and Big Ambergris Cay remains invasive predator free (**indicator 0.1**).

Biosecurity capacity (**indicator 0.2**) is well raised and most importantly is being addressed and taken up independently by partners – in particular the private islands. Rodent control plan has been successfully implemented on Pine Cay/Little Water Cay/Half Moon Bay (**indicator 1.2**) throughout the project and has been handed over and embedded into staff operations whilst on Big Ambergris Cay biosecurity operations are now being managed on island with support from RSPB (**indicator 2.2**). The DoA is well committed to biosecurity, driving the biosecurity legislation (**indicator 2.8**) recruiting two quarantine officers at Providenciales, and partnering on the inter-territory biosecurity project “*Enabling effective biosecurity in the UK Overseas territories*” – something that would likely not have come about without this project.

Biosecurity awareness is improved amongst the partnership and tour operators though to varying degrees. It is fair to say that the private islands and gov partners (particularly DoA) are both more aware and addressing biosecurity in TCI, though there is more to be done to engage and improve awareness for others, particularly those involved in trading, where their participation in preventing invasions is crucial ([Output 4](#)) (**indicator 0.3**).

Turks and Caicos Rock Iguana *Cyclura carinata* populations across both project islands appear to be stable with an extended range thanks to the translocation to Grouper Cay and Devil's Cut Cay (Pine Cay) (**indicator 0.4**). There are indications of increases to islands where cats were removed (fig 3) and juvenile iguanas are now able to move unimpeded from Little Water Cay/Half Moon Bay to Water Cay. Iguana site management is much improved (**indicator 1.4**) with Half Moon Bay itself in a better state thanks to significant *Casuarina* clearance and tour operators actively encouraging the iguana friendly code of conduct to visitors (**indicator 4.2**)

Improved biosecurity legislation is now gazetted (**annex 5.7**) with both animal and plant health ordinances revised with biosecurity in mind (**indicator 0.6**).

3.3 Monitoring of assumptions

- **Assumption 1** *TCI Government continue to see importance of biosecurity to TCI's native wildlife and related industries.* Held true and improved throughout the project. This is evidenced by DoA Director, Wilhelmina Kissoonsingh being proactive in pushing the biosecurity legislation through and signing up to, and informing the design of, the Darwin Strategic Biosecurity Project.
- **Assumption 2** *Tour operators and developers ready to engage in discussions about biosecurity* **and Assumption 21** *There is interest from tour operators for adopting an iguana friendly code of conduct.* Held true. Tour operators have engaged positively throughout the project, and some have more formally adopted the code of conduct
- **Assumption 3** *The 10-island eradication project is successful at removing all invasive mammalian predators* **and Assumption 16** *Rat- and cat-free status of the 10-island Pine Cay complex is confirmed.* Rat eradication was unsuccessful (confirmed prior to the start of this project) therefore this has not held true. Cats have remained absent from Pine Cay which is ultimately a priority given the impact of cats on iguanas compared to the impact of rats. The rodent control plan developed by WMIL has been and continues to be (by Pine Cay staff) implemented effectively.
- **Assumption 4** *The project is not affected by extreme weather events such as hurricanes.* Held true. In September 2022, hurricane Fiona had some minor impacts in TCI but mostly elsewhere and not in Providenciales and key project sites. The project has not had to deal with significant weather impacts during implementation.
- **Assumption 5** *Private island management continue to engage with collaborative biosecurity efforts* **and Assumption 7** *Private island owners remain committed to developing biosecurity* **and Assumption 11** *TCI partners remain committed to addressing biosecurity capacity gaps, as demonstrated with hiring Biosecurity Officer for Pine Cay / Big Ambergris* **and Assumption 18** *Big Ambergris management remain supportive of the project and to continue commitment of co-funding.* This has fluctuated throughout the project, though has ultimately not impacted its Outcome. Change in senior management within the owners of Big Ambergris Cay changed the level of engagement with the project, however adjusting our engagement to focus on island management has proved successful and by end of project the private islands are arguably some of the better implementing partners given the adoption of biosecurity rodent control into existing operations. Pine Cay has increased its engagement with the partnership. It is the Pine Cay Homeowners Association that is pushing for iguana population augmentation on Pine Cay to ensure iguana recovery there. There is a good working relationship between island managers and the partnership.
- **Assumption 6** *The economic impact of the global covid-19 pandemic does not impact TCI Government's ability to engage,* **and Assumption 12** *TCI Government continue to see importance of biosecurity to TCI's native wildlife and related industries.* Held True. Partners in government remained engaged throughout the project. This was certainly aided by Project Manager being based in-territory.
- **Assumption 8 & 13** *It remains possible for project staff to access all of the islands.* Though this has held true and there have not been major issues, the lack of a working boat to access Little Water Cay with TCNT has meant additional coordination needed with local operators. Big Ambergris Cay and Pine Cay continued to provide transport/access to the islands as required.

- **Assumption 9** *Government agencies are committed to inputting and approving management plans.* Mostly held true. Government priority has not been regarding management plans, however, there has also been no blocking their implementation.
- **Assumption 10** *Successful recruitment of appropriate candidates.* For new project roles this held true throughout the project. However, staff retention in the National Trust has been incredibly low and backfilling these roles with appropriate people hasn't been possible. This is perhaps not surprising given the opportunities elsewhere in TCI (e.g., tourism sector) and the exceptionally high cost of living (see [Lessons learnt](#)).
- **Assumption 14 Specialist group members (volunteers) willing to engage.** A small number of volunteers have been willing to engage but the interest has tended to drop off slightly due to the numbers of Green Iguanas sightings in TCI being (thankfully) low. There is positive engagement and willingness to report sightings amongst key stakeholders such as port staff.
- **Assumption 15** *Appropriate consultant available for ecological assessment.* Held true. WMIL have been available to support throughout project implementation as necessary and work largely led by SDWZA field team supported by RSPB. Data being analysed to inform paper ([Output 3](#)).
- **Assumption 17** *An appropriate lab analysis of blood assays for rodenticide levels is available.* Held true with same methodology and lab used as part of DPLUS055 utilised effectively.
- **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.* Held true but engagement is quite varied amongst stakeholders. Majority of tour operators have responded well, taking on board the iguana code of conduct ([Output 4](#)) and elsewhere key stakeholders such as the Port Authority staff, and barge operators have been receptive to discussions and meetings about biosecurity.
- **Assumption 20** *Tourism Board is in support of an accreditation scheme.* Didn't hold true as the Tourism Board was replaced by a Destination Management and Marketing Organisation (DMMO), Experience TCI. This has prevented any engagement directly with the Board or its replacement re the scheme. That said, the new organisation is more closely aligned with the aims of the project (conservation, codes of conduct for high standards of behaviour and a natural experience for visitors). This however is a longer-term goal. We did not progress activities to establish the accreditation scheme as attention focused on engaging tour operators and hotels at this stage ([Output 4](#) & [Lessons learnt](#)) therefore we've had limited engagement with this new government body to date.

4 Contribution to Darwin Plus Programme Objectives

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

The project contributed to the UK's commitments under the **Convention on Biological Diversity (CBD)**

- **Article 8(h) on alien species;** implementing effective control of rodents on Pine Cay, Responding to possible incursions of cats and rats (rats on Big Ambergris Cay), improving biosecurity operations on Pine Cay and Big Ambergris Cay.
- **Article 12 on research and training;** monitoring impacts of cat and (failed) rodent eradication, monitoring impacts of roadkill on Big Ambergris Cay on iguanas/boas, Establishing impacts of rodenticide on TC rock iguanas, biosecurity trainings to partner/private island staff, workshops/trainings for tour operators re: the code of conduct
- **Article 13 on public education and awareness** workshops/trainings for tour operators re: the code of conduct (to disseminate to the public)

The project has delivered against the **25-Year Environment Plan (2018)** target "to prevent human induced extinction or loss of known threatened species in UK and the Overseas Territories" as we have managed to keep cats off Pine Cay and both rats and cats off Big Ambergris Cay and expanded the range of iguanas to Grouper Cay ([Output 3](#)). It has delivered against the strategic priorities of the **UK Government's Overseas Territories Biodiversity Strategy (2010)**. (i) *baseline data* and (ii) *invasive species* by establishing baseline blood analysis following the (failed) 2019 rat eradication and focuses heavily on managing invasive

species (namely cats, rats and Green Iguanas). The project was informed in no small part by the priority activities outlined in the **IUCN Turks and Caicos Rock Iguana Conservation and Management Plan 2020 – 2024**. 28 activities noted in the action plan have been either completed or initiated (ongoing) and learnings from this project have indicated a need to review 7 priority activities. An action plan update summary is provided in **annex 5.12**.

The following TCI government priorities have also been addressed:

National Parks Ordinance (2016): improved management of Little Water Cay (rodent control/biosecurity) and Half Moon Bay (*Casuarina* removal) and adoption of Half Moon Bay as part of Little Water Cay management plan addressing management actions spanning across two national parks (Princess Alexandra Land & Sea National Park, Princess Alexandra Nature Reserve; Fort George Land & Sea National Park). **The Environmental Charter (2001) Principle 7** (*To safeguard and restore native species, habitats and landscape features, and control or eradicate invasive species*). Maintaining Pine Cay and Big Ambergris as cat-free islands, and rat free island in the case of Big Ambergris Cay.

4.2 Gender Equality and Social Inclusion (GESI)

Please quantify the proportion of women on the Project Board ² .	Project steering group comprises of c.50% individuals who identify as women
Please quantify the proportion of project partners that are led by women, or which have a senior leadership team consisting of at least 50% women ³ .	Both CEO and Director of TCNT and RSPB, DoA and DECR Directors are women. 50% of SDZWA's ' key leaders '.

GESI Scale	Description	Put X where you think your project is on the scale
Not yet sensitive	The GESI context may have been considered but the project isn't quite meeting the requirements of a 'sensitive' approach	
Sensitive	The GESI context has been considered and project activities take this into account in their design and implementation. The project addresses basic needs and vulnerabilities of women and marginalised groups and the project will not contribute to or create further inequalities.	X
Empowering	The project has all the characteristics of a 'sensitive' approach whilst also increasing equal access to assets, resources and capabilities for women and marginalised groups	
Transformative	The project has all the characteristics of an 'empowering' approach whilst also addressing unequal power relationships and seeking institutional and societal change	

The project wasn't designed specifically with the GESI scale in mind (given this is an addition to the final reports in 2024), but we feel that we have approached its implementation accordingly to

² A Project Board has overall authority for the project, is accountable for its success or failure, and supports the senior project manager to successfully deliver the project.

³ Partners that have formal governance role in the project, and a formal relationship with the project that may involve staff costs and/or budget management responsibilities.

the definition provided above for 'Sensitive'. At all levels, from recruitment and, equality of opportunity for, participation in trainings/workshops we consider appropriate approaches, i.e., no exclusion for any gender, racial or social demographics. Where materials have been developed, and it necessary, we have ensured they are inclusive of the make-up of TCI and thus include English, Spanish, Creole translations (e.g., Green Iguana business cards, Iguana ID booklets (**Annex 5.4**)).

5 Monitoring and evaluation

The project had to adapt to the reality that the rat eradication failed on Pine Cay and neighboring islands. The assumption that the cats and rats would not be present is the essential context which informed the original project design. This was confirmed prior to project start and so we had to make changes to several activities and indicators, i.e., switching focus to rodent control as opposed to biosecurity on Pine Cay complex. Overall, the general project design has held up well and we have adaptively managed the project updating the logframe as needed. These mostly related to adaptive management of the project and reallocating budget effectively to achieve the project's Outcome, which remains unchanged since the initial proposal and is well achieved by project end (see [Outcome](#)).

The project has been monitored effectively and we have been able to seek guidance and support from senior leaders from across the partnership at annual steering group meetings. Having the Project Manager, Simon Busutil based in territory as the *de-facto* project manager as aided communication across the partnership significantly.

The project was subject to an external mid-term review by Darwin Plus just prior to the final year of the project in February 2023 and indicated that the project's M&E was good (**annex 5.13**). Five recommendations made in this review were discussed by the project team. A summary of the recommendations and our response is below.

- 1. *There is need for further efforts to improve biosecurity infrastructure/enforcement at the two main maritime points of entry and inter-island barge departures on Providenciales: South Docks and Heaving Down Rock; and at Bellefield Landing, North Caicos. Greater direct engagement by the project (through DoA/EHD) with the Ports Authority is encouraged.***

This is not within scope of this project and requires significant budget though it is agreed necessary to improve biosecurity in TCI. RSPB has subsequently supported collaboration across departments during the Biosecurity Brunch in Feb 2023 (**annex 5.4**) and subsequent visit by project lead, Joe Jeffcoate in 2024 in which meetings with Port Authority, DeH and DoA were secured. Port Authority were particularly receptive and supportive of the need to address biosecurity and has acknowledged the need for better collaboration with DoA which is being facilitated with support of RSPB in-territory. South Dock is currently being redeveloped (as is Bellefield Landing, North Caicos in the near future) and a specific area for DoA assigned for improved biosecurity facilities has been allocated. This recommendation also aided the design of the Darwin Strategic funded project, *Enabling Effective biosecurity in Caribbean UK overseas territories* in which infrastructure improvement and capacity for enforcement at ports of entry are a core component.

- 2. *A budgeted plan to staff and upgrade facilities at the International Airport on Providenciales and on South Caicos – before international flights begin to arrive there – should be prepared for submission to TCIG.***

As with the above, this is not within the scope of this project, however it is acknowledged it would be beneficial.

- 3. *The project should establish a 'biosecurity working group' under the project's Steering Committee. This would comprise senior representatives (i.e., Director-level) of all key government departments / agencies involved: DoA, DECR, EHD, TCNT (and the Ports Authority, if Recommendation 1 is accepted). This should meet at least bi-monthly for the remaining project period. There should be a MoU between members, an agreed designated lead organisation (DoA?) and a clear line of communication and agreed Standard Operating Procedures. Its main roles would be to help push through the legislation updates (already drafted); and to***

determine minimum staffing levels and an annual operating budget from TCIG sufficient for a Biosecurity Unit to operate.

This recommendation related to enabling the passage of the animal and plant health ordinances to pass which has since happened, without the need for a bi-monthly working group. We've made efforts to facilitate cross departmental working as noted above in response to recommendation 1.

4. Following on from Recommendation 3 above: Add (and monitor closely) an Outcome level Assumption that TCIG will provide the necessary budgets to enable Biosecurity work to continue after the project ends.

This is not formally added to our logframe assumptions, but we are aware of this. A good indicator of commitment is that of DoA in partnering in the Darwin Strategic project in which a key goal is the recruitment, and post project funding of a biosecurity officer focused on high-risk entry point (South Dock) and species incursions.

5. Initiate discussions with WIHL to ensure that a sustainable, operationally embedded biosecurity plan is agreed and (ideally funded by WIHL) to ensure Ambergris Cay remains rat-free.

Waterloo Investment Holdings Ltd (WIHL) has been a challenge to engage collaboratively since new senior management took over. We have gained much better results working directly with Big Ambergris Cay's local management team and island staff at 'ground level' and have managed to secure biosecurity activities into existing operations. This bottom up rather than top-down approach enables us to function unimpeded and ensure biosecurity is being implemented. For now, we feel this adequate, and ultimately any request for resources/funding is better coming from the bottom up (i.e., island management) as opposed to requests from an outside entity such as TCNT, RSPB or others in the partnership.

The report also encouraged the Darwin plus programme to: *Consider commissioning a review of all DPLUS (and island-based Darwin Main) projects which have focused on biosecurity or managing invasive species to identify what has worked well, what has not, and what lessons could usefully be shared.*

We strongly support this recommendation and would encourage the programme to initiate as soon as possible.

6 Lessons learnt

- **Failed rat eradication.** The project design assumed that rats (and cats) were not present on the Pine Cay complex i.e., that the eradication was successful. This was acknowledged in the Outcome level assumptions in our proposal logframe, however, given that eradications are notoriously difficult to achieve it may have been prudent to have contingency plans in place prior to project start rather than developing these once the rat eradication was confirmed to have failed. This could've included having rodent control plan ready to go.
- **Staff turnover** on private islands and in particular with TCNT has been a significant challenge throughout the project. This has impacted the value of trainings/workshops (see below). Regarding TCNT, poor staff retention impacted LWC biosecurity operations and coordinating *Casuarina* clearing on Half Moon Bay. RSPB staff (Biosecurity Advisor, Pine Cay Biosecurity Officer) were able to achieve the project outputs without planned TCNT staff support. In part, high turnover is likely impacted by the high cost of living in TCI and the reality that the tourism industry is able to offer far more attractive roles on the islands. Other projects operating in TCI (and Darwin when reviewing proposal budgets) should account for the high cost of living and ensure an appropriate benefits package can be offered.
- **Training** Projects should consider focusing on light-touch engagement and regular follow ups or embedding training materials into employee induction programmes (if they exist) as opposed to lengthy workshops which take time to prepare and implement and may have less value especially when staff retention is so poor. Further to this, the project initially intended to complete a baseline/endline survey to assess biosecurity awareness across stakeholders. Inevitably, projects can take some time to get established (in our case this was caused by Covid-19 delayed project start) and so collecting a baseline early enough in the project can

be a challenge. Therefore, if possible existing baselines should be used which will also help to produce realistic indicators/targets.

- **TCI Context and conservation** TCI is focused on cultural heritage, economics, and the tourism industry – in which it is dependent on – and less focus/attention is given to environmental concerns or biodiversity. There isn't a significant drive for conservation/wildlife field jobs which can require long hours outdoors in sometime challenging working conditions (heat, flies etc) so being flexible to recruiting external candidates may support conservation outcomes in the short-term.
- **Government communications** As a neutral party, RSPB has been able to facilitate improved inter-departmental communications between different government agencies - not being linked to any one government department. Bringing partners together in annual iguana partnership meetings worked well, and proactively following up and linking different agencies was a benefit to the project. Visits by project leads, and 1:1 meeting by the in-territory project manager seemed to open up aid communications between agencies such as Port Authority, DeH and DoA and we continue to connect these partners.
- **Accreditation scheme** The project is quite ambitious to aim to establish an accreditation scheme in 3 years which would require a form of auditing, branding and investment to implement. A dedicated project for this may be best and can build on the outputs of this project. For now, it seems to be working well in TCI with a voluntary sign-up 'carrot-not-stick' approach and a formalised accreditation scheme may put some operators off.
- **In-territory project management** has been a significant benefit to the project's success. As mentioned above it has improved communications between partners and has enabled us to respond in real-time to any challenges. Where possible, projects would benefit from a project manager based in-territory.

7 Actions taken in response to Annual Report reviews

There was one comment in the last review: *"It would be interesting to learn what efforts are being made to encourage the new senior management team on Big Ambergris Cay to be more supportive of the project."*

Our approach has been to accept the reality that island owners are not interested in engaging with the partnership and to focus our efforts on engaging 'at ground level' with the island management, staff, and homeowners' association. The island general manager, Paul Mahoney has been receptive to supporting the project goals and identified the head of security as someone who can take on this work (given the regular checks by RSPB end at the end of this project) (see [Output 2](#)). As we move forward, past the end of this project, we will continue to provide support through the partnership (mostly RSPB and SDWZA given capacity issues within TCNT) to Big Ambergris Cay staff re: biosecurity. This will take the form of advice or recommendations re: resources, but it remains the responsibility of the island to resource these needs effectively (e.g., procurement of traps, bait) which is well within their means to do so.

8 Sustainability and Legacy

Amendments to the animal and plant health ordinances (**annex 5.7**) are a significant step towards improved biosecurity in TCI and are likely the most impactful and longest lasting legacy of this project. DoA's commitment to improving biosecurity is significant and will continue to grow with support of the Darwin Strategic ([DPSTR001](#)) project in which Simon Busuttil is the Project Manager. Simon remaining in territory means there will be ongoing support to partners to continue embedding outcomes of this project and further improving biosecurity in TCI. The former Pine Cay Biosecurity Officer, Nichoy Bent is now working with another private island, Parrot Cay and is taking learnings from this project with him. There is potential in future to replicate similar efforts to improve biosecurity on Parrot Cay via Nichoy who maintains a good relationship with the partners.

The removal some 90% of the *Casuarina* at Half Moon Bay is a significant achievement for the project. Long-term this will require management by TCNT (and DECR to some degree). TCNT capacity to implement this at present is significantly limited ([Lessons learnt](#)), however RSPB staff, and volunteers that supported the work remain in-territory for the foreseeable future and will be

able to support this until TCNT are able to resolve staffing issues at the site (which RSPB continues to support TCNT to resolve). A Heritage Sites Operations Manager is being sought with support from John Ellerman Foundation and responsibility for Little Water Cay/ Half Moon Bay will ultimately sit with this post.

Rodent control/biosecurity operations are now embedded within existing operations on both Pine Cay and Big Ambergris Cay, and we feel there is a good chance this is likely to endure. This is further supported by Simon as he remains in-territory and can provide advice/support as necessary. The individuals on both islands implementing this work appear to be passionate, interested and committed to the subject matter and the island manager of Big Ambergris Cay has already confirmed their support for participation of staff in forthcoming biosecurity training opportunities included under the Darwin Strategic biosecurity project.

SDWZA has shared relevant iguana and boa data collected in the project (and prior to the project) with RSPB and we are in the process of sharing data with relevant agencies in TCI, e.g., DECR. The partnership is reviewing how best to share this data more widely and will likely look to include this on the [TCI gov data portal](#) – a database initialled established as part of a [Darwin Initiative funded project](#).

The iguana partnership established as part of this project has broadened both with new partners and its remit. The initial iguana focus has now begun to broaden wider into overall biosecurity in TCI and we expect to continue regular engagement with the partners going forward. Partners are much more aware of the importance of biosecurity and are acting, either implementing biosecurity operations on private islands or responding to green iguana sightings on Providenciales.

9 Darwin Plus Identity

This project is part of an ongoing program of work building on DPLUS055 and the work of both TCNT and SDWZA in TCI. In-territory there is likely a fairly high knowledge of Darwin Plus amongst the organisations in the iguana partnership. The National Trust and DECR have been partner to or led Darwin Plus projects previously, whilst other partners (DeH, DoA) have been made aware at a senior level in annual steering group meetings. Where appropriate, we have made use of the Darwin Plus logo throughout the project. This has included materials such as the economic benefits of rock iguana flyers (**annex 5.11**), new signage at Half Moon Bay and Little Water Cay includes the Darwin Plus logo and iguana identification booklets (**annex 5.4**). TCNT will have a new website soon and the iguana code of conduct will be promoted and Darwin’s support to the iguana islands acknowledged.

10 Risk Management

No new risks have occurred in the last 12 months that the project was not aware of, however it should be noted that the capacity of a key partner, TCNT is significantly weakened at end of project. The Director has since resigned and there are currently no wardens/conservation officer staff operating at Little Water Cay. A Heritage sites manager is yet to be recruited and the Heritage sites officer has too since resigned from TCNT. Embedding the outputs of the project long-term are a challenge that RSPB will continue to address in collaboration with the new TCNT Director once appointed.

11 Safeguarding

Has your Safeguarding Policy been updated in the past 12 months?	No
Have any concerns been investigated in the past 12 months	No
Does your project have a Safeguarding focal point?	Yes Simon.Busuttil@rspb.org.u [REDACTED]
Has the focal point attended any formal training in the last 12 months?	Yes All RSPB staff complete annual mandatory Safeguarding training

What proportion (and number) of project staff have received formal training on Safeguarding?	Past: 100% 3 Planned: 100% 3
Has there been any lessons learnt or challenges on Safeguarding in the past 12 months? Please ensure no sensitive data is included within responses. No	
Please describe any community sensitisation that has taken place over the lifetime of the project; include topics covered and number of participants. n/a	
Have there been any concerns around Health, Safety and Security of your staff over the lifetime of the project? If yes, please outline how this was resolved. No	

12 Finance and administration

We are yet to compile all financial reporting information for the project duration though we expect to have spent according to the budget provided below in 2023/24. A recent change request was submitted and approved in December 2023 thus the budget was up to date and accurate for our expected expenditure for the final quarter of the project. Financial information will follow the report shortly.

12.1 Project expenditure

Project spend (indicative since last Annual Report)	2023/24 Grant (£)	2023/24 Total actual Darwin Plus Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs				no significant variance expected for all categories
Consultancy costs				
Overhead Costs				
Travel and subsistence				
Operating Costs				
Capital items				
Others				
TOTAL	27758			

Staff employed (Name and position)	Cost (£)
TOTAL	

Consultancy – description and breakdown of costs	Other items – cost (£)

Half Moon Bay fieldwork support	2560
TOTAL	2560

Capital items – description	Capital items – cost (£)
none	
TOTAL	

Other items – description	Other items – cost (£)
none	
TOTAL	

12.2 Additional funds or in-kind contributions secured

Matched funding leveraged by the partners to deliver the project	Total (£)
RSPB Animal and Plant Health legislation drafting (Ordinances, Regulations and Notices)	
RSPB EFTEC economic benefits of iguana's report - consultancy	
RSPB EFTEC report flyer design	
TOTAL	24256

Total additional finance mobilised for new activities occurring outside of the project, building on evidence, best practices and the project	Total (£)
DPSTR001 – Enabling effective biosecurity in the UK Overseas Territories. This funding buildings directly on from the DPLUS121 project and this project has played a crucial part in informing the design of DPSTR001	2,572,235
TOTAL	2,572,235

12.3 Value for Money

The project has been achieved in the context of a global pandemic, cost of living crisis and within the context of what is an incredibly expensive island to operate. Despite these challenges, the total project budget has not been increased, even by extending the project from 3 to 4 years.

Utilising volunteers to aid in the removal of *Casuarina* from Half Moon Bay proved incredibly effective and efficient and meant we were able to clear far more than anticipated.

The economic benefits of Rock Iguanas report (**Annex 5.10**) identified that rock iguanas could potentially contribute c.\$2.2m UDD to the TCI economy annually. An investment of c.\$200k is needed annually to potentially contribute >\$2m to the TCI economy and this project was able to significantly support iguana conservation in TCI for <\$97k per annum (<\$385k over 4 years).

13 Other comments on progress not covered elsewhere

None

14 OPTIONAL: Outstanding achievements of your project (300-400 words maximum). This section may be used for publicity purposes.

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

File Type (Image / Video / Graphic)	File Name or File Location	Caption, country and credit	Online accounts to be tagged (leave blank if none)	Consent of subjects received (delete as necessary)
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No

Annex 1 Report of progress and achievements against logframe for the life of the project

Project summary	Progress and achievements
<p>Impact 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>The future for iguanas is much improved as a result of activities in the project. There is improved capacity to be able maintain and keep private islands predator free /populations suppressed. Habitats are in a better state and their range increased. More stakeholders from wider sectors, such as tourism sector, are involved and becoming more invested in the safeguarding of these species. SDWZA estimate that in time, there could be 5-10K additional iguanas as a result of feral cat removal. The economic quantification of the benefits of iguanas and that general shift in approach from focusing on environmental heritage to now looking at economic impacts has enabled the beginnings of broader engagement with commercial operators.</p>
<p>Outcome Increased biosecurity capacity and stakeholder commitment to safeguard the endemic Turks & Caicos rock iguana and its natural habitats.</p>	
<p>Outcome indicator 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>Both islands have been monitored regular and Pine Cay has remained cat-free throughout the project and Big Ambergris Cay invasive predator free (i.e., rats and cats). Three incursions have been responded to appropriately for both rats (Big Ambergris Cay) and cats (Pine Cay).</p>
<p>Outcome indicator 0.2 Improved capacity within TCI partners/stakeholders to lead biosecurity efforts collaboratively and independently by end of project</p>	<p>Pine Cay and Big Ambergris Cay are embedding biosecurity/rodent control practices into existing operations with minimal support provided by NGO partners. Capacity in TCNT is severely lacking by end of project due to poor staff retention. DoA now employs two Quarantine Officers at Providenciales airport to aid biosecurity efforts.</p>
<p>Outcome indicator 0.3 Increased biosecurity awareness shows greater compliance with biosecurity protocols from 10 tour operators using iguana islands by end 2023.</p>	<p>There is greater awareness amongst private island, Gov agencies, in particular DoA, and 6 tour operators, including 3 of the 4 largest.</p>
<p>Outcome indicator 0.4 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 by end of project.</p>	<p>Iguana population appears stable across all project sites, with some marginal increases on Water Cay and Pine Cay. Translocation of iguanas to Grouper Cay and Devil's cut Cay (Pine Cay) completed successfully, with hope for successful breeding to take place in 2024.</p>
<p>Outcome indicator 0.5 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 end of project.</p>	<p>Iguana populations on Pine Cay complex no longer declining (and appear stable) following feral cat eradication. Indications are that iguanas are able to move eastwards from Little Water Cay/Half Moon Bay to Water Cay unimpeded by feral</p>

	cats. Paper, outlining recommendations re: eradication in development for publication in 2024.
Outcome indicator 0.6 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.	Policy developed and endorsed, and Animal and Plant Health Ordinances drafted, submitted and gazetted in by June 2024.
Output 1 Improved site management of the 10-island Pine Cay complex and Big Ambergris Cay to enhance protection of endemic TCI rock iguana.	
Output indicator 1.1 Biosecurity checks via a grid of rodent monitoring stations are completed on Big Ambergris Cay on a monthly basis throughout project with any rodent incursions responded to	Biosecurity checks implemented by RSPB, supported by island staff. Incursions have been responded to (e.g., wreck of the Phila Rosa) Big Ambergris Cay remains invasive predator free.
Output indicator 1.2 Quarterly rat baiting is implemented on Pine Cay throughout project as per a Pine Cay Rodent Control Plan.	Rat control plan successfully implemented by project staff and embedded in Pine Cay operations.
Output indicator 1.3 Rodent control initiated and enhanced at at least 2 priority pathway points (key departure points and barges) on Providenciales to reduce rodent incursion risk for Big Ambergris Cay by end of project.	Rodent control operations ongoing at ports but not at specific areas that service Big Ambergris Cay – though a lower pathway risk than first identified (see section 3). 1 of 3 barges (1 newly identified during project) implementing rodent control with rat stations being actively maintained on-board.
Output indicator 1.4 A management plan is agreed and initiated by TCI partners for Half Moon Bay by end 2023.	Management plan revised (annex 5.3) to include biosecurity/rodent control operations. Majority of <i>Casuarina</i> removed from Half Moon Bay, hut erected, and new signage developed. Management plan not formally signed off, but effective management achieved much more than anticipated, e.g., Casuarina removal, improved facilities in spite of TCNT staff challenges.
Output indicator 1.5 A management plan is drafted by TCI partners for Big Ambergris & Little Ambergris Cay by end of project	Specific management plan document not developed, but priority actions within any plan (biosecurity) beginning to embed in Big Ambergris Cay operations (see Output 2). No capacity in TCNT to implement any plan for Little Water Cay (Lessons learnt)
Output indicator 1.6 Mitigation measures in place to reduce the number of road kills of iguanas on Big Ambergris from the DPLUS055 baselines by the end of the project	Regular engagement during site visits to Big Ambergris Cay by both SDWZA and RSPB and development of bumper stickers construction vehicles distributed. Roadkill numbers are reduced from DPLUS055 baseline (fig 2). Total of 56 iguanas recorded during project implementation. A paper examining this issue further is being drafted by SDWZA.

Output 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.	
Output indicator 2.1 Resources embedded within priority TCI partners/stakeholders through RSPB post to build dedicated biosecurity capacity by Mar 2021.	Biosecurity Advisor, Simon Busuttil was delayed to island (Covid-19) but led coordination of project as project manager in-territory. Pine Cay Biosecurity Officer, Nichoy Bent with the project until Nov 2023.
Output indicator 2.2 Three TCI partners have strengthened biosecurity capacity by end of project.	Both Pine Cay and Big Ambergris Cay have begun to embed biosecurity (rodent control for Pine Cay) into their operations. DoA now have quarantine officers operating at airports. Currently no capacity within TCNT to implement biosecurity. DoA have keenly partnered in the Darwin strategic project which will provide biosecurity officer within the gov department.
Output indicator 2.3 Commitment from at least one TCI partner to establish permanent biosecurity role(s) by 2023.	Both Pine Cay and Big Ambergris Cay have begun to embed biosecurity (rodent control for Pine Cay) into their operations. DoA now have 2 quarantine officers operating at airports. DoA have keenly partnered in the Darwin strategic project which will provide biosecurity officer within the gov department. Currently no capacity within TCNT to implement biosecurity due to high staff turnover.
Output indicator 2.4 TCNT owned institutional strengthening plan, which will include biosecurity, in place by Dec 2020 and strengthened institutional capacity by Dec 2021.	Completed and signed off by TCNT council in 2020 with biosecurity a core part. (annex 5.6).
Output indicator 2.5 Training programme developed by end-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.	Informal training and regular support/advice given throughout project. Unfortunately, there is significant staff turnover both in the National Trust and Big Ambergris Cay so many of staff in receipt of this training have since left (see Lessons Learnt)
Output indicator 2.6 The 2018 UK Government capacity needs assessment repeated at end of project to demonstrate training impact.	Though not completed during course of project we have had confirmation that GBNNSS is repeating this assessment in 2024, and we would expect to see TCI to be much improved from the baseline (where TCI was ranked lowest of all UK Overseas territories) as a result of this project.
Output indicator 2.7 A national biosecurity policy is drafted and submitted to Cabinet by end 2021	Both the animal and plant health ordinances were revised, informed by the biosecurity policy (annex 5.7), and gained support from other departments (i.e., DeH, DECR) during inter-departmental consultations. These were passed at the House of Assembly and published in the gazette on 28 June 2024.
Output indicator 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.	As above

<p>Output indicator 2.9 A green iguana rapid response volunteer team is established with three rapid response kits (Provo, Grand Turk, South Caicos) by the end of the project.</p>	<p>Focused changed to raising awareness of the Green iguana issue with key stakeholders given the (thankfully) low numbers of Green iguanas. The Green iguana hotline has been promoted and utilised during the project and Green Iguana Identification booklets in two languages have been distributed to priority bodies (DoA staff, DECR staff and Port staff) (annex 5.4) Green iguana sightings have been well responded to by partners (annex 5.8).</p>
<p>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>	
<p>Output indicator 3.1 Regular field checks of the 10-island Pine Cay complex to confirm cat-free status throughout project and assess options for rodent control by end 2023.</p>	<p>All 10 islands have remained cat-free during the project period. Rodent control is completed throughout project and is now implemented by Pine Cay staff (see Output 1).</p>
<p>Output indicator 3.2 Two datasets of iguana surveys from the 10-island Pine Cay complex collected to monitor biological impact of the cat- and rat-eradication project delivered in 2023.</p>	<p>Iguana surveys conducted on all islands in the Pine Cay complex. Given the rat-eradication failed, no significant change in iguana numbers were observed on islands that did not require cat eradication (i.e. islands with rats but not cats) However, iguanas are increasing on at least 2 islands where cats were eradicated (Water Cay, Pine Cay) (see Output 3)</p>
<p>Output indicator 3.3 Two datasets and data analysis of iguanas and boas on Big Ambergris Cay to monitor impacts of ongoing development activities.</p>	<p>Iguanas and boa surveys suggest populations of both species are stable on Big Ambergris Cay. This, in spite of an increase in development on the island and continuing road mortality (though this appears somewhat reduced see Output 1)</p>
<p>Output indicator 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>Baseline established (36% of the 25 iguanas sampled had detectable levels of brodifacoum in their plasma ranging from 0.003 to 0.026 ppm) and further data collected up until 2022 whereby no significant levels detected. A paper is being drafted by SDWZA</p>
<p>Output indicator 3.5 Translocation suitability plan produced by mid-2023 and completion of an iguana reintroduction to Grouper Cay by the end of the project.</p>	<p>Iguana translocation completed to Grouper Cay and Devil's Cut Cay in 2023. Follow-up site visit in February/March 2024 showed positive signs that the iguanas are doing well. Breeding expected in 2024.</p>
<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>Output indicator 4.1 A questionnaire survey on basic biosecurity practices of 50% tour & barge operators, including the biggest five, completed by end of project shows >50% of those surveyed have adopted new practices after a targeted public awareness campaign delivered throughout the project.</p>	<p>Evidence of an increased understanding of basic biosecurity practices is clear amongst key stakeholders and partners – notably Pine Cay and Big Ambergris Cay staff (see Output 2) and a broader stakeholder assessment was commissioned to assess knowledge of biosecurity in TCI, though response rate was low (See Output 4) (annex 5.9).</p>

<p>Output indicator 4.2 'Iguana friendly' voluntary code of conduct developed and agreed by the Tourism Board by end 2023 and 10 tour operators and barge operator's sign up.</p>	<p>Code of conduct developed and agreed by the partners (TCNT, DECR) and has been promoted at workshops throughout project (annex 5.4). Caicos Dream Tours (likely the largest operator) has adopted the code of conduct for display on its vehicles and vessels and is actively encouraging responsible conduct when visiting Little Water Cay and Half Moon Bay along with 5 other operators.</p>
<p>Output indicator 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 end of project.</p>	<p>A formalised accreditation scheme is yet developed and may well not be the most appropriate mechanism (see Lessons learnt). A voluntarily sign-up to the iguana code of conduct has seen uptake amongst tour operators and positive engagement/trainings undertaken with Grace Bay hotels and TCHTA too.</p>
<p>Output 5 Project managed and monitored effectively</p>	
<p>Output indicator 5.1 Project monitoring plan developed in first 3 months and reviewed every six months</p>	<p>Adapted as needed with input from steering group meetings</p>
<p>Output indicator 5.2 Regular communication maintained between the team; quarterly skype calls and annual visits and reports from managers.</p>	<p>Aided in particular by project manager in-territory facilitating regular conversations across partnership</p>
<p>Output indicator 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>Annual steering group meetings completed as necessary, again regular communications between partners facilitated by in-territory project manager.</p>
<p>Output indicator 5.4 Technical and financial reporting to RSPB and Darwin accurate and on time and to high standard.</p>	<p>All technical information provided/facilitated by in-territory project manager and all reports to Darwin submitted</p>

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

	Measurable Indicators	Means of verification	Important Assumptions
<p>Impact 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>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. Improved capacity within TCI partners/stakeholders to lead biosecurity efforts collaboratively and independently by end of project</p> <p>0.3. Increased biosecurity awareness shows greater compliance with biosecurity protocols from 10 tour operators using iguana islands by end 2023.</p> <p>0.4. 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</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. TCI partner staff work plans include leading biosecurity efforts and stakeholder training.</p> <p>0.2.2. Repeated capacity assessment report against 2018 UK Government baseline.</p> <p>0.2.3. Cabinet paper to TCI Government for addressing biosecurity capacity gaps.</p> <p>0.3.1. Conservation management benefitting Iguanas implemented at Half Moon Bay</p> <p>0.3.2. MOU/agreement with Tourism Board for voluntary 'Iguana Friendly' code of conduct scheme</p> <p>0.3.3. Repeated assessment report of barge/tour operator biosecurity practices.</p> <p>0.3.4. Report to TCI Government with results of voluntary tour operator code of conduct outlining recommendations on formalising an accreditation scheme.</p> <p>0.4.1. Report on iguana populations numbers.</p> <p>0.4.2. Translocation plan for Grouper Cay.</p> <p>0.4.3. Progress update report against IUCN SSC Species Action Plan for TCI</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 does not impact TCI Government's ability to engage</p>

	<p>through one re-introduction by end of project.</p> <p>0.5. 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 end of project.</p> <p>0.6. 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.</p>	<p>rock iguana.</p> <p>0.5.1. Recommendations paper submitted to IUCN Iguana Specialist Group, Invasive Species Specialist Group and regional group.</p> <p>0.6.1 TCI Government National Biosecurity Policy document</p> <p>0.6.2 Draft National Biosecurity Legislation & Cabinet submission statement</p>	
<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 via a grid of rodent monitoring stations are completed on Big Ambergris Cay on a monthly basis throughout project with any rodent incursions responded to.</p> <p>1.2. Quarterly rat baiting is implemented on Pine Cay throughout project as per a Pine Cay Rodent Control Plan.</p> <p>1.3. Rodent control initiated and enhanced at at least 2 priority pathway points (key departure points and barges) on Providenciales to reduce rodent incursion risk for Big Ambergris Cay by end of project.</p> <p>1.4. A management plan is agreed and initiated by TCI partners for Half Moon Bay by end 2023.</p>	<p>1.1.1 Records of biosecurity checks through quarterly datasheets, reports.</p> <p>1.2.1 Pine Cay Rodent Control Plan, Records of visits, datasheets, reports</p> <p>1.3.1 Training materials, monitoring schedule, staff timesheets, data records.</p> <p>1.4.1 Management plan signed off by TCI Government/TCNT council for Half Moon Bay.</p> <p>1.5.1 Agenda, stakeholder consultation</p>	<p>Private island owners remain committed to developing biosecurity. <i>We believe this holds true as two have committed own funds and to being partners of this project.</i></p> <p>It remains possible for project staff to access all of the islands. <i>This currently holds true due to equipment purchased in DPLUS055.</i></p> <p>Government agencies are committed to inputting and approving management plans. <i>The key agencies are project partners and are fully supportive of the project.</i></p>

	<p>1.5. A management plan is drafted by TCI partners for Big Ambergris & Little Ambergris Cay by end of project</p> <p>1.6. Mitigation measures in place to reduce the number of road kills of iguanas on Big Ambergris from the DPLUS055 baselines by the end of the project</p>	<p>report and draft management plan for Big Ambergris & Little Ambergris Cay.</p> <p>1.6.1 Data and comparative reports to existing baselines on iguana road kills on Big Ambergris Cay. 1.6.2 photos of road mortality mitigation measures.</p>	
<p>Output 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 post to build dedicated biosecurity capacity by Mar 2021.</p> <p>2.2. Three TCI partners have strengthened biosecurity capacity by end of project.</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 end-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>2.1.1 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. 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. 2.5.2 Biosecurity code of practice (CoP) cabinet paper, cabinet meeting minutes approving CoP.</p> <p>2.6.1. TCI biosecurity capacity</p>	<p>Successful recruitment of appropriate candidates. <i>TCI partners remain committed to addressing biosecurity capacity gaps, as demonstrated with hiring Biosecurity Officer for Pine Cay / Big Ambergris.</i></p> <p>TCI Government continue to see importance of biosecurity to TCI's native wildlife and related industries.</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 three rapid response kits (Provo, Grand Turk, South Caicos) by the end of the project.</p>	<p>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 2.9.2 Reports of responses delivered to green iguana sightings within a database</p>	
<p>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>	<p>3.1. Regular field checks of the 10-island Pine Cay complex to confirm cat-free status throughout project and assess options for rodent control by end 2023.</p> <p>3.2. Two datasets of iguana surveys from the 10-island Pine Cay complex collected to monitor biological impact of the cat- and rat-eradication project delivered in 2023.</p> <p>3.3. Two 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</p>	<p>3.1.1 Final technical report publication reviewing Pine Cay eradication project, Photographs</p> <p>3.2.1 Iguana 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>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. <i>We believe this will hold true as we have run some trail samples from DPLUS055 with a lab associated with the partners.</i></p> <p>Big Ambergris management remain supportive of the project and to continue</p>

	<p>eradication projects and long-term management efforts.</p> <p>3.5. Translocation suitability plan produced by mid-2023 and completion of an iguana reintroduction to Grouper Cay by the end of the project.</p>	<p>3.5.1 Plan document, photograph, iguana database, translocation report</p>	<p>commitment of co-funding. <i>We believe this will hold true as they are listed as a partner on the project.</i></p>
<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 questionnaire survey on basic biosecurity practices of 50% tour & barge operators, including the biggest five, completed by end of project shows >50% of those surveyed have adopted new practices after a targeted public awareness campaign delivered throughout the project.</p> <p>4.2. 'Iguana friendly' voluntary code of conduct developed and agreed by the Tourism Board by end 2023 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 end of project.</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>4.3.1. Cabinet paper submitted with recommendations for accreditation scheme. 4.3.2. Records of interest from tour companies and hotel agreement letters/MoUs.</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>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>Output 5 Project managed and monitored effectively</p>	<p>5.1 Project monitoring plan developed in first 3 months and reviewed every six months.</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</p>	<p>5.1 Monitoring plan and half yearly 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>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>5.4 Technical and financial reports and approval notes from Darwin.</p>	
<p>Activities</p> <p>Output 1</p> <p>1.1 Rat control, Cat monitoring and incursion response plans for Little Water Cay and Pine Cay are prepared and implementation commenced by end 2021.</p> <p>1.2 An assessment of (including proposed response to) rat re-invasion all sites in the 10-island Pine Cay complex by end 2023.</p> <p>1.3 Biosecurity monitoring for rats is completed monthly across Big Ambergris Cay.</p> <p>1.4 Rodent control established on the barges that service Big Ambergris Cay, by Year 3 Q4 and maintained throughout the project.</p> <p>1.5 Rodent control established at the South Dock extension, the port that services Big Ambergris Cay, by end of project</p> <p>1.6 Implement measures to improve conditions for iguanas at Half Moon Bay including Casuarina removal and greater engagement with tour companies with aim of better compliance with Iguana Code of Conduct</p> <p>1.7 Facilitate a stakeholder workshop on the management of Half Moon Bay with key output of an agreed management plan, including biosecurity, by end 2023.</p> <p>1.8 Facilitate a stakeholder consultation on the management of Big Ambergris Cay / Little Ambergris Cay with key output of a draft management plan, including biosecurity, by end 2023.</p> <p>1.9 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> <p>Output 2</p> <p>2.1 Recruit an experienced Biosecurity Officer in Year 1 by end March 2021 for 2 years to coordinate biosecurity efforts, training, staff development support and project delivery across Iguana Islands Partnership within TCI.</p> <p>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.</p> <p>2.3 Facilitate workshop in Year 1 to establish an institutional strengthening plan for TCNT.</p> <p>2.4 Progress drafting of national biosecurity policy by YR2 Q2 and submit to Cabinet by end 2022.</p> <p>2.5 Progress drafting of national biosecurity legislation by YR2 Q4 and submit to Cabinet by the end of the project.</p> <p>2.6 Produce biosecurity training materials and resources by end of 2021.</p> <p>2.7 Develop biosecurity training programme and schedule by integrating into existing staff induction/training programmes for Iguana Islands partners by end of project.</p> <p>2.8 Deliver six biosecurity training courses/workshops to 20 staff and volunteers from 10 partner and stakeholders organisations by end of project.</p> <p>2.9 Establish a green iguana response network through training a volunteer response team and establishing three green iguana incursion response kits (Provo, Grand Turk & South Caicos) across the main inhabited islands in TCI by the end of project</p> <p>2.10 In Year 3 and beyond the project, biosecurity training led by key DECR/TCNT/DoA staff for specialised roles across the Iguana Islands Partnership.</p> <p>2.11 Complete a repeated biosecurity capacity needs assessment in Year 3 Q4 to assess improvements against UK Government 2019 and 2018 baseline reports.</p> <p>2.12 Produce a biosecurity communications strategy and plan for the Dept of Agriculture by Year 3 Q4.</p> <p>Output 3</p>			

- 3.1 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.
- 3.2 Complete two annual iguana surveys on Big Ambergris Cay to compare against baselines from DPLUS055 to continue monitoring of development impacts.
- 3.3 Complete boa monitoring to compare against baselines from DPLUS055 to continue monitoring of development impacts.
- 3.4 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.
- 3.5 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.
- 3.6 Write a peer-review paper outlining the rodenticide results and recommendations for future eradications on islands with iguanas present.
- 3.7 Produce a translocation plan for iguanas to Fort George and Grouper by mid-2023, in light of the results from 3.1.
- 3.8 Complete re-introduction of iguanas to Grouper Cay by end of project following translocation plan (Action 3.9).

Output 4

- 4.1. Design a questionnaire survey on basic biosecurity practices and collect data on 50% tour/barge operators in TCI by end of the project.
- 4.2. Develop an 'Iguana friendly' voluntary code-of-conduct with Tourism Board by end of 2023.
- 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. 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.

Output 5

- 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 3 x annual meeting of project team and management (preferably in TCI) 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 YR4 Q3.

Annex 3 Standard Indicators

Standard indicators were not included in the project's logframe as these were added in the final year of the project (this is a Round 8 project). However, we have added some relevant indicators for reference though these do not fully align as they are not formally endorsed.

Table 1 Project Standard Indicators

DPLUS Indicator number	Name of indicator	Units	Disaggregation	Year 1 Total	Year 2 Total	Year 3/4 Total	Total achieved	Total planned
DPLUS -B01	Number of new or improved habitat management plans available and endorsed	Number of plans	TCI Improved	0	1	0	1	2
DPLUS -B02	Number of new or improved species management plans available and endorsed Note IUCN Action plan is to be updated/endorsed formally	Number of plans	TCI Improved	0	1	0	1	1
DPLUS -C01	Number of best practice guides and knowledge products published and endorsed Note this is yet to be promoted/endorsed formally	Number	TCI English	0	0	1	1	0
DPLUS -C02	Number of new conservation or species stock assessments published Note not published	Number	TCI TCI Rock Iguana Cylcura Carinata, TCI Boa Chilabothrus chrysogaster	0	0	2	2	2

Table 2 Publications

Title	Type (e.g. journals, manual, CDs)	Detail (authors, year)	Gender of Lead Author	Nationality of Lead Author	Publishers (name, city)	Available from (e.g. weblink or publisher if not available online)

Annex 5 Supplementary material (optional but encouraged as evidence of project achievement)

- 5.1 Pine Cay rat control plan
- 5.2 Pine cay rat control summary report
- 5.3 Little Water Cay/Half Moon Bay revised management plan (Draft)
- 5.4 Supporting images
- 5.5 Designing for iguanas – Advice for TCI developers
- 5.6 TCNT strategic & operational plans
- 5.7 Biosecurity policy and Animal and plant health ordinances Gazette
- 5.8 Green iguana sightings/captures database
- 5.9 Biosecurity survey consultancy report
- 5.10 Economic benefits of rock iguanas - report
- 5.11 Economic benefits of rock iguanas - flyers
- 5.12 TCI Rock Iguana action plan update 2024
- 5.13 Mid-term review report 2023

Checklist for submission

	Check
Different reporting templates have different questions, and it is important you use the correct one. Have you checked you have used the correct template (checking fund, type of report (i.e. Annual or Final), and year) and deleted the blue guidance text before submission?	X
Is the report less than 10MB? If so, please email to BCF-Reports@niras.com putting the project number in the Subject line.	X
Is your report more than 10MB? If so, please discuss with BCF-Reports@niras.com about the best way to deliver the report, putting the project number in the Subject line. All supporting material should be submitted in a way that can be accessed and downloaded as one complete package.	
If you are submitting photos for publicity purposes, do these meet the outlined requirements (see section 14)?	
Have you included means of verification? You should not submit every project document, but the main outputs and a selection of the others would strengthen the report.	X
Have you involved your partners in preparation of the report and named the main contributors	X
Have you completed the Project Expenditure table fully?	X
Do not include claim forms or other communications with this report.	