



Darwin Initiative Main and Post Project Annual Report

To be completed with reference to the “Writing a Darwin Report” guidance: (<http://www.darwininitiative.org.uk/resources-for-projects/reporting-forms>). It is expected that this report will be a **maximum** of 20 pages in length, excluding annexes)

Submission Deadline: 30th April 2020

Darwin Project Information

Project reference	DPLUSO75
Project title	Securing endemic land birds and their habitats at Tristan da Cunha
Country/ies	Tristan da Cunha
Lead organisation	Tristan da Cunha Conservation Department
Partner institution(s)	
Darwin grant value	£87,000
Start/end dates of project	Start: 1/4/2018. Ends: 31/3/2021
Reporting period (e.g. Apr 2019 – Mar 2020) and number (e.g. Annual Report 1, 2, 3)	Apr 2019 – Mar 2020 Annual Report 2
Project Leader name	Trevor Glass
Project website/blog/social media	tristandc.com
Report author(s) and date	Trevor Glass May 28, 2020

1. Project summary

The Tristan da Cunha archipelago, comprising Tristan, Inaccessible, Nightingale and its offshore islets, support five endemic land-birds: one rail, one thrush and three buntings. In addition, an introduced population of the Gough Moorhen *Gallinula comeri* (globally Vulnerable) occurs on Tristan. We have some data for Wilkins’ Bunting *Nesospiza wilkinsi* (globally Endangered), but no recent population estimates have been carried out for the other five species.

Inaccessible Island is a UNESCO World Heritage Site and home to the smallest flightless bird in the world, the Inaccessible Island Rail *Atlantisia rogersi* (IUCN Vulnerable). The uninhabited islands of Nightingale and Inaccessible are currently rodent-free but at very real risk of rodent incursion from shipwreck due to increased shipping in Tristan’s EEZ (as illustrated by the grounding of MS *Oliva* at Nightingale Island in 2011), and native habitats are threatened by changes in vegetation due to invasive alien plant and insect species.

Local capacity will be strengthened for low-effort baseline survey and monitoring of land-bird populations and their preferred habitats. Robust biosecurity measures will be put in place at Inaccessible and for all inter-island transfers of visitors and goods, and a rodent incursion plan implemented for the uninhabited islands.

This project addresses Tristan Biodiversity Action Plan priority 6.4.6: “Monitoring protocols... put in place for breeding land-birds”; and Gough and Inaccessible Islands WHS Management Plan A1.5 “Eradicate New Zealand flax *Phormium tenax* from Inaccessible Island”.



A map to show the track on Nightingale Island

2. Project partnerships

The project started as a partnership between Tristan Conservation and the Royal Society for the Protection of Birds (RSPB). However, we also invited the FitzPatrick Institute of African Ornithology at the University of Cape Town to join the project. Prof. Peter Ryan, Director of the Institute, has conducted work on birds at Tristan since the 1980s, and is well placed to assist with the project.

This year we also consulted with Dr. Norbet Maczey from Fera Science Ltd (Fera) and Dr. Chris Malumphy from CABI about the possible use of biocontrol of *Coccus hesperidum*, an invasive scale insect. This species is becoming a major concern as it is contributing to the decline of the only native tree, *Phyllica arborea*. Loss of the tree will have knock-on effects for the endemic large-billed buntings (*Nesospiza wilkinsi* and *N. acunhae dunnei*), which specialize on feeding on the tree's large, woody fruits.





(Above Wilkins' Bunting (*Nesospiza wilkinsi*) feeding on the *Phyllica arborea* (Island Tree)
How the woodland look use to look before the storm.

3. Project progress

Two trips have been made to the caves on the south west side of the island the trip started at Burnt wood and carry along the path to the caves then along to stony beach a count was done along the track fifty metres each side.

A trip was also made to the east side of the island to do population trends these trips will be follow up again for the next five years.

3.1 Progress in carrying out project Activities

There was only one visit to Nightingale Island. Mapping was done by the Conservation team and worked in the areas of the Path and the *Phyllica* area.

Tristan da Cunha was heavily impacted by two storms, in July and November 2019. The July storm heavily damaged all government buildings on Tristan, and this affected all island activities because of the need for the whole community to work together on storm repairs. This severely limited opportunity to conduct fieldwork on Nightingale and Inaccessible Islands.

3.2 Progress towards project Outputs

Output 1: A programme for survey / monitoring populations of endemic land-birds at each of the Tristan Group islands implemented (Tristan, Nightingale, Inaccessible) and program embedded in Tristan Conservation annual work plan.

A simple protocol to allow qualitative assessment of land bird populations at the uninhabited islands is being developed/ trialed which can now be implemented annually, and Tristan Conservation staff were instructed/ trained in the relevant survey techniques and methodologies. This protocol was

followed this year on a trip to the Caves, in the southwest part of Tristan. Three days were spent surveying along the track from the Settlement to the Caves to collect data on the distribution and abundance of Gough moorhen (*Gallinula comeri*) and Tristan thrush (*Turdus eremita*) populations found on Tristan.

A separate survey on Nightingale was conducted for this island's populations of Tristan thrush's, Nightingale Bunting (*Nesospiza questii*) and Wilkin's Bunting (*Nesospiza wilkinsi*). This followed the protocols established the previous season as it was in the same location. Drone footage was taken to document any changes in *Phylica* distribution (e.g. trees flattened in the storms) between the two survey years.

Output 2: Habitat preferences/niches or dependencies for each of the endemic land-bird species within the Tristan Group islands identified and quality of these habitats assessed

The *Phylica arborea* trees, found mostly in the uplands (> 300 m) on Nightingale Island, were heavily impacted by the July 2019 storm. We estimate that up to 90% of the trees were impacted and damaged by this storm. The recently planted nursery that is located closer to the shoreline were in a more sheltered location and were not as damaged by the storm. This highlights the importance of the continued development and establishment of this tree nursery.

This year more *Phylica arborea* trees were planted in the nursery. Photos were taken to continue to monitor development and the area was surveyed by GPS.

It was also observed that the *Phylica arborea* trees in the nursery had their first fruits in four years. These trees could help replace the food source for the land birds that depended on the trees that were damaged in the storms.

A second observation was that temperature conditions were too warm to plant nursery trees in February, the main part of the summer season. This next set of nursery trees will be planted later in September, in cooler conditions.

Output 3: Habitat at Nightingale and Inaccessible islands improved by the control of invasive alien plant species at key sites for land-bird species and feasibility studies carried out on species not yet fully understood

The main threat to land birds on the uninhabited islands currently is the introduced Soft Brown Scale (*Coccus hesperidum*) and associated sooty mould (*Seiridium phylicae*), which are now established on both islands. In the last 7 years they have had a major impact on Island Trees *Phylica arborea* along the western coastal cliffs at Inaccessible Island, greatly reducing fruit production and killing mature trees. This is most worrying given the importance of *Phylica* fruits for the large-billed buntings at both islands. Biological control of the scale insect is being investigated; small parasitic wasps have proven effective against Soft Brown Scale in agricultural landscapes.

This first year of this project identified that the introduced invasive Scale Insect and associated sooty mould is spreading at a rate greater than previously anticipated. In this last year, Tristan Conservation Department has developed a collaboration with insect experts at two of the UK's leading research groups; Fera (Fera Science Limited) and CABI (Centre for Agriculture and Bioscience International). Under a separate project managed by the RSPB, we hope to test a biological control on the scale insects during the next three years.

Output 4: Improved biosecurity for inter-island movements of people and goods between Tristan, Nightingale and Inaccessible Islands

Biosecurity certification / declaration forms are now adopted for all transit between the three Northern Islands. Tristan Conservation Dept are responsible for issuing these forms to all boats and passengers prior to embarkation. These are to be filled in and signed off by the coxswain before leaving the harbour on Tristan da Cunha and given to a TdC Conservation Dept to be approved safe for transit and a container has been placed at the bottom of the steps where a boot wash will take place.

Tristan conservation record all inter-island visit information in an excel spreadsheet database and keep the completed forms for future traceability.

Output 5: Robust measures are in place to respond to potential rodent incursion at Nightingale and Inaccessible Islands

Two response units have been purchased by Estelle van der Merwe in Cape Town. These will be placed on the two top islands in case of a ship running aground. There was an issue with these supplies being backordered originally. Given the challenges of transport to Tristan, these items still have not arrived.

3.3 Progress towards the project Outcome

Outcome: Strengthened local capacity for managing biosecurity and the monitoring of breeding land-bird populations and their habitats informs improved conservation management in the Tristan da Cunha archipelago

It is still too early to tell whether the indicators for this outcome will be met by the end of the project, but good progress was made in the second year of the project, laying a solid foundation for the next year when attention will shift to enhancing local capacity to implement the required activities. Progress has been made on developing a practical biosecurity manual and biosecurity legislation for all of the Tristan archipelago. Tristan Conservation Department is also working closely with the Gough Restoration project regarding biosecurity.

3.4 Monitoring of assumptions

Assumption 1 (Outcome): Capacity is retained on island (either by people staying or training being shared)

Comments: There has been no turnover in Tristan conservation staff.

Assumption 2 (Output 1): Sufficient project length allows adequate weather windows to get RIB across to Nightingale and Inaccessible Islands to carry out fieldwork, as well as to remoter parts of Tristan

Comments: Storm damages and the entire community involvement on repairs had a great impact on time for fieldwork.

Assumption 3 (Output 2): Tristan Conservation staffs are able to identify key plant species

Comments: Tristan Conservation staffs were given some training on plant identification, particularly introduced species, on Inaccessible Island, but more training is needed. The Conservation department will be working with Fera and CABI to continue to increase plant identification knowledge during the project to remove the invasive scale insect.

Assumption 4 (Output 3): Weather conditions allow access to Nightingale and Inaccessible and for control/eradication work to take place

Comments: The presence of two conservation RIBs at Tristan has increased the ability to conduct work on the outer islands and maximize productivity on good weather days. The lack of field days was due more to the entire Tristan communities focus on storm repairs to the government buildings on Tristan.

Assumption 5 (Output 4): Engagement of Tristanians and visitors with biosecurity procedures and checks

Comments: This remains challenging as some people are slow to adopt the biosecurity procedures. Presentations to the local school children and the community have helped raise awareness about the importance of biosecurity on Tristan.

3.5 Impact: achievement of positive impact on biodiversity and poverty alleviation

The project's stated impact is that Nightingale and Inaccessible Islands are kept free of invasive species, while securing the future of endemic breeding land-bird populations and their habitats at the Tristan Group islands. The project is contributing to this by strengthening biosecurity measures and reducing the impact of invasive species already established on the uninhabited islands. The only contribution to poverty alleviation is through contributing to the salaries of Tristan Conservation staff and their ad hoc field assistants.

4. Contribution to the Global Goals for Sustainable Development (SDGs)

Because of the very limited population on Tristan, and the focus of this project on the two uninhabited islands in the Tristan group, this project primarily addresses Goal 15: Life on Land. There is a real threat of extinction to the endemic *Nesospiza* buntings due to the loss of the native *Phylica arborea* on Nightingale and WHS Inaccessible Islands. Surveys conducted the last two years will continue to document the tree population decline and assist in the scale insect biological control project.

5. Project support to the Conventions, Treaties or Agreements

The project is crucial to the UK meeting its obligations under the Convention on Biological Diversity (addressing Articles 5, 6, 7, 8, 12, 13, 17 and 18 of the CBD). The land birds on Tristan are all endemic species, and with the exception of the Tristan Thrush (near threatened), all are listed as globally threatened by the IUCN Red List. Inaccessible also is a UNESCO Natural World Heritage Site, and thus there is an obligation to ensure the long-term maintenance of its natural state. A Tristan representative attended the 4th UNESCO Global World Heritage Marine Managers Conference. Tristan presented and discussed its invasive species challenges and meeting Aichi Targets.

6. Project support to poverty alleviation

Given the very limited population on Tristan, and generally fairly high standard of living, poverty alleviation is not a key focus of this project. However, project funding does assist with funding Tristan Conservation staff costs and provides *ad hoc* employment to other islanders.

7. Consideration of gender equality issues

The project is ensuring that gender inequality is not increased. Presentations to the school children about this project help ensure information is given to both genders. Community awareness and knowledge about the project increased as a result of these talks.

8. Monitoring and evaluation

It was discovered the *Phylica* trees that were planted in open areas, where they can get the sunlight and are not overgrown by the tussock grass, are areas also frequently used by the Albatrosses. After the trees had grown approximately 50 mm high they all got trampled down by the Albatrosses. After this was discovered, we have overcome this by cutting down and clearing an area without Albatrosses nests and replant the trees. The *Phylica* trees are responding well to where this nursery has been planted in 2016. We observed ~30 cm of growth since planting in areas outside of Albatross nests. It was also observed that nursery trees need to be planted later in September, when conditions are cooler.

It was also observed, and photo documented, that both species of buntings are feeding on the fruit from these nursery trees. This will be an area of critical importance for the native buntings after the storm damage to *Phylica* trees in other areas of Nightingale Island. Outside of this there have been no other changes to monitoring and evaluation.

9. Lessons learnt

Things that went well include:

The continuation and expansion of the *Phyllica* nursery on Nightingale Island. This includes the observation that seedlings need to be planted later in the summer when temperatures are lower.

This is the first time trees in the *Phyllica* nursery fruited in four years.

The continuation and expansion of the *Phyllica* nursery on Nightingale Island. This includes the observation that that seedlings need to be planted later in the summer due to lower temperatures. This is the first time these trees have fruited in four years. If the current growth rate continues, these nursery trees will become an important food source for the land birds.

The documentation of the storm impacts to the *Phyllica* trees on the top end of Nightingale Island.

Things that did not go well:

Planting trees in February resulted in failures due to the warmer temperatures.

Time for fieldwork was very limited this year because of storm recovery work.

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

11. Other comments on progress not covered elsewhere

12. Sustainability and legacy

A long-term legacy of this project is the *Phyllica* tree planting. This is providing increased habitat area for the buntings and this is becoming more critical for their population as the invasive scale insect has now been documented on Nightingale Island. This year's storm damage also highlighted the need to have *Phyllica* trees planted in different locations to prevent impacts from future storm damage.

13. Darwin identity

Without the Darwin Initiative funding, the project would not happen. Islanders realize the importance of this project's goals and these funds as the Fisheries and Conservation Departments are familiar with the Darwin Initiative. There is recognition of the importance and value of these funds for Tristan as these funds are the only funding source available for projects like this.

Due to limited Internet bandwidth and reliability, it is a constant challenge to try to incorporate social media updates about Tristan and any project. The two storms stopped communications for short periods and the communities focus was on rebuilding. There have been several re tweets from other Darwin Plus accounts. Despite the lack of media and public relations skills, we hope to promote more the important work of this project during the next year.

14. Safeguarding

Tristan da Cunha remains committed to the safeguarding of all children and vulnerable people in all settings. The Darwin Initiative project has a zero tolerance approach to safeguarding and aims to provide a safe and trusted environment where all who come in contact with the project are free from risk of bullying, harassment, sexual exploitation and abuse.

There is a Safeguarding Policy in place which is fully available to all staff and volunteers at all times. The policy outlines the processes in place to address safeguarding concerns as they arise. Staff and

volunteers are required to read and understand this policy prior to commencing work with the project. This policy is available to be shared with all downstream partners as required. Safeguarding Training is now available for all staff and volunteers. It is anticipated that all staff and volunteers will have completed initial safeguarding training by November 2020.

In the year 2019/2020 no safeguarding concerns have been raised by staff, volunteers or beneficiaries of the project. In the event of a concern all staff and volunteers are aware of Safeguarding Policy and the required action to be taken. The project manager is the first point of contact for any safeguarding concerns and would ensure any concerns or incident were addressed in accordance with the department Safeguarding policy. There is a Safeguarding register in place to record any incidents and action taken.

There is a Generic Social Worker based on Tristan da Cunha (currently until 2022) who is available to provide training, advice and guidance as required.

Tristan da Cunha is a small community (250 residents). The government Tristan da Cunha have an existing Whistle Blowing policy in place which is the method by which all island professionals, including those working on the Darwin Initiative project are supported and encouraged to raise concerns appropriately and safely.

The Darwin Initiative has in place a Code of Conduct for staff and volunteers that sets out clear expectations of behaviours. It is clear to all staff members of what will happen in the event of non-compliance or breach of these standards.

15. Project expenditure – to follow. Delayed by CV19

Table 1: Project expenditure during the reporting period (1 April 2019 – 31 March 2020)

Project spend (indicative) since last annual report	2019/20 Grant (£)	2019/20 Total Darwin Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)				
Consultancy costs				
Overhead Costs				
Travel and subsistence				
Operating Costs				
Capital items (see below)				
Monitoring & Evaluation (M&E)				
Others (see below)				
TOTAL				

Annex 1: Report of progress and achievements against Logical Framework for Financial Year 2019-2020

Project summary	Measurable Indicators	Progress and Achievements April 2019 - March 2020	Actions required/planned for next period
<p>Impact</p> <p>Tristan's Conservation team must keep on planting trees on the outer islands and Tristan we must also make sure that the outer islands are free of invasive species while securing the future of the endemic breeding land-bird populations and their habitats.</p>		<p>A system has been set up where each coxswain have to sign a paper that clears himself and all the crew that all biosecurity has been checked before leaving Tristan going to the outer islands (copy will be added to report)</p>	
<p>Outcome working closely with the school planting trees that heavily depend on the future for the land birds.</p> <p>Strengthened local capacity for managing biosecurity and the monitoring of the breeding land birds population.</p>	<p>0.1 two surveys have been complete at Tristan one third of the island have been surveyed (maps to follow)</p> <p>0.2 Nightingale Big Bill have been counted again leaving the population pretty well the same.</p> <p>0.3 Ring thrushes have been crudely counted.</p> <p>0.4 Trees have also been planted and will start again in spring.</p> <p>0.5 Biosecurity protocols have been developed and put in place</p>	<p>(Report against the indicators on progress towards achieving the project Outcome)</p>	<p>(Highlight key actions planned for next period)</p> <p>1.1 starting planting trees on nightingale repairing the nursery and building another one at Tristan.</p>
<p>Output 1. A survey has been completed at Nightingale and Inaccessible population trends of land birds?</p>	<p>1.1 Population established for three of the six endemic breeding land birds for Tristan and outer islands.</p> <p>1.2 Monitor the birds up the path at Nightingale.</p> <p>1.3 Try to get a population trend of the thrushes at Tristan</p>	<p>1.1 All known flax has been eradicated from Nightingale, monitoring will go on for the next five years.</p> <p>1.2 Collecting data by the conservation department from Tristan and the outer islands from the land birds will be on going.</p> <p>1.3</p> <p>1.3</p>	
<p>Activity 1.1 Insert activities relevant to this Output</p>		<p>(Report completed or progress on activities that contribute toward achieving this Output)</p>	<p>(Outline what will be carried out in the next</p>
<p>Activity 1.2, Etc.</p>			

Output 2. (Insert agreed Output) Habitat preferences/niches		(Report against the indicators on progress towards achieving the Output)	
Activity 2.1.			
Activity 2.2. Etc.			
Output 3. Etc.			

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

Project summary	Measurable Indicators	Means of verification	Important Assumptions
Impact: .			
Outcome:			
Output 1 <i>Add more outputs as necessary</i>	1.1 1.2 1.3 etc.	1.1 1.2 1.3 etc.	
Output 2	2.1 2.2	2.1 2.2	
Output 3	3.1	3.1	
Activities (each activity is numbered according to the output that it will contribute towards, for example 1.1, 1.2 and 1.3 are contributing to Output 1)			

Annex 3: Standard Measures

Table 1 Project Standard Output Measures

Code No.	Description	Gender of people (if relevant)	Nationality of people (if relevant)	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
Established codes								

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)
Short-term movement patterns, population estimates and breeding biology of an island endemic bird, The Tristan Thrush	Journal	Peter G. Ryan, Ben J. Dilley, Delia Davies, Trevor Glass & Fitsum Abadi Revista Brasileira de Ornitologia 27(4): 2019	Male	South African	<i>Revista Brasileira de Ornitologia</i> 27(4): 2019	
Population Estimates of Burrow-Nesting Petrels Breeding At The Nightingale Island Group, Tristan Da	Journal	Ben J. Dilley , Delia Davies ,Alex Mitham , Trevor Glass , Julian Repetto ,	Male	South African	<i>Marine Ornithology</i> 47: 267–275 2019	

Cunha Archipelago		George Swain & Peter G. Ryan				
Population Trends Of Spectacled Petrels <i>Procellaria Conspicillata</i> And Other Seabirds At Inaccessible Island	Journal	Peter G. Ryan , Ben J. Dilley & Robert A. Ronconi	Male	South African	<i>Marine Ornithology</i> 47: 257–265 2019	



Thrush chicks on Nightingale Island

Annex 4 Onwards – supplementary material (optional but encouraged as evidence of project achievement)

Checklist for submission

	Check
Is the report less than 10MB? If so, please email to Darwin-Projects@itsi.co.uk putting the project number in the Subject line.	
Is your report more than 10MB? If so, please discuss with Darwin-Projects@itsi.co.uk about the best way to deliver the report, putting the project number in the Subject line.	
Have you included means of verification? You need not submit every project document, but the main outputs and a selection of the others would strengthen the report.	
Do you have hard copies of material you want to submit with the report? If so, please make this clear in the covering email and ensure all material is marked with the project number. However, we would expect that most material will now be electronic.	
Have you involved your partners in preparation of the report and named the main contributors	
Have you completed the Project Expenditure table fully?	
Do not include claim forms or other communications with this report.	