Darwin Plus Main: Annual 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: 30th April 2024

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

Darwin Plus Project Information

Project reference	DPLUS191
Project title	Enabling invasive plant eradications and long-term management in Tristan
Territory(ies)	Tristan da Cunha Group
Lead Partner	Royal Society for the Protection of Birds (RSPB)
Project partner(s)	Conservation Department, Tristan Government Key Contractors: Indigena Biosecurity International, I-Rigging Solutions
Darwin Plus grant value	£532,182
Start/end dates of project	April 2023 – March 2026
Reporting period (e.g. Apr 2023-Mar 2024) and number (e.g. Annual Report 1, 2)	April 2023 – March 2024
Project Leader name	Andy [redacted]
Project website/blog/social media	N/A
Report author(s) and date	David [redacted] & Chloe [redacted] (RSPB), Carmen [redacted]), Bradley [redacted])

1. Project summary

The Tristan archipelago is one of the remotest in the world (**Fig. 1**), home to 95+ unique species which have evolved in isolation. With the transport of people and goods across the globe, many plant species have been introduced into novel areas, with devastating and far-reaching consequences for the native biodiversity. A 2007/8 expert botanical survey identified 137 alien plant species on Tristan itself. Many of these species threaten to transform the island's ecosystems, driving biodiversity loss and impacting on livelihoods; these depend heavily on subsistence agriculture, via cattle-grazing on the highly limited pastureland, and potato-growing. Of the 137 species identified, 17 were highlighted as of imminent concern, but competing urgent priorities and limited capacity meant little follow-up was undertaken.

New Zealand Flax (*Phormium tenax*) was previously introduced to the islands as an important windbreak and thatching species. However, its unchecked spread resulted in an impenetrable monoculture that has the potential to destroy the breeding sites of millions of seabirds in the Tristan Group. Eradication efforts began on Inaccessible Island in 2019 and this project will complete the final three years of eradication effort estimated to remove all emergent flax plants within the known invaded area on Inaccessible Island, delivering one of the primary conservation management objectives for this UK World Heritage Site.

The subsequent rapid spread of two invasive tree species Pōhutukawa (*Metrosideros excelsa*) and Monterey pine (*Pinus radiata*)) is now highly visible around both the settlement and on key pastureland, and they are starting to spread into natural sites. Pōhutukawa is currently estimated to be present over 100 ha (c.1% of the island's total area), and Monterey Pine 8 ha (<0.1%), with the Pōhutukawa now spreading very rapidly. The Tristan community have therefore formally asked the RSPB for urgent support in their management before the scale of the invasion renders eradication impossible and requires in-perpetuity control costs of these invasive species instead.

In close collaboration with international experts, this project aims to eradicate all known NZ Flax plants on Inaccessible Island World Heritage Site, plus train and enable a Tristan-led eradication of all emergent, accessible Pōhutukawa trees and self-sown Monterey Pine on Tristan itself. A comprehensive survey of all Tristan's other invasive plants will provide Tristan Conservation Department with a prioritised long-term management & eradication strategy, safeguarding natural habitats and vital agricultural land.

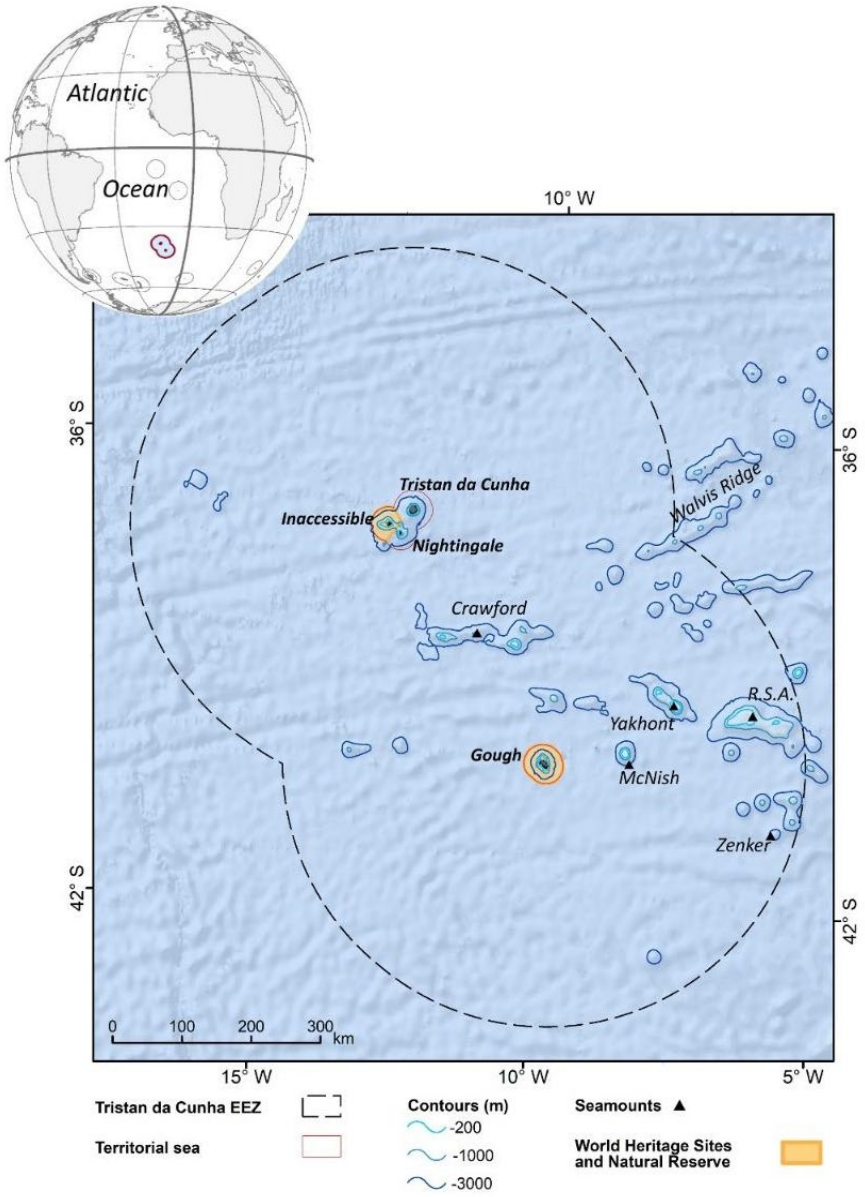

Figure 1. *Tristan da Cunha archipelago is the world's most remote inhabited island group, located almost half-way between South America and South Africa. The project will work on two of the three main northern islands: Tristan and Inaccessible.*

Figure 2. *The challenging sea cliffs of Inaccessible Island (WHS) where much of the NZ Flax removal work takes place © Brandon Cloete.*

2. Project stakeholders/partners

The partnership is between Tristan da Cunha Government's Conservation Department (TCD) and the Royal Society for the Protection of Birds (RSPB). Although not formal project partners, the specialised nature of the work required external expertise with invasive plant experts, Indigena Biosecurity International (IBI) and rope access specialists, I-Rigging Solutions (IRS) joining the project as key consultants (for ease, both will be referred to as 'partners' henceforth). This partnership was formed because of a request for urgent support from Tristan to manage several invasive plant species which have shown a dramatic spread in recent decades. There is growing community concern for the encroachment of species on already very limited pastureland, as well as their impact on endemic and threatened flora and fauna. All partners were involved in project planning, feeding in their relevant expertise for the design of each output.

Trevor Glass (Head of Tristan Conservation Department) writes:
"*The invasive NZ Christmas tree (Pōhutukawa) has been a real risk to Tristan as it is now spreading to the mountain where the albatrosses are nesting. At the beginning of 2024, 287 trees were cut down, some from six millimetres to three ft in circumference. There were also training courses on the project which included the young apprentices, which were very important as there has never been a course for the department before. The wood from these trees is now being dried out and many of the pensioners are using it for firewood; the rest have been put through the chipper to make compost for vegetable gardens.*" (May 2024)

Unfortunately, there was a relationship breakdown in 2023 between TCD and IBI. An invasive plant specialist from IBI visited Tristan in Sep/Oct and frustrations on both sides led to a breakdown of communication and certain planned activities not taking place; the situation escalated, and the specialist left almost two weeks earlier than planned on a different vessel. As lead partner, RSPB worked separately with both TCD and IBI to find a resolution. Both parties indicated that they were committed to the project and continuing to work together, although a different staff member from IBI will be involved going forwards as the specialist concerned does not want to return to Tristan in Year 3. Together, an alternative plan was agreed, involving an individual from RSPB covering the training element which was previously going to be delivered by IBI. Advice was sought from Darwin and a change request was submitted and approved in January 2024.

Although it is the primary responsibility of the RSPB to monitor and evaluate the project, the partners regularly meet to discuss project progress, make decisions, and feed into planning. However, due to relationships being tested in this first project year, since October 2023 meetings have been held between individual partners and then relaying information to all. In Year 2, we expect to return to full partner meetings to ensure outputs remain on track. Despite the challenges this year, positive progress has been made and one highlight has been bringing young apprentices from TCD into project delivery, contributing towards their training and creating the next generation of conservation leaders on Tristan.

NB

To make the report text more concise, project partners have been abbreviated as follows:

- Royal Society for the Protection of Birds - **RSPB**
- Tristan da Cunha Conservation Department - **TCD**
- Indigena Biosecurity International - **IBI** (sometimes 'Indigena')
- I-Rigging Solutions - **IRS**

3. Project progress

3.1 Progress in carrying out project Activities

The activities which have not commenced to date, as per the project timeline, have not been reported on below.

Output 1

1.1.1 Experienced rope access team hired to travel to Inaccessible Island in Q3 of each year to carry out NZ Flax eradication and survey work

I-Rigging Solutions (IRS) were hired to return to Inaccessible Island to continue the New Zealand Flax eradication work. IRS have been involved in flax removal on the island since 2019 and so understand the terrain, the challenges of the work and possess the necessary skillset to deliver it safely and effectively. The team departed Cape Town aboard the *Urchin* expedition yacht on 24 November 2023, arriving at Inaccessible Island on 5 December 2023. The team remained on the island until 16 February 2024 when they were collected by Tristan Conservation Department (TCD) staff and returned to Tristan. Flax removal efforts were focussed on an area of the island shown to have a high density of flax plants from the previous season. In total, 1,142 plants were removed by the team: 554 (the 'Slant'), 245 ('Salt Beach 1'), 208 ('Spearhead'), 135 (valley adjacent to 'Spearhead') with a further 183 seedlings from Waterfall Ridge, an area cleared two years previously (see **Fig. 3** below) (For a full trip report, see **Annex 4.1** with supporting material in **Annex 4.2**).

Figure 3. *Area targeted for flax removal work during the 2023/24 season. C. Ferreira & G. Tölken, April 2024.*

Extensive drone surveys were planned for this season but unfortunately the drone's phone app (DJI) logged out of the account due to not connecting to the internet for 4 weeks. This meant

that the drone had very limited flight capabilities (limited height above ground and reach). Despite planned aerial surveys not being possible, the drone had previously been used (before logging out) for rigging recces which greatly aided aligning of the anchors and lines relative to where the plants were allocated on the cliff face. Aerial surveys will therefore be prioritised in the first few weeks of the expedition next season to create the necessary maps.

1.1.2 NZ Flax team Lead receives drone/GIS training in Q2 of Year 1 to guide eradication work and produce updated flax coverage maps each season

Prior to heading out to Inaccessible Island, two of the flax team members completed a two-day drone course (*Introduction to Unmanned Aircraft Systems (UAS)*). It was important to have two trained operators for the project in case one person became ill/injured which could jeopardise this important aspect of the work. For a full breakdown of what was covered in the course as well as certificates, see **Annex 4.2**.

1.1.3 Inaccessible Island equipment/food airdrop takes place during the annual SA Agulhas II Gough Island relief voyage, in each project year

The Inaccessible Island airdrop was carefully planned and arranged but frustratingly the helicopter did not have the appropriate quick-release cargo hook. The pilot tried landing on the plateau instead but could only get to within 15m of the ground due to the uneven and vegetated terrain. 15m was deemed too high to simply drop the load (340kg of food, ropes, rigging and camping equipment), without the cargo being damaged upon impact.

Due to the cost of such a flight, it wasn't possible for the helicopter to return to Tristan and make a second attempt. The airdrop was therefore returned to Tristan and brought ashore with all other expedition equipment on 7 December 2023, when the team landed. With no airdrop, time was lost from plant removal/mapping work as equipment had to be loaded into backpack friendly loads of 10-15kg and carried/hauled up the 250m high fixed lines to the plateau edge before a challenging 30-minute uphill hike to the campsite. Lessons will be learned to ensure the airdrop goes ahead next season, thereby saving this logistical burden on the team and maximising flax eradication efforts.

1.2.1 NZ Flax team are joined by a Tristanian with rope access experience during each field season

Christiaan Gerber joined the rigging team from IRS for a fourth consecutive season of flax removal work. Flax team lead, Carmen Ferreira writes "Living on Tristan, Christiaan is an important resource to the flax removal team due to his local area knowledge, his experience on Inaccessible, his invaluable skills such as boat handling and first aid, as well as his practical contribution to rope access and plant removal techniques. Any novice team members take their plant removal technique cues from Christiaan. Christiaan's experience makes him the second most senior member of the team, and his safety-first mindset, team skills and work ethic are unmissable components in the overall team functionality".

1.2.2 Tristanian flax team member receives training and attains 1000 rope hours during three field seasons to achieve IRATA Level 2 certification

Since the start of the flax removal efforts on Inaccessible, Christiaan has accumulated 447 rope hours. During the 2023/24 season he accumulated another 179 rope-related hours which brings him to a grand total of 626 hours logged. For him to attain his IRATA level 2 status, Christiaan needs to accumulate a total of 1000 hours as an IRATA level 1 technician. He therefore needs a further 374 hours over the next two field seasons, which is certainly feasible. For further details, refer to the Trainer's report (**Annex 4.3**).

1.3.1 NZ Flax team deliver engagement activities each year, culminating in an end-of-project presentation given to the Tristan community in the final year

An important objective of the flax eradication work has been to build capacity within TCD to enable them to deliver future invasive plant work in the future. Such skills are essential given the steep and challenging terrain found across the islands. As part of the 2022/23 season, Shannon Swain and Kieran Glass (apprentices in TCD) completed some basic rope and rigging theory and a practical session in January 2023. In February 2024, Tristan Glass joined TCD's apprentices and completed two days of basic rope access climbing training with the IRS team alongside Kieran and Shannon. For further details, refer to the Trainer's report (**Annex 4.4**).

1.4.1 NZ Flax team assess effectiveness of flax control in Year 2 & 3 by surveying a sample of 'cleared' areas – findings presented in final report

Whilst this activity is due to start next season, six rope-access-based monitoring inspections were done on Waterfall Ridge above Base Camp in order to scan the cliffs for seedlings (the area had been cleared two years ago). 183 seedlings were removed from this area.

Output 2

2.1.1 Experienced invasive plant specialist hired to assess and map non-native plant species on Tristan, and to deliver plant control and safe herbicide usage training

An invasive plant specialist from Indigena Biosecurity International (IBI) travelled to Tristan in October 2023. During the visit, they assessed and mapped non-native species within and nearby to the settlement, using Niek Gremmen & Ruerdje Lenna Halbertsma's 2007/2008 field visit where 137 non-native species were identified as a guide. Due to the timing of the visit, it was difficult to find and identify all 137 species, especially annual and pasture species as they weren't in a larger growth stage or flowering. The follow-up visit in Year 3 will be timed for the austral summer to aid identification of the remaining species. 11 species, previously identified as priorities, were re-surveyed for their current extent where possible, and 13 new species were recorded (**Annex 4.5**).

Unfortunately, due to reasons stated in Section 2, only certain areas of the island could be visited and training with the Conservation Department team could not be arranged. Documents, presentations and videos were supplied to be delivered during a visit by trained RSPB staff in February 2024 in IBI's stead. Training was given in the safe use of herbicides, storage and record keeping along with PPE requirements. All attendees were given copies of the materials provided by IBI to familiarise themselves with and refer back to. In total, all seven members of the Conservation Department (including the three new apprentices) attended the two days of training (2 female: 5 Male).

2.1.2 RSPB community engagement lead delivers chainsaw training to 8 Tristanians in Year 1

All seven members of Tristan Conservation Department (2 female: 5 male) attended a day's chainsaw training with a qualified RSPB staff member. All elements of chainsaw maintenance and safety were covered, including:

- General maintenance and maintenance log keeping.
- Set up and a demonstration of daily, weekly and monthly maintenance checks and why these are important.
- General anatomy of a saw and a run through all the safety features, why they are there and what they do.
- Chain and bar maintenance including sharpening demonstration followed by sharpening and maintenance practical for all attendants.
- PPE - how to use and why.
- Cutting and felling techniques – differences, and when to use each method and when NOT TO, and why.
- What to look for if saw is set up wrongly, i.e., how to identify things like slack chain, overheating of bar etc.
- Fuels and lubricants
- Watching a chainsaw video tutorial

All attendees demonstrated a good level of knowledge and competency.

2.1.3 Invasive plant specialist provides training to 8 Tristanians to use specialist App, and spreadsheet templates, so all plant eradication work is recorded

IBI provided both a database and mobile app for recording all invasive plant locations and tasks. However, due to the breakdown of working relationships between individuals (mentioned previously), and limited internet, they were not installed. IBI have since provided alternative software/spreadsheet templates which do not require specialist training and should be perfectly adequate for the planned control work and a better option given the delay.

2.2.1 Invasive plant specialist uses drone/GIS software to create a revised map of Pōhutukawa coverage on Tristan

Pōhutukawa was surveyed and its current extent mapped where possible. Due to the relationship breakdown, the full extent was unable to be determined during the visit. However, what was clear was that the distribution was greater than anticipated and the spread up the steep slopes and vertical cliffs around the coast has indicated that full control without the use of helicopter or specialist drone is unlikely to be possible. Ongoing conversations with IBI and the re-assessment report (Annex 4.5) have highlighted areas which should be prioritised for control which are likely to limit the spread of the trees. Clearing these areas, as well as continued mapping of its distribution (especially outliers), is the priority for the Conservation Department team. A significant proportion of the trees are accessible and will be removed during this project and these three years will be critical for informing further control work of the species.

2.3.1 Tristanian invasive plant team recruited and trained in safe Pōhutukawa eradication techniques

All seven members of Tristan Conservation Department attended two days of training on safe chainsaw and herbicide usage in February 2024 with a trained RSPB staff member. In the absence of the staff member from IBI, training documents and presentations were provided which the RSPB staff member took to Tristan to facilitate training. One of these documents was IBI's standard operating procedure (SOP) for Pōhutukawa (**Annex 4.6**) which is the procedure the Conservation Department team will use for the remainder of the project.

2.3.2 Tristanian project team eradicate all accessible, emergent Pōhutukawa trees by project end

Due to the relationship breakdown and later training of the Conservation Department team, Pōhutukawa control work was delayed until the final quarter of Year 1. However, despite only having a few weeks to clear plants, the team managed to remove an estimated 10-15% of trees (**Fig. 4**), prioritising areas indicated by IBI which would limit the spread. These areas will be rechecked in Year 2 to ascertain the effectiveness of control.

Figure 4. *Conservation Department team members physically manually removing Pōhutukawa trees and then treating the stumps and area with herbicide © Shannon Swain*

Output 3

3.1.1 Tristan Conservation Department staff trained in safe Monterey Pine control – including chainsaw/herbicide usage

See Activities 2.1.1 and 2.1.2. Due to the delay in training mentioned previously, control was focussed on Pōhutukawa given the limited time and accessibility of the pines. We will reach out to IBI in Year 2 for their recommended SOP for Monterey Pine.

3.2.1 Invasive plant specialist provides drone and GIS mapping training to Tristan Conservation Department staff – revised coverage map created in partnership

Prior to the relationship breakdown, Tristan Conservation Department staff worked alongside the specialist from IBI to help with general island orientation. Unfortunately, there wasn't a chance to work together to map the revised coverage of species and this was carried out independently by the specialist (see Annex 4.5). We hope that there will be a chance for some spatial data training in Year 3 when another specialist from IBI visits Tristan to reassess the remaining species.

3.3.1 Tristanian project team trained in safe Monterey Pine eradication techniques

See Activity 3.1.1.

3.3.2 Tristanian project team eradicate all self-sown Monterey Pines by end of Year 2

Due to a boat being required to access the pine plantation, and a fuel shortage on Tristan this year, it was decided to delay pine control work until Year 2. This decision was also in light of the extent of Pōhutukawa being greater than originally thought, making it an even more pressing priority.

Output 4

4.1.1 Invasive plant specialist reassesses invasive plant species from 2008 report, feeding back in person to Tristan Government and producing a written report

See Activity 2.1.1 regarding the reassessment of invasive plant species from the 2008 report, and Activity 2.2.1 regarding the feedback from IBI around the challenges of fully eradicating Pōhutukawa. Feedback was largely done with RSPB acting as intermediary between Tristan Conservation Department (TCD) and IBI and a revised approach to Pōhutukawa was agreed. Due to the timing of the visit and difficulty in locating all 137 species from the 2008 report, reassessment of the remaining species will now take place in the final project year, with a follow up meeting with Tristan Government to discuss the findings.

4.2.1 Invasive plant specialist produces up to date maps of species of concern from 2008 report

See Activity 2.2.1 and Annex 4.5.

4.3.1 Invasive plant specialist and community engagement lead host annual invasive plant update meeting for the community in Q3

It wasn't appropriate this year to host such a meeting given the relationship breakdown. However, during two visits to Tristan in this first year, the community engagement lead met with almost every member of the community and answered questions about the project as naturally there was interest in the work.

4.3.2 Annual plant eradication newsletter detailing work carried out that year written and compiled by project field teams and shared with all Tristan households

An article was written by the flax team (Annex 4.2, pg.29) covering the work carried out on Inaccessible this season. Due to the delay in training and late start to plant removal work this season, a newsletter wasn't written by the Conservation Department; this will be prioritised in Year 2 to cover plant eradication work on Tristan in the first two project years.

4.4.1 Community engagement lead visits Tristan in Q3 (annually) to engage Council, school children and community members via public meetings, informal discussions and classroom teaching

As previously mentioned, the RSPB community engagement lead visited Tristan in Q3, and again in Q4 to deliver the delayed training element of the project. Funding for the second trip was covered by a reallocation of funds approved in a change request in January 2024. During both trips, they had a chance to meet with most members of the community and were able to answer questions about the project. There was particular interest from the community due to the socioeconomic impacts (as well as conservation) of invasive plants and their removal.

4.5.1 Invasive plant specialist works in partnership with Conservation and Agriculture Departments to identify plant species of concern and to write 'Weed Control Manual'

This activity is planned for later in the project. However, during IBI'S visit last year, the specialist identified several invasive plant species which will not only be significant but achievable wins for the community (**Annex 4.7**). Three species can be brought to zero population density in just a few days, with several other garden escape species able to be controlled outside of the Settlement in a couple of weeks.

3.2 Progress towards project Outputs

Output 1. All emergent New Zealand Flax plants eradicated from areas of known presence on Inaccessible Island World Heritage Site

See section 3.1, Output 1. Output 1 is on track, progressing well after the first year of the project despite an airdrop not going ahead and limitations with the drone.

1,142 New Zealand Flax plants were mapped and removed from an area of cliffs above Salt Beach, shown in the previous season to have high plant density (Indicator 1.1). Christiaan Gerber from Tristan joined the team for the fourth consecutive season. He built upon his experience and leadership and logged another 179 rope hours meaning he just needs a further 374 hours in the next two seasons to achieve the required 1,000 hours for IRATA Level 2 (Indicator 1.2). A newsletter was produced to update the community on the season and two days of rope access training was delivered to the new apprentices in Tristan's Conservation Department (Indicator 1.3). Although not due to begin until Year 2, an area cleared of flax plants two years previously on Waterfall Ridge was rechecked, with a further 183 seedlings removed (Indicator 1.4).

Output 2. Targeted Pōhutukawa control with tree coverage significantly reduced on Tristan

See section 3.1, Output 2. Output 2 is on track with Pōhutukawa control training complete and eradication efforts underway. Although Pōhutukawa mapping is incomplete, it will not impact eradication activities in Years 2 and 3, with its extent largely known and priority areas identified. Indicators are not referenced when not applicable to this project year.

All seven members of TCD (2 female: 5 male) have been trained in Pōhutukawa control and safe herbicide/chainsaw use as planned by the end of Year 1. Training in the use of a specialist weed management app is now redundant as IBI have provided software/templates that do not require specialist training (Indicator 2.1). Pōhutukawa coverage mapping began, with the full extent of coverage to be completed in Year 3 when IBI visit Tristan again. Mapping has revealed distribution is greater than anticipated from the 2007/08 baseline, with areas to be prioritised for control identified (Indicator 2.2). Tristanians have removed an estimated 10-15% of the plants identified during the Year 1 survey (Indicator 2.3).

Output 3. All emergent self-sown Monterey Pine eradicated from Tristan

See section 3.1, Output 3. Due to boat fuel restrictions, Monterey Pine control will now begin in Year 2 instead of Year 1, and mapping will be completed in Year 3 following a second visit from an IBI specialist. TCD now feasibly aims to eradicate all emergent self-sown pine in Year 2, rechecking and retreating where necessary in Year 3. Indicators are not referenced when not applicable to this project year.

All seven members of TCD (2 female, 5 male) have been trained in safe herbicide/chainsaw use as planned by the end of Year 1, exceeding the minimum target of four. IBI will provide their recommended SOP for Monterey Pine in Year 2 (Indicator 3.1).

Output 4. Baseline knowledge and community understanding of existing priority invasive plant species improved through surveys, mapping and F2F discussion

See section 3.1, Output 4. Output 4 is on track and progressing well despite minor adjustments to delivery because of the relationship breakdown. Community engagement has been maintained and the invasive plant species assessment is underway. Indicators are not referenced when not applicable to this project year.

The IBI specialist began reassessment of all 137 species highlighted in the 2007/08 invasive plant report and any new species discovered (Indicator 4.1) and updating the baseline maps of the 17 priority species (Indicator 4.2) during his visit to Tristan. 13 new species, and several species which can be bought to zero density with minimal effort and significant impact, have

already been identified. Due to the delay in plant control work this season, TCD will now update the community with a newsletter at the end of Year 2 summarising the first two years of removal activities (Indicator 4.3). The annual community update meeting was not appropriate to hold this year given the relationship breakdown, but both the plant specialist and RSPB community engagement lead held face-to-face discussions with many Tristanians (over 50 community members, all Island Council and school children) (Indicator 4.4).

3.3 Progress towards the project Outcome

Outcome: All emergent NZ Flax, Pōhutukawa and self-sown Monterey pine are removed from known and accessible invasion sites, and Tristan Government is informed and upskilled to deliver long-term invasive plant eradications / management.

Successful first field seasons of NZ Flax and Pōhutukawa control, and the training of all seven members of TCD in elements of invasive plant control, combined with progress on the reassessment of some of the 137 known invasive plants, have been significant steps towards the Project Outcome. Despite the delays to Monterey Pine control efforts and the relationship breakdown impacting some Year 1 activities, adapted operational planning means we largely remain on track to achieve the Outcome above. The indicators below remain adequate for measuring the project's Outcome.

Indicator 0.1. No emergent New Zealand Flax plants are recorded on the previously infested Inaccessible Island plateau or cliffs by end of Year 3

IRS delivered a successful first season of eradication work, mapping and removing 1,142 New Zealand Flax plants from four different infested areas, with a further 183 seedlings removed from Waterfall Ridge (an area cleared two years previously). This gives the team a strong baseline of cleared areas on which to monitor the effectiveness of control work between years. The team is experienced at surveying areas, with six inspections performed on Waterfall Ridge this year to scan the cliffs for seedlings.

Indicator 0.2. 80% reduction of emergent Pōhutukawa trees achieved on Tristan by end of Year 3

With all seven TCD members receiving training in Pōhutukawa control and safe herbicide use, the team have successfully removed 10-15% of all Pōhutukawa trees mapped by the invasive plant specialist during the Year 1 survey; this is despite fewer weeks spent on eradication work than originally planned. A change request approved in January 2024 now means that TCD will have additional funding for eradication efforts in Year 2 to compensate for the shorter Year 1 field season.

Indicator 0.3. By project end, 15% increase in available pastureland at Sandy Point post self-sown Monterey Pine removal

If all emergent self-sown Monterey Pine is eradicated from Tristan, as this project intends, the community should see a 15% increase in available pastureland at Sandy Point. Although Monterey Pine control did not begin in Year 1 as originally planned, seven members of TCD are now trained in safe herbicide/chainsaw use and therefore ready to begin control work in Year 2. TCD is confident that given the extent of the Monterey Pine, the adapted operational plan to perform all removal work in Year 2 is feasible. For a community almost exclusively reliant on subsistence agriculture, pastureland at Sandy Point is at a premium, and so Tristanians are highly motivated to remove all the encroaching pine.

Indicator 0.4. Tristan Conservation Department (1 female / 3 male) trained in invasive plant identification, control and mapping by project end

All seven members of TCD (2 female: 5 male) received training in invasive plant control from a trained RSPB staff member (safe herbicide/chainsaw use and Pōhutukawa control). IBI have provided SOPs for specific species' control requirements, as well as software and spreadsheet templates to enable the team to monitor control efforts.

Indicator 0.5. By project end, Tristan Conservation Department formally adopts a Tristan Invasive Plant Strategy, which will guide seedbank control for the project's three target species, plus other prioritised invasive plants.

An Indigena specialist visited Tristan and began work reassessing all 137 species highlighted in the 2007/8 report, updating baseline maps of the 17 priority species, and noting any new species. 13 new species, and several species which can be brought to zero density with minimal effort and significant impact, have already been identified, and Pōhutukawa mapping has revealed its distribution to be much greater than anticipated. This information will be used to help shape the Invasive Plant Strategy, due to be produced in Year 3 following a second visit by an IBI specialist.

3.4 Monitoring of assumptions

All key assumptions are outlined in the logframe (**Annex 2**). Most assumptions that have been tested have held true, as outlined in the narrative above, with the following exceptions:

Assumption: A goal of invasive plant eradication is not possible within the three-year timeframe of the project due to the uncertain size, distribution and longevity of these species' seedbank in the soil. The primary objective is therefore to reduce and then maintain invasive plant populations at 'zero density', whereby all individuals capable of reproduction are removed and no further seed is added to the seedbank. Ultimately this will result in eradication.

Comments: As mentioned previously, following surveys and mapping of Pōhutukawa this year, reducing trees to 'zero density' is not going to be possible within the span of this project. Instead, eradication will now target all accessible trees, significantly reducing numbers (80%), thereby limiting the spread and informing a long-term strategy for the control of the species.

Assumption: Prior to each field season, an airdrop is essential to transport equipment/supplies to the plateau to minimise time spent moving between base- and satellite-camps. This is highly achievable as it has occurred in the two years prior to this project.

Comments: An airdrop was attempted but was unsuccessful due to the reasons stated previously (3.1 - Activity 1.1.3). Significant time was lost for flax removal work due to ferrying the kit from the beach to the campsite. Lessons will be learned to ensure the airdrop goes ahead next season to maximise the time for mapping and control work.

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

After Year 1 the project is making good progress on tackling rapidly spreading, highly invasive plants and upskilling TCD to deliver an effective long-term invasive plant management strategy. Such strategic long-term outcomes will not only safeguard Tristan's natural habitats and biodiversity but also the limited agricultural land on the island.

Invasive non-native species are declared a primary threat to biodiversity in the UKOTs, and their removal is a priority in DEFRA's UKOT's Biodiversity Strategy (2014). This is reiterated in the UK Government's 25-Year Environment Plan (2018), with a named target 'to prevent... loss of known threatened species in... the Overseas Territories' and reflected under Tristan's own Biodiversity Action Plan to introduce a 'Programme of control or removal of alien plants'. The project is recognising this significant and immediate threat by controlling three priority invasive non-native species, protecting native flora and habitat for millions of globally important

seabirds. Tristan Government will deliver work against Commitment 2 of its Environment Charter, 'Ensure the protection and restoration of key habitats... and attempt the control and eradication of invasive species'. With one season of New Zealand Flax eradication work on Inaccessible already complete, this project is also delivering on eradicating the plant from the island, which is a priority action in the Inaccessible Island Management Plan.

Commitment 6 in Tristan's Environmental Charter is to 'Implement effectively obligations under the Multilateral Environmental Agreements already extended to Tristan'. By removing flax from Inaccessible Island, as both a Ramsar and World Heritage Site (WHS), the project is implementing Tristan's responsibilities under Resolution V.III/18 'Invasive Species & Wetlands' and delivering the key action needed to respond to the UNESCO site assessment which identified flax as a threat to the integrity of the WHS which must be addressed. At least five Convention of Migratory Species (CMS) Appendix-listed species are breeding on Tristan and Inaccessible in habitats threatened by Pōhutukawa and flax, and so eradication efforts restoring such habitats will deliver on Article III of the Agreement on the Conservation of Albatross and Petrels.

By targeting three invasives impacting on Tristan's biodiversity across two islands, the project also supports the new Convention on Biological Diversity Kunming-Montreal Global Biodiversity Framework Target 6 to 'eliminate, minimize, reduce and or mitigate the impacts of invasives... especially in priority sites, such as islands'. With Pōhutukawa damaging brickwork and Monterey Pine encroaching on the vital pastureland at Sandy Point and threatening subsistence agriculture, this project also supports Sustainable Development Goal 11 (Sustainable Communities).

5. Gender Equality and Social Inclusion (GESI)

Please quantify the proportion of women on the Project Board[1].	2 female: 4 male
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[2].	50%

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.	
Empowering	The project has all the characteristics of a 'sensitive' approach whilst also increasing equal	X

[1] 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.

[2] 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.

	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	

We believe the project is 'Empowering' on the GESI scale. Previously on Tristan, roles have been divided down traditional gender norms, with males typically carrying out practical tasks and the women more administrative-focused. The project logframe was therefore designed to give training and practical opportunities on as equal a basis as possible, whilst considering what was realistic in three years. The Conservation Department on Tristan used to be male dominated but there are now two female members; these women serve as role models to others in the community, which this project aims to further. One of the women is a recent school leaver, showing that the younger generation is being inspired, and opportunities to get involved in practical conservation are open to anyone who shows interest. Chainsaw and herbicide training was given to all seven Conservation Department members in this first year and as the project progresses and the community witness the practical work first-hand, we hope that others will be encouraged to get involved. Removal of these highly invasive species will also benefit the whole community, improving livelihoods irrespective of gender.

The flax team lead from I-Rigging Solutions is female and recruits members on a team dynamics and skills basis. The team this year was 1 female: 3 male but going into Year 2 it looks like the gender ratio will be 2: 2. Following the expedition to Inaccessible Island this year, rope access training was given to the three Conservation Department apprentices on Tristan (1 female: 2 male), providing training opportunities to the next generation.

RSPB has strict employment policies in place to ensure fair and non-discriminatory recruitment practices, and these are always followed for any roles to be filled. The CEO, Executive Director of Conservation and Head of the UK Overseas Territories are all roles currently held by women, helping to inform the RSPB's work in Tristan, the UK and globally.

6. Monitoring and evaluation

RSPB leads the project's monitoring and evaluation (M & E), coordinated by the RSPB Project Manager who assumes overall responsibility. Regular monitoring meetings between all four partners were planned bi-monthly to discuss the work plan and evaluate progress against the project timetable and indicators. However, due to the relationship breakdown in 2023, since October 2023 the project has been unable to hold such sessions as planned. In place of full-team meetings, RSPB has instead maintained regular contact with partners individually, with everyone committed to working together and full-team meetings planned for Year 2. Partner meetings in September 2023 and March 2024, pre- and post-field season, were integral to guiding practical work and for capturing any lessons learned which could be taken into next year. These discussions also informed the change request which was submitted in December 2023, revising certain activities and reallocating funding.

Our measures of achievement are guided by the progress against logframe indicators, which all project activities contribute towards. The logframe and timetable have been continually referenced this year to ensure everything is on track and the Outcome remains achievable. The Output indicators relate mainly to the 'monitoring' aspect (i.e., to project progress), whereas the Outcome indicators relate mainly to 'evaluation' (i.e., project's overall impact). Following the reassessment of Pōhutukawa by the specialist from IBI, it became apparent that full control was unlikely to be possible during this project. Following multiple discussions with partners and Darwin, this Output was revised to become more about control and devising a long-term strategy for the species, rather than full eradication. Although this was very disappointing to discover, it showed that the M & E plan for the project is effective, coming up quickly with a well thought out and achievable revision which still delivers huge conservation and livelihood benefit

to Tristan. A significant legacy of this project is the upskilling of TCD and developing an invasive plant strategy for Tristan, meaning that control efforts and ongoing monitoring will continue in perpetuity.

7. Lessons learnt

- As previously mentioned, a relationship breakdown between partners had an impact on project activities in Year 1 and a change request needed to be submitted. Tristan da Cunha is obviously an extremely remote island and though project contractors going to such places are generally robust characters who are trained, experienced and accustomed to working with local communities, the isolation can escalate situations which would be easier to manage on the mainland. Fortunately, an RSPB member of staff was on the island at the same time to mediate between parties and we would recommend other projects do the same if a contractor has not visited a Territory before and so does not have pre-existing relationships.
- Surveys in Year 1 have shown both density and distribution of Pōhutukawa to be greater than originally thought. As such, the scope of this output has had to be revised. This has demonstrated the value of sending specialists to places like Tristan, as despite the logistical challenges of such trips, the information gathered is critical for project planning and overall success.
- It takes a very specific personality type, together with a specialised set of skills, to live and work in as remote and challenging environment as Inaccessible Island. Unfortunately, one team member proved not to be a good fit for the expedition this year and caused additional strain on the flax team. The flax team lead aims to assess future team members for their suitability for working in such an environment by devising and appropriate activity prior to departure to ensure good team dynamics.
- The drone is essential for the survey work for flax plants on Inaccessible. However, due connectivity issues and the drone logging out of the app after four weeks without internet, limited flights were possible this year. Survey work will be prioritised for the first four weeks of the trip next year to ensure it's completed before the app logs out.
- The airdrop for Inaccessible is essential to maximise flax removal work on the island and minimise logistical set up time. The airdrop didn't go ahead this year due to reasons stated previously, meaning at least two weeks were lost from control work. If this happens in every project year, an estimated six to eight weeks will be lost from total removal efforts, making this particular output very challenging to achieve. Clear communication well in advance of the airdrop attempt is critical in this second project year to ensure it goes ahead as planned.
- There was already a good level of practical knowledge on Tristan prior to training conducted in February 2024. However, the instructor commented on the fact that lack of training can lead to bad habits, leading to certain activities being unsafe, but which this project has now hopefully addressed.

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

N/A - This is the first Annual Report.

9. Risk Management

N/A - Risks have been referred to previously in the report, with key issues from Year 1 being the relationship breakdown and the distribution of Pōhutukawa being greater than expected meaning that the project has needed to revise its approach to one of control rather than eradication. We plan to start developing a risk register in the coming months, following the approval of a change request in January 2024 and the project getting back on track.

10. Sustainability and legacy

Non-native plant species and their impacts are already well-known on Tristan, with the community requesting RSPB's support in this project due to the impacts to biodiversity and livelihoods already taking place. Indeed, a significant aspect of Tristan's Conservation and Agricultural Departments work programme involves plant control, but the former have had limited training on techniques.

This project has been designed with long-term sustainability at its core. With 137 invasive species highlighted in the 2007/8 report, it is critical that priority species are tackled as soon as possible; their unchecked spread could make species too logistically challenging or costly to remove. Tristanians must also be equipped with the necessary tools and knowledge to manage eradication work independently, beyond this project. All intended sustainable benefits post-project are therefore still valid.

By clearing all emergent and accessible plants of the target species by project end, future control work will focus on the seedbanks of the species. This work will be more focussed and considerably less time-consuming, meaning it will fit well into the established work programmes of each Government department. Teams will be able to monitor and remove any further individuals, ensuring the seed bank reduces over time eventually resulting in eradication.

There has been good progress in this first year towards the significant training element of the project. All TCD staff have received training in invasive plant control in Year 1, which will be built on in years 2 and 3. This has been put into practice with the team removing 10-15% of mapped Pōhutukawa. The Tristanian member of the flax eradication team logged a further 179 rope hours this year taking him to 374 short of the 1,000 hours required for IRATA Level 2, which is achievable in the remainder of the project. This internationally recognised qualification will ensure there is local capacity to monitor flax presence on Inaccessible post-project, as well as continuing community rope access training.

St Helena National Trust are keen to find out how successful flax eradication efforts are on Inaccessible during this project. This is following a previous knowledge exchange visit for the team lead, Carmen Ferreira, where she learned flax eradication techniques in return for providing rope access training to the team.

11. Darwin Plus identity

The Darwin identity continues to be positively regarded within the community on Tristan da Cunha and there is a good understanding of Darwin, particularly within the Conservation and Fisheries Departments. Approximately 10% of the community have worked directly on a Darwin project, and project updates are given at the fortnightly Government Department meetings. Darwin are recognised as one of the few funders who directly support work on the island, and this project has several elements which directly support livelihoods on Tristan, be that employment, training, providing equipment, or simply the legacy of invasive plant removal and a future control strategy for Tristan. Where possible, the Darwin logo has been used on project documentation, such as the reassessment report (Annex 4.5) and the Tristan newsletter produced by the flax team (Annex 4.2), showing the sometimes-extreme lengths gone to carry out vital conservation work in some of the most remote places on earth - something the Darwin Initiative stands out as supporting.

12. Safeguarding

The RSPB have clear safeguarding policies and procedures (updated in January 2022) which apply to our international work and includes appropriate annual training for all our staff members working internationally. We now have an internal Global Safeguarding Subgroup who oversee and advise on our international safeguarding work. This group includes staff with

extensive safeguarding experience as well as representation from staff posted overseas working with partners and local communities. Fortunately, there have been no safeguarding concerns in this reporting year, but this subgroup would advise should any concerns arise.

We have a strong commitment to work closely with all our partners to ensure they adhere to good safeguarding practices; the sub-grant contract with Tristan Government included our standard Annex outlining the obligations of the partner to safeguarding and how they report, record and mitigate any incidents. For the remainder of the project, we will continue to liaise with the relevant FCDO desk officer around whether there are any new potential safeguarding issues on Tristan which we should be aware of.

Has your Safeguarding Policy been updated in the past 12 months?	No
Have any concerns been reported in the past 12 months	No
Does your project have a Safeguarding focal point?	No
Has the focal point attended any formal training in the last 12 months?	N/A – All lead partner staff have completed online safeguarding training in the last 12 months.
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	
Does the project have any developments or activities planned around Safeguarding in the coming 12 months? If so, please specify. No	
Please describe any community sensitisation that has taken place over the past 12 months; include topics covered and number of participants. NA	
Have there been any concerns around Health, Safety and Security of your project over the past year? If yes, please outline how this was resolved. No	

13. Project expenditure

Table 1: Project expenditure during the reporting period (1 April 2023 – 31 March 2024)

Project spend (indicative) in this financial year	2023/24 D+ Grant (£)	2024/25 Total actual D+ Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs	[redacted]			
Consultancy costs				
Overhead Costs				
Travel and subsistence				
Operating Costs				
Capital items				
Others (Please specify)				
TOTAL	**189,979**	**187,866**	**-1**	

Table 2: Project mobilised or matched funding during the reporting period (1 April 2023 – 31 March 2024)

NA

	Secured to date	Expected by end of project	Sources
Matched funding leveraged by the partners to deliver the project (£)			
Total additional finance mobilised for new activities occurring outside of the project, building on evidence, best practices and the project (£)			

14. Other comments on progress not covered elsewhere

N/A - The project was discussed with a Darwin representative prior to submitting a significant change request in December 2023. All other comments on progress have been covered in the narrative above.

15. OPTIONAL: Outstanding achievements or progress of your project so far (300-400 words maximum). This section may be used for publicity purposes.

I agree for the Biodiversity Challenge Funds to edit and use the following for various promotional purposes (please leave this line in to indicate your agreement to use any material you provide here).

Annex 1: Report of progress and achievements against logframe for Financial Year 2023-2024

Project summary	Progress and Achievements April 2023 - March 2024	Actions required/planned for next period
Impact Native wildlife thrives on Inaccessible World Heritage Site in the absence of invasive plants, and Tristan's community and biodiversity benefit from successful eradications of all feasibly removed invasive plant species.	Eradication work began removing New Zealand Flax from Inaccessible and accessible, emergent Pōhutukawa on Tristan. An Indigena specialist and RSPB community engagement lead visited Tristan, respectively reassessing all 137 known invasive plant species and training all Tristan Conservation Department in invasive plant control.	
Outcome **- All emergent NZ Flax, Pōhutukawa and self-sown Monterey Pine are removed from known and accessible invasion sites, and Tristan Government is informed and upskilled to deliver long-term invasive plant eradications/management.**		
Outcome indicator 0.1 No emergent New Zealand Flax plants are recorded on the previously infested Inaccessible Island plateau or cliffs by end of Year 3.	**See section 3.3, Annex 4.1, Annex 4.2** 1,142 New Zealand Flax plants mapped and removed from an area of Cliffs above Salt Beach. Six inspections performed on Waterfall Ridge to scan the cliffs for seedlings.	Flax team complete another three-month field season of flax eradication and survey work.
Outcome indicator 0.2 80% reduction of emergent Pōhutukawa trees achieved on Tristan by end of Year 3.	**See section 3.3.** Estimated 10-15% of all Pōhutukawa trees mapped in Year 1 by Indigena removed after training Tristan Conservation Department in Pōhutukawa control.	Tristanians complete another field season of Pōhutukawa eradication and record any new seedlings in previously cleared areas.
Outcome indicator 0.3 By project end, 15% in available pastureland at Sandy point post self-sown Monterey Pine removal.	**See section 3.3.** Tristan Conservation Department trained in safe invasive plant control (herbicide/chainsaw use).	Tristanians trained in Monterey Pine removal and aim to remove all emergent self-sown pine from Sandy Point.
Outcome indicator 0.4 Tristan Conservation Department (1 female/3 male) trained in invasive plant identification, control and mapping by project end.	**See section 3.3.** All of Tristan Conservation Department (2 female: 5 male) trained in safe herbicide/chainsaw use and Pōhutukawa control. IBI provided mapping software and spreadsheets.	Tristan Conservation Department trained in Monterey Pine removal.

Outcome indicator 0.5 By project end, Tristan Conservation Department formally adopts a Tristan Invasive Plant Strategy, which will guide seedbank control for the project's three target species, plus other prioritised invasive plants.	**See section 3.3, Annex 4.5** Indigena specialist visited Tristan and began reassessing all 137 species highlighted in the 2007/08 invasive plant report, which will inform the Invasive Plant Strategy.	Indigena continues to work updating the invasive plant report with data from Year 1's visit.
Output 1 - All emergent New Zealand Flax plants eradicated from areas of known presence on Inaccessible World Heritage Site.		
Output indicator 1.1 NZ Flax plants are mapped and removed from all known areas, and surveyed for presence throughout a 500m buffer, by Q4 in Year 3.	**See section 3.2, Annex 4.1, Annex 4.2** 1,142 New Zealand Flax plants mapped and removed from an area of cliffs above Salt Beach.	Flax team complete another three-month field season of flax eradication and survey work.
Output indicator 1.2 One local Tristan trainee demonstrates year-on-year improvement in rope access skills, achieving internationally recognised certification by project-end.	**See section 3.2, Annex 4.3** Christiaan Gerber joined the flax team on Inaccessible, logging another 179 rope hours.	Christian will join the flax team in the upcoming field season and log more rope hours.
Output indicator 1.3 Annual Q4 flax eradication community newsletter produced, annual Q4 Flax team Tristan school lesson delivered, and Q4 of Year 3 open-invite community presentation made.	**See section 3.2, Annex 4.4** Newsletter produced to update the community on the season's work. Two days of rope access training delivered to the new apprentices in Tristan's Conservation Department.	Newsletter produced on the outcomes of the field season, school lesson delivered.
Output indicator 1.4 Emergent plant eradication success monitoring completed via at least two random plateau transects and two random cliff transects in Q4 of Y2 and Y3.	**See section 3.2, Annex 4.1** Although not due to begin until Year 2, Waterfall Ridge, an area cleared of flax plants two years previously, was rechecked. 183 seedlings removed.	Flax team completes at least four random monitoring transects.
Output 2 - Targeted Pōhutukawa control with tree coverage significantly reduced on Tristan.		

Output indicator 2.1 A minimum of 8 Tristanians (at least 3 female) are trained in aspects of Pōhutukawa control, safe herbicide use, safe chainsaw use and use of a specialist weed management app by Q4 of Year 1.	**See section 3.2, Annex 4.6** All seven members of Tristan Conservation Department (2 female: 5 male) trained. IBI provided a SOP for Pōhutukawa control and software/templates in place of a specialist weed management app.	Completed.
Output indicator 2.2. Pōhutukawa coverage mapped and compared with 2008 baseline by Q3 of Year 1.	**See section 3.2.** Extensive Pōhutukawa coverage mapping revealed its distribution to be greater than anticipated against the 2008 baseline, with priority control areas to limit its spread identified.	N/A (Further mapping planned for Year 3).
Output indicator 2.3 All accessible, emergent trees are eradicated by Q4 of Year 3.	**See section 3.2.** Tristanians removed an estimated 10-15% of all emergent plants identified in the Year 1 mapping, focusing on the areas IBI suggested to prioritise.	Tristanian project team complete another field season of Pōhutukawa removal, investing elevated resource to compensate for the shorter than planned Year 1 control season.
Output indicator 2.4 Year 1 and Year 2 clearings rechecked and re-treated as required in Qs 3 and 4 of Years 2 and 3.	**See section 3.2.** N/A until Year 2.	Tristanian project team record and re-treat any new Pōhutukawa seedlings in areas cleared in Year 1.
Output 3 – All emergent self-sown Monterey Pine eradicated from Tristan.		
Output indicator 3.1 A minimum of four Tristan Conservation Department staff (3 male, 1 female) are trained in aspects of Monterey Pine mapping, control and safe herbicide/chainsaw use by Q4 of Year 1.	**See section 3.2.** All seven members of Tristan Conservation Department (2 female: 5 male) trained in safe herbicide/chainsaw use.	IBI provide TDC with their recommended SOP for Monterey Pine removal.
Output indicator 3.2 Monterey Pine coverage mapped, compared with 2008 baseline by Q4 of Year 1.	**See section 3.2.** Mapping efforts have been rescheduled to take place in Year 3 when an Indigena specialist visits Tristan.	Tristan Conservation Department capture drone footage of pine extent.

Output indicator 3.3 All emergent trees spreading outside of planted stand felled/treated by Q4 of Year 2.	**See section 3.2.** Eradication efforts rescheduled to commence in Year 2.	Tristanian project team complete a field season of Monterey Pine control, with the aim to eradicate all emergent trees.
Output indicator 3.4 Year 1 and Year 2 clearings rechecked and treated where necessary.	**See section 3.2.** N/A in Year 1.	N/A (No Year 1 clearings to check in Year 2 due to operational rescheduling).
Output 4 – Baseline knowledge and community understanding of existing priority invasive plant species improved through surveys, mapping and F2F discussion.		
Output indicator 4.1 Reassessment of all 137 species highlighted in the 2008 invasive plant report and any new species discovered by Q2 of Year 3.	**See section 3.2, Annex 4.5, Annex 4.7** Reassessment and mapping commenced. 13 new species identified, and several species which can be bought to zero density with minimal effort highlighted.	Indigena continues to work on the report with data from Year 1's visit.
Output indicator 4.2 2008 baseline maps of the 17 priority species updated, with detailed maps of the priority species by Q4 of Year 3.	**See section 3.2, Annex 4.5** Reassessment and mapping commenced, including revealing Pōhutukawa coverage to be more extensive than anticipated.	Indigena continues to work on the report with data from Year 1's visit.
Output indicator 4.3 Every household receives annual Q4 Tristan plant eradication community newsletter and at least 10% of community attend annual community update meeting.	See section **3.2.** N/A – annual newsletter and update meetings postponed due to the relationship breakdown.	Community newsletter issued; RSPB community engagement lead hosts community update meeting.
Output indicator 4.4 At least 75% of Tristan Council members, at least 75% of Tristan school children, and at least 50 Tristanians (equal male to female ratio) have face-to-face discussions with community engagement lead and plant specialist in Q3 of Years 1 and 3.	See section **3.2.** RSPB community engagement lead and plant specialist held face-to-face discussions with most members of the community (over 50 Tristanians, and Tristan Council members and school children).	RSPB community engagement lead visits Tristan and engages with the Tristan community via meetings, informal discussions and classroom teaching.

Output indicator 4.5 Weed Control Manual, focussed on at least 5 priority species of agricultural threat and 5 of conservation threat, produced in partnership with Tristan community, Conservation and Agriculture Departments by Q4 of Year 3.	See section **3.2, Annex 4.7** Indigena specialist identified several invasive plant species which will not only be significant but achievable eradication/control wins for the community.	Indigena completes more of the manual preparation work.
Output indicator 4.6 By end of project, a minimum of 10 members of the Tristan community have received training in safe agro-chemical herbicide use for their domestic agriculture.	See section **3.2.** N/A until Year 3.	N/A until Year 3.

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

Project Summary	SMART Indicators	Means of Verification	Important Assumptions
Impact: Native wildlife thrives on Inaccessible Island World Heritage Site in the absence of invasive plants, and Tristan's community and biodiversity benefit from successful eradications of all feasibly-removed invasive plant species.			
Outcome: All emergent NZ Flax, Pōhutukawa and self-sown Monterey pine are removed from known and accessible invasion sites, and Tristan Government is informed and upskilled to deliver long-term invasive plant eradications / management.	0.1 No emergent New Zealand Flax plants are recorded on the previously infested Inaccessible Island plateau or cliffs by end of Year 3 0.2 80% reduction of emergent Pōhutukawa trees achieved on Tristan by end of Year 3 0.3 By project end, 15% increase in available pastureland at Sandy Point post self-sown Monterey Pine removal 0.4 Tristan Conservation Department (1 female / 3 male) trained in invasive plant identification, control and mapping by project end. 0.5 By project end, Tristan Conservation Department formally adopts a Tristan Invasive Plant Strategy, which will guide seedbank control for the project's three target	0.1 Flax assessment final report; updated flax presence maps; photographic evidence 0.2 Pōhutukawa presence maps updated annually; assessment report; photographic evidence 0.3 Monterey Pine maps updated annually; Photographic evidence 0.4 Monitoring app records; training reports; feedback forms; photographic evidence 0.5 Invasive Plant Strategy report; updated 'species of concern' list	A goal of invasive plant eradication is not possible within the three-year timeframe of the project due to the uncertain size, distribution and longevity of these species' seedbank in the soil. The primary objective is therefore to reduce and then maintain invasive plant populations at 'zero density', whereby all individuals capable of reproduction are removed and no further seed is added to the seedbank. Ultimately this will result in eradication. Tristan Conservation Department and the RSPB will continue monitoring and control efforts beyond the life of the project. We have worked in partnership for almost 20 years, and RSPB funds a core staff salary in the Conservation Department, neither of which are dependent on further project-funding, so we will be able to deliver on this. New invasive plant introductions are likely to be much reduced as Tristan

	species, plus other prioritised invasive plants.		has a new biosecurity officer and legislation (2021), plus a bespoke new biosecurity facility (2022).
Outputs: **1**. All emergent New Zealand Flax plants eradicated from areas of known presence on Inaccessible Island World Heritage Site	1.1 NZ flax plants are mapped and removed from all known areas, and surveyed for presence throughout a 500m buffer, by Q4 in Year 3 1.2 One local Tristan trainee demonstrates year-on-year improvement in rope access skills, achieving internationally-recognised certification by project-end. 1.3 Annual Q4 flax eradication community newsletter produced, annual Q4 flax team Tristan school lesson delivered, and Q4 of Year 3 open-invite Tristan community presentation made. 1.4 Emergent plant eradication success monitoring completed via at least two random plateau transects and two random cliff transects in Q4 of Y2 and Y3.	1.1 Control team reports; Waterfall Ridge transition to Salt Beach flax presence map; buffer survey report; drone training report; photographic evidence 1.2 Baseline skills assessment on rigging techniques, gear inspection and rope management; trainer's report; IRATA Level 2 certificate (project end) 1.3 TDC community flax update articles, school presentation ppt, community presentation ppt. 1.4 Monitoring SOPs; monitoring report; photographic evidence	Prior to each field season, an airdrop is essential to transport equipment/supplies to the plateau to minimise time spent moving between base- and satellite-camps. This is highly achievable as it has occurred in the two years prior to this project. Team size: four-person team for each year is essential to achieve stated indicators. Injuries / unforeseen circumstances in team could have a significant impact on results but is highly unlikely as the team has been working safely on Inaccessible for the past three years and are experienced in all elements of the work. 8-12 week working period on Inaccessible essential for reaching control/mapping targets. Time on island not impacted by unpredictable shipping schedules/suitable weather conditions for drop-off and pick-up. Both elements mitigated against by carrying out work in summer months plus yacht charter.

2. Targeted Pōhutukawa control with tree coverage significantly reduced on Tristan	2.1 A minimum of 8 Tristanians (at least 3 female) are trained in aspects of Pōhutukawa control, safe herbicide use, safe chainsaw use and use of a specialist weed management app by Q4 of Year 1 2.2 Pōhutukawa coverage mapped and compared with 2008 baseline by Q3 of Year 1 2.3 All accessible, emergent trees eradicated by Q4 of Year 3 2.4 Year 1 and Year 2 clearings rechecked and re-treated as required in Qs 3 and 4 of Years 2 and 3	2.1 Pōhutukawa control training protocol; herbicide training report; photographic evidence *2.2* Updated Pōhutukawa coverage map 2.3 Timesheets; monitoring data from weed management app; photographic evidence 2.4 Monitoring report; weed management app data; photographic evidence	Possible community fears about herbicide use can be allayed. This is highly likely as Tristan Conservation and Agriculture Departments already use herbicides widely on the island and will be given additional training in their safe use. The project will also always favour the least toxic herbicide that will get the job done. All required herbicides are available in South Africa. Highly likely as Tristan already source multiple varieties from SA. Sufficient personnel available to carry out the eradication work. Highly likely as Tristan Conservation Department are highly committed and all salary costs are covered. Community allows trees to be removed from gardens and other private land. Highly likely as 98% of the trees are on Crown land and Community have already stated their support for removal due to Pōhutukawa damaging brickwork and outcompeting native ‘island tree’ (Conservation Department regularly gets asked to remove Pōhutukawa from near homes).
3. All emergent self-sown Monterey Pine eradicated from Tristan	3.1 A minimum of four Tristan Conservation Department staff (3 male: 1 female) are trained in	3.1 Monterey Pine control training report (Indigena); chainsaw	Possible community fears about removing pines can be allayed (the planted stand is a popular landmark

	aspects of Monterey Pine mapping, control and safe herbicide/chainsaw use by Q4 of Year 1 3.2 Monterey Pine coverage mapped, compared with 2008 baseline by Q4 of Year 1 3.3 All emergent trees spreading outside of planted stand felled/treated by Q4 of Year 2 3.4 Year 1 and Year 2 clearings rechecked and treated where necessary	training report (RSPB); photographic evidence 3.2 Updated Monterey Pine coverage map; community meeting minutes/photographic evidence 3.3 Timesheets; monitoring data from weed management app; photographic evidence 3.4 Monitoring report; photographic evidence	from sea). This will be possible as the planted stand will remain untouched, and the pines are encroaching into the highly valued yet limited available public pastureland. Tristan Conservation Department will be leading the work on the ground, with Indigena support, so visibly a locally run project that can therefore better engage locals.
4. Baseline knowledge and community understanding of existing priority invasive plant species improved through surveys, mapping and F2F discussion	4.1 Reassessment of all 137 species highlighted in 2008 invasive plant report and any new species discovered by Q2 of Year 3 4.2 2008 baseline maps of the 17 priority species updated, with detailed maps of priority species by Q4 of Year 3 4.3 Every household receives annual Q4 Tristan plant eradication community newsletter and at least 10% of community attend annual community update meeting	4.1 Reassessment of invasive plant species report 4.2 Updated alien plant maps 4.3 Newsletter; attendance register 4.4 Photographs from public meetings and school talks; educational resources for school; trip report 4.5 Weed Control Manual; Manual feedback 4.6 Training Report (Indigena)	COVID-19 restrictions don't prevent plant specialist travelling to South Africa from New Zealand (both countries previously having some of the strictest measures put in place globally). Highly likely as prevalence of Covid less, vaccination rates high and travel will occur during spring/summer months when case rate significantly lower. Islanders will engage as invasive plants are an increasingly prominent issue. Significant demand in particular for weed control advice as some novel weeds are rendering some of the potato patches unviable.

	4.4 At least 75% of Tristan Council members, at least 75% of Tristan school children, and at least 50 Tristanians (equal male:female ratio) have face-to-face discussions with community engagement lead and plant specialist in Q3 of Years 1 and 3 4.5 Weed Control Manual, focussed on at least 5 priority species of agricultural threat and 5 of conservation threat, produced in partnership with Tristan community, Conservation and Agriculture Departments by Q4 of Year 3 4.6 By end of project, a minimum of 10 members of the Tristan community have received training in safe agro-chemical herbicide use for their domestic agriculture.		

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. Each activity should start on a new line and be no more than approximately 25 words.)

1.1.1 Experienced rope access team hired to travel to Inaccessible Island in Q3 of each year to carry out NZ Flax eradication and survey work
1.1.2 NZ Flax team Lead receives drone/GIS training in Q2 of Year 1 to guide eradication work and produce updated flax coverage maps each season
1.1.3 Inaccessible Island equipment/food airdrop takes place during the annual SA Agulhas II Gough Island relief voyage, in each project year
1.2.1 NZ Flax team are joined by a Tristanian with rope access experience during each field season
1.2.2 Tristanian flax team member receives training and attains 1000 rope hours during three field seasons to achieve IRATA Level 2 certification
1.3.1 NZ Flax team deliver engagement activities each year, culminating in an end-of-project presentation given to the Tristan community in the final year
1.4.1 NZ Flax team assess effectiveness of flax control in Year 2 & 3 by surveying a sample of 'cleared' areas – findings presented in final report

2.1.1 Experienced invasive plant specialist hired to assess and map non-native plant species on Tristan, and to deliver plant control and safe herbicide usage training
2.1.2 RSPB community engagement lead delivers chainsaw training to 8 Tristanians in Year 1
2.1.3 Invasive plant specialist provides training to 8 Tristanians to use specialist App, and spreadsheet templates, so all plant eradication work is recorded
2.2.1 Invasive plant specialist uses drone/GIS software to create a revised map of Pōhutukawa coverage on Tristan
2.3.1 Tristanian invasive plant team recruited and trained in safe Pōhutukawa eradication techniques
2.3.2 Tristanian project team eradicate all accessible, emergent Pōhutukawa trees by project end
2.4.1 Numbers of new Pōhutukawa seedlings recorded in sample 'cleared' areas between years to assess effectiveness of eradication work

3.1.1 Tristan Conservation Department staff trained in safe Monterey Pine control – including chainsaw/herbicide usage
3.2.1 Invasive plant specialist provides drone and GIS mapping training to Tristan Conservation Department staff – revised coverage map created in partnership
3.3.1 Tristanian project team trained in safe Monterey Pine eradication techniques
3.3.2 Tristanian project team eradicate all self-sown Monterey Pines by end of Year 2
3.4.1 Numbers of new Monterey Pine seedlings recorded in sample 'cleared' areas between years to assess effectiveness of eradication work

4.1.1 Invasive plant specialist reassesses invasive plant species from 2008 report, feeding back in person to Tristan Government and producing a written report
4.1.2 Invasive plant specialist writes 'Invasive Plant Strategy' by project end to provide guidance to Conservation Department for future seedbank control of priority species
4.2.1 Invasive plant specialist produces up to date maps of species of concern from 2008 report
4.3.1 Invasive plant specialist and community engagement lead host annual invasive plant update meeting for the community in Q3
4.3.2 Annual plant eradication newsletter detailing work carried out that year written and compiled by project field teams and shared with all Tristan households
4.4.1 Community engagement lead visits Tristan in Q3 (annually) to engage Council, school children and community members via public meetings, informal discussions and classroom teaching
4.5.1 Invasive plant specialist works in partnership with Conservation and Agriculture Departments to identify plant species of concern and to write 'Weed Control Manual'
4.5.2 Council meeting held in Q4 of final year to review all control work and to decide future eradication priorities using Weed Control Manual as guidance

Annex 3: Standard Indicators

Table 1 Project Standard Indicators

DPLUS Indicator number	Name of indicator	Units	Disaggregation	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
DPLUS-A01	A minimum of 8 Tristanians (at least 3 female) are trained in aspects of Pōhutukawa control, safe herbicide use, safe chainsaw use and use of a specialist weed management app by Q4 of Year 1.	People	Gender	7 (2F : 5M)			7	8
DPLUS-A03	Tristan Conservation Department (1 female / 3 male) trained in invasive plant identification, control and mapping by project end.	Number of Organisations	Tristan Conservation Department	1			1	1
DPLUS-B02	Weed Control Manual, focussed on at least 5 priority species of agricultural threat and 5 of conservation threat, produced in partnership with Tristan community, Conservation and Agriculture Departments by Q4 of Year 3.	Number	Invasive Species Management	0			1	1
DPLUS-B05	By end of project, a minimum of 10 members of the Tristan community have received training in safe agro-chemical herbicide use for their domestic agriculture.	People	Gender	0			0	10 (5F : 5M)
DPLUS-D12	By project end, 15% increase in available pastureland at Sandy Point post self-sown Monterey Pine removal	Area (hectares)	New	0			0	15% increase (exact area not yet known)

Table 2 Publications

Title	Type (e.g. journals, best practice manual, blog post, online videos, podcasts, 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 4: Onwards – supplementary material (optional but encouraged as evidence of project achievement)

Annex	Evidence provided	Document name
4.1	Report from Yr 1 Inaccessible flax season	4.1_DPLUS191_AR1_ FlaxTripReport
4.2	Supporting material for Yr 1 flax work	4.2_DPLUS191_AR1_ FlaxSupportingMaterial
4.3	Trainer's rigging report for Christiaan Gerber (TDC)	4.3_DPLUS191_AR1_Christiaan_TR
4.4	Trainer's rigging report for TDC Conservation Dept.	4.4_DPLUS191_AR1_TDCConservation_TR
4.5	Reassessment report of TDC invasive plant species	4.5_DPLUS191_AR1_TristanAlienSpeciesReport(IBI)
4.6	Protocol for the control of Pōhutukawa	4.6_DPLUS191_AR1_M.excelsaSOP(IBI)
4.7	IBI identified easier invasive plant targets on TDC	4.7_DPLUS191_AR1_OtherSpeciesTargets(IBI)

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.	
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
If you are submitting photos for publicity purposes, do these meet the outlined requirements (see section 15)?	
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.	