# DPLR1\1064

Darwin Plus Local - Final Report (1)

Officer: Jessica Magnus

#### Section 1 - Darwin Plus Local Project Information (Essential)

#### **Project Reference Number**

DPL0010

## Q1. Project Title

No Response

#### **Overseas Territory(ies)**

☑ St Helena, Ascension, and Tristan de Cunha

#### Lead Organisation or Individual

Ascension Island Government Conservation and Fisheries Directorate

#### Partner Organisation(s)

Zoological Society of London

#### Value of Darwin Plus Local Grant Award

#### **Project Start Date**

03 April 2023

#### **Project End Date**

31 March 2024

#### **Project Leader Name**

Tobias Capel, Tiffany Simpson

#### Project Website/Twitter/Blog etc.

No Response

## Report Author(s)

Tobias Capel

#### **Report Date**

05 April 2024

#### **Project Summary**

No Response

#### **Project Outcomes**

Checked	Biodiversity: improving and conserving biodiversity, and slowing or reversing biodiversity loss and degradation;
Checked	Climate Change: responding to, mitigating and adapting to climate change and its effects on the natural environment and local communities;
Checked	Environmental quality: improving the condition and protection of the natural environment;
Checked	Capability and capacity building: enhancing the capacity within OTs, including through community engagement and awareness, to support the environment in the short- and long-term.

#### Section 2 - Project Outcomes (Essential)

# On a scale of 1 (high – outcome substantially exceeded ) to 5 (low – outcome substantially did not meet expectation ), how successful do you think your project has been?

⊙ 3 - Outcome met expectation

#### Project outcomes and justification for rating above

#### **OBJECTIVE 1: MITIGATING LITTERING OF CIGARETTE BUTTS**

Cigarette butt bins were deployed in all locations proposed in the bid. Quarterly surveys of three beach hut areas in Long Beach Nature Reserve (n=2) and North East Nature Reserve (n=1), our indicator sites for quantifying the impact of the new bins, showed an observable reduction in the number of cigarette butts littered in comparison to the average 2023 prevalence before installation of the new bins. Our target for measuring success of this intervention was to see a 50% reduction in the number of cigarette butts found at these sites in comparison to the average baselines determined from quarterly surveys pre-bin installation performed as part of the DPLUS176 project. The post bin installation survey saw an average reduction of 41.49% across these indicator sites, however, there was a large range observed between sites: Long Beach beach hut (LB) 37.53%, Turtle Ponds beach hut (TP) 13.68%, and North East beach hut (NE) 73.26% (Figure 1). An additional metric for measuring the impact of the bins was devised after application submission, which was to assess the relative prevalence of cigarette butts in the total litter recorded in these sites to investigate the relative reduction of cigarette butt littering specifically by comparing with other litter present. This analysis showed an average

18.25% reduction in the relative prevalence of cigarette butts in the total litter at indicator sites, however, there was an even greater range with this between LB, TP and NE showing changes of -37.63%, +18.97% and -36.05%, respectively (Figure 2). In conclusion, whilst the bins have been successful at reducing overall number and relative prevalence of cigarette litter, they did not consistently reach our intended target and evidently the performance of the bin at TP needs addressing as it was not as successful as those at other sites.

OBJECTIVE 2: TARGETED REMOVAL OF PLASTIC DEBRIS FROM REMOTE SECTIONS OF COASTLINE BEFORE THEY DEGRADE IN SITU

Two remote beach cleans were performed with the remote beach clean equipment along the Shelly Beach coastline within the Wideawake Fairs Nature Reserves. Cumulatively, a 100% clearance of plastic debris was achieved from that location, meeting our measure of success target of 90-100% reduction. The majority of that plastic was in the form of two fish aggregating devices (FADs) and one large net (Figures 3 – 5). Multiple smaller items, principally single-use plastic bottles and hard plastic fragments, were also collected (Figure 6). Five AIGCFD employees removed 65kgs of plastic in the first remote beach clean (Figure 7). An even greater volume of debris was removed during the second remote beach clean, attended by 6 volunteers from the public (Figure 8). The equipment bought through this grant, has enabled a large scale clean of the area and the removal of items that have been degrading in that environment for years. On the success of these efforts, additional beach cleans are planned by AIGCFD who now have the capacity to perform them with the equipment provided through this grant.

## Supporting Evidence - file(s) upload

<ul> <li>▲ Figure 7 - First remote beach clean group with e <u>quipment</u></li> <li>         29/04/2024         ① 13:11:32         ☑ jpg 8.57 MB         </li> </ul>	<ul> <li>▲ Figure 5 - Large net removed from Shelly Beach.</li> <li>         29/04/2024         ① 13:11:26         ☑ jpg 5.42 MB         </li> </ul>
<ul> <li>➢ Figure 6 - Single-use plastic bottles collected duri ng remote beach clean</li> <li>i 29/04/2024</li> <li>⊙ 13:11:22</li> <li>i jpg 7 MB</li> </ul>	<ul> <li>▲ Figure 4 - FAD 2 removed from Shelly Beach</li> <li>         29/04/2024         ① 13:11:18         ☑ jpg 4.41 MB         </li> </ul>
<ul> <li>▲ Figure 3 - FAD 1 removed from Shelly Beach</li> <li>▲ 29/04/2024</li> <li>④ 13:11:15</li> <li>▲ jpg 4.67 MB</li> </ul>	<ul> <li>▲ Figure 8 - Second remote beach clean</li> <li>▲ 29/04/2024</li> <li>④ 13:11:09</li> <li>▲ jpg 3.42 MB</li> </ul>
<ul> <li>☆ Figure 2</li> <li>iiii 05/04/2024</li> <li>iiiiii 18:34:04</li> <li>iiiiiii png 26.31 KB</li> </ul>	<ul> <li>▲ Figure 1</li> <li>➡ 05/04/2024</li> <li>④ 18:34:04</li> <li>➡ png 23.75 KB</li> </ul>

#### Supporting Evidence - links to published document/online materials

Supporting evidence includes eight figures, two graphs presenting data collected from surveys of cigarette butt litter and six images from the remote beach cleans as uploaded above.

## **Project Challenges**

One unexpected problem encountered by the project was the lack of impact that the cigarette bin placed at Turtle Ponds beach hut was having on reducing the relative prevalence of cigarette butt litter at that site in comparison to the other two indicator sites which saw similar levels of reduction. An assessment was made that a possible key factor that could be negatively affecting the performance of the bin, in comparison to the bins at the other two indicator sites, was that the Turtle Ponds beach hut is more extensive in area than other monitored beach huts, enabling occupants who smoke to have multiple areas to smoke away from the current bin location. With support of the AIG Waste Management Team, it was decided to install a second cigarette bin to provide an additional disposal option in that area for smokers and to increase the visibility of bins at that beach hut. Continued monitoring by AIGCFD staff in the future will evaluate whether this action has been successful in improving the performance of the cigarette bins in this area.

#### **Lessons Learned**

i) The timelines worked well for procurement, installation and use of equipment to see a return of results within the project timeframe.

ii) As outlined above, the installation of the cigarette bins was not as impactful as initially hoped. This is most likely due to the fact that the presence of the bins and dissemination of a public notice is something that can facilitate an anti-litter behaviour change in the community rather than an intervention that drives one systemically.

iii) If this project were to be re-done, greater investment from the onset into a more comprehensive behaviour change campaign would improve the success of the new bins. This would require investment in staff costs and consultancy fees with relevant specialists to perform an in-depth community consultation to understand the scale and motivation behind the littering behaviour within the community, followed by the creation of tailored values-based messaging and materials that addresses the individuals involved in the littering behaviour.
iv) Projects seeking to tackle plastic pollution must consider which end of the problem, source or sink, they wish to address and invest accordingly. This project attempted to do both and, in hindsight achieved realistic results given the specific investments made and the time frame allotted to the project. It is easier to achieve results when cleaning up plastic pollution than to create systemic change preventing the creation of plastic pollution within a year time frame.

## Section 3 - Project Finance (Essential)

## **Project Expenditure**

Project Spend (indicative) since last Annual Report	2023/24 Grant (£)	2023/24 Total actual Darwin Plus Costs (£)	Variance %	Comments (please explain significant variances)
Staff Costs	£0.00	£0.00	0	No Response
Consultancy Costs	£0.00	£0.00	0	No Response
Overhead Costs	£0.00	£0.00	0	No Response
Travel and Subsistence	£0.00	£0.00	0	No Response
Operating Costs	£0.00	£0.00	0	No Response

Capital Items			•	Significant variation was due to a large overestimate of the required shipping costs.
Others	£0.00	£0.00	0	No Response
Total				

#### Please provide a short narrative summary on project finances.

This project planned for the purchase of capital equipment including cigarette bins, rucksacks, PPE and tools. The actual purchase price of these items was very close to the budgeted amount with being budgeted and being spent.

However, shipping costs can be highly variable depending on the amount of total freight being transported to Ascension per ship. To account for this, **account** was budgeted for shipping while only **account** was actually required. This led to a significant underspend.

#### Section 4 - Contribution of Project to Darwin Plus Programme Objectives

Please select up to **one** indicator that applies within **each group/indicator list** (**A**, **B**, **C**, **D**) and report your results for that indicator in the text box underneath. If you do not have relevant results to report for any of the indicators in a particular group, you can leave them blank.

Please also submit some form of evidence (above) to demonstrate any results you list below, where possible.

## Group A: Capability and Capacity - Core Darwin Plus Standard Indicators (select one)

Unchecked	DPLUS-A01: Number of people from key national and local stakeholder groups completing structured and relevant training.
Unchecked	DPLUS-A02: Number of secondments or placements completed by individuals of key local and national stakeholders.
Checked	DPLUS-A03: Number of local/national organisations with improved capability and capacity as a result of project.
Unchecked	DPLUS-A04: Number of people reporting that they are applying new capabilities (skills and knowledge) 6 (or more) months after training.

## **Group A Indicator Results**

Ascension Island Government Conservation and Fisheries Directorate staff (currently n=26) has improved capability to perform beach cleans to address plastic pollution washing up in Nature Reserves. Ascension Island Government Waste Management Team has improved capability in their waste management infrastructure to capture waste generated in coastal areas.

## Group B: Policies, Practices and Management- Core Darwin Plus Standard Indicators (select one)

Unchecked	DPLUS-B01: Number of new/improved habitat management plans available and endorsed.
Unchecked	DPLUS-B02: Number of new/improved species management plans available and endorsed.
Unchecked	DPLUS-B03: Number of new/improved community management plans available and endorsed.
Unchecked	DPLUS-B04: Number of new/improved sustainable enterprises/ community benefits management plans available and endorsed.
Unchecked	DPLUS-B05: Number of people with increased participation in local communities / local management organisations (i.e., participation in Governance/citizen engagement).
Unchecked	DPLUS-B06: Number of Local Stakeholders and Local Communities (people) with strengthened (recognised/clarified) tenure and/or rights.

## **Group B Indicator Results**

N/A

## Group C: Evidence and Best Practices - Core Darwin Plus Standard Indicators (select one)

Unchecked	DPLUS-C01: Number of best practice guides and knowledge products published and endorsed.
Unchecked	DPLUS-C02: Number of new conservation or species stock assessments published.
Unchecked	DPLUS-C03: New assessments of habitat conservation action needs published.
Unchecked	DPLUS-C04: New assessments of community use of biodiversity resources published.

## **Group C Indicator Results**

N/A

Group D: Sustainable Benefits to People, Biodiversity and Climate -Core Darwin Plus Standard Indicators (select one)

Unchecked DPLUS-D01 Hectares of habitat under sustainable management practices.

Unchecked DPLUS-D02: Number of people whose disaster/climate resilience has been improved.

Unchecked DPLUS-D03: Number of policies with biodiversity provisions that have been enacted or amended.

## **Group D Indicator Results**

N/A

#### Section 5 - Project Partnerships, Wider Impacts and Contributions

#### **Project Partnerships**

i) Ascension Island Government Fisheries and Conservation Directorate (AIGCFD)

- Overall project and financial management.
- Deliver on-island project activities, public engagement, monitoring and evaluation.
- Zoological Society of London (ZSL)

• Assist with processing co-created data and the design of survey methodologies used to gather evidence for measuring the impact.

• Providing systemic diagnosis technical input to guide and evaluate interventions and ensure alignment with the existing John Ellerman

Foundation and Darwin Plus grants (DPLUS167)

ii) The Ascension Island Government is the lead partner on this project.

iii) A strong project partnership was established between AIGCFD and ZSL during the onset of the DPLUS175 project "Turning the tide on plastic pollution: Ascension and St Helena", which was producing initial results from which this Darwin Plus Local project was designed to address. One key strength has been the communication between partners, with regular email correspondence and fortnightly 1:1 meetings to discuss project actions enabling active collaboration between both partners throughout the duration of the project.

iv) The Ascension Island community was involved in the project in several ways: they were addressed in the public notices to be made aware of the newly installed cigarette bins, two club owners participated by deploying cigarette bins in their venues to promote awareness and a small number of individuals participated voluntarily in one of the remote beach cleans.

## Wider Impacts and Decision Making

The results obtained from this Darwin Plus Local project have directly informed the development of the Ascension Island single-use plastic system map created as a key output for project DPLUS176, a tool that diagnoses the system and identifies barriers and opportunities for change. This project has highlighted that the littering behaviour on Ascension Island is too ingrained for the provision of an appropriate waste disposal bin to mitigate littering significantly. The proposed behaviour change campaign as outlined in Section 2 (Lessons learned, part iii) is one of the proposed interventions for the plastic system on Ascension Island to reduce the leakage of plastic into the environment.

## Sustainability and Legacy

As outlined above in Section 4, the key legacy of this project will be the continued and improved capability within the Ascension Island Government. The Conservation and Fisheries Directorate will be able to continue performing targeted remote beach cleans with the remote beach clean equipment they will inherit upon completion of this Darwin Plus Local project. Clearance of plastic pollution is a stated objective within the management plans of the coastal nature reserves but the capability of the directorate to perform them efficiently and safely in the more inaccessible and polluted parts of the reserves was severely limited before the necessary equipment, including PPE, was bought in through this grant. In addition, the Waste Management Team will continue to service the cigarette bins deployed in all of the key coastal community hubs, providing continued benefits of a reduction in cigarette butt littering. The bins also provide the infrastructure to facilitate a behaviour change campaign to be run on the island to address the littering behaviour (as mentioned in Section 2, Lessons Learned, part iv), which is also a recommended intervention in the outputs of the project DPLUS176 to reduce the impacts of plastic pollution on Ascension Island.

#### Section 6 - Communications & Publicity

#### **Exceptional Outcomes and Achievements**

This project DPLR1\1064, Tackling plastic pollution on Ascension Island, addresses two of the biggest threats pertaining to plastic pollution where the greatest opportunity for successful intervention exists. Littering around beach huts used for social gatherings is the greatest source of local plastic pollution leaking into the marine environment from the population of Ascension. Surveys around Ascension's coastline and nature reserves found cigarette butts were the most frequently littered item, with the majority accumulating at beach huts. There was a lack of butt bins in sensitive coastal areas and the scale of the problem suggests low awareness of the impact cigarette butts have.

From offshore sources, plastic pollution brought to Ascension via ocean currents is washing up on the remote south coast. Surveys indicate this coastline to be the most polluted, containing 42% of all litter recorded on beaches. Over time, plastic debris will degrade into microplastics that will permeate throughout the marine environment impacting ecosystem health. The only available intervention for this threat was to remove plastic items while they are relatively intact. However, this was beyond the capability of volunteer work parties. In response to the local litter issue, cigarette butt bins were deployed in key locations around the island including the Long Beach Nature Reserve, North East Nature Reserve and Turtle Ponds. Subsequent surveys showed an observable reduction in the number of cigarette butts littered in these areas. The results were variable across the sites but there was an average reduction of almost 42% of littered cigarette butts following the installation of the bins.

To address the issue of pollution along the south coast of the island, equipment was purchased to enable more effective beach cleans to occur in remote locations. Now, with specialty tools, PPE and large volume rucksacks, volunteer parties are able to break down large items washed up on the beaches and safely carry them back for disposal. Two remote beach cleans were performed with the new equipment along the Shelly Beach coastline within the Wideawake Fairs Nature Reserves. Cumulatively, a 100% clearance of plastic debris was achieved from

that location. On the success of these efforts, additional beach cleans are planned by AIGCFD who now have the capacity to perform them with the equipment provided through this grant.

## Photo, video or graphic to be used for publicity and communications.

Please upload at least one relevant and engaging image, video or graphic that you consent to be used alongside the above text in Defra, JNCC or NIRAS communications material.

- ▲ <u>1064 remote beach clean Ascension Island Lor</u> <u>na West</u>
   ▲ 29/04/2024
- 23:04:202
  22:46:30
- ipg 8.5 MB

#### Photo, video, and/or graphic captions and credits.

Large volume rucksacks and specialty tools allow effective beach cleans along the remote coastline of Ascension Island. 🛛 Lorna West

I agree for the Biodiversity Challenge Funds Secretariat, Administrator, and/or JNCC to publish the content of this section.

• Yes, I agree for the BCFs Secretariat and/or JNCC to publish the content of this section.

Please list any accounts that you would like tagged in online posts here. This can include project pages, partners' pages or individuals' accounts for any of the following platforms: LinkedIn, Facebook, Twitter, or Instagram.

AIG Conservation Facebook Page - https://www.facebook.com/AscensionIslandConservation/ AIG Twitter Page - @AIGConservation (Twitter)

#### Section 7 - Darwin Plus Contacts

Please tick here to confirm that you have read and acknowledge the BCF's Privacy Notice on how contact details will be used and stored and that you have sought agreement from anyone that you are sharing personal details with us on their behalf.

● I confirm I have read the Privacy Notice and have consent to share the following contact details

#### **Project Contact Details**

Project Contact Name	Tiffany Simpson
Role within Darwin Plus Project	Primary Applicant
Email	
Phone	