



Darwin Initiative/Darwin Plus Projects Half Year Report (due 31st October 2020)

Project reference	DPLUS090
Project title	Reducing the impacts of plastic on the BIOT natural environment
Country(ies)/territory(ies)	British Indian Ocean Territory (BIOT)
Lead organisation	Zoological Society of London
Partner(s)	Swansea University, BIOT Administration
Project leader	<i>Rachel Jones</i>
Report date and number (e.g. HYR3)	<i>HYR2</i>
Project website/blog/social media	<i>#BIOTscience</i> www.marine.science

1. Outline progress over the last 6 months (April – Sept) against the agreed project implementation timetable (if your project has started less than 6 months ago, please report on the period since start up to end September).

Activity	Expected timing	Progress
1.1 Bimonthly surveys to record hawksbill and green turtle nesting	April – Sept 2020	<p>The survey schedule on Diego Garcia has been amended due to covid-19 travel-related restrictions.</p> <p>Monthly surveys of the Index Beach on Diego Garcia took place to record nesting tracks and monitor impacts of plastics on nesting activities.</p> <p>Two visits to the experimental plots (to assess effects of microplastics on nesting temperature) have been conducted to record any disturbance during this 12 month study ending December 2021. No disturbance has been reported in the first 8 months of the experiment.</p>
<p>1.2 Analysis of waste collected during beach cleans to establish main sources and composition.</p> <p>Study of ocean currents to increase understanding of source/circulation of plastic debris arriving in BIOT</p>	April – Sept 2020	<p>Analysis of beach waste complete - see annual report for year 1.</p> <p>The 3D modelling activity (using photogrammetry) has now been completed. This has calculated the volume of beach waste currently held at the waste facility on DG as 350m³ as of June 2019.</p> <p>Hindcasting model to track circulation of plastics to nesting beaches in progress.</p> <p>Progress made on turning MSc project analysing distribution of plastic waste across BIOT into a manuscript for publication.</p> <p>#OneLess specific list launched on Marine Debris Tracker app for future project litter tracking in BIOT</p>

2.3 Conduct before attitudes and behaviour survey with 300 people to assess personal use of SUP and levels of awareness around environmental impacts of ocean plastic	April – June 2020	First round of surveys (pre COVID) secured 169 responses. The Environment Officer has now returned to the island and has distributed more surveys – the first responses are arriving back at the time of writing and results will be in the annual report. We have revised our overall target to 250 responses prior to campaigning activity
2.7 Develop and implement SUP water bottle reduction campaign, including drive for residents to sign the #OneLess pledge	April – Sept 2020	SUP reduction campaign designed with messaging, digital assets produced. Campaign delivery delayed from June 2020 to Jan 2021. As well as developing the communications for the campaign we have also used social media to share progress of the project, with Twitter impressions reaching 6,896. The OneLess London campaign also published a blog talking about work we've conducted in BIOT
2.8 SUP water bottle amnesty held in DG to raise awareness of project and distribute refillable bottles with information - a stand at July 4th street celebrations.	Apr- Sept 2020	1100 refillable water bottles designed and produced with 'Hello DG, Goodbye Ocean Plastic' branding (Appendix 1). All being flown to DG ready for campaign activity in Jan 21 through negotiated space on supply flights due to changed transport routes.
2.9c Capture any video and interviews needed for the film 2.9d Film commissioned, produced and shown in cinema, radio materials produced and interviews given on MWR radio station and in Tropical Times newsletter	Aril – Sept 2020 April 20 – Mar 21	All footage collected Film completed. Will be shown on island during campaign activities (delayed from June 20 to Jan 21) ditto on island comms. EO to hold planning meetings over the next month on island.
2.10 Plastic waste sampled from waste storage area and numbers of plastic bottles/ tonne of waste estimated.	April – Sept 2020	As reported in the Yr 1 annual report an analysis of the composition and quantities of beach waste has been completed. Analysis of quantities of waste produced from retail sources on DG has been done for year 1 – figures for year 2 sales pending.
3.2 Samples taken from beach cleaned plastic and DG generated plastic and most common items sorted and quantified by plastic waste stream type	April – Sept 2020	Analysis completed and will be reported in the next annual report. One top line figure is that DG produces approx. 3.9 tonnes of new PET waste/year from SUP water bottles alone

2a. Give details of any notable problems or unexpected developments/lessons learnt that the project has encountered over the last 6 months (for Covid-19 specific delays/problems, please use 2b). Explain what impact these could have on the project and whether the changes will affect the budget and timetable of project activities.

2b. Please outline any specific issues which your project has encountered as a result of Covid-19. Where you have adapted your project activities in response to the pandemic, please briefly outline how you have done so here. Explain what residual impact there may be on your project and whether the changes will affect the budget and timetable of project activities.

Covid-19 has delayed key elements of the project including our main activity for Year 2; our plastics reduction activities on DG centred around a two-week campaign delivered by the whole project team. We have delayed these activities from June 2020 to Jan 2021 in the hope that we can still deliver them in the original project year for which they were planned.

However, there is currently a two week quarantine in place on arrival in DG and this will incur additional costs not originally in the project budget (accommodation and food) as well as more expensive flights compared to our original costings for the budget. We estimate these additional costs amount to £2,500 per head. There are two potential alternative scenarios – if the access restrictions stay as they are then we propose to off-set these costs by reducing the project team from ZSL from three to two people making a saving of approx £6000. By modifying campaign activities we believe we have sufficient people remaining in the project team to deliver the activities we have planned; there is an additional Environment Officer to be recruited by BIOT who may join the existing EO in DG in Jan – as well as the Director of the Chagos Conservation Trust who plans to join the team funded by CCT. Synergistic timing with a sea turtle expedition will assist with achieving our project activities.

We recognise that reducing the team size is less than ideal and we have also factored in restrictions in place on DG to limit the number of people that can gather together. These two factors mean that our campaign activities will be split up into more frequent interactions with smaller groups of people rather than large groups but we are confident we can still achieve our objectives in this way.

By making this change we can deliver our activities in the project year as planned without exceeding the budget or the timeline. We have not therefore made a formal change request but this has been discussed with Eilidh Smith in a phone call on 26 Oct 2020.

However, if the access restrictions tighten again before the Jan dates then an alternative approach would be to delay all project activities until later in 2021 (May or June). We would have to put the project on hold, including all expenditure, and would hope to achieve the aims with a short time extension but incur no increase in the overall budget. The final decision will be taken in the first week of December in consultation with the BIOT administration and a formal change request would be submitted if we are required to pursue this option at that time.

We continue to experience covid-19 related delays in delivery of a freezer to Diego Garcia for storage and subsequent necropsy of stranded turtles to estimate plastic accumulation in their guts. The freezer was ordered in January after confirmation of space availability from Diego Garcia. The order was put on hold due to a suspension of ordering during lockdown. In June, there were no stocks of freezers of appropriate size with ordering postponed to November.

2c. Have any of these issues been discussed with LTS International and if so, have changes been made to the original agreement?

Discussed with LTS: Yes

Formal change request submitted: No

Received confirmation of change acceptance N/A

3a. Do you currently expect to have any significant (e.g. more than £5,000) underspend in your budget for this year?

Yes No Estimated underspend: £

3b. If yes, then you need to consider your project budget needs carefully. Please remember that any funds agreed for this financial year are only available to the project in this financial year.

4. Are there any other issues you wish to raise relating to the project or to Darwin's management, monitoring, or financial procedures?

