

Darwin Initiative Main/Post/D+ Project Half Year Report (due 31 October 2016)

Project Ref No	DPLUS046
Project Title	Tracking marine megafauna at Ascension Island: towards evidence-based 'blue belts'
Country(ies)/Territory(ies)	Ascension Island
Lead Organisation	Ascension Island Government Conservation Department (AIGCD)
Partner(s)	Zoological Society of London (ZSL), Ascension Island Fishing Charters (AIFC), University of Windsor (UoW), South Atlantic Environmental Research Institute (SAERI)
Project Leader	<i>Dr Sam Weber/ Dr Nicola Weber</i>
Report date and number (e.g., HYR3)	<i>30th October 2016 HY1</i>
Project website/ Twitter/ Blog/ Instagram etc	https://www.facebook.com/AscensionIslandConservation https://twitter.com/AIGConservation
Funder (DFID/Defra)	<i>Defra</i>

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

1.1 A part-time project officer was appointed in April 2016, the role being taken by Dr Andy Richardson who had previously led on the Darwin Ascension Island Marine Sustainability project (DPLUS021, 2014-2016) and had experience in tagging methodology and data analysis.

1.2 Partner institution staff from ZSL (Dr Matthew Gollock and Fiona Llewellyn) and UoW (Dr Nigel Hussey) visited Ascension Island from 17th June to 1st July 2016 to train five of the AIGCD project team and initiate the tagging programme (see 2.2). AIGCD staff all had prior experience of attaching tracking devices to various species, but none specifically to sharks. Five AIGCD staff were trained in shark tag attachment and tissue sampling, with a further four staff trained in tissue sampling protocols.

2.1 Equipment for tagging operations was sourced on Ascension Island or purchased from the UK and USA, delivery and shipping to the island being achieved prior to the tagging expedition. Contracting and logistical arrangements for the use of a local fishing charter ("Dive Frigate") were made with the project partner AIFC for the duration of the tagging expedition.

2.2 During the initial training/tagging expedition in late-June 2016 (AIGCD, UoW, ZSL, AIFC) and a subsequent tagging event on 14th August 2016 (AIGCD, AIFC), all 18 Wildlife Computers (WC) SPOT tags were successfully deployed on sharks (16 Galapagos sharks, 2 tiger sharks) along with 8 WC-MiniPAT tags (6 Galapagos sharks, 2 tiger sharks) (Fig 3). As detailed in the original proposal, these sample sizes reflect the relative abundances of these species at Ascension Island, with tiger sharks being comparatively rare when compared to Galapagos sharks. Additional biometric measurements (sex, length) were taken from tagged individuals, as were tissue samples for future genetic and stable isotope analysis (non-DPLUS046 funding). All animals were handled in the water throughout the tagging process and released in a healthy condition. As of 30th October 2016, 1377 messages had been received from deployed tags, providing 439 locations of tagged animals. Although full analysis and discussion will be



Fig 1.



Fig 3.



Fig 2.

presented later in the project (in accordance with the agreed schedule), preliminary results are promising. While all Galapagos sharks have, so far, remained close to the island (one example, see Fig 1), one of the tiger sharks has crossed the western Atlantic (~2300km), moving from Ascension to the coast of Brazil (Fig 2) where it continues to transmit locations. All data is freely visible in MoveBank (<https://www.movebank.org/>) with free registration to the website.

Although the project also proposed tracking of marlin, all tags were placed on sharks due to: 1) additional funding having since been secured specifically for tagging of blue marlin at Ascension Island through the Blue Marine Foundation; 2) as of June 2016 there has been an unusual but significant increase in the number of large Galapagos sharks around the Island, this study being considered an opportunity to track this presumably mobile stock if and when it moves away from Ascension. Increasing the number of tags on these sharks increased sample size to provide data from both sexes and different sizes.

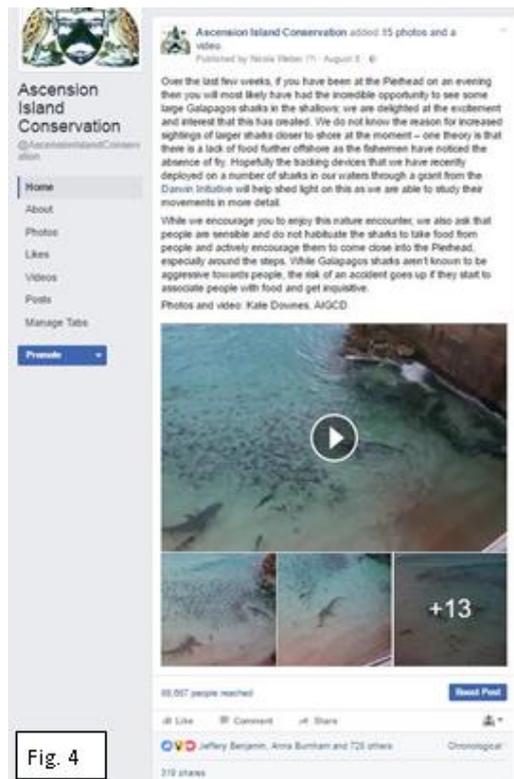


Fig. 4

4.1 A video documentary was compiled and produced of the tagging programme, being disseminated using social media (<https://vimeo.com/173475358> (5891 people reached) and was well received. The video was also shown as part of two public-engagement talks for island residents.

4.2 Updates from the project have been posted on both the lead and partner organisations' social media outlets, both during tagging expeditions and after continued follow-up dissemination. Reception for some posts has been exceptionally good, with one update on Facebook being viewed by 88,687 people (Fig.4). All posts have acknowledged Darwin funding and included appropriate branding. A Facebook photo album of Ascension shark tagging activities has reached 1946 people, received 124 'Likes' and 28

shares. Twitter updates have an average 'retweet' of around 50.

4.3 A public talk by AIGCD, UoW and ZSL at the conclusion of the June tagging expedition was well attended and presented content from the current project along with an overview of the global status of shark populations and the threats that they face, drawing on partner organisations' experience and wider work in this field. Updates on DPLUS046 have also been included in two AIGCD talks aimed at schoolchildren and the wider public held in August and September 2016, respectively. The talk to the schoolchildren as part of their activities group "Ascension Explorers" allowed the children to name all of the tagged sharks which has helped to continue the public interest in the project.

2a. Give details of any notable problems or unexpected developments/lessons learnt that the project has encountered over the last 6 months. Explain what impact these could have on the project and whether the changes will affect the budget and timetable of project activities.

2b. 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/No

Formal change request submitted: Yes/No

Received confirmation of change acceptance Yes/No

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.

If you anticipate a significant underspend because of justifiable changes within the project please submit a rebudget Change Request as soon as possible. There is no guarantee that Defra will agree a rebudget so please ensure you have enough time to make appropriate changes if necessary.

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

If you were asked to provide a response to this year's annual report review with your next half year report, please attach your response to this document.

Please note: Any planned modifications to your project schedule/workplan can be discussed in this report but **should also be raised with LTS International through a Change Request.**

Please send your **completed report by email** to Eilidh Young at Darwin-Projects@ltsi.co.uk . The report should be between 2-3 pages maximum. **Please state your project reference number in the header of your email message e.g., Subject: 22-035 Darwin Half Year Report**