





## Darwin Initiative/D+ Project Half Year Report (due 31stOctober 2019)

Project reference	DPLUS062
Project title	Securing the future of the Tristan marine environment
Country(ies)/territory(ies)	Tristan da Cunha
Lead organisation	RSPB
Partner(s)	Tristan da Cunha Government
Project leader	Andy Schofield
Report date and number (e.g. HYR3)	HYR2
Project website/blog/social mediaetc.	www.tristandc.com
Report author(s) and date	James Glass, Rob Mrowicki and Andy Schofield
	October 2019

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).

During Feb – July two staff from the Fisheries Department were given training at CEFAS in the UK on Data management, Database development, Data storage, and Presentation skills (Activity 1.3)

An *ex situ* experiment to determine the effects of tagging on adult lobster growth and mortality (Activity 2.2) was undertaken by Tristan fisheries observers on board the MV Geo Searcher during August 28<sup>th</sup> and 1<sup>st</sup> September 2019, during the Independent Biomass Lobster Survey and commercial fishing.

## The objectives are;

- 1. To Investigate the mortality rate of tagged lobster
- 2. To Identify the importance of short-term mortality from the tagging process vs. longer term mortality from the tag wound
- 3. To Record growth rates for tagged vs. not tagged lobster if moulting occurs in captivity.

During the voyage 40 lobsters were tagged and held in two holding tanks on the vessel, the holding tanks were 1m long 1.2 meters wide and 0.9 meters high and used to store all live lobster caught on the vessel for a period of 2-3 days. The tags used were T-bar and fish tags, 20 lobsters were tagged with T-bar tags and 20 were tagged with fish tags. All lobster was tagged in the muscle between the carapace and the tail. All of the lobster were caught and tagged at Tristan. Lobsters in the tank were monitored daily to find the mortality rate, and fed every two days until the vessel departed Tristan for Cape Town on the 22<sup>nd</sup> October at which time the ones that were still alive were released at Tristan. This will be repeated again in November when the vessel returns to Tristan and fishes until January 2020.

Four South American silver porgy (*Diplodus argenteus*), were caught during the winter 2019, used to obtain data on population structure, reproductive cycles and diet of this non-native species in Tristan waters (Activities 4.1 & 4.3). These will be processed during Marine biologist Rob Mrowicki visit in November.

For the purposes of monitoring the distribution and relative abundances of fish species, including the porgy, two Baited Remote Underwater Video (BRUV) surveys were carried out at Tristan (Activities 4.2 & 4.3).

Two inshore plankton samples were collected at Tristan sites to determine relative abundances for main taxonomic groups (Activity 5.4).

Marine biologist Rob Mrowicki will be working with Tristan Fisheries Department staff during Nov 2018–Mar 2019 (i.e. Tristan's summer) to complete this year's fieldwork objectives: plankton sampling and lobster larval monitoring; repeat BRUV surveys of fish abundance; intertidal and subtidal biodiversity surveys; new deepwater camera deployments; invasive South American Porgy sampling and population study; kelp forest ground-truthing for future mapping; sessile fauna settlement tile retrieval. Although these activities are obviously weather-dependent, the aim is to undertake them systematically across all main islands, revisiting previously established monitoring sites as well as expanding surveys to new areas.

There will also be additional training and experience for Fisheries staff in the respective data collection, processing and analysis methods. Depending on conditions, qualified divers on Tristan who are keen to participate in future fieldwork will undertake a refresher, including theory review and skills practice in sheltered water.

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.

As is normal there has been very little happening over the winter months due the weather and staff being off island, there was a horrific storm that hit Tristan on the 18-19<sup>th</sup> July which did considerable damage (see tristandc.com) which repairs will take more than a year to repair. During this storm the windscreen of the crane was taken out due to water flooding the electrics, the crane was then out of working order until a technician came from Cape Town in August. This prevented any boats being launched. Suitable weather since has been used to repair the damage, and there has only been two fishing days in September, when we did do a field trip.

The weather now should continue to improve, and we look forward to receiving the Marine biologist Rob Mrowicki on the next vessel in November, at which time we will get back on track. Therefore, I do not see any changes that will affect the budget or 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:	No	
Formal change request submitted:	No	
Received confirmation of change acceptance	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 x Estimated underspend: £		
<b>3b.</b> 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?		
No		

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. Additionally, if you were funded under R25 and asked to provide further information by your first half year report, please attach your response as a separate document.

Please note: Any <u>planned</u> modifications to your projectschedule/workplan can be discussed in this report but <u>should also</u> be raised with LTS International through a Change Request. <u>Please DO NOT send these in the same email.</u>

Please send your **completedreport by email** to <u>Darwin-Projects@ltsi.co.uk</u>. The report should be between 2-3 pages maximum. <u>Please state your project reference number in the header of your email message e.g. Subject: 25-035 Darwin Half Year Report</u>