



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

Project reference	DPLUS057
Project title	Population recovery of right whales in South Georgia waters
Country(ies)/territory(ies)	South Georgia
Lead organisation	British Antarctic Survey
Partner(s)	Sea Mammal Research Unit, School of Biology, University of St Andrews, Scotland/ University of Auckland, New Zealand International Fund for Animal Welfare, Woods Hole Oceanographic Institute, Massachusetts, USA Department of Biology, University of Utah, Instituto Aqualie, Minas Gerais, Brazil (NGO) Projeto Baleia Franca, Instituto Australis, Santa Caterina, Brazil (NGO) Happywhale.com University of Barcelona, Spain
Project leader	Jennifer Jackson
Report date and number (e.g. HYR3)	25 th November 2020, HYR3
Project website/blog/social media	www.facebook.com/sqwhale and https://www.bas.ac.uk/project/south-georgia-right-whale-project/

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).

Progress against Project Outcome: To establish and publish baseline data on the status and recovery levels of South Georgia southern right whale feeding grounds, post whaling. Characterise abundance, distribution, diversity, habitat use, health and calving ground connections for conservation management.

- The ship strike risk assessment and whale habitat use assessments are both underway. There have been some minor delays so these are anticipated to be completed by March 2021.
- Estimates of krill consumption are underway
- Analysis of right whale prey preference using stable isotopes is underway and will be complete by March 2021.
- The baseline analysis of right whale health: photogrammetry analyses have been completed, and animals compared with other calving grounds. A visual assessment of right whale health has been conducted. Hormone analyses have also been conducted by the University of St Andrews. Unfortunately, few of the right whale samples collected had sufficient blubber for hormone analysis, but it has been possible to conduct this analysis for both humpback and blue whales. The summary report on these parameters is in preparation.

Output 1. Report to GSGSSI on (i) status assessment of southern right whale SG distribution, habitat use and recovery patterns in the southwest Atlantic, (ii) risks to the population, (iii) recommended actions to mitigate risks

- The final project workshop (Activity 1.1) was planned to be held in December 2020. Due to delays in shipping samples to collaborators and access to laboratories, I am requesting a 3 month extension to our project, to hold the final project workshop online in March 2021.
- Activity 1.4.7 – I continue to generate regular social media outputs about the project via the project Facebook page (930 followers). I have also released one news story (<https://www.bas.ac.uk/media-post/humpback-whales-return-to-south-georgia/>) and one press release (<https://www.bas.ac.uk/media-post/blue-whales-return-to-south-georgia-after-near-extinction/>) about DARWIN project outputs since April 2020.
- Activity 1.5 – Biological samples have been shipped to St Andrews University for hormone analysis (Output 3), and the University of Auckland (NZ) for genetic analysis (Output 3). There has been a delay shipping whale breath samples to Woods Hole Oceanographic Institute (USA) as we could not guarantee their safe delivery while the building is closed due to Covid-19 I am waiting for our collaborators to advise when we can safely ship these samples.
- Activity 1.6 – collaborators have our photo-ID catalogue in hand and are conducting matching. So far one very informative match has been identified between two geographically distant feeding areas for right whales, the Antarctic Peninsula and South Georgia. This is noteworthy, suggesting rare right whale sightings in the Antarctic Peninsula may be from the same population that feeds at South Georgia. Other catalogue matching is due to complete in December.
- Activities 1.7-1.9 - this work is underway
- Activity 1.10- New Zealand samples were significantly delayed due to shipping problems but are now in New Zealand and this activity has begun.
- Activity 1.11 and 1.12 – this has now been completed
- Activity 1.13 – we propose to hold the final workshop in March 2021, if Darwin approve.

Output 2. Report key whale habitat use data to CCAMLR through a scientific paper to the EMM Working Group for consideration within spatial management proposals for regional krill fishery development.

- All activities are on track for completion by March 2021

Output 3. Report right whale connectivity and health assessment data to the IWC to address multiple scientific recommendations and concerns regarding threats and data gaps and contribute to the IWC Conservation Management Plan for this population.

- All activities are on track for completion by March 2021

Output 4. Calculate right whale depletion levels and recovery status in the southwest Atlantic, considering the population abundance in South Georgia and strength of linkages with calving areas.

- Only some aspects of this output can be completed (as detailed in our Change Request to Darwin).
- Activity 4.1 has been completed (Vighi et al. in press)

- Activity 4.3 has not yet been conducted, and awaits completion of Activity 1.6 in December.
- Activities 4.4 and 4.5 cannot be conducted as an Argentine research team have conducted this work independently.

Output 5. Create strong collaborative network of stakeholders to sustain project results, assist with further monitoring and broaden scope of baseline surveys to other whale species.

- These activities have not yet been completed.
- Stakeholder networks are strong. (1) We have now entered into a CASE partnership with South Georgia Heritage Trust, to support a PhD studentship focussed on studying the genetic identity of humpback whales feeding at South Georgia, using recently collected genetic samples. (2) We are forging a new collaboration with Uruguayan researchers who also hold photo-ID catalogues for right whales (see DARWIN change request). (3) This year, the scientists based at King Edward Point in South Georgia have begun weekly monitoring of whales in Cumberland Bay, including collecting photo-IDs (which will be shared with Happywhale for matching), a plan which will become a permanent part of future science work at South Georgia, and reported annually in the King Edward Point Science Plan.

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.

No new problems or developments to report, with the exception of delays due to Covid-19.

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.

Some aspects of the project have been delayed due to Covid-19 (in particular, shipment of biological samples and matching of photos), and the planned in-person workshop (December 2020) cannot be held. We have proposed in a Change Request to Darwin some changes to the budget originally allocated towards workshop travel costs, to allow us to deliver on our outcomes in our project more fully. These include matching our right whale photo-ID catalogue with the Uruguayan photo-ID catalogue, funding to support an analysis of ship strike risk for humpbacks in South Georgia, and providing humpback and killer whale photo-ID catalogues to South Georgia to assist with future whale monitoring.

Overall, the timeline of delivery of our project outcomes is anticipated to be delayed by three months (to March 2021) but all outcomes detailed in our previous report and Change Request are currently deliverable by this date.

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: No

Formal change request submitted: Yes

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 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. Please DO NOT send these in the same email as your report.

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 DO NOT send these in the same email.**

Please send your **completed report by email** to 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: 25-001 Darwin Half Year Report**