



**Darwin Initiative/Darwin Plus Projects  
Half Year Report  
(due 31<sup>st</sup> October 2021)**

<b>Project reference</b>	DPLUS122
<b>Project title</b>	Biodiversity discovery and the future of South Georgia's seaweed habitats
<b>Country(ies)/territory(ies)</b>	South Georgia & the South Sandwich Islands (SGSSI)
<b>Lead organisation</b>	The Natural History Museum (NHM)
<b>Partner(s)</b>	South Atlantic Environmental Research Institute (SAERI), Shallow Marine Surveys Group (SMSG), British Antarctic Survey (BAS), Tritonia Scientific Ltd.
<b>Project leader</b>	Prof. Juliet Brodie
<b>Report date and number (e.g. HYR1)</b>	HYR1 26 <sup>th</sup> October 2021
<b>Project website/blog/social media</b>	Twitter: @Juliet_Seaweeds @SAERI_FI @Shallow_marine @BAS_News

**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).**

PhD researcher Amy Guest, based at SAERI in the Falkland Islands, received training in seaweed DNA extraction, quantification and amplification techniques at the NHM molecular laboratories in June and July 2021 (four weeks), during which she processed 42 specimens from the collection made by Dr Emma Wells during the previous SMSG expedition to South Georgia in 2011 (Activity 1.2, DNA analysis of recent specimens). Amy also gained expertise in working with museum herbarium specimens, including species identification. The project was then paused until September, when Dr Rob Mrowicki joined as Project Officer (PO). In addition to organising equipment and logistics for the upcoming field expedition to South Georgia (together with project partners SAERI, SMSG, BAS and Tritonia), Rob has located and databased 83 historical (1867–1966) specimens from the NHM algal herbarium, adding to the 154 contemporary (2011) specimens databased by Amy during Q4Y1 (Activity 1.1, Databasing existing specimens). Using these combined data, and updating species names based on current taxonomy, we have written a preliminary check-list of 76 species for South Georgia, complementing Amy’s pictorial identification guide (Activity 1.2, Produce initial check-list and guide; contributing to Activity 2.4, Write and publish ID guide). Additionally, Rob continued Amy’s laboratory work and obtained sequences for eight DNA samples (from five specimens), initiating the molecular framework to support species identification (Activity 1.1).

The team is currently in the Falkland Islands, preparing for departure aboard the MV Pharos SG to South Georgia on 2<sup>nd</sup> November as planned, while conducting training and outreach activities (Activity 3.1; to be reported in the next Annual Report) and additional specimen collection.

**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.**

The molecular work has been challenging, with a small proportion of specimens yielding DNA of sufficient quality to progress to sequencing. However, this was not surprising, given that extraction and amplification of DNA from seaweeds is often tricky (particularly when dealing with specimens that are not freshly preserved). Subsequent planned molecular work (Q4Y1 onwards) will include some additional troubleshooting for this initial batch of samples, which will not impact the project budget and timetable. Also, Amy received training in molecular laboratory techniques at the NHM, which is a valuable outcome of the project, not anticipated in the original plan.

**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.**

Changes to the project as a result of COVID-19 were addressed in the previous Annual Report, following the Change Request submitted in June 2020. There have been no further impacts of COVID-19 on the project during this reporting period.

**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/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. 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?**

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.

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](mailto: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**