



## Falkland Islands Government

---

Environment Department Secretariat Stanley Falkland Islands

Telephone: (500) 28427

E-mail: [environmental.officer@sec.gov.fk](mailto:environmental.officer@sec.gov.fk)

### ESB 2021/22 Reporting Form

As part of the funding conditions for projects through the Environmental Studies Budget we require that you complete a report detailing the outcomes and/or findings of your project and submit this to the Environment Department. The report can be created in a different format to the below, but this form asks for the *minimum information* to be provided to the Department on conclusion of your project or for multi-year projects for each year of your project by 31 August. Many previous recipients of the projects have provided us with comprehensive and informative reports. We would encourage recipients to continue to provide detailed reports.

In other words, you will need to complete this form **OR** produce a report that includes the information requested in this form as a minimum and submit it to the FIG Environment Department by 31 August 2022.

If possible, and where appropriate **please take photographs of your work and share these with the Environment Department**. It is very informative for committee members to be able to see what the work looks like. FIG also appreciate having this material to include on our website or in other communications materials.

Please complete answers or complete your report in **as much detail as possible**. If you have any questions or queries then please don't hesitate to contact us.



## Falkland Islands Government

Environment Department Secretariat Stanley Falkland Islands

Telephone: (500) 28427

E-mail: environmental.officer@sec.gov.fk

### Project Details

<b>Applicant Name</b>	Ander de Lecea / Paul Brickle		
<b>Applicant Address</b>	SAERI		
<b>Project Title</b>	Fine scaling the design of Falkland Islands Marine Management Areas DPLUS071		
<b>Funding Amount</b>	£7500	<b>Project Duration</b>	2.5 years
<b>Year of first award</b>	2019	<b>Year of Funding</b>	2020

### Details of Funding Use

<b>Breakdown of funds used and purpose</b> (please provide details of your use of the funds giving details of the amount spent on each item)	
Fieldwork expenses: 50 % Staff time: 50 %	
<b>Priority Areas Addressed</b>	<input type="checkbox"/> <b>Invasive Species and Biosecurity</b> <input type="checkbox"/> <b>Habitat Restoration</b> <input type="checkbox"/> <b>Climate Change Adaptation and Mitigation</b> <input type="checkbox"/> <b>Oceans and Coasts</b> <input type="checkbox"/> <b>Blue-sky project</b>
<b>Objectives addressed and progress towards each objective</b> (please state the objective as detailed in your/application and how you have achieved this objective. For multi-year projects note your progress towards achieving the objectives. Provide as much detail as possible, simply stating "yes" or "no" is not sufficient. If you have not met an objective please state clearly why and whether or not you will be able to meet this in the future, should you have a multi-year project.)	
<p>The main goal of DPLUS071 were to work toward designation of proposed Marine Managed Areas. Two key work packages were undertaken with support from the ESB.</p> <ul style="list-style-type: none"><li>• Work package 1 - Data Collection Inshore – Data Collection Inshore: Fine scale data gathering in the 3 nm baseline to better delineate categories in the proposed inshore MMA. This is will include more benthic work in the proposed nature reserve areas (Jasons, Beauchêne and Bird Islands). Multibeam and dropdown camera work in depths greater than SCUBA. There is a gap in knowledge between 15 – 20m to about 100 m. In conjunction with data collection from the project, historical data from research cruises from the fisheries department will also be analysed. Different modelling approaches will be undertaken to examine suitable habitat for sensitive habitats like biogenic reefs etc. A significant amount of additional tracking work has been conducted since the higher predator model used in Marine Spatial Planning project that ended in 2016. These were consolidated and re-analysed to inform spatial and temporal seabird and marine mammal abundance.</li></ul>	



## Falkland Islands Government

Environment Department Secretariat Stanley Falkland Islands

Telephone: (500) 28427

E-mail: environmental.officer@sec.gov.fk

- Work package 2 - Data Collection Southern MMA and Burdwood Bank: Data gathering on the Burdwood Bank using a research vessel to: 1) Mapping Bathymetry from 200 – 2000m; 2) SUCS camera landers for epibenthic characterisation 2) Agassiz trawl (AGT) for benthic ground truthing; 3) CTD (oceanography); 4) Pelagic nets for bathypelagic ecosystems e.g., Myctophids (lantern fish) are abundant in that region and there has been mention of this within the fishing community; 5) Consolidate ROV, multibeam, core, grab and other data from the northern part of the bank and slopes from the oil industry. The multibeam, benthic work and consolidated data will allow modelling of the bank and its slope for habitats etc. and allow for fine scale design.

**What changes/impacts have you seen as a result of your project work, and/or what changes/impacts do you expect to see in the next 3 to 5 years? (Answers to this question may include change observed physically on the ground or at a higher-level. Please provide as much detail as possible. If this is a multi-year project then please include changes since the last report).**

The ExCo paper approving a formal consultation was passed on the 24<sup>th</sup> February 2021. This was a key project milestone, because it re-enforced FIG support for MMAs and ownership of the MMA designation process. SAERI has recruited a 2.5 year Marine and Coastal Project Coordinator to continue to support proposed MMA designation initiated through DPLUS071.

**Please include at least one photo taken during project work.**

### Details of Media Outreach

<b>What outreach activity/ies have you carried out this year as part of your project work?)</b>	The project used a variety of outlets, including penguin news articles, popular talks, including a talk at the local Yacht Club Annual General Meeting. Increased interest in the project was through a local radio interview, as well as by providing volunteer opportunities. The project also had a featured article in the June 2020 Darwin Initiative magazine, including the cover photograph for that issue. The last community engagement from the DPLUS071 project was during the High School Careers Day on the 18 <sup>th</sup> March 2021. The valued contribution by FIG through the ESB and as the main partner on the project, was highlighted during outreach activities.
<b>Date(s) of Community Outreach</b>	Numerous – throughout 2020/21
<b>What was the main content/purpose of the outreach activity?</b>	
All outreach was related to benthic ecology of Falkland Islands inshore and offshore environment.	
<b>What was the outcome and impact of the outreach activity? Was there any feedback from the public?</b>	



Falkland Islands Government

Environment Department Secretariat Stanley Falkland Islands

Telephone: (500) 28427

E-mail: environmental.officer@sec.gov.fk

We did not quantify the outcome and impact of the outreach activities. However, given our outreach was across media outlets, school and international peer reviewed journals, we assume our project had a wide reach.

Was this communicated more broadly through media, social media or other channels? Please provide dates and details of any media broadcasts or publications.

Yes, radio, penguin news, Darwin Initiative newsletters, tweets, Facebook and peer reviewed publications. Examples below:

Please include photos taken during outreach events, where possible.

(For research projects only)

What research questions has the funding helped you address and how have you addressed them? Has the research generated new knowledge?



## Falkland Islands Government

Environment Department Secretariat Stanley Falkland Islands

Telephone: (500) 28427

E-mail: [environmental.officer@sec.gov.fk](mailto:environmental.officer@sec.gov.fk)

The project has collected and analysed a significant amount on environmental baseline data in support of the proposed MMAs. These data represent a great deal of discovery and will benefit many other initiatives outside of the MMA project. Therefore, the project provides a great legacy for environmental understanding and management of the Falkland Islands marine environment. The capability to manage environmental assets across the Falkland Islands has been improved through equipment, data and capacity building. For example, the project acquired equipment that will provide the Islands with high quality underwater imagery in order to continue monitoring the subtidal ecosystem around the Islands beyond scuba diving depth.

The project has collected novel data on the Burdwood Bank and has collected and collated available marine data within the inshore area. The project has provided baseline data for many previously unstudied sites, which allows benchmarking of any future marine management strategies. It will also provide a baseline of the natural environment against which future change (e.g. climate change) can be measured.

The project directly contributed towards goals in the Islands Plan 2018 – 2022, for example a) Develop and implement a comprehensive environmental strategy, b) Encourage research into the Falkland Islands environment; and c) contributes to fulfilling FIG's commitments under international treaties, among other goals.

**Have there been any publications from your work funded under the ESB? Please list and include peer and non-peer reviewed literature. If your work has not been published yet, please provide an indication of the likely publication. Please also submit these along with this report.**

<https://blogs.oregonstate.edu/seabirdoceanographylab/2021/08/02/predators-and-marine-managed-areas/>

Baylis, A. M. M., de Lecea, A. M., Tierney, M., Orben, R. A., Ratcliffe, N., Wakefield, E., Catry, P., Campioni, L., Costa, M., Boersma, P. D., Galimberti, F., Granadeiro, J. P., Masello, J. F., Pütz, K., Quillfeldt, P., Rebstock, G. A., Sanvito, S., Staniland, I. J., and Brickle, P.. 2021. Overlap between marine predators and proposed Marine Managed Areas on the Patagonian Shelf. *Ecological Applications* 00( 00):e02426. [10.1002/eap.2426](https://doi.org/10.1002/eap.2426)

Brickle, P., J. Barton, D. Simovic, N. Golding, A. de Lecea, and P. Brewin. 2019. Marine ecosystem protection in the Falkland Islands. *Marine Biologist Magazine* 20–21.

N.B. there are a number of peer reviewed publications planned and in various stages of development and these will be circulated as they become available.